CHAPTER 1

INTRODUCTION

1.1Background of the Study

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 canalizing the available resources in the needed sectors. It is the intermediary between the deficit and the surplus of financial resources. Financial system contains two components viz: depository financial institutions and non-depository financial institutions. Commercial Banks and Finance Companies (in Nepalese context) are the example of depository financial institutions whereas Employee Provident Fund, Development Banks, Insurance Companies are the example of non-depository financial institutions. All the economic activities are directly or indirectly channeled through these banks. People keep their surplus money as deposits in the banks and hence banks provide such funds to finance the industrial activities in the form of loans and advances.

Financial institutions play an important role in the proper functioning of an economy. These institutions act as an intermediary between the individuals who lend and those who borrow. These institutions accept deposits and provide loans and advances to those who are in need. They make the flow of investment easier. Therefore, we cannot deny the role a bank plays in developing an economy. It pools the funds scattered in the economy and mobilizes them to the productive sectors. Their main objective is collecting the idle funds, mobilizing them into productive sectors and causing an overall economic development. Thus, the bankers have the responsibility of safeguarding the interest of the depositors, the shareholders and the society as a whole.

Development of a nation depends upon various sectors viz: trade, industry, agriculture etc. Hence, to develop these sectors a continuous and adequate supply of resources is required. In developing countries, especially like ours, there is always a dearth of capital. The government cannot contribute to the economic development all alone. Nevertheless, the private sector also cannot reinforce due to low per capita income and higher propensity to consume of the people. Hence, due to low income, saving is low which on the other hand results in low capital formation. Thus, investment is one of the vital aspects in the improvement of the economic condition of a country.

In general, investment means to pay out money to get more. It is the sacrifice of current dollar for future dollar. It is geared by two factors: time and risk. The sacrifice takes place in the present, is certain while the reward comes later, and is generally uncertain. Investment policy ensures efficient allocation of funds to achieve the overall objectives. A distinction is often made between investments and saving. Saving is defined as foregone consumption; investment to restrict to ‘real’ investment of the sort that increases national output in future. Thus, investment is only possible where there are adequate savings. They are interrelated and go hand in hand.

The Commercial Bank Act, 2031 B.S. of Nepal has stated, “A commercial bank means banks which deals in exchanging currency, accepting deposits, giving loans and doing commercial transactions”

The profit of a bank largely depends upon the lending practices and policies and investments opportunities in different sectors. The greater the credit created by the bank the higher will be its profitability. Bank receives funds from various sources like share capital, reserve funds, retained earnings, bank borrowing, deposits and other liabilities. These funds cannot be kept idle, they have to be invested in assets like cash and bank balance, money at call or short notice, investments, bills purchased and discount, loans and advances, fixed assets and deferred expenses. It is because the bank has to repay some liabilities on demand, it also has to give interest on deposits made by its customers and even the shareholders seek maximum return. Therefore, the funds received by the bank should be invested in such a way that they will be readily available to repay and distribute the returns. Hence, the bank should have enough liquidity and profitability with all the safety measures. In gist, a right balance should be kept between safety liquidation and profitability. Investment policy provides banks with several inputs through which they can handle their investment operations efficiently assuring maximum return with minimum exposure to risks. Thus, a sound lending and investment policy is necessary in order to uplift the economic condition of a country. Furthermore, considering the importance of lending to the individuals, business community and the society as a whole, it is imperative that the bank meticulously plan its credit operations

1.2 Development of Banking in Nepal

In the country, the development of banking is relatively recent. The record of banking system in Nepal gives detail account of mixture of slow and steady evolution in the financial and global economy of Nepalese life. Involvement of property owners, rich merchants, shopkeepers and other moneylenders has acted as fence to institutional credit in presence of unorganized money market.

Though the establishment of banking industry was very recent, some basic bank operations were in practice even in ancient times. In Nepalese Chronicle, it was recorded that the new era known as Nepal Sambat was introduced by Shankhadhar, a Sudra merchant of Kantipur in 879or 880 A.D. after having paid all the outstanding debts in the country. In 8th century, Gunakama Dev had borrowed money to rebuild the Kathmandu valley. Similarly, in 11th century, during Malla regime there was evidence of professional moneylenders and bankers. During the regime of Jayasthiti Malla, caste system was introduced based on profession. Tankadhari were such caste, who used to provide loans and used to perform exchange trades. It is further believed that money-lending business, particularly for financing the foreign trade with Tibet became quite popular during the reign of Mallas. However, in the absence of any regulatory measures, the unscrupulous moneylenders were known to have charged exorbitant rates of interest and other extra dues on loans and advances.

The establishment of the “Tejarath Adda” during the year 1877 A.D. was fully subscribed by the government of Kathmandu valley, which played a vital role in the banking system. It helped the public by providing credit facilities at a very low rate of 5 percent. It provided credit especially on collateral of gold and silver. It ran successfully for four decades. Hence, the establishment of Tejarath Adda could be regarded as the foundation stone of banking in Nepal. An institutional banking system came into existence only in the 19th century with the establishment of Nepal Bank Ltd. in 1937 A.D. under “ Nepal Bank Act, 1937”.

After the establishment of Nepal Bank Ltd. in 1937, on the long run Commercial Bank Act was felt, accordingly, it was enacted in 1974 A.D. Hence, the door for opening commercial banks was opened to the private sector with the establishment of NABIL Bank in 1985 A.D. Since then, many commercial banks have been established.

1.3 Profile of the Concerned Bank

NEPAL CREDIT AND COMMERCE BANK LTD. (NCCB)

Nepal Credit & Commerce Bank Ltd. was established on 14th October 1996 as Nepal - Bank of Ceylon Ltd. (NBOC), a Joint Venture Commercial Bank between Bank of Ceylon, Sri Lanka, the Pioneer Bank in Sri Lanka and Nepalese Promoters, NB Group (Nepal) Pvt. Ltd. and Nepal Insurance Company Ltd. It enjoys the reputation of the first Bank with largest authorized capital of NRS. 500 Million. It also ventured to establish its Head Office outside the capital of the country at Siddharthanagar, Rupandehi, and the birthplace of LORD BUDDHA (The Light of Asia) for the first time in the Nepalese context.

NBOC started its operations from Siddharthanagar on October 14, 1996. Within nine months of its operation NBOC expanded its business through four branches, Siddharthanagar and Lumbini in Rupandehi, Bag Bazaar in Kathmandu and Barahbise in Sindhupalchowk. The Name of the Bank has been changed to Nepal Credit & Commerce Bank Limited on 10th September 2002. This change was effected due to the transfer of shares and management from Sri Lankan co-venture to Nepalese Promoters. At present NCCB provides its financial facilities and services to rural and urban areas of the Kingdom through its 17 branches. The bank has developed corresponding agency relationship with more than 180 international banks having worldwide network.

Bankers with the quality service strive for expansion with profitability, professionalism and personalized Banking Services is the mission statement of the bank.

The main goal of NCCB is to provide a wide range of banking services and products in the emerging socio-economic environment within and outside the country maintaining high standards of integrity and efficiency with excellence.

The services and facilities provided by NCCB are as follows:

Services and Facilities provided by NCCB

Deposits:

NCCB provides various types of deposits including savings, current, Fixed and Call Deposits, Savings Plus, Bal Suraksha Khata (BSK), Mahila Suraksha Khata (MSK) and Jestha Nagarik Suraksha Khata. Savings Plus deposits hold the added benefits of interest payable on daily balance and not on monthly minimum balance. Bal Suraksha, Mahila Suraksha Khata and Jestha Nagarik Suraksha Khata are special schemes for children, Women and senior citizens of the country respectively and are entitled to receive 0.5% interest above normal savings account. In addition to these all the savings deposit holders enjoy facilities like limitless free withdrawals, personal accidental insurance up to Rs. 500,000/- and medical expenses reimbursement.

Non-Funded Services:

Non-funded facilities are where funds are not involved. NCCB provides non-funded functions like issue of letters of credit and guarantees, discounting of bills and remittance facilities. The income from such facilities and services constitute the key element of the total income of the Bank.

Funded facilities and services:

In funded facilities, funds are directly involved like Term Loan, Working capital Loans and other loans and advances. NCCB provides various kinds of loans and advances to its customers like project loans, overdrafts, term loans, personal loans, hire purchase loans, personal housing loans, car loans, and self employment schemes for small entrepreneurs, soft loans to facilitate export and import business etc.

Besides these core-banking services the bank also provides the following services

NCC Bank is adopting the concept of Universal Banking, in contrast to traditional bank, which offers wide array of products to its client under one roof. The services provided by NCC Bank are:

- Investment Banking

NCC Bank has recently established investment-banking department in an effort to enter into Universal Banking and building competitive edge. Investment banking functions carried out by the banks in the international scenario is:

- Financial Advisory
- Project Appraisal
- Fund Management
- Managing IPO's
- Underwriting
- Merger and Acquisition
- Corporate Restructuring
- Syndication of Funds

- Remittance arrangement with ICICI

NCC Bank has recently entered into an agreement with ICICI Bank which facilities its customers to remit their money to more than 670 locations of India through ICICI Bank branches and their correspondent banks in India.

Its customer can affect their money transfer to India either though Speed Transfer Arrangement or though Demand Draft arrangement, Under Speed Transfer Arrangement, money can be credited on line to the beneficiaries account at more than 400 branch of ICICI Bank located at India. Under Demand Draft arrangement, the bank can issue draft payable at more than 670 locations in India.

- Any Branch banking facility within Katmandu Valley.

- Safe Deposit Lockers:

- NCC Bank has recently introduced NCC Debit Card to provide various ATM facilities to its customers.

- NCC Bank has also introduced a Loan scheme "Loan against Gold" to cater to the Fund requirements of the middle class loans seekers.

Future Plans:

- The bank strives to provide modern & Efficient & Personalized Banking facilities within the country to its customers.

- The bank also aspires to develop new and modern banking systems and technologies to provide market oriented facilities and services to its valued customers.

- The Management and staff of the Bank are committed to innovate and introduce new products in the market in order to provide maximum benefits to its valued customers.

1.4 Focus of the Study

Banking plays an important role in the economic development of a nation. Without banking, the development of the nation is a mere thought. It is regarded as the heart of financial system. People invest their earnings with a hope of getting good return on their investment. Nevertheless, due to certain circumstances they loose their hard earnings. Therefore, in order to make the right decision we have to have a sound investment policy. The study focuses on evaluating the deposit utilization of the bank in terms of loans and advances and investments and its contribution in the profitability of the bank. It also focuses on the contribution of off-balance sheet activities in the earnings of the bank and on non-performing assets position of the bank.

1.5 Significance of the Study

As it is well known fact that the commercial banks can affect the economic condition of the whole country, the effort is made to highlight the investment policy of commercial banks expecting that the study can bridge the gap between deposits and investment policies. In the context of Nepal, there are less availability of research work, articles and journals in investment policy of commercial banks and financial institutions. Thus the study will certainly help the management of NCCB to improve their performance and to take corrective action if necessary. Moreover, the study will be very useful to various groups in various ways such as,

The research will provide required information to various people and parties such as general reader, investors, shareholders, brokers' financial agencies, businessmen and general public (depositors, customers)

The study will be helpful to use as pilot work for future research.

The study will help shareholders to make decisions while making investment on shares.

1.6 Statement of Problem

In the dawn of new millennium, towards the end of 2005, there are 17 commercial banks. All these banks have created a cutthroat competition in the financial sector. Fluctuating and low interest rates on deposits, poor deposit mobilization etc. has affected on the return of funds, total assets, total deposits and shareholders' wealth position.

Since the liberalization policy of the government, various banks and financial institutions have been established with a view to reinforce the economic growth of the country. They have played a pivotal role by accepting deposits and granting loans. Investment of the collected funds is the most important factor for both shareholders and the bank as they are the source of earning. Credit extended by these banks is directly related to the national interest. Therefore, the banks should have a sound investment policy.

Diana Mc Naughton said, "Investment policy should incorporate several elements such as regulatory environment, availability of the funds, selection of risks, and loan portfolio balance and term structure of liabilities".

Commercial Banks are of utmost importance as they have contributed significantly to the overall economic development of the country. Yet, after so long since their establishment and successful operations for almost two decades, they are not free from problems and hindrances in their avenue. Since, we are concerned with the sample NCCB we will be discussing about it.

Commercial banks are more interested in providing loans on short-term basis against movable collaterals. They are reluctant to invest in huge and long term projects due to safety and security of their loans. Thus, they are following conservative loan policy based on strong security. Similarly, these banks do not have a well-organized investment policy. They rely much on the instructions and guidelines of Nepal Rastrya Bank. Even if they have formulated some guidelines, they fail to implement it due to poor supervision and lack of professionalism.

Project appraisal method followed by commercial banks is not scientific and appropriate. Granting loan against insufficient deposits, overvaluation of goods pledged, land and building mortgaged, risk-averting decision regarding loan recovery and negligence in recovery of overdue loans are some of the drawbacks of unsound investment policy. Similarly, loan supervision and follow-up mechanism is lacking in many commercial banks. Due to this, the portion of non-performing assets on total loans and advances has been increasing rapidly.

Nepal being an agricultural country needs more investment in this sector. Nevertheless, commercial banks are rather concerned in industrial and foreign projects. As a result, the credit extended to this sector is unsatisfactory. Besides, they are not even fulfilling the NRBs regulation of 12% investment of their total loans to the priority sectors like agriculture, cottage and small industries and services.

Similarly, the banks are not following the diversification principle i.e. they are not considering the investment portfolio position. A good portfolio theory indicates diversification of invest able funds to reduce risks. Hence, the principle “do not put all the eggs in one basket” really does not apply in context of Nepalese commercial banks. As a result, many banks today could not recover their loan because, in the past, a major portion of their investment were made in garment, carpets and hotel sectors that has now come to the brink of extinction.

Thus, the study mainly focuses on analyzing the different aspects of the bank and finding the answers to questions such as

- ❖ Is the bank able to utilize the available funds effectively?
- ❖ How aggressively is the bank lending?
- ❖ What is the proportion on risk free and risky investment on total investment made by the bank?
- ❖ What is the proportion of Non-performing assets on total loans and advances of the bank?
- ❖ What is the relationship of total deposit on total investment and total investment on total net profit of the bank?
- ❖ What steps should be taken to improve the investment policy of the bank?
- ❖ Is the bank maintaining sufficient liquidity position?

1.7 Objectives of the Study

The main objective of this study is to evaluate the investment policy of NCCB and to recommend corrective measures, if any, in order to improve its performance.

❖ To evaluate the liquidity, assets management, profitability position,
Loans and advances portfolio management of the bank.

❖ To analyze deposit utilization and its relationship with total investment and net profit of the bank.

❖ To examine the growth rate of bank in terms of deposits, loans and advances, investment and profitability of the bank.

❖ To assess the proportion of loan loss provision to total loans and advances and to evaluate the non-performing assets position of the bank.

1.8 Limitations of the Study

As every coin has two sides, there is no doubt that even this thesis has some limitations of its own. Here are some of them to begin with,

- As mentioned earlier, this thesis is mostly based on secondary data (published annual reports of commercial banks), journals, newspapers, magazines etc and unpublished thesis.
- The study covers only 7 years data, beginning from 2059/60 to 2064/65.
- It only examines the investment policy of the bank and ignores other aspects for comparison.
- To some extent, the data published on the websites may vary sometimes, with that of the annual reports of commercial banks. So, the data from the websites are considered as authentic one.
- The study is meant for academic purpose i.e. partial fulfillment of the requirement of the Masters of Business Studies (M.B.S.).
- It has taken into account only certain factors affecting the investment decision.

CHAPTER - TWO

REVIEW OF LITERATURE

Review of literature is basically a stock taking of available literature in the field of research. Every possible effort has been made to grasp knowledge and information that is available from libraries, document collection centre, other information managing bureaus and concerned commercial banks. This chapter helps to take adequate feedback to broaden the information to the study. The first part of the chapter includes the conceptual framework and the second part includes the review of various related studies.

2.1 Conceptual Framework

This chapter focuses to discuss briefly about the theoretical concept of the investment and its relation with other subject matter in relation to the banks.

Bank plays an important role in the economic development of a country. Banking when properly organized, aids and facilitates the growth of trade and industry and hence of national economy. In the modern economy, banks are considered not as a dealer in money but as the leaders of development. Banks are not just the storehouses of the country's wealth but are the reservoirs of resources necessary for economic development.

Commercial banks deal with others people money. They have to find ways of keeping their assets liquid so that they could meet the demand of their customers. In their anxiety to make profit, the bank cannot afford to lock up their funds in assets, which are not easily releasable. The depositors must be made to understand that the bank is fully solvent. 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. Cash is an ideal assets and the banker cannot afford to keep a large possession of his assets in the form of cash. Therefore the banker has to distribute his assets in such a way that he can have adequate profits without sacrificing liquidity. (Radheswamy and Vasudevan.1979)

Commercial Bank Act 2031 B.S. of Nepal has defined that "A commercial bank is one which exchanges money, deposits money, accepts deposits ,grant loans and performs commercial banking functions which is not a bank meant for co-operative, agriculture, industries or such specific purpose."

Investment can be defined as the sacrifice of present consumption with expectation of return in future. Investment takes place at present but return can be expected in future and it is uncertain too. Uncertainty is measured by risk. Since there is always involvement of risk in investment, investment operation of commercial banks is very risky one. Bank came into existence mainly with the objectives of collecting the idle funds mobilizing them into productive sector and causing an overall economic development. The bankers have the responsibility of safeguarding the interest of the depositors, the shareholders and the society as a whole they are serving. So, banking sector is exposed to a number of risks.

2.1.1 Banking Risks.

Normally, Banks confront different kinds of risks, which are categorized as follows:

Credit Risk:

Credit risk arises whenever another party enters into an obligation to make payment or deliver value to the bank. This type of risk is mostly associated with lending.

Liquidity Risk:

Liquidity risk arises when bank itself fail to meet its obligation. The bank required to make payments to the different parties at different times. The failure to make the payments to the depositors at the time of requirement is known as liquidity risk.

Yield Risk:

It is the risk that bank's assets may generate less income than expense generated by its liabilities.

Operational Risk:

The failure in the banks procedures or controls, whether from external or internal causes or as a result of error or fraud within the institution is known as operational risk.

Market Risk:

The risk of loss resulting from movements in the market price of financial instruments in which the bank has a position is the market risk. Such instruments include bonds, equities, foreign exchange and associated derivative products.

Ownership/Management Risk:

The risk that shareholders, directors or senior management be unfit for their respective position or dishonest.

2.1.2Some Important Terms used in the Study.

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

Deposits:

For a commercial bank, deposit is the most important source of liquidity. For a bank's financial strength, it is treated as 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:

a) Current deposits

b) Saving deposits

c) Fixed deposits

Loan and advances:

Loan, advances and overdrafts are the main source of income for a bank. Bank deposits can cross beyond a desired level but the level of loans, advances and overdraft will never cross it. The facilities of granting loan, advances and overdrafts are the main service in which customers of the bank can enjoy.

Fund 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 an economic and business activities always increase the demand for funds. Due to limited resources and increasing loans, there is some fear that commercial banks and other financial institutions too may take more preferential collateral while granting loans causing unnecessary burden to the general customers. Such loans from 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 undesired effect of low interest rate.

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

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 below,

It may want to space its maturities so that the inflow of cash coincide with expected withdrawals by depositors or large loans demand of the customers.

It may wish to have high grade marketable securities to liquidate, if its primary source of reserves becomes inadequate.

It may also be forced to invest because the demand for loan has decreased or it is not sufficient to absorb its excess reserve.

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

Investment on other company's shares and debentures

Due to excess fund but least opportunity of the profitable investment and also to meet the requirement of NRB directives commercial bank utilizes funds to purchase shares and debentures of other companies (Financial and non Financial). Like most commercial banks purchase shares of regional development banks, NIDC and other development banks.

Other use of funds

A commercial bank must maintain the minimum bank balance with NRB i.e.8% for fixed deposit and 6% for current and saving deposit account in local currency. Similarly, 3% cash balance of all local currency accounts must be maintained by a commercial bank according to the rules of NRB to have a good liquidity position. Again, a part of funds should be used for bank balance in foreign bank and to purchase fixed assets like land, building, furniture, computers and stationery etc.

Off balance sheet activities

These are items like letter of credit, letter of guarantee, commission, bills for collection etc. Nowadays, these activities are stressfully highlighted by some economists and finance specialist, to expand the modern transaction of a bank. These activities are very important, as they are the good source of profit to the bank though they have high risk. These items are not recognized as assets or liabilities in Balance Sheet, but are the future purchase or sale of assets, which are contingent obligation.

2.1.3 Features of sound lending and investment policy.

The income and profit of the bank depends upon its lending procedures, lending policy and investment of its different securities. The greater the credit created by the bank, the higher will be the profitability. A sound lending and investment policy is not only prerequisites for banks' profitability, but also crucially significant for the promotion of commercial savings of a backward country like Nepal. Some necessities for sound lending and investment policies which must be considered by the commercial banks can be explained as follows:

a) Profitability

A commercial bank can maximize its volume of wealth through maximization of return on their investment 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.

b) 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. It must not invest its funds into speculative businessman who may be bankrupt at once and who may earn millions in a minute also. Security means adequate collateral having good value, which 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= Ascertainable

S= Stability

T= Transferability

c) Liquidity

Liquidity is the ability of a firm to satisfy its short term obligation when they become due for payment. People deposit money at the bank in different account with confidence that the bank will repay their money when they need. To maintain such confidence of the depositors, the bank must keep this point in mind while investing its excess funds in different securities so that it can meet current or short term obligations when they become due for payment.

d) Purpose of loan

From the viewpoint of security, a banker should always be known that why a customer is in need have loan. If a borrower misuses the loan granted by the bank, it can never repay and bank will posses heavy bad debts. Therefore in order to avoid this situation each and every bank should demand and examine all the essential detailed information about the scheme of the project or activities, before lending.

e) Diversification

A bank should not put 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 this way the loss can be minimized or recovered.

f) Tangibility

Though it may be considered that tangible property does not yield an income apart from direct satisfaction of possession of property. Many times intangible securities have lost their value due to price level inflation. A commercial bank should prefer tangible security to intangible one.

g) Legality

Illegal securities will bring out many problems for the investors. A Commercial bank must follow the rules and regulation as well as different directions issued by NRB, Ministry of Finance, Ministry of Law and other while mobilizing its fund.

i) National Interest

In addition to its own profitability 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 toward the society and the country. The bank is required to invest on such sectors as per the government and Nepal Rastra Bank's instruction. Investment on government bonds, priority and deprived sector lending are the examples of such investments.

2.2 Review of Related Studies

2.2.1Review of Books

Financial Institutions are the basic need and they play the vital role in the money market as well as open market policy system of the business competition world. It deals with the money, credit instrument and balance between the liquidity, profitability and safety. Good circulation of money is very important for the bank. Uneven flow of cash harms the bank as well as the economy. Thus, to collect funds and utilize it in a good investment should be taken very carefully. Investment of the fund may be the life and death for the bank. Investment management of Bank is guided by the investment policy adopted by the bank. The investment policy of the banks helps the investment operation of the bank to be efficient and profitable by minimizing the profitable risk. So that an economic word is attach in economics risk and return theory of future results. It is challenging task for commercial bank.

Bhagat Bista, in his book "Nepal Ma Aadhunik Banking Byabastha " has made an attempt to highlight some of the important factors, which have contributed to the efficiency, and performance of Joint Venture banks. He concluded in saying that

The establishment of JV banks a decade ago marks the beginning of modern banking era in Nepal.

The JV banks have brought many new banking techniques such as computerization, hypothecation, consortium finance and modern activities into the economy. (Bista; 2048 : 44)

James B Bexley expresses his view as "Investment policy fixed responsibility for the investment disposition of the banks assets in terms of allocating funds for the investment and loan establishing responsibility for day to day management of those assets." (Bexley; 1987: 12)

There are mainly three concepts of investment.

Economic investment that is an economist's definition of Investment

Investment in a more general of extended sense which is used by the man of street

The sense in which we are going to be very much interested namely financial investment

The problem of investor is to select the funds whose objectives and degree of risk taking most closely match its own situation. The one that will accomplish for him what he would wish to do for himself if he could diversify and manage his own holdings. (Valla; 1983: 2)

In the words of S.P Singh "The investment policy of banks are conditioned to great extent by the national policy framework, every baker has to apply his own judgment for arriving at a credit decision keeping of course his bankers credit also in mind." (Singh; 1983: 5)

"A sound investment policy of a bank is such that its funds are distributed in different types of assets with good probability on the one hand and provides maximum safety and security to the depositors and banks on the other hand; moreover risk in banking sectors tends to be concentrated in the loan portfolio. When a bank gets into a serious financial trouble its problem usually comes from the significant amount of loan that have become uncollectible due to mismanagement, illegal manipulation of loan, misguided leading policy or unexpected economic downturn. Therefore the bank's investment policy must be such that it ensures that it is sound and prudent in order to protect public funds." (Baidhya; 1997: 46-47)

B. Sharma in "Banking the future on Competition" wrote that the commercial banks are establishing and operating mostly in urban areas. He found that only limited banks are giving their services in the urban areas. They are not properly analyzing the credits system. Moreover, only the branch of Nepal and R.B.B are running in rural areas. He found that due to the lack of Investment avenues, banks are tempted to invest without proper credit appraisal and personnel guarantee, whose negative side effects would show color only after four or five years. (Sharma; 2000: 13)

According to Reed, Cotter, Gill and Smith "Commercial banks still remain the heart of our financial system holding the deposits of millions of persons, government 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." They further states that 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. Through 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 effects and the social results are the same. (Edward, W.R, etc, all; 1980:1-5)

Preeti Singh has defined Investment in this way "Investment is the employment of funds with the aim of achieving additional income of growth in value." (Singh; 1980:1)

In the word of Gitman and Johnk, "Investment is any vehicle into which funds can be placed with the expectation that will preserve or increase in value and generate positive return." (Gitman; 1990:47)

"The term investment can cover a wide range of activities. It often refers to investing money in certificates of deposits, bonds, common stock or mutual funds. More knowledgeable investors would include other financial assets such as warrants, puts and calls future contracts and convertible securities. Investing encompasses very conservative positions and aggressive speculation."(Parker; 1988:35)

Sunity Shrestha in her book "Portfolio behavior of commercial banks in Nepal " said the commercial banks fulfill the credit needs of various sector of the economy including agriculture, industry, commercial and social service sectors. The lending policy of commercial banks is based on the profit maximizing of the institution as well as the economic enhancement of the country. (Shrestha; 1995:51-52)

H.D.Cross in the book "Management policies of commercial banks" says that lending is the essence of commercial banking; 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 credit creating function effectively and minimizing the risk inherent in any extension of credit. (Cross; 1963: 87)

In investment decision expenditure and benefit should be measured in cash. In investment analysis, cash flow is more important than accounting profit. It may also be pointed out that investment decision affects the firm's value. The firm's value will increase if investments are profitable and add to the shareholders wealth. Thus, investment should be evaluated on the basis of a criterion, which is compatible with the objectives of the shareholders fund maximization. An investment wills all to the shareholders wealth if it yields benefit in excess to the minimum benefits as per the opportunity cost of capital. (Panday; 1999: 407)

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 in cash (on hand quickly realizable) to meet every claim for the bank to pay its way and earn profit for its shareholders.(Radhaswami; 1979: 24)

Investment management of bank is guided by the investment policy adopted by the bank. The investment policy of the bank helps the investment operation of the bank to be efficient and profitable by minimizing the inherent risk. So that an investment word is attach in economics risk and return theory of future result.

Various authors of above definition views that it is clear that investment means to trade a known rupee amount today for some expected future stream payments or benefit. Thus it is the most important functions of commercial banks. Bank has to be very cautious while investing their funds in various sectors. The success of bank heavily depends upon the proper management of it's invest able funds

Nowadays, more and more banks have developed formal written lending policies in recent years. They provide guidance for the lending officers and there by establish a greater degree of uniformity in lending practices. Since lending is important both to the bank and to the community it serves, loans policies must be worked out carefully after considering many factors like as follows.

- Capital position
- Risk and profitably of various types of loans
- Stability of deposits
- Economic Condition
- Influence of Monetary and fiscal policy
- Ability and experience of banks personnel
- Credit needs of the area served

Commercial banks have their own investment policy. However, few banks have followed the written investment policy and few other banks do not follow the written investment. Those who object to the written investment policy are those who feel that the economic environment of banking changes so rapidly that a formal written statement would become dated within a short time. It is true that banking operates in a changing environment, but changes do not occur rapidly that they cannot be incorporated into a written policy. The basic factors that will determine the objectives of a banks investment policy are the income and its liquidity needs and management willingness to trade liquidity for greater income opportunity and vice versa which means accepting greater or lesser degree of risk. Formulation of an investment policy must give cognizance to the entire risk exposure that bank management is willing to assume as well as risk carried by the securities that comprise the investment account. One of the acceptable methods of reducing risk on the investment portfolio of a commercial bank is by diversification, which is a basic important rule of any investment policy. However risk cannot be completely avoided by diversification, but hey can be reduced. A statement of investment policy should designate the person responsible for handling the investment program. This is fundamental to the efficient operation of an investment portfolio, is that “too many cooks spoil the stew” Since the board of directors is responsible for proper investment of the banks funds, periodic report regarding the investment portfolio should be prepared for the boards use in evaluating investment management and establishing investment policy. The investment policy of bank should be reviewed occasionally and modified as economic condition change.

Thus we can conclude saying a commercial bank must always mobilize its finds and other deposits to profitable secured and marketable sector so that it earns a handsome amount of profit as well as it should be secured and can be converted into cash as per the requirement.

2.2.2 Review of Relevant Act

Commercial Bank Act 2031 was formulated to facilitate the smooth run of commercial banks. All the commercial banks are functioning under this act. This act defines the banks as, “ A commercial bank is one which exchange money, deposits money, accepts deposits, grants loans and performs commercial banking function and which is not a bank meant for cooperative, agriculture, industry or for specific purpose”.

NRB rules regarding fund mobilization of commercial bank

To mobilize bank's deposit in different sectors of the different part of the nation to prevent them from the financial problems, central bank may establish a legal framework by formulating various rules and regulation. These directives must have direct or indirect impact while making decision to discuss those rules and regulation which are formulated by NRB in terms of investment and credit to priority sector, deprived sector, other institution, single borrower limit, CRR loan loss provision, capital adequacy ratio, interest spread, and productive sector investment. A commercial bank is directly related to the fact that how much fund must be collected as paid up capital while being established at a certain place of the nation, how much fund is needed to expand the branch and counters, how much flexible and helpful the NRB rules are also important. But we discuss only those, whose are related to investment function of commercial banks. The main provisions established by NRB in the form of prudential norms in above relevant area are briefly discussed here under.

Provision for credit to the priority sector:

NRB requires commercial banks to extend loan and advance, amounting at least to 12 % of their total outstanding credit to the priority sector. Commercial banks credit to the deprived sector is also a part of priority sector credit. Under priority sector, credit to agriculture, credit to the cottage and small industries and credit. Under priority sector, credit to service are counted commercial bank loan to the co-operatives licensed by the NRB is also be computed as the priority sector credit from the fiscal year 1995/96 onwards.

Cash Reserve Requirement (CRR):

Commercial banks shall maintain liquid assets (also called cash reserve) in such proportion of the domestic deposits liabilities as the NRB may prescribe. The cash reserve Ratio requirement, after the amendment of NRB policy is fixed at 4.5% of their fixed deposits and 7% of other deposits, which should be balanced with NRB, along 2% of local currency deposits as the vault cash requirement. (Monetary Policy for FY 2004/05; clause: 39).

Loan classification and loss provisions:

Any loan and advance classified as sub- standard, doubtful, and loss assets considered as non-performing assets in Nepal. As per the directives of Nepal Rastra Bank, banks and other financial institutions classify their loans and advance into these classifications.

Furthermore, NRB has directed commercial banks to maintain certain reserves as loan loss provision. The existing loan loss provisioning is as follows.

Loan Loss Provision (LLP)

Loan Classification	**Duration**	**Loan Loss Provisioning**
Pass	Up to 3 months from maturity	1%
Sub Standard	3-6 months from maturity	25%
Doubtful	6months – 1 year from the maturity	50 %
Loss	Above 1 year of maturity	100%

(Source: NRB Directive No.2/064/65; clause 1 and 8.1)

Directives to raise capital funds (CAR)

The commercial banks under operation and having low capital base have been directed to raise their capital funds at a minimum level of Rs. 50000 million with 5 year of period i.e. by the end of FY 2000/ 01. Moreover, the commercial banks are allowed to include paid up capital and reserves for meeting the minimum capital requirement but they have to deduct the net loss from such funds if they are in loss.

The review of above relevant literature has contributed to enhance the fundamental understanding and knowledge, which is required to make this study meaningful and purposive

2.2.3 Review of Articles and Research Papers

This part of the study deals with the examination and reviewing of some related research papers, articles and journals published in different magazines, newspapers, World Bank discussion papers and economic journals and other related books and publications. However, there is not much articles published related to investment management in Nepal. As the country is poor and there is not much avenues for investment in different sectors due to the current scenario of the country, the study and application of investment management is still in infant stage except for some joint venture commercial banks.

Dr.Sunity Shrestha (1993) in her research, "Investment planning of commercial banks in Nepal", has made remarkable efforts to examine the investment planning of commercial banks in Nepal. From the study, what she concluded is that bank portfolio (loans and investment) of commercial banks had been influenced by the variable securities rates. Investment planning of commercial banks in Nepal is directly traced to fiscal policy of government and heavy regulatory procedure of the central bank. As a result, investments are not made in a professional manner. Similarly, investment planning and operation of commercial banks in Nepal have been found unsatisfactory in terms of safety, profitability, liquidity, productivity and social responsibility. To overcome this problem, she has suggested, "commercial banks should take their investment function with proper business attitude and should perform lending and investment operation effectively and efficiently with proper analysis of the projects."

Dr.Govind Bahadur Thapa(1994: 29-37) is of the opinion that commercial banks including foreign joint venture banks seems to be doing pretty well in mobilizing deposits. Similarly, loans and advances of these banks are also in an increasing trend. Nevertheless, compared to the high credit needs, particularly by the newly emerging industries, the bank still seems to lack adequate funds for investments. The banks are increasing their lending to non-traditional sectors along with the traditional sectors.

Among several commercial banks, Nepal Bank Ltd. and Rastriya Banijya Bank are the only two that are operating with a nominal profit and sometimes incurring losses. Due to non-recovery of accrued interest, the margin between interest income and interest expenses is declining. These banks have not been able to increase their income from commission and discount through traditional off-balance sheet operations. On the other hand, they have heavy burden of personnel and administrative overheads. Similarly, profit position of these banks has been seriously affected due to excessive accumulation of overdue and defaulting loans. Contrary to this, the foreign joint venture banks have been operating efficiently. They are making tremendous amount of profits and are distributing a large portion of it to its shareholders and employees as dividends and bonus. Because of their effective persuasion for loan recovery and management, overdue and defaulting loans have been limited resulting in high margins between interest income and interest expenses. Similarly, concentration of these banks in modern off-balance sheet activities and efficient personnel management has added to the maximization of their profits.

Mr.Shiba Raj Shrestha, Deputy Chief Officer of Nepal Rastra Bank, banking operation department (1998) has given an insight on the, "Portfolio management in commercial banks; theory and practice." He has highlighted following issues in the article. The portfolio management is essential both for individuals and for institutional investors. Investors would like to select a best mix of investment assets subject to following aspects:

Good liquidity with adequate safety of investment

Flexible investment

Maximum tax concession

Certain capital gains

Economic, efficient and effective investment mix

Higher return compared with alternative opportunities available according to the risk class of investors

In view of above aspects, following strategies can be adopted:

Do not hold any single security i.e. try to have a portfolio of different securities.

Do not put all the eggs in one basket i.e. try to have a diversified investment.

Choose such a portfolio of securities, which ensures maximum return with minimum risk or lower return but with added objective of wealth maximization.

However, Mr. Shrestha has also presented following approach to be adopted for designing a good portfolio and its management:

- To find out the risk of the securities depending upon the attitude of investor towards risk.
- To identify securities for investment to refuse volatility of return and risk.
- To find out the invest able assets (generally securities) having scope for better returns depending upon individual characteristics like age, health, need, liquidity, tax liability, disposition.
- To develop an alternative investment strategy for selecting a better portfolio that will ensure a trade-off between risk and return with a view to attach the primary objective of wealth maximization at lower risk.

Mr. Shrestha has presented two types of investment analysis techniques i.e.: fundamental analysis and technical analysis to consider any securities such as equity, debentures or bonds and other money and capital market instruments. He has suggested that the banks having international network can also offer access to global financial markets. He has pointed out the requirements of skilled work force, research and analysis team and proper management information system (MIS) in any commercial bank to get success in portfolio management and customer's confidence.

According to him, the portfolio management activities of Nepalese commercial banks at present are in promising stage. However, on the other hand, most of the banks are not doing such activities so far because of the following reasons:

Unawareness of the clients about the service available

Hesitation of taking risk by the clients to use such facilities

Lack of proper techniques to run such activities in the best and successful manner

Less developed capital market and availability of fewer financial instruments in the financial markets.

Dr. Radhe S. Pradhan (1994), “Financial Management and Practices in Nepal” in 1992, dealt mainly with financial function, sources and types of financing, financing decision involving debt effect of change in taxes on capital structure, financial distress, dealing with banks and dividend policy. The main findings of the study connected with financial management are as follows:

- Banks and retained earnings are the two most widely used financing sources.
- The enterprises have a definite performance for bank loans at a lower level of debts.
- Generally, there is no definite time to borrow the issue stocks. That is majorities of respondents are unable to predict when interest rate will lower or go up or are unable to predict when the stock will increase or decrease.
- Most enterprise does not borrow from one bank only and they do switch between banks whichever offer best interest rates.
- Most enterprises find that banks are flexible in interest rates and convenient.

Thus, to sum up it can be said that out of numerous studies in the capital market of Nepal, this study has established itself as a milestone.

F. Morris (1990) in his discussion paper’ “Latin America’s Banking System in the 1980s” has concluded that most of the banks concentrated on compliance with central bank’s rules on reserve requirements, credit allocation and interest rates. While analyzing loan portfolio, operating efficiency and soundness of bank investment management has largely been overlooked. The huge losses now found in the bank’s portfolio in many developing countries are testimony to the poor quality of this oversight investment function.

He further adds that mismanagement in financial institutions has involved inadequate and overoptimistic loan appraisal, lower loan recovery, high-risk diversification of lending and investments, high-risk concentration, connected and insider lending, loan mismatching etc. This has led many banks of developing countries to the failure in 1980s.

Sekhar Bahadur Pradhan (1996:9) has presented a glimpse on investment in different sectors, its problems and prospects through his article, “Deposit mobilization, its problem and prospects.” On his article, he has expressed that, “Deposit is the lifeblood of any financial institution, and be it commercial bank, finance company, co-operative or non-government organization.” He also added, in consideration of 10 commercial banks and nearly three dozens of finance companies, the latest figure does produce a strong feeling that a serious review must be made of problems and prospects of deposit sector. Except few joint venture banks, other organization rely heavily on the business deposit receiving and credit disbursement.

In the light of this, Mr. Pradhan has pointed out following problems of deposit mobilization in Nepalese perspective:

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

Mr. Pradhan mentioned that deposit mobilization carried out effectively is in the interest of the depositors, society, financial sector and the nation. Lower level of deposit rising allows squeezed level of loan delivery leaving more room to informal sector. That is why higher priority to deposit mobilization has all the relevance.

Dr.Sunity Shrestha (1998: 23-27) in her article, “Lending operation of commercial banks of Nepal and its impact on GDP”, has presented with the objectives to make an analysis of contribution of commercial bank’s lending to the gross domestic product (GDP) of Nepal. She has set hypothesis that there has been positive impact of lending of commercial banks to the GDP. In research methodology, she has considered GDP as the dependent variable and various sectors of lending viz: agriculture, industry, commerce, service and general and social sectors as the independent variables. A multiple regression technique has been applied to analyze the contribution. The multiple regression analysis has shown that all the variables except service sector lending have a positive impact on GDP. Thus, in conclusion she has accepted that there has been positive impact by lending of commercial banks in various sectors of economy, except service sector investment.

Prabhakar Ghimire (1999) has published an article in which he has mentioned that most of the commercial banks of Nepal are ready to pay the penalty instead of investing in rural, priority sectors, poverty stricken and deprived areas. In the directives of Nepal Rastra Bank, it is clearly mentioned 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 compatriots. 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 do not have any network among these priority areas. So, if investment is made to these areas, operation cost will be high, that exceeds the penalty cost if investment is not made. That is why they are even ready to pay penalty rather than invest in priority sectors.

Dev Lal Kishi (Vol.25,1996: p. 27-32) in his article, “The changing face of the banking sector and the HMG/N recent budgetary policy”, concluded that following an introduction of the reform in the banking sectors as an integrate part of the liberal economic policy, more banks and finance companies have come up as a welcome measure of competition. Slowly and steadily, the two government controlled banks, Nepal Bank Ltd. and Rastriya Banijya Bank have also shown an improvement of non-performing loans and are taking steps to adopt improved technology. However, higher economic growth with social justice brings a significant benefit to the poor, are yet to be achieved as envisaged by the HMG/N.

Krishna D. Bhattarai (2003) has presented an article about the “Non- Performing Assets (NPA) Management”. According to him, a loan is a very easy term for a borrower when he has already taken and for a lender not availed. It is equally difficult for a borrower to avail and for lender to recover. From a banker’s view, it is just like a stone to roll down from the top of the hill while sanctioning, but too difficult to roll back the same stone to the top of the hill while recovering. A loan not recovered within the given timeframe either in the form of interest servicing or principal repayment is called non-performing loan. There are other parameters as well to quantify a NPL. Security not to the extent of loan amount with specified safety margin, value of security not realizable, possession not as per the requirement of bank, conflict of charges are some of the reasons which causes difficulties while recovering the loan.

According to him, NPL of a bank is like a cancer in a human body, which will collapse the entire bank if not taken care in time. This is an important discipline in banking to prevent the entire NPL or avoid situation for a loan to turn into NPL. Loan for banks is very essential to generate revenue for operational expenses as well as to provide return to the shareholders.

When a loan advanced from good money turns into a bad loan, the chances of shareholders return as well as the survival of the bank is at stake. Ailing banks cannot portray a better image in public. When a public looses the confidence on a bank and does not deposit, the bank will be in the verge of extinction. Therefore, deposits are the essence for a bank. A loan disbursed as good loan does not turn into bad overnight. It has certain course to turn into bad. An efficient bank management can recover the loan before turning it into bad and can save itself from the unwanted catastrophe. A general survey reveals following reasons why a good loan turns into a bad one:

Situational Problems

Poor analysis of project and its capital requirement leading to a situation of over/under capitalized.

- Problem in managing the unit.
- Faulty evaluation of loan and security.
- Mismatch in demand and supply leading over inventory or under inventory.
- Actual modus operandi is very different from the projection and unit unable to cope with the situation.
- Sudden change in internal and external environment and project not being able to run according to its plan.
- Collection of receivables unnecessarily delayed resulting delay in re-order and chances of business penetration by other competitors.

Intentional Problems

- Intention to flee without settling the loan.
- Intention to cheat the bank.
- Intention to auction the property.
- To relieve from other debts.
- Malicious acts of both the bank staffs and the borrower.
- To show other creditors of his bankruptcy which is unmanageable?
- To waive interest/ penal interest or avail discount on loan if paid in later stage when bank offers such facilities.

In conclusion, a borrowing may reflect one or all the above signals that may cause harm to the bank. There are few ways to protect bank from intentional defaulter but for those default caused by situations we can reschedule or restructure their facilities and help them to meet their debt obligation as per the cash flow they are having. Even an authentic loan that has been sanctioned with a good intention may turn into bad due to lack of proper management and carelessness. The bank will have to face heavy consequences in such a case. When a good loan, with all effort to protect it, turns into bad and the borrower's ability is not sufficient to repay it, he then tries to hide it from the bank and wants to be relieved temporarily. Such situations give some signals to the bank and these signals are called danger signals.

A bank must be one-step further than its customers must. It must collect all the relevant information that are required by the borrower for the establishment of a business and be rigid to give loan than to give his own money without any security. When a borrowing unit is not able to serve the debt from the source explored, the documentations are merely a decree to enforce legal action against him. Nevertheless, what gets realized when everything is lost. A jail and punishment does not satisfy the interest of bank. Therefore, he is of the view that the bank should always keep in mind the formula Know Your Customers (KYC) before giving loans.

The security given by a borrower may be ample for the exposure. However, the borrower from other source of business may not be able to generate substantial earning to service the debt. Bank has the right to auction the property and liquidate the loan but in doing so realization from the auction of the property is always less than the value of the assets. This will serve neither the purpose of bank nor the borrower instead cause loss to both.

Mr. Ramesh Lal Shrestha (2047: p.93-97), in his article, " A study on deposits and credit of commercial banks in Nepal," concluded that the credit deposit ratio would be 51.30%, other things remaining the same, in 2004 A.D., which was the lowest under the period of review. Therefore, he had strongly recommended that the commercial banks should try to give more credit earning new field as far as possible. Otherwise, they might not be able to absorb even its total expenses.

Mr. Bhagat Bista (2048) in his research paper, "Nepalma Adhunik Banking Byabastha" has attempted to highlight some of the important indicators, which have contributed to the efficiency and performance of joint venture banks in the field of commercial banks. He has concluded that the establishment of joint venture bank a decade ago marked the beginning of modern banking era in Nepal. The joint venture banks have bought in many new banking techniques such as computerization hypothecation, consortium finance and modern fee based activities into economy. These are indeed milestone in the financial significant development process of the economy.

2.2.4 Review of Master's Degree Thesis

Various students have conducted studies regarding the various aspects of commercial banks such as financial performance, lending policy, investment policy, interest rate structure, resources mobilization etc. Some of them which seem relevant to the present study are briefly described below.

Samiksha Thapa; (2005) conducted a study on "A comparative study on investment policy of Nepal Bangladesh Bank Limited and other Joint Venture bank." On her study the major objectives were:

- To evaluate the liquidity, assets management, efficiency profitability and risk position of NB banks in comparison to NABIL and NGBL.
- To analyze the ratio relationship between loan and advances and total investment with other financial variables of Sample Banks.
- To examine the fund mobilization and investment policy of NB bank through off balance sheet and on- balance sheet activities in comparison to the other two banks.
- To study the various risk in investment
- To analyze the deposit utilization trend and its projection for next five years of sample banks.
- To provide the suggestion for improving the investment policy of NB bank on the basis of findings of analyses.

The major findings of her study on the basis of primary and secondary data are as follows.

- The liquidity position of NB bank is comparatively better that that of NABIL and NGBL It has the highest cash and bank balance to total deposits, cash and bank balance to current assets ratio. It has good deposits collection and has made enough loan and advances, however made the negligible amount of investment in government securities.
- The NB bank is not in better position regarding its on balance as well-as off balance activities in comparing to NABIL and NGBL. It does no follow any definite policy regarding the management of asset.
- The profitability position of NB bank is comparatively worse than that of NABIL and NGBL. Must maintain the high profit margin for the well being in future.

- NB bank has maintained high growth rate in comparison to other banks though it is not successful to make enough investment.

At last she concludes that there is significant relationship between deposit and loan an advances and outside assets and net profit of NB bank, NABIL bank and NGBL but no significant relationship between the deposits and investment.

The position of NB bank in regard to utilization of the fund to earn profit is not better in compare to NABIL and NGBL.

NB bank has not provided ATM facility, credit facility, any branch bank facilities and web site etc. Though these facilities are being offered by NABIL and NGBL

Lila Prasad Ojha (2006) conducted a study on "Lending practices: A study on NABIL, SCB Nepal Ltd and Himalayan bank Ltd" with the following objectives.

Determine the liquidity position, the impact of deposits in liquidity and its effect in lending practices.

- To measure the banks lending strength.
- To analyze the portfolio behavior of lending and measuring the ratio and volume of loans and advances made in agriculture, priority and productive sectors.
- To measure the lending performances in quality, efficiency its contribution in total income.

The research findings of the study conducted with the secondary data are as follows.

The liquidity position has revealed the mean current ratio of all the three banks is not widely varied.

The measurement of liquidity strength has revealed that the total liability to total assets of SCBNL has the highest ratio. The high ratio is the result of high volume of shareholder equity in the liability mix. Himalayan bank ltd has high volume of saving and fixed deposits in comparing to current deposits resulting to low ratio of non- interest bearing deposits to total deposits ratio as compared to the mean ratio.

The loans and advances and investment to deposits ratio has shown that NABIL Bank ltd has deployed the highest proportion of its total deposits in earning activities, which indicate that in fund mobilizing activities NABIL bank is significantly better.

The mean volume of net assets and deposits is highest in SCBNL with moderate variation. The volume of net assets of Himalayan bank is the least due to the low share capital, reserve and surplus in its capital mix. Whereas volume contributed by Himalayan Bank is highly appreciable as compared to its net assets.

The portfolio analysis has revealed that the flow of loans and advances in agriculture sector is the lowest priority sectors among these commercial banks. The contribution of all the banks in industrial sector is appreciable. The contribution by Himalayan Bank in industrial sector is the greatest than that of SCBNL

The lending in commercial purpose is highest in case of NABIL Bank Ltd. and least in case of SCBNL. SCBNL has the highest contribution in service sector.

The performance of SCBNL is significantly better than other two banks in case of Profitability. EPS is highest in case of SCBNL.

Tanka Kumar Raya (2007) conducted the study on "Investment policy and analysis of commercial banks in Nepal:A comparative study of Standard Chartered Bank ltd with Nepal Investment Bank and Nepal Bangladesh Bank ltd. " The main objectives of his thesis are as follows.

- To discuss fund mobilization and investment policy in respect to its fee based off balance sheet transaction and fund based on balance sheet transaction.
- Evaluation of the liquidity, efficiency, profitability and risk position.
- To evaluate the growth ratios of loans and advances, total investment with financial variables
- To analyze the trends of deposits utilization towards total investment.

For this study the financial, accounting and statistical tools have been used. Here, simple analytical tools such as percentage graph, Karl Pearson's coefficient of correlation, regression, and the method of least square and test of hypothesis are used.

The above analysis has the following findings in his research.

- SCBL is comparatively better than NIBL and NIBL has the lowest cash and bank balance deposits.
- SCBL has good deposits collection. Has made enough investment on government securities but maintained low investment policy.
- The on balance sheet operation is average successful but the off balance sheet transaction has been strongly maintained by the SCBL
- SCBL has successfully maintained and managed its assets towards income generating activities.
- The profitability ratio of SCBNL is comparatively higher position than the other banks.

- Thus in conclusion, SCBNL are recommended not to give much importance to the government securities and diversify the investment policy on more yield-based funds.
- SCBL is recommended to collect a large variety of deposits through schemes
- It is strongly recommended to follow liberal lending policy and maintain more stability on the investment policy.
- At times the banks focuses much of its attention to one sector leaving the other sectors untouched so recommended to touch all the sectors and balance it effectively so as to have the optimal performance of the bank.

Dina Shrestha (2008) conducted the study on "Investment Analysis of Commercial Banks, A comparative study on HBL and Nepal SBI" The main objectives of the thesis are as follows.

- To evaluate the liquidity, assets management, efficiency, profitability and risk position of Himalayan Bank in comparison to that of Nepal SBI.
- To study the relationship between investment and deposits of the banks.
- To analyze investment trend, deposits trend and total income and their projection for next five years.

Analysis of the study is as follows.

- Various financial, accounting and statistical tools have been used to achieve the objective of the study. Simple analytical statistical tools are also used. Similarly some financial tools are also used.
- Major findings of the study and recommendation are as follows.
- Both the banks should maintain required current ratio, as the current ratio of both banks is not sufficient.
- They have to consider more on the liquidity of the deposits as they are for the sake of the bank's reputation.
- Recommended to increase SBI investment and to increase their profitability in future to compete with other banks.
- As banks have invested less on shares of other companies so recommended to mobilize its fund for business and industries for industrial support.
- As ratio of interest income to total income is too high in both banks thus its income should not be limited to interest earned from loan.
- Also recommended to diversify business to more income generating areas like foreign exchange business, remittance and other commission based business.

2.3 Justification of the Study/Research Gap

Investment in different sectors is made on the basis of the directives and circulars of Nepal Rastra Bank as well as the investment guidelines and policy of the concerned commercial bank. The directives of NRB change over time. NRB makes necessary amendments in prevailing directives and circulars and communicates to commercial banks. Commercial banks should follow these directives and circulars. Furthermore their own investment guidelines and policies should be in live with NRB directives and circulars. So, the up to dated study over the change of time frame is major concern for the researcher and concerned organization as well as industry as a whole. This study covers the most recent financial data. NRB circulars and guidelines than that of studies previously conducted.

Portfolio management is the major part of the bank's investment policy. The optimum diversification of loan and advances reduced the default risk of credit. It is the major concern of stakeholders to know the portfolio behavior of the bank. 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. No case study has yet been conducted about the investment policy of NCC BANK LTD. Some comparative studies are previously done but in-depth study about the bank is not found. Investment function is the major function the commercial bank. NCC BANK LTD is one of a leading joint venture bank and its investment activity has significant impact on the national economy. Hence, this study fulfills the prevailing research gap about the in depth analysis of the investment policy pursued by the organization, which is the major concern of public shareholders and other stakeholders.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

"Research Methodology is a way to systematically solve the research problem."(Kothari; 1990:.10) Research methodology describes the method and process applied in the entire subject of the study. It may be understood as a science of studying how research is done significantly. It is very necessary for the researcher to know not only the research method or technique but also the methodology. Research method refers to the methods/ways that are used in conducting research or performing research operations. In other words, research methods are those methods, which are used by the researcher during the course of studying his/her problems. Research methodology is a way to solve the research problem systematically. The research methodology is wider than that of research methods i.e. research method is a part of research methodology. The research methodology considers the logic behind the methods used in the context of research study and explains why particular technique or method is used. It also highlights about how the research problem has been defined, what data have been collected, what particular method has been adopted, why the hypothesis has been formulated etc.

3.2 Research Design

A research design is purely and simply the framework or plan for a study that guides the collection and analysis of data.

A research design is the arrangement of conditions for collection and analysis of data that aims to combine relevance to the research purpose. Research design is the plan, structure and strategy of investigation conceived so as to obtain answers to the research questions and to control variance. (Kerlinger; 1986:275)

A true research design is basically concerned with various steps to collect the data for analysis and draw a relevant conclusion. Descriptive and analytical research design has been used in this study. Descriptive research is essentially a fact finding approach relative largely to the present, and abstracting generalizations by the cross-sectional study of the current situations. In other words, a descriptive research identifies problems or justifies current conditions and practices to make comparisons and evaluations in making future plans and decisions. In the present study, few topics related questions are also presented to the banks for the primary data collection. Some financial and statistical tools have been applied to examine facts and descriptive techniques have been adopted to evaluate the investment policy of the concerned bank.

3.3 Population and Sample

The population refers to the industries of the same nature and its services and product in general. Thus, the total commercial banks constitute the population of the data and the bank that is selected under study constitutes the sample for the study. So from the population of various commercial banks operating in Nepal the bank taken as sample is,

NEPAL CREDIT AND COMMERCE BANK LTD. (NCC BANK LTD.)

The study covers the data of 7 years only beginning from fiscal year 2059/2060 to 2064/2065.

3.4 Sources of Data

As we all know, data are collected from the two sources, which are, primary and secondary. The study is also based on both the primary and the secondary data. The primary data have been collected through Questionnaires, which is the main source of primary data. While conducting the primary sources different questions with four options or more than four options are presented to the sample bank. Then the employees of the related department fill the questionnaire. After going through the primary data process the secondary data are used to analyze the facts and figures. The secondary sources of data are those that have been used from published sources or used by someone previously. The annual reports of the concerned bank are the major secondary sources of data.

3.5 Data Analysis Tools

Presentation and Analysis of the collected data is the core of the research work. The collected raw data are first presented in systematic manner in tabular forms and are then analyzed by applying different financial and statistical tools to achieve the research objective. Besides theses some graph charts and tables have been presented to analyze and interpret the findings of the study. Likewise some of the tools applied are as follows.

3.5.1 Financial Tools

It helps to analyze the financial strength and weakness of a firm. Tools like ratio analysis are used for financial analysis. Even though there are many ratios to analyze and interpret the financial statement. Only those ratios that are related to the investment operation of the banks have been covered in this study. Financial ratios are the mathematical relationship between two accounting figures. Ratio analysis is a part of the whole process of analysis of financial statement of any business or industrial concern especially to take output and credit decision.

Thus ratio analysis is used to compare a firm’s financial performance and status to that of other firms or to it overtime. The qualitative judgment regarding financial performance of a firm can be done with the help of ratio analysis. Before we examine the main liquidity ratios in detail, we should be clear what a ratio is, and what it is designed to tell us. Ratios express one thing in terms of another or, most often, as a percentage of another; they are a numerical expression of the relationship between two values. Their usefulness in analysis is as a tool that allows us to compare aspects of a bank’s performance, either internally, over time or with those of other banks, or with industry benchmarks. In the present study, the researcher has attempted to compare the aspects of NCC BANK’S performance regarding investment policy over time by analyzing various ratios.

3.5.1.1 Liquidity Ratios

These ratios are used to judge the ability of banks to meet its short-term liabilities that are likely to mature in the short period. It measures the speed with which bank assets can be converted into cash to meet deposit withdrawal and other current obligations. The following ratios are evaluated under liquidity ratios.

1. Liquid assets ratio

The liquid asset ratio is the basic measure of asset liquidity. The ratio indicates what percentage of total assets consists of instruments that can easily be sold in times of crisis. The criterion is liquidity, therefore high quality items having short maturities that can easily be converted into cash are included here (i.e. Cash, deposits with the central bank, treasury bills, and government securities).This ratio is computed by dividing total liquid assets and deposits with banks by total assets. It is presented as,

$$\text{Liquid asset ratio} = \frac{\mathit{Total}\ \text{liquid assets}\ \Gamma\ \text{deposits with banks}}{\text{Total assets}}$$

2. Cash and bank balance to current asset ratio

This ratio examines the bank's liquidity capacity on the basis of its most liquid assets i.e. cash and balance. This ratio reveals the ability of the bank to make the quick payment of its customer deposits. A high ratio indicates the sound ability to meet their daily cash requirements of their customer deposits and vice versa. This ratio can be calculated by using the following formula:

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

In the present study cash and bank balance represent total of local currency, foreign currencies, cheques in hand and various bank balance in local as well as foreign banks.

Both higher and lower ratio is not desirable. The reason is that is a bank maintains higher ratio of cash, it has to pay interest on deposits and some earnings may be lost. In contrast, if a bank maintain low ratio of cash, it may fail to make the payment for presented cheques by its customer. So, sufficient and appropriate cash reserve should be maintained properly.

3. Cash and bank balance to total deposit ratio

Cash and bank balance are the most current liquid assets. This ratio measures the percentage of most liquid fund with the bank to make immediate payment to the depositor. This ratio is computed by dividing cash and bank balance by the total deposit. It is presented as,

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

Cash and bank balance includes cash on hand, foreign cash on hand, cheques and other cash items, balance with domestic and foreign banks. The total deposits consist of current deposit, saving deposit, fixed deposit, money at call or short notice and other deposit.

4. **Investment on government securities to current assets**

Investment on government securities on current assets ratio reflects the current assets invested on government securities, treasury bills and development bonds. This ratio can be computed by dividing investment on government securities by current assets. This ratio can be calculated by applying the following formula.

$$\text{Invest.on Govt. Sec.to Current Assets} = \frac{\text{Invest. On Govt. Securities}}{\text{Total Assets}}$$

Where, Investment on government securities includes treasury bills, development bonds, saving bonds, government securities.

This ratio examines that portion of a commercial bank's current assets, which is invested on different Govt. securities. More or less commercial bank is interested to invest their collected fund on different securities issued by government in different times to utilize their excess funds and or for other purpose. Though government securities are not so liquid as cash and bank balance of commercial bank, they can easily be sold in the market or they can be converted into cash in other ways.

5. **Loans and advances to current assets ratio**

Loan and advances are also included in the current assets of commercial bank because generally they provide short-term loan, advance, overdraft, and cash credit. The ratio can be computed in following way:

$$\text{Loan and advance to current asset ratio} = \frac{\text{Loan and Advances}}{\text{Current Assets}}$$

In the present study loan and advance represent to local and foreign bills discounted purchased and loan, cash credit and overdraft in local currency as well as inconvertible foreign currency.

To make high profit by 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 to the customers. If sufficient loan and advances cannot be granted, it should pay interest on those unutilized deposit funds and may lose some earning. But high loan and advances may also be harmful to keep the bank in most liquid position because they can only be collected at the time of maturity only.

3.5.1.2 Assets Management Ratio / Activity Ratio

It measures the proportion of various assets and liabilities in balance sheet. The proper management of assets and liabilities ensures its effective utilization. The banking business converts the liability into assets by way of its lending and investing function. Assets management ratio measures how efficiently the bank manages the resources at its command. The following are the various ratios relating to assets and liability management, which are used to determine the efficiency of the subjected bank in managing its assets. The ratios related to assets management are presented as:

1. Loan and advances to total deposit

This helps to find out, how successfully the banks are utilizing their total deposit on loans and advances for profit generating purpose. Greater ratio implies the better utilization of total deposits; this can be obtained by dividing loans and advances to total deposits, which can be stated as

$$\text{Loans and advances to total deposit} = \frac{\text{Loan and advances}}{\text{Total Deposit}}$$

2. Total investment to total deposit ratio

Investment is one of the major credits created to earn income. This implies the utilization of firm's deposits on investment in government securities and shares and debentures of other companies and banks.

The total investment consists of investment on government securities, investment on debentures and bonds, shares in other companies and other investment. It can be computed as follows.

$$\text{Total investment to total deposit ratio} = \frac{\text{Total Investment}}{\text{Total Deposit}}$$

3. Loans and advances (to working fund) ratio

Loan and advances is the major component in the total working fund (total assets), which indicates the ability of bank to channels its deposits in the form of loans and advances to earn high return.

Here total-working funds includes, all assets as of on balance sheet items. Includes current assets and other fixes assets, loans for development of banks and other miscellaneous assets but excludes off balance sheet items. The ratio is calculated as,

Loan & advances to total working fund ratio = $\dfrac{\text{Loans \& advances}}{\text{Total Working Fund}}$

4. Investment on government securities to total working fund ratio

This ratio shows that banks investment on government securities i.e comparison to the total working fund. A high ratio indicates better mobilization of fund as investments on government securities and vice versa. This ratio calculated by dividing investment on government securities by total working fund. This is presented as:

$$\text{Invest. on govt. sec. to total working fund ratio } X \frac{\text{Invest. on govt. securities}}{\text{Total working funds}}$$

Here, investment on government securities includes treasury bills and development bond etc. Total working fund includes all asset of on balance sheet items i. e. (Total asset – Bill for collection). Current assets, net fixed assets, loans for development banks and other miscellaneous assets but excludes off-balance sheet items such as letter of credit (L.C) letter of Guarantee etc.

5. Investment on shares and debentures to total working fund ratio

This ratio shows the banks investment in shares and debenture of the subsidiary and other companies in terms of total working fund. This ratio is computed by dividing shares and debentures by total working fund. This can be shown as,

Invest. on share & deb. to total working fund ratio

$$X \frac{\text{Investment on share \& debenture}}{\text{Total working fund}}$$

Where,

Numerator includes investment on debentures, bonds and shares of the other companies.

3.5.1.3 Profitability Ratio

Profits are the lifeblood of any commercial firm. By making adequate earnings, a bank, like any other firm, will be able-barring exceptional circumstances- to maintain solvency, survive, and, in a suitable environment, grow and prosper. Robust profits enable a bank to build up its capital internally through retained income and thereby absorb economic shocks, attract outside capital and to earn its way out of problems. Ample earning provides the bank with the wherewithal (resources) to make investments that may be necessary for it to flourish within a competitive environment. A commercial bank's ability to generate profit and thereby become self-sustaining is critical to its longer term credit worthiness.

When considering earnings and profitability, it must be remembered that an increase in profits does not necessarily mean an increase in profitability. Output must always be related to inputs, whether those inputs are measures in terms of shareholder's fund or the assets the bank holds. Though external support, by the government for example, may underpin a bank's creditworthiness, a reasonable level of profitability is always a positive factor in assessing its credit standing.

Profitability ratios are very helpful to measure the overall efficiency of operations of a firm. It is a true indicator of the financial performance of any institution. It is notable that higher the profitability ratios better the financial performance and vice versa. The various profitability ratios can be obtained through the following ways.

1. Return on Total Assets Ratio:

Return on total assets measures net profit against total assets, which for a Bank consists largely of financial assets such as loans. Return on assets indicates how effectively the bank's assets are being managed to generate revenues. In other words, return on assets measures the efficiency with which an enterprise is employing its assets.

Return on total assets ratio measure the profitability with respect to the total assets. In the present study, this ratio is calculated and analyzed to measure the profitability of all financial resources invested in the banks assets, A higher ratio usually indicates efficiently in utilizing its overall resources and vice versa. The ratio can be computed by following process:

$$\text{Return to total assets ratio} = \frac{\text{Net Profit}}{\text{Total assets}}$$

2. Return on Loan & Advances Ratio:

Return on loan and advances ratio shows how efficiently the banks and the other financial institutions have utilized their resources to earn good return from providing loan and advances. This ratio is computed by dividing net profit/loss by the total amount of loan and advances. This can be shown as,

$$\text{Return to loan and advances ratio} = \frac{\text{Net profit}}{\text{Loan \& Advances}}$$

3. Total Interest Earned on Total assets Ratio

Total interest earned on total assets ratio shows how much interest the bank has generated by mobilizing its assets. Interest occupies significant place in income for the banks. Generally, banks earn interest through the provision of loans and advances, overdrafts and investments in securities. The ratio can be calculated in the following way,

$$\text{Total interest earned on total assets ratio} = \frac{\text{Total Interest Earned}}{\text{Total Assets}}$$

3.5.1.4 Risk Ratios

Risk taking is the prime business of bank's investment management. It increases effectiveness and profitability of the bank. These ratios indicate the amount of risk associated with the various banking operation which ultimately influences the investment policy of the bank.

- **Credit risk ratio**

It measures the possibility that the loan will not be repaid or that investment will deteriorate in quality or go into default with consequent loss to the bank. By definition it is expressed as the percentage of non – performing loan to total loans and advances. This is stated as,

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

- **Liquidity risk ratio**

Poor liquidity is the proximate cause of bank failure, and the analysis of a bank's liquidity position is a crucial part of the bank credit analyst's role in determining overall creditworthiness. Adequate liquidity can allow an otherwise weak bank to continue operating. However ,even a good bank with, say, a clean balance sheet, sound management and making solid returns, can quickly face severe problems and ultimately collapse if liquidity weakens or dries up.

A bank's liquidity management policy will aim to ensure that the bank has sufficient funds available to meet its operational needs, as well as to ensure compliance with regulatory guidelines. Liquidity risk includes the risk associated with an increase in funding costs and the risk of being unable to honor deposit withdrawals, make repayments at maturity of other liabilities and being unable to liquidate apposition in a timely manner and at a reasonable cost.

It measures the liquidity for the deposits. The bank must invest its deposits in loans and advances to earn profit because loans and advances cover very high risk. If the bank keeps more idle cash accepting more deposits then bank will not be in any liquidity risk position but might not earn sufficient return too. Thus the liquidity risk is calculated by the following formula

$$\text{Liquidity Risk Ratio} = \frac{\text{Cash and Bank Balance}}{\text{Total Deposits}}$$

3.5.1.5 Growth Ratio

Growth ratios are directly related to the fund mobilization and investment of a commercial bank. It represents how well the commercial banks are maintaining the economic position.

To examine and analyze following growth ratios are calculated in this study.

- Growth ratios of loan and advances
- Growth ratio of total investment
- Growth ratio of deposits
- Growth ratio of net profit

3.5.2 Statistical Tools / Statistical Analysis

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 Pearson's coefficient of correlation, trend analysis adopted which are as follows:

A) Arithmetic Mean (Average):

It represents 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 dispersion. 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.

$$\exists X \sqrt{\frac{X^2}{N} Z \frac{X}{N}^{2}}$$

Where,

± = Standard Deviation

$\frac{\phi\varepsilon^{2}}{N}$ X Sum of Squares of Observation

$\frac{\phi\varepsilon^{2}}{N}$ X Sum of Squares of Mean

3.5.2.1 Coefficient of Correlation Analysis

This analyzes, identifies and interprets the relationship between two or more variables. In the case of highly correlated variables, the effect of one variable may have effect on other variable. The study is to find out the relationship between the following variables.

- Coefficient of correlation between deposit and loans and advances
- Coefficient of correlation between deposit and total investment
- Coefficient of correlation between total outside assets and net profit

The coefficient of correlation can be calculated by the following formula.

$$r = \frac{NEXY - \phi X \phi Y}{\sqrt{N\phi X^2 - (\phi X)^2} \quad \sqrt{N\phi Y^2 - (\phi Y)^2}}$$

The result of coefficient is always between –1 to +1, when r=+1, it means there is significant relationship between two variables and when r=-1, It means there is no significant relationship between two variables

3.5.2.2 Trend Analysis

Under this topic we analyze and interpret the trend of deposits, loan and advances, investment and net profit of HBL that helps to make forecasting for next five years. The following trend value analyses have been used in this study.

i. Trend analysis of total deposit

ii. Trend analysis of loan and advances

iii. Trend analysis of total investment

iv. Trend analysis of loan loss provision

The trends of related variables can be calculated as, $Y= a + bx$

3.6 Primary data analysis

We have discussed above in the financial tools that have been used in this study and all the related ratios that have been calculated. But the tool used in this study is the questionnaire. The questionnaire has questions related to how the sample bank has adopted the Current Directives provided by the NRB related to the investment policy. There are various directives provided by the bank on the investment policy analysis but here in this study only few have been concentrated. Questions have been prepared and asked concentrating only few directives. Thus the provision that are taken into consideration while preparing questions are as follows

- Directives of loans and advances and loan loss provision
- Directive regarding investment in shares and securities and

The questions have mainly concentrated these provisions only. More than that other questions are also asked like do they feel current provision relating to the investment policy should be changes or revised, if yes then which area need the changes, are the banks facing difficulties because of the current provision etc.

CHAPTER - FOUR

PRESENTATION AND ANALYSIS OF DATA

This is an analytical chapter, which primarily deals with the presentation and analysis of data collected from various sources with a view to measure the various dimensions of the problems of the study that particularly affects the investment management and fund mobilization of NCC BANK LTD.

4.1 Measuring the Liquidity Position of the Bank.

A commercial bank must maintain its liquidity position satisfactory to satisfy the credit needs of the community, to meet demands for deposits withdrawal, pay maturity obligation in time and convert non cash assets into cash to satisfy immediate needs without loss to the bank and without consequent impact on long run profitability of the bank. To measure the liquidity position of the bank, the following measures of liquidity ratio has been calculated and a brief analysis of the same has been done as below.

4.1.1. Liquid assets ratio

The liquid asset ratio is the basic measure of asset liquidity. The ratio indicates what percentage of total assets consists of instruments that can easily be sold in times of crisis. The criterion is liquidity, therefore high quality items having short maturities that can easily be converted into cash are included here (i.e. Cash, deposits with the central bank, treasury bills, and government securities).This ratio is computed by dividing total liquid assets and deposits with banks by total assets. (See on Annexure-A1)

This ratio is presented as,

$$\text{Liquid asset ratio} = \frac{\mathit{Total}\ \text{liquid assets}\ \Gamma\ \text{deposits with banks}}{\text{Total assets}}$$

Table 4.1 Liquidity Assets Ratios(%)

Bank\FY	2060/61	2061/62	2062/63	2063/64	2064/65	Mean	S.D.	C.V.
NCCB	76.43	78.23	79.52	88.61	84.76	81.51	4.51	5.53

Source: Financial statement of bank 2059/60 TO 2064/65

4.1.2 Cash & Bank Balance to Current Assets Ratio:

Cash & bank balance to current assets ratio reflects the portion of cash and bank balance in total of current assets. Cash & bank balance are the most liquid current assets. This ratio measures the percentage of most liquid fund with the bank to make immediate payment. This ratio is calculated by dividing the cash & bank balance by current asset. (See on Annexure-A2)

Cash and bank balance is composed of cash at hand, deposits with the central bank, deposits with other banks and financial institutions.

Current assets is total liquid assets which consists of cash and bank balance, deposits with the central bank, deposits with other banks and financial institutions, money at call, loans and advances and bills purchased.

Table 4.2 Cash and Bank balance to current asset ratio

Bank\FY	2060/61	2061/62	2062/63	2063/64	2064/65	Mean	S.D.	C.V.
NCCB	17.45	17.73	18.32	10.81	14.39	15.74	2.82	17.92

Source: Financial statement of bank 2059/60 TO 2064/65

The above table shows that the mean, standard deviation and coefficient of variation of cash and bank balance to current assets ratio of NCCB has fluctuating trend. The highest ratio is 18.32% in 2060/61 and lowest ratio is 10.81% in 2061/62. The mean ratio of the study period is 15.74% and the C.V. between them is 17.92%.

4.1.3. Cash & Bank Balance to Total Deposits Ratio:

Cash & bank balance are the most liquid current assets, which is said to be the first defense of every bank. This ratio measures the availability of a bank's highly liquid and immediately available fund to meet its unanticipated calls on all type of deposits. This ratio is computed by dividing cash & bank balance by total deposits. Higher ratio shows higher liquidity position and ability to cover the deposits and vice versa.

Cash and bank balance is composed of cash at hand, deposits with the central bank, deposits with other banks and financial institutions

Total deposits means current deposits, saving deposits and fixed deposits as well as call money deposits and certificate of deposits.

Cash & bank balance to total deposit ratio of NCC BANK from the fiscal year 2058/59 TO 2062/63 are given below. (See on Annexure-A3)

Table 4.3 Cash & Bank Balance to Total Deposit Ratio

Bank\FY	2060/61	2061/62	2062/63	2063/64	2064/65	Mean	S.D.	C.V.
NCCB	14.72	15.61	16.21	10.00	11.84	13.68	2.37	17.32

Source: Financial statement of bank 2059/60 TO 2064/65

The ratio of cash & bank balance to total deposit ratio is in fluctuating trend. NCCB has lowest ratio at FY 2061/62 with 10% and the highest ratio of 16.21%at FY 2060/61. The mean ratio of the study period is 13.68% with standard deviation of 2037 % and coefficient of variation of 17.32%.

4.1.4. Investment on Government Securities to Current Assets Ratio:

Investment on government securities to current assets ratio reflects the current assets invested on government securities, treasury bills and development bonds. Though the government securities are not so liquid as cash & balance, they can be easily sold in the market or they can be easily converted into cash in other ways and they are risk free too.

This ratio shows that out of total current assets, how much percentage of it has been occupied by the investment on government securities. This ratio is calculated by dividing the amount invested on government securities by current assets. (See annexure-A4)

Table 4.4 Investment on Govt. securities to current Asset ratio

Bank\FY	2060/61	2061/62	2062/63	2063/64	2064/65	Mean	S.D.	C.V.
NCCB	6.38	8.34	9.67	5.30	10.12	7.96	1.86	23.37

Source: Financial statement of bank 2059/60 TO 2064/65

NCCB has lowest ratio at FY 2063/64 with 5.30% and the highest ratio of 10.12%% at FY 2064/65.The mean ratio of the study period is 7.96% with standard deviation of 1.86 % and coefficient of variation of 23.37%.

According to the NRB directives issued, there shall be no restriction as to investments by the banks in the securities of His Majesty's Government and securities issued by Nepal Rastra Bank. Bank and finance companies can purchase and get endorsed (transferred) in their name only those HMG securities which were primarily issued by NRB.

4.1.5. Loan & Advances to Current Assets Ratio:

It shows the relationship between loan & advances to current assets ratio or it shows the bank's liquidity capacity of discounting and purchasing the bills and loans, cash credit and overdraft facilities to the customers. To make high profit by mobilizing its fund in the best way, bank should invest its fund as loan and advances to the customers. If sufficient loan and advances cannot be granted, it has to pay interest on those unutilized deposit funds and may loose some earnings. But high loan and advance may also be harmful to keep the bank in most liquid position because they can only be collected at the time of maturity. Thus, a bank must maintain its loan and advance in appropriate level.

This ratio is computed by dividing loan and advance by current assets. The Table 4.5 below shows the ratio of loan & advances to current assets ratio of NCC BANK.(See Annexure- A5)

Table 4.5 Loan and advance to current asset ratio (%)

Bank\FY	2060/61	2061/62	2062/63	2063/64	2064/65	Mean	S.D.	C.V.
NCCB	91.96	89.84	89.06	98.07	108.27	95.44	7.15	7.49

Source: Financial statement of bank 2059/60 TO 2064/65

The loan & advances to current assets ratio of the NCCB is in fluctuating trend with mean ratio of 95.44 and C.V. of 7.49%, which shows that the ratio seems to be consistent and less variable.

4.2. Assets Management Ratio:

Assets management ratio or activity ratios are employed to evaluate the efficiency with which the firm manage and utilize its assets. The efficiency with which the assets are used would be reflected in the speed and rapidity with which the assets are converted into revenues. The greater the rate of turnover or conversion, the more efficient is the management or utilization of assets. Here, some of these ratios are computed to assess the bank's efficiency in utilization of available assets.

4.2.1. Loans & advances to total deposits ratio:

This ratio actually measures the extent to which the bank is successful to mobilize the total deposits on loan and advances for the purpose of profit generation. A high ratio of loan and advances indicates better mobilization of collected deposits and vice versa. But it should be noted that too high ratio may not be favorable. This ratio is calculated by dividing loan and advance by total deposits. The below Table 4.6 shows the loans & advances to total deposits ratio of NCC BANK from fiscal year 2059/60 to 2064/65 (See Annexure-B1)

Table 4.6 Loan and advance to total deposit ratio (%)

Bank\FY	2060/61	2061/62	2062/63	2063/64	2064/65	Mean	S.D.	C.V.
NCCB	77.60	79.09	78.78	90.66	89.12	83.05	5.63	6.78

Source: Financial statement of bank 2059/60 TO 2064/65

The above Table 4.6 shows that the loans & advances to total deposit ratios are in increasing trend. The deposit of NCCB has been increasing over the review period. It is not necessary that the increment in deposit increases the loan and advances. The increased deposit may be deployed in other investment areas too. But in case of NCCB, the investment in loan and advances has been increasing along with the increase in deposits. The average mean ratio is 83.05% with standard deviation of 5.63% and coefficient of 6.78. The C.V. between the ratios shows that the ratios are satisfactorily consistent over the study period. It shows that the ratios are consistent and less variable.

4.2.2. Loan & Advances to total working fund ratio:

Loans & advances is an important part of total assets (total working fund). Commercial banks must be very careful in mobilizing the total assets as loan & advances in appropriate level to generate profit. This ratio reflects the extent to which the commercial banks are successful in mobilizing their assets as loans & advances for the purpose of income generation. A higher ratio indicates better in mobilization of funds as loans & advances and vice versa.

This ratio is calculated by dividing loan and advances by total working fund.The below Table 4.7 shows the loans & advances to total working fund of NCC BANK for the fiscal year 2059/60 TO 2064/65 (See Annexure- B2)

Table 4.7 Loan and advance to working fund ratio (%)

Bank\FY	2060/61	2061/62	2062/63	2063/64	2064/65	Mean	S.D.	C.V.
NCCB	70.28	70.28	70.82	86.90	91.78	78.01	9.38	12.02

Source: Financial statement of bank 2059/60 TO 2064/65

Referring to the above Table 4.7, we can see that NCCB has fluctuating ratios of loan and advances to working fund. The standard deviation is 9.38% and coefficient of variation is 12.02%, which shows that the loan & advances to working capital fund is less variable and consistent.

4.2.3. Total investment to total deposit ratio:

Total investment to total deposit ratio indicates how properly firm's deposits have been invested on government securities and shares and debentures of the other companies. This ratio can be computed by dividing the total investment by total amount of deposit collections.

In the process of portfolio management of bank assets, various factors such as availability of fund, liquidity requirement, central bank's norm etc are to be considered in general. A high ratio is the indicator of high success to mobilize the banking fund as investment and vise versa. The below Table 4.8 shows the ratio of total investment to total deposit. (See Annexure- B3)

Table 4.8 Total investment to total deposit ratio(%)

Bank\FY	2060/61	2061/62	2062/63	2063/64	2064/65	Mean	S.D.	C.V.
NCCB	7.64	9.59	9.59	6.04	8.94	8.36	1.36	16.27

Source: Financial statement of bank 2059/60 TO 2064/65

In the Table 4.8, NCCB has fluctuating trend regarding the ratios during the study period. The mean value of NCCB is 8.36% and standard deviation of 1.36% with the coefficient of variation 16.27% which reveals that the investment policy is in average position.

4.2.4 Investment on government securities to total working fund ratio:

This ratio measures the contribution made by investment on government securities in total working fund of the bank. Besides mobilizing its major portion of funds in the form of loans and advances, banks invests their funds in purchasing different types government securities. They do so mainly to utilize the excess funds for income generation without taking more risk and to maintain the adequate level of liquidity since these securities are more liquid assets than loans and advances. A high ratio indicates better mobilization of fund as investments on government securities. Investment on government securities to total working fund ratio shows how much part of total investment is there on government securities in percentage. This ratio can be computed by dividing investment on government securities by total working fund.

The below Table 4.9 shows the ratio of investment on government securities to total working fund ratio (See Annexure- B4)

Table 4.9 Investment on government securities to total working fund ratio (%)

Bank\FY	2060/61	2061/62	2062/63	2063/64	2064/65	Mean	S.D.	C.V.
NCCB	4.88	6.52	7.69	4.69	8.58	6.47	1.53	23.65

Source: Financial statement of bank 2059/60 TO 2064/65

Investment on government securities to total working fund ratio is in fluctuating trend during the study period. The mean ratio is found to be 6.47% and standard deviation is 1.53% with 23.65% of C.V. between them, which indicates that the ratios are variable and not consistent during the study period.

4.2.5 Investment on shares and debentures to total working fund ratio:

This ratio measures the contribution made by investment on shares and debentures in total working fund of the bank. Nowadays commercial banks invest its fund not only on government securities, but also invest on the shares and debenture of other different types of companies. A high ratio indicates better mobilization of fund as investments on shares & debentures and vice versa.

Investment on shares and debentures to total working fund ratio shows the investment on shares and debentures of financial institutions and other companies out of total working fund. This ratio can be computed by dividing shares and debentures by total working fund

The below Table 4.10 shows the ratio of investment on shares and debentures to working fund ratio of NCC BANK from fiscal year 2059/60 TO 2064/65 . (See Annexure –B5)

Table 4.10 Investment on share and debenture to total working fund ratio (%)

Bank\FY	2060/61	2061/62	2062/63	2063/64	2064/65	Mean	S.D.	C.V.
NCCB	3.08	3.13	2.27	2.41	2.59	2.70	0.35	12.96

Source: Financial statement of bank 2059/60 TO 2064/65

Investment on shares and debentures to total working fund ratio is in fluctuating trend during the study period. The mean ratio is found to be 2.70% and standard deviation is 0.35% with 12.96% of C.V. between them.

Banks may invest in shares and securities of any one organized institution not exceeding 10 % of the paid up capital of such organized institution. Any amount of investment made in excess of this limit, for the purpose of calculation of the capital fund, shall be deducted from the Core capital Fund.

Bank shall invest in the shares and securities of organized institutions, which are already listed in the stock exchange, or arrangement exists for listing within one year.

4.3 Activity or Performing Ratios

In this section, the lending efficiency in terms of quality of turnover is measured. Not all of the bank's customers will pay back the loans extended in full. In bank jargon, not all loans will perform. Some will perform for a time and then become non- performing. When a particular borrower is unable or unwilling to pay the loan extended by the bank then the loan is referred to as overdue. After a certain period of time, an overdue loan may become non- accruing or non -performing, subject to the definitions utilized by the bank and the regulatory authority that supervises it. A non- performing loan is one form of non- performing asset. Such problem asset become burden to a bank and a bank with an increasing proportion of problem asset can be said to be experiencing deterioration of its asset quality. Non-performing loans are undesirable for the banks. Simply put; loans are the assets out of which a bank generates its profits. Because margins on bank loans are low-money is , after all , merely a commodity- and because banks are so highly leveraged, the complete loss of a single bad loan can wipe out the profits generated from dozens of performing loans. Here different ratios are used to analyze the lending efficiency of the bank. For this purpose different variables of balance sheet and profit and loss account have been established. The following ratios are analyzed for this purpose.

4.3.1 Non-Performing Loans to Total Loans and Advances Ratio

This ratio measures the proportion of non- performing loans on the total volume of loans and advances. This ratio reflects the quantity of quality assets that the bank is holding. It signifies the degree to which a bank is lending money to borrowers who are not paying it back. Higher ratio reflects the bad performance of the bank in mobilizing loans and advances and bad recovery rate and vice versa. This ratio is computed by dividing the non- performing loans by total loans and advances.

The non-performing assets for commercial banks should be in single digit i.e. less than 10%. (See Annexure –C1)

Table 4. Non-Performing Loans to Total Loans and Advances Ratio (%)

Bank\FY	2060/61	2061/62	2062/63	2063/64	2064/65	Mean	S.D.	C.V.
NCCB	40.11	20.63	12.72	8.64	21.89	20.80	10.84	52.12

Source: Financial statement of bank 2059/60 TO 2064/65

The above table shows that the ratios are in the fluctuating trend during the study period. The mean ratio is found to be 20.80% with standard deviation of 10.8. The coefficient of variation between the ratios are 52.12 which shows that the ratios are inconsistent

4.3.2 Loan Loss Provision to Total loan and Advances Ratio

The ratio of loan loss provision to total loans and advances describes the quality of assets that a bank is holding. Nepal Rastra Bank has directed the commercial banks to classify its loan and advances into the category of pass, sub-standard, doubtful and loss on the basis of maturity of principal to make the provision of 1%,25%,50%and 100% respectively. Nepal Rastra bank has classified pass loan as performing loan and other three loans as non-performing loans. This volume of non-performing loan is called non-performing assets (NPA) of the commercial banks. Loan loss provision set aside for performing loan is defined as general loan loss provision and loan loss provision set aside for non-performing loan is defined as specific loan loss provision. The provision for loan loss reflects the increasing probability of non- performing loans in the volume of total loan and advances. Loan loss provision on the other hand signifies the cushion against future contingencies created by the default of the borrowers. The lower ratio signifies the good quality of assets in the total volume of loan and advances. Similarly, the higher ratio signifies the relatively more risky assets in the volume of loans and advances. This ratio shows how efficiently the bank manages its loans and advances and makes effort for timely recovery of loans. This ratio is calculated by dividing the loan loss provision by total loans and advances. (See Annexure –C2)

Table 4.11 Loan Loss Provision to Total loan and Advances Ratio (%)

Bank\FY	2060/61	2061/62	2062/63	2063/64	2064/65	Mean	S.D.	C.V.
NCCB	19.39	11.75	9.45	9.85	21.29	14.35	4.99	34.77

Source: Financial statement of bank 2059/60 TO 2064/65

The above table shows that the loan loss provision to total loan and advances ratios are in the fluctuating trend during the study period. The mean ratio is found to be 14.35% with standard deviation of 4.99%.The coefficient of variation between the ratios is 34.77 which indicate that the ratios are less consistent and more variable during the study period.

4.4. Profitability Ratios:

One of the major objectives of the commercial bank is to earn more profit. Management and shareholders of the bank expect reasonable and more return. Efficiencies of any firm can be measured in terms of profit. Profitability ratio indicates public acceptances of the service of the bank. In this study, the profitability ratios are computed by relating the profits of banks to their investment. To measure the profitability of NCC BANK, following ratios have been calculated and analyzed.

4.4.1. Net profit to total assets ratio:

Return on total assets ratio measure the profitability with respect to total assets. In the present study, this ratio is calculated and analyzed to measure the profitability of all financial resources invested in the bank’s assets. A higher ratio usually indicates efficiency in utilization of its overall resources and vice-versa. This ratio is computed by dividing Net Profit by total assets.

The below Table 4.11 shows the ratio of net profit to total assets of NCCB from fiscal year 2059/60 TO 2064/65. (See Annexure- D1)

Table 4.12 Net profit to total assets ratio (%)

Bank\FY	2060/61	2061/62	2062/63	2063/64	2064/65	Mean	S.D.	C.V.
NCCB	9.69	1.69	0.05	(0.75)	(8.86)	0.36	5.92	1644.44

Source: Financial statement of bank 2059/60 TO 2064/65

Table 4.11 explains that the ratios are fluctuating with overall decreasing trend ranging between (8.86%) in 2064/2065 to 9.69% in 260/2061. The mean ratio is found to be 0.36% with 1644.44% C.V between them which indicates that the ratios are variable and inconsistent during the period of study. The above Table 4.11 shows that the return on total assets ratios is in fluctuating trend. It has increased in FY2060/63 then is in decreasing trend thereafter. The bank suffers loss in the FY 2063/64 &2064/65 with the ratios of (0.75%) & (8.86%) respectively.

4.4.2 Net profit to loan & advances ratio:

Return on loan advance ratio measures the earning capacity of a commercial bank on its mobilized fund based loan and advances. A high ratio indicates greater success to mobilize fund as loan and advances and vise versa.

Return on loan & advances ratio shows how efficiently the bank has utilized their resources to earn good return from providing loan and advances. This ratio can be computed by dividing net profit/loss by the total amount of loan and advances.

The below Table 4.12 shows the ratio of net profit to the total amount of loan and advances of NCCB from Fiscal year 2059/60 to 2064/2065. (See Annexure-D2)

Table 4.13 Net profit to loan & advances ratio

Bank\FY	2060/61	2061/62	2062/63	2063/64	2064/65	Mean	S.D.	C.V.
NCCB	(13.80)	2.41	0.07	(0.09)	(9.66)	-4.21	6.34	-150.59

Source: Financial statement of bank 2059/60 TO 2064/65

Table 4.12 explains that the ratios are fluctuating with overall decreasing trend ranging between (13.80%) in 2060/2061 to 2.41% in 2061/2062. The mean ratio is found to be (4.21%) with (150.59%) of C.V between them which indicates that the ratios are variable and inconsistent during the period of study. The bank suffers loss in the FY 2063/64, 2063/64 &2064/65 with the ratios of (13.80%), (0.09%) & (9.66%) respectively.

4.4.3 Total interest earned on total working fund ratio

Total interest earned on total assets ratio shows how much interest the bank has generated by mobilizing its assets. Interest occupies significant place in income for the banks. Generally, banks earn interest through the provision of loans and advances, overdrafts and investments in securities. In other words, this ratio reflects the extent to which the bank is successful in mobilizing its total assets to generate high income as interest .A high ratio is an indicator of high earning power of the bank’s total asset and vice-versa.

This ratio is computed by dividing total interest earned by total working fund. (See Annexure D3)

Table 4.14 **Total interest earned on total working fund ratio (%)**

Bank\FY	2060/61	2061/62	2062/63	2063/64	2064/65	Mean	S.D.	C.V.
NCCB	7.51	9.05	7.31	7.83	8.76	8.09	0.69	8.53

Source: Financial statement of bank 2059/60 TO 2064/65

Total interest income from total working fund ratio of NCCB has followed fluctuating trend. It is ranging from 7.31% to 9.05% during the study period. The mean ratio is found to be 8.09% in the review period with standard deviation of 0.69% and coefficient of variation of 8.53%.

4.5. Risk Ratios:

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 risk if it expects high return on its investment. So, the bank opting for high profit has to accept the risk and manage it effectively. Through the following ratios, effort has been made to measure the level of risk taken by the concerned bank.

4.5.1 Credit Risk Ratio:

Credit risk ratio helps to check the probability of loan non-payment or the possibility of loan to go into defaults. Credit risk ratio is expressed as the percentage of non-performing loan to total loan & advances. Risk of non-repayment of loan is known as credit risk. This ratio can be calculated by dividing total loan & advances by total assets. The below Table 4.14 shows the ratio of total loan & advances to total assets of NCCB LTD. from fiscal year 2059/60 TO 2064/65 (See Annexure- E1)

Table 4.15 Credit Risk Ratio

Bank\FY	2060/61	2061/62	2062/63	2063/64	2064/65	Mean	S.D.	C.V.
NCCB	56.67	62.02	64.13	78.34	72.24	66.68	7.68	11.52

Source: Financial statement of bank 2059/60 TO 2064/65

The ratio of NCCB has followed fluctuating trend. It has ranged from 56.67% to 78.34%. The mean ratio is found to at 66.68 % with standard deviation of 7.68% and coefficient of variation of 11.52%. It indicates that the ratios are inconsistent.

4.5.2 Liquidity Risk Ratio

Liquidity risk ratio of banks defines its liquidity need for deposits. Cash and bank balance are the most liquid assets. The ratio of cash and bank balance to total deposits is an indicator of banks liquidity needs. If the funds are kept idle the risk is low but it directly affects profitability that is profit will also be low. When a bank makes loan, its profitability increases and also risk. Thus higher liquidity ratio indicates less risk and less profitable return.

Here we have considered the cash and bank balance to total deposit ratio, which have been already calculated in the liquidity ratios in Table 4.3 with the **(**Detail in Annexure A3)

4.6 Growth Ratios

Growth ratio represents how well the banks are maintaining their economic and financial condition. It is related to the fund mobilization and investment management of the bank. The higher ratio represents the superior performance. To measure the growth ratios of NCCB following ratios has been calculated and analyzed. (See Annexure –F)

4.6.1 Growth Ratio

Table 4.16 Growth Ratios:

Bank/FY	2060/61	2061/62	2062/63	2063/64	2064/65	Growth Rate(%)
Deposit	3708.97	4294.10	5987.70	6630.94	6619.58	15.58
Loans & Advances	2878.29	3396.41	4717.30	6011.90	5899.16	19.65
Investment	283.23	411.83	573.98	400.34	591.64	20.22
Net Profit	(397.17)	81.80	3.41	(5.16)	(569.74)	(9.44)

Source: Financial statement of bank 2059/60 TO 2064/65

The above table 4.16 explains the growth ratios of total deposits, total investment, loan & advances and net profit of NCCB during the study period. The analysis shows that the NCCB has sufficient growth in total deposit i.e.

15.58%. The total deposit was highest in 2063/64 and lowest in 2060/61. So, we can predict that deposit has increasing trend.

The analysis of loan and advances over the study period shows that loan and advances is in increasing trend till the FY 2064/65. The growth rate of loan and advances is 19.65% over the study period.

The analysis of the total investment of the bank is in increasing trend with the growth rate of 20.22% during the study period.

The analysis of net profit over the study period does not seem to be good since the bank has negative growth rate of (9.44%)

4.7 Trend analysis

Under this topic, we analyze and interpret the trend of deposits, loan & advances, investment and net profit of NCCB that helps to make forecasting for next five years. The following trend value analysis has been used in this study.

4.7.1. Trend Analysis of Total Deposits:

Here, an effort has been made to calculate the trend values of total deposits of NCCB for five years from FY 2059/60to2064/65 and forecasted the same for next five years till 2068/69. The following table-4.13 shows the trend values of total deposits of NCCB for 10 years from 2058/59 TO 2068/69. (See Annexure – G1)

Table 4.17

(Rs. In Million)

Year (t)	**Trend Values yc = a + bx** **yc= 5448.26+815.81x**
2059/60	3816.64
2060/61	4632.45
2061/62	5448.26
2062/63	6264.07
2063/64	7079.88
2064/65	7895.69
2065/66	8711.50
2066/67	9527.31
2067/68	10343.12
2068/69	11158.93

From the above table 4.13, it is clear that the total deposit of NCCB is in increasing trend. Other things remaining same, the total deposits of the bank will be Rs.11,158.93 million in the FY 2068/2069, which is the highest under the study period. This can be shown with help of the following figure as well.

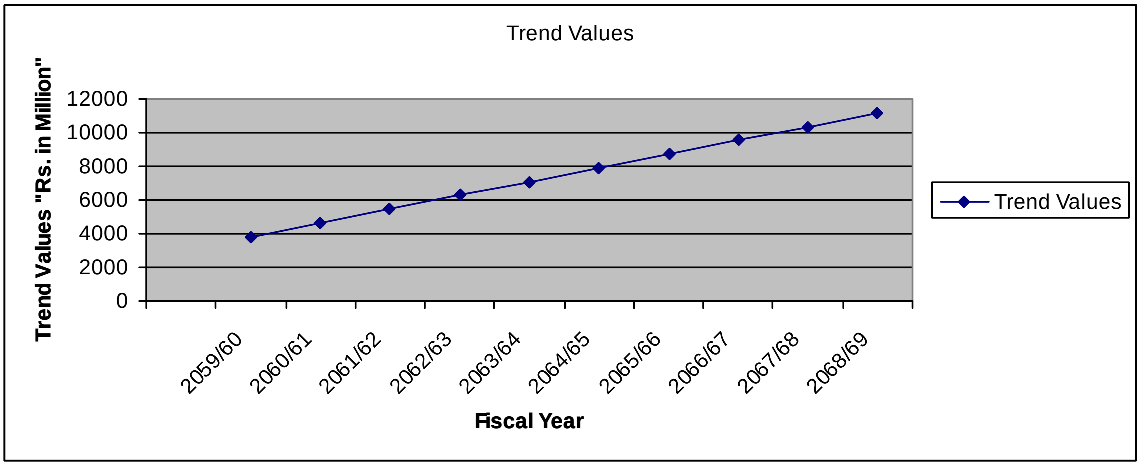

Fig 1.Total deposits of NCCB.

4.7.2. Trend Analysis of Loan & Advances

Here, the trend values of total loan & advances from FY 2059/60 to 2064/65 and the forecast for next five years till 2064/65 to 2068/69 have been done. (See Annexure –G2)

Table 4.18

(Rs. In Million)

Year (t)	Trend Values yc = a + bx yc= 4580.72+865.72x
2059/60	2849.28
2060/61	3715.00
2061/62	4580.72
2062/63	5446.44
2063/64	6312.16
2064/65	7177.88
2065/66	8043.60
2066/67	8909.32
2067/68	9775.04
2068/69	10640.76

The above table- 4.1 6 shows that the loan & advances of NCCB is in increasing trend. Other things remaining same, total loan & advances of NCCB in FY 2067/2068 will be Rs.10640.76 million, which is the highest under the study period. This can be shown with help of the following figure as well.

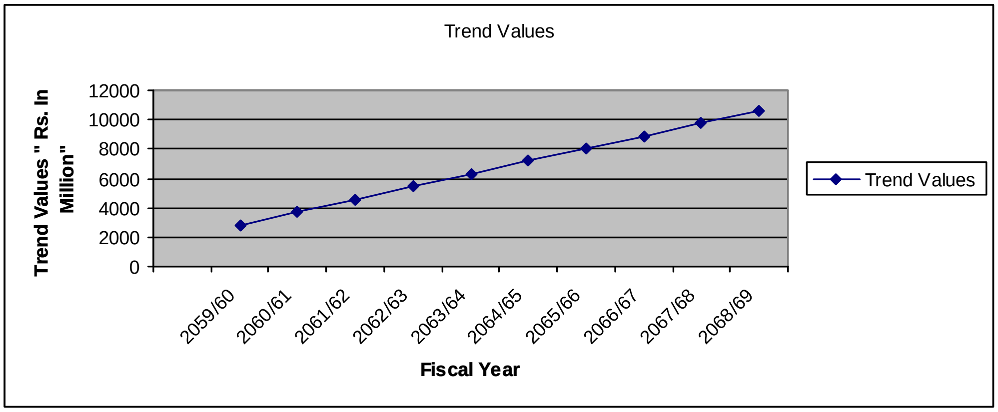

Fig : 2. Trend values of Loan& Advances of NCCB.

4.7.3. Trend Analysis of Total Investment

Here, an attempt has been made to analyze the trend values of total investment of NCCB for five years from FY 2058/59 to 2064/65 and forecasted the same for next five years till 2067/68. The following table shows that the trend values of total investment of NCCB for 10 years from FY 2058/59 to 2067/68. (See Annexure –G3) Table 4.19

(Rs. In Million)

Year (t)	Trend Values yc = a + bx yc= 452.20+60.53x
2059/60	331.14
2060/61	391.67
2061/62	452.20
2062/63	512.73
2063/64	573.26
2064/65	633.79
2065/66	694.32
2066/67	754.85
2067/68	815.38
2068/69	875.91

From the above table 4.17, it is clear that the total investment of NCCB is in increasing trend. Other things remaining same, total investment of the bank in FY 2067/2068 will be Rs875.91 million, which is the highest under the study period. This can be shown with help of the following figure as well.

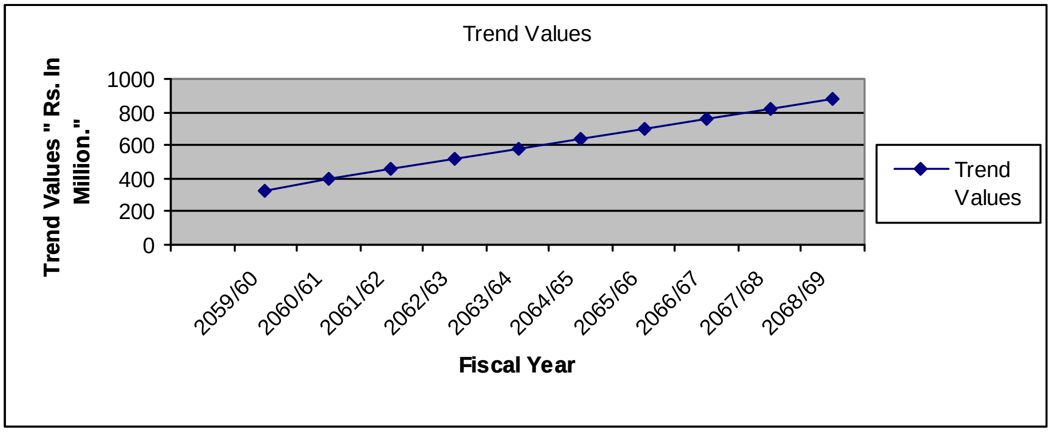

Fig : 3. Trend values of Total Investment of NCCB.

4.7.4 Trend Analysis of loan loss provision

Here, an attempt has been made to analyze the trend values of loan loss provision of NCCB for five years from FY 2058/59 to 2063/64 and forecasted the same for next five years till 2068/69. The following table shows that the trend values of loan loss provision of NCCB for 10 years from FY 2059/60 to 2068/69. (See Annexure –G4

Table 4.20

(Rs. In Million)

Year (t)	Trend Values yc = a + bx yc=647.07+155.76x
2059/60	335.55
2060/61	491.31
2061/62	647.07
2062/63	747.93
2063/64	958.59
2064/65	1114.35
2065/66	1270.11
2066/67	1425.87
2067/68	1581.63
2068/69	1737.39

From the above table-4.18, it is clear that the loan loss provision of NCCB is in increasing trend. Other things remaining same, the loan loss provision of the bank in FY 2068/2069 will be Rs1737.39 million, which is the highest under the study period. This can be shown with help of the following figure as well.

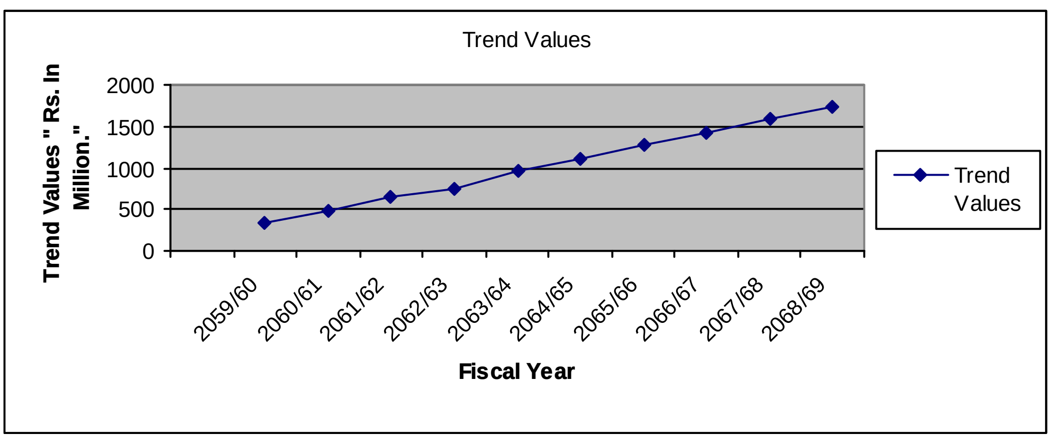

Fig : 4. Trend values of Loan Loss Provision of NCCB

4.8 Coefficient of Correlation Analysis:

Coefficient of correlation analysis is the mathematical method of measuring the degree of association between the two variables i.e. one dependent and another 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:

i. Coefficient of correlation between deposit and loan & advances.

ii. Coefficient of correlation between total deposit and total investment

iii. Coefficient of correlation between total investment and net profit.

The above analysis tools analyze the relationship between these relevant variables and helps the bank to make appropriate polices regarding deposit collection, fund utilization (loan & advances) and profit maximization.

To find out those relationships, the following formula is used:

Coefficient of correlation (r) = –

$$\boxed{\frac{xy}{n \pm x \pm y}}$$

$$P.Er. \mathrm{X} 0.6745 \mid \frac{1 \mathrm{Z} r^2}{\sqrt{N}}$$

The result of coefficient is always between –1 to +1, when r = +1, it means there is significant relationship between two variables and when –1, it means there is no significant relationship between two variables.

4.8.1 Coefficient of Correlation between Total Deposits and Loan & Advances:

Deposits have played a very important role in the performance of a commercial bank and similarly loan & advances are important to mobilize the collected deposits. Coefficient of correlation between deposit and loan & advances measure the degree of relationship between these two variables. In this analysis, deposit is independent variable (X) and loan & 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 & advances in a proper way or not. The table-4.16 shows the value of 'r'' Probable Error (P.Er.) and 6P.Er.between total deposits and loan & deposits. (See Annexure –H1)

Table 4.21 Coefficient of correlation between Total Deposits and Loan & Advances

Correlation coefficient(r)	P. Er.	6*P.Er	Remarks
0.97	0.02	0.12	r>6*P.Er.

The above table 4.13 shows correlation coefficient (r) between total deposits and loan and advance of the bank id 0.97 i.e positive and probable error multiplied by six found to be 0.12. Since r > 6 * PE r, it is significant and there is correlation between total deposits and loan & advance in NCCB.

4.8.2 Coefficient of Correlation between Total Deposits and Total Investment:

Coefficient of correlation between total deposit and total investment measure the degree of relationship between these two variables. In this analysis, deposit is independent variable (X) and investment is dependent variable (Y). The main objective of computing 'r' between these two variables is to justify whether deposits are significantly used as investment in a proper way or not. The table 4.14 shows the value of 'r', Probable Error (P.Er.) and 6 x P.Er. between total deposits and total investment. (See Annexure–H2)

Table 4.22 Coefficient of Correlation between Total Deposits and Total Investment

Correlation coefficient	P. Er.	6*P.Er	Remarks

0.72	0.15	0.9	rΦ6*P.Er.

The above table 4.17 shows correlation coefficient (r) between total deposits and total investment of the bank id 0.72 i.e positive and probable error multiplied by six found to be 0.15. Since r Φ 6 * PE r, it is insignificant and there is not correlation between total deposits and loan & advance in NCCB.

4.8.3 Coefficient of correlation between total investment and net profit.

Coefficient of correlation between total investment and net profit measure the degree of relationship between these two variables. In this analysis, total investment is independent variable (X) and net profit is dependent variable (Y). The main objective of computing 'r' between these two variables is to find out whether investment and net profit is significantly correlated or not. The table shows the value of 'r'.Probable Error (P.Er.) and 6 x P.Er. between total investment and net profit. (See Annexure –H3)

Table 4.23 Coefficient of Correlation between total investment and net profit

Correlation coefficient	P. Er.	6*P.Er.	Remarks
-0.10	0.30	1.80	r<6*P.Er.

The above table 4.18 shows correlation coefficient(r) between total investment and net profit of the bank is -0.10 i.e negative and probable error multiplied by six found to be 1.80 Since r < 6 * PE r, it is insignificant and there is not correlation between investment and net profit in NCCB.

4.8.4 Coefficient of correlation between loan loss provision and loan and advances

The correlation between loan loss provision and loan& advances measures the degree of relationship between these two variables, In fact loan loss provision is the product of loan & advances i.e. these variables are co-related. Increase in loan and advances likely to increase the volume of loan loss provision and vice versa. The value of (r) explains whether there is significant relationship between these two variables or not. In this analysis, loan & advances is independent variable and loan loss provision is dependent variable(see AnnexureH4)

Table 4.24 Coefficient of Correlation between loan loss provision and loan & advances

Correlation coefficient	P. Er.	6*P.Er.	Remarks
0.58	0.20	1.20	r<6*P.Er.

The above table 4.19 shows correlation coefficient(r) between loan loss provision and loan and advances is 0.58 i.e and probable error multiplied by six found to be 1.20 Since r < 6 * PE r, it is insignificant and there is not correlation between loan loss provision and loan and advances.

4.9 Analysis of the Questionnaire

The questionnaire distributed to the staffs of the concerned bank. Breakdown of the samples and the respondent were.

Question no	No of samples	Number of respondents
1to 10	25	25

<u>Following Results were derived from the NCCB (Detailed in ANNEXURE I & J)</u>

Question no 1

All the respondents have answered that they are strongly following the NRB directives. So it can be said that NCCB bank has been strongly following the NRB directives related to the investment policy of the commercial banks.

Question no 2

Upon asking whether the bank has been monitoring from time to time by the central bank about the implementation of the investment policy directives, 100% respondents have said yes to the asked question.

Question no 3

All the respondents agree that the classification directive of the loan and advances and loan loss provision provided by the NRB is effective.

Question 4

Upon asking whether the bank has been able to easily follow the directive regarding investing in shares and securities under the criteria of NRB, 100% respondents have answered yes to the asked question.

Question 5

Upon asking does the fluctuation of interest rates as per the NRB directives, will have positive, negative or no impact on the deposits, profits and other banks operation. 60% respondents feel it will have positive impact whereas 40% of them feel there will be no impact at all.

Question 6

40% respondents agree that the impacts of the investment in the year to come with the proper implementation of the investment policies in the banks will be good financial health of the banks.40% of them agree that the profitability of the bank will increase and remaining 20% said that the depositors’ money will be fully protected.

Question 7

None of the respondents think that the current Nepal Rastra bank’s investment policy directives are difficult to follow.

Question 8

All the respondents agree that the Central Bank think liberally while making investment policy directives.

Question 9

Regarding the current investment policy directives provided by the NRB , 60% respondents think that they should be revised or changed whether 40% of them think that they should not be revised or changed.

Question 10

80% of respondents think that if the NRB directives are changed or revised, there is likely to increase the economic growth of the country whereas 20% of them think that there will be no effect at all.

4.10 Major Findings of the study

The preceding chapter have discussed and explored the facts and matters for the various parts of the study. Analytical part, which is the heart of the study, makes an analysis of various aspects of the investment policy of NCCB by using some of important financial as well as statistical tools.

Having completed the basic analysis required for the study, the final and most important task of the researcher is to enlist finding issues and gaps of the study and give suggestions for further improvement. This would be meaningful to the top management of the bank to initiate action and achieve the desire result. The objective of the researcher is not only to point errors and mistakes but also to correct them and give directions for further growth and improvement.

The main findings of the study that are derived on the basis of financial data analysis of NCCB are presented below:

4.10.1 Findings from the Liquidity Ratios Analysis

A.1 From the analysis of the liquidity assets ratio, it can be said that the bank has sound ability to meet their short term obligation. The ratios are in the increasing trend. In general, the liquidity ratio analysis of the bank over the five years period indicates that the bank has been able to meet its short term obligations and has satisfactory liquidity position.

A.2 The cash & bank balance to current assets ratio of NCCB has fluctuating trend. The mean ratio for the study period is 15.74% and the C.V. between them is 17.92%. On the basis of C.V. the ratios seems to be less variable and consistent. It indicates that NCCB is in better position in maintaining its cash & bank balance to meet its daily requirements to make the payments on customers' deposits withdrawal.

A.3 The cash & bank balance to total deposits ratio of NCCB has fluctuating trend. The mean ratio for the study period is 13.68% with standard deviation of 2.37 % and coefficient of variation of 17.32%, which shows that the ratios are consistent. The above analysis indicates that the cash & bank balance position of NCCB with respect to total deposit is better to serve its customers deposit withdrawal demands. It implies the satisfactory liquidity position of NCCB.

A.4 The investment on government securities to current assets ratio of NCCB has the fluctuating trend. The mean ratio of the study period is 7.96% with standard deviation of 1.86 % and coefficient of Variation of 23.37%. According to the NRB directives issued, there is no restriction for the commercial banks to investment in the securities of His Majesty's Government and securities issued by Nepal Rastra Bank. Investment on government securities is the secondary defense mechanism for commercial banks. It shows the proportion of additional source of liquidity in addition to cash and bank balance in total current assets. From the analysis of investment on government securities to current assets ratio, NCCB's investment in government securities can be considered as healthy.

A.5 The loan & advances to current assets ratio of the NCCB is in fluctuating trend with mean ratio of 81.54% and C.V. of 6.05% which shows that the ratio seems to be consistent and less variable.

4.10.2 Findings from Assets Management Ratio analysis

B.1 Loan & advances to total deposit ratio of NCCB is in increasing trend with mean ratio 71.11% and C.V. of 8.63%. The C.V. between the ratios shows that the ratios are satisfactorily consistent over the study period. Loan and advances is the banks' most risky asset. High level of risk is not desirable for commercial banks as the default in loans can increase the loan loss provision and hence decrease the profit.

B.2 Total investment to total deposit ratios is in fluctuating trend during the study period. The mean ratio of investment to total deposit is 8.36%. The C.V of 16.27% which shows that the ratios are less consistent and more variable. The figures suggest that the bank has mobilized significant amount of its total deposits in government securities and shares and debentures of other companies.

B.3 The mean ratio of loan & advances to total working fund is 66.68% and the C.V. between them is 11.53%, which shows that the ratios are consistent over the study period. This shows that loan and advances comprises 66.68% in average of the total assets of the bank. This shows that more than fifty percent of the assets of the bank comprises loan & advances i.e. risky assets. Loan & advances is the most risky and most productive assets of the bank. High ratio suggests high risk and eventually yields high return for the bank. So, NCCB has adopted high risk policy towards the mobilization of its fund to risky assets.

B.4 Investment on government securities to total working fund ratio is in fluctuating trend during the study period. The mean ratio is found to be 6.47% with 23.65% C.V. between them, which indicates that the ratios are variable and not consistent during the study period. Investment on government securities is the risk free investment for the commercial banks. This ratio shows the proportion of risk free assets in the total assets of bank. The Analysis shows that the bank has mobilized about less than one fifth of fund on government securities i.e. low productive and risk free sector.

The investment in government securities depends upon the flow of money in the economy and hence there could be fluctuations in this type of investment as most of the commercial banks tend to bid in low discount rate when they have large volume of idle deposits.

B.5 Investment on shares and debentures to total working fund ratio is in fluctuating trend during the study period. The mean ratio is found to be 2.70% with 12.96 % C.V. between them, which indicates that the ratios are variable and not consistent during the study period. So NCCB has invested very less percentage of total working fund into shares and debentures of other companies.

4.10.3 Findings from Activity or Performing Ratios.

C.1 Non- performing loan to total loan and advances ratio shows that the ratios are in the fluctuating trend during the study period. The mean ratio is found to be 20.80% with standard deviation of 10.8. The coefficient of variation between the ratios is 52.12 which shows that the ratios are inconsistent.

This is the proportion of non performing asset of commercial bank and NPA is major problem nowadays. Commercial banks should maintain its NPA, within a level. In Nepalese context NPA should be below 10%.otherwise the bank will be in serious trouble. The mean NPA level of NCCB over 5 year study period is 20.80% which is higher than the standard level. So, the bank should give prior attention towards NPA management.

C.2 The loan loss provision to total loan and advances ratios are in the fluctuating trend during the study period. The mean ratio is found to be 14.35% with standard deviation of 4.99%.The coefficient of variation between the ratios is 34.77 which indicate that the ratios are less consistent and more variable during the study period.

The loan loss provision is the cushion against future defaults by borrowers. But in short term, it affects the profitability of the bank. Higher ratio is the indication of the low quality of productive asset. The loan loss provision for performing loan is 1% and higher ratio than 1% indicates that the bank has certain proportion of non performing loan .the increasing trend of loan loss provision during the study period indicates that the quality of loans becoming degrading year by year i.e. it seems that amount of non- performing loan is increasing and possibility of default in future is increasing.

4.10.4 Findings from Profitability Ratios

D.1 Net profit to total asset ratios is fluctuating during the study period The mean of the ratios is found to be 1.36% with 1644.44% C.V. between them, which indicates that the ratios are variable and inconsistent during the study period. The return on assets of the bank is in negative figure which indicates the earning capacity of the bank assets and utilization of its assets is not good.

D.2 Net profit to loan and advances ratio is fluctuating with overall decreasing trend. The mean ratio is found to be (4.21) % with (150.59%) of CV between them. This indicates that the ratios are variable and inconsistent during the period of study.

D.3 .The interest earned to total working fund of NCCB has fluctuating trend. The mean ratio is found to be 8.09% and coefficient of variation between them is 8.53% during the study period. The ratios are consistent and less variable.

4.10.5 Findings from the Risk Ratios

E.1 The credit risk ratio of NCCB has the fluctuating trend. The mean ratio of the credit risk ratio during the study period is 78.01%. The NCCB has average lending policy. The ratio seems to be less variable with 9.38% standard deviation and coefficient of variation of 12.02%.

E.2 The liquidity risk ratio of NCCB has fluctuating trend. The mean ratio of liquidity risk is 13.67% during the study period. The ratio seems to be stable and consistent with 2.37% standard deviation and coefficient of variation of 17.34%.

4.10.6 Findings from the Growth Ratios

The analysis of growth ratios of total deposits, total loan & advances, total investments and net profit of NCCB during the study period shows that total deposits of bank is in increasing trend with the net growth rate of 15.58%. Similarly, loans & advances of the bank is also in increasing trend with the net growth rate of 19.65%. The analysis shows that the total investment of the bank is also in increasing trend with net growth rate of 20.22% during the study period. The net profit of the NCCB has negative growth rate of (9.44%) during the study period.

The major source of fund of the bank is deposit from its customers and it is in increasing trend. Similarly, the bank's utilization of its fund in the form of loan & advances and investment are also in increasing trend with satisfactory and high growth rate respectively. The net profit of the bank has negative growth rate due to high degree of non performing assets.

4.10.7 Findings from the Correlation Analysis

The correlation between total deposits and total loan & advances shows that the correlation (r) between deposits and loan & advances of the bank is 0.98 and probable error multiplied by six is found to be 0.01 Since r >6*P. Er. It is significant and there is correlation between total deposits and loan & advance in NCCB. Correlation (r) is positive and near to 1. So, it is inferred that there is positive correlation between total deposits and loan & advances during the study period. It means the increase and decrease of total deposit of the bank strongly affects the volume of loan & advances.

The correlation between total deposit and total investment shows that the correlation coefficient (r) between total deposits and total investment of the bank is 0.72 and probable error multiplied by six is found to be 0.9. Since rΦ6*P.Er, it is insignificant and there is no correlation between total deposit and total investments during the study period in NCCB.

The correlation between total investment and net profit shows that the correlation coefficient (r) between total investment and net profit of the bank is (0.10) and probable error multiplied by six is found to be 1.80. Since rΦ6*P.Er, it is insignificant and there is negative correlation between total investment and net profit during the study period in NCCB.

The correlation between loan loss provision loan loss provision and loan and advances shows that the correlation coefficient (r) between loan loss provision and loan and advances of the bank is 0.58 and probable error multiplied by 6 is found to be 1.20.since r Φ 6*P.Er , it is insignificant and there is no correlation between loan loss provision and loan and advances.)

4.10.8 Finding from Trend analysis:

From the trend analysis of total deposit, loan and advances and investment shows that they are in increasing trend. Total value projected for total deposit, loan and advances and investment are Rs.11158.93 million, Rs.8878.38 million, Rs.875.91 million respectively. But the value projected for net profit is (Rs. 479.84%).Though total deposit, loan and advances and investment are in increasing trend, because of the high rate of non-performing assets, the bank has not been able to generate desired profit during the study period.

4.10.9 Findings from Primary Data Analysis.

Tabulation of the questionnaire (Details from Annexure-J)

Details of the samples and respondents of the questionnaire related to how the bank has adopted the NRB directives.

After collecting the questionnaires, they were tabulated in the table. For each question the responses were converted to percentage based on the total no of respondents so that the percentage analysis can be done.

From the analysis of questionnaires regarding NRB directives, it has been found that the concerned bank is following the NRB directives strongly.

The bank is monitored time to time by the central bank about the implementation of investment policy direction. It is found that the classification directives of loans and advances and loan loss provision provided by the NRB is effective and the bank has been able to follow easily the directive regarding investing in shares and securities under the criteria of NRB. The fluctuation of interest rates as per the NRB directives will positively affects the deposits, profits and other banks operation. With the proper implementation of the investment policies in the bank, the bank will have good financial health. Since Central Bank think liberally while making investment policy directives, the bank does not think that the current Nepal Rastra bank’s investment policy directives are difficult to follow. The NCCB thinks that if the NRB directives are changed or revised, there is likely to increase the economic growth of the country.

CHAPTER- FIVE
SUMMARY CONCLUSION AND RECOMMENDATION

5.1 Summary & Conclusions:

Investment management of a bank is guided by the investment policy adopted by the bank. The investment policy of bank helps the investment operation of the bank to be efficient and profitable by minimizing the inherent risk. The investment is the most important function of commercial banks. A healthy development of any commercial bank depends upon its investment policy. A good investment policy attracts both borrowers and lender, which helps to increase the volume and quality of deposits, loans and investment.

Investment refers to buying of shares, stocks and bond of the capital market. In terms of banking, investment means purchasing of stocks, securities, treasury bills etc. A commercial bank should mobilize its deposits and other funds to secured, profitable and marketable sector so that it can be easily liquidated when necessary. Therefore when loan investments are made, it should analyze all the aspects of good lending practices so that it would gain profit on the transaction of loan. Investment policy provides guidelines to handle their investment operation smoothly ensuring maximum return with minimum exposure towards risk.

Main investment of the banks is lending its collected fund in different sector of economy. The formulation of sound lending policies for all banks should have adequate and careful consideration over community needs, size of loan portfolio, character of loan, credit worthiness of borrower and asset pledged to security borrowing, interest rate policy. Lending affects the company's profitability and liquidity, so it is one of the crucial decisions for the commercial banks.

The major source of income of a bank is interest income from loans and investments and fee based income. Loan is not the money market investment but it is considered as the investment of the bank. Loan and advances provided by commercial banks are very risky. Risk of non- repayment of loan is known as credit risk or default risk. Performing loans have multiple benefits to the society by helping the growth of economy while non-performing loans even erodes existing capital. The directions and guidance provided by

Nepal Rastra Bank- are the major policy statements for Nepalese commercial banks. So commercial banks have to follow these policies to utilize their funds. Thus proper utilization of the resources has become relevant and current issue for the banks.

As there has been a number of commercial bank established, the research has taken into consideration to a single bank only i.e.

‘Nepal Credit and Commerce Bank Ltd.’

Financial as well as statistical tools have been used in order to analyze and interpret the data and information. Under financial analysis, various financial ratios related to the investment function of commercial banks i.e. liquidity ratio, asset management ratio, activity ratio, loan and advances portfolio evaluation, profitability ratio and growth ratio have been analyzed and interpreted. To find out the effect of Investment portfolio on capital adequacy, a separate analysis on capital adequacy and investment portfolio was assessed. Under statistical analysis, some relevant statistical tools i.e. co-efficient of correlation and trend analysis have been used. These analyses give clear picture of the performance of the bank with regard to its investment operation and policy.

In this study, the word investment is conceptualized as the investment of income, savings, or other collected funds. The term investment covers the wide range of activities. It is only possible where there is an adequate saving. Investment policy is an important ingredient of overall national economic development because it ensures efficient allocation of fund to achieve the materials and economic well being of the society as a whole.

The primary objective of the joint venture bank is always to earn profit by investing or granting loan & advances to people associated with trade, business and industry etc. That means they are required to mobilize their sources properly to acquire profit. How well a bank manages its investment has a great deal 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 economy.

The income and profit of the bank depends upon its lending procedures, lending policy and investment of its fund in different securities. The greater the credit created by the bank, the higher will be the profitability.

They should revise its policy time to time to sustain in a competitive business environment.

5.2 Conclusions

From the overall analysis of investment policy of NCCB with the help of financial and statistical tools the problems set for the study is answered as under, which is the main objective of this study.

1. The relation of total deposit is positive to total investment i.e. if total deposit increases, bank's loan & advances, investment on government securities, shares and debentures of other companies also increases.

2. The bank has sound ability to meet their short term obligations and has satisfactory liquidity position. The analysis of liquidity ratios shows that the bank holds enough amounts of liquid assets in the form of cash and bank balance, government securities, treasury bills etc.

3. It has been observed that the loan loss provision of the bank is in increasing trend due to the high proportion of non performing assets on total loan and advances. In the Nepalese context, NPA should be in single digit to be considered as satisfactory. But the NPA of the bank is higher than these standards.

4. The major source of fund of the bank is deposit from its customers and it is in increasing trend. Similarly, the bank's utilization of its fund in the form of loan & advances and investment are also in increasing trend with satisfactory and high growth rate respectively. The net profit of the bank has negative growth rate due to high degree of non performing assets.

5.3 Recommendation

On the basis of analysis, findings, issues and gaps of the study, following recommendation can be made to overcome weakness, inefficiency and to revitalize and improve present fund mobilization and investment policy of NCCB.

1. The liquidity position of a bank can be affected by external as well as internal factors. The affecting factors can be interest rates, supply as well as demand position of deposits and loan, investment situation, central bank's directive, the lending policies, capability of management, strategic planning and funds flow situations.

Liquidity position of NCCB is found to be fair enough. It is obvious that the holder of highest deposit among the private sector commercial bank have been facing challenges to maintain its liquidity position. Therefore, NCCB is recommended to increase the investments in the government securities, which helps to utilize funds into income generating asset as well as minimizes risk and also helps to maintain optimal level of liquidity.

The management of the bank should work in the interest of its owners such as promoters and share holders. Therefore, the bank must always analyze and investigate thoroughly on every investment opportunities. The bank must also have the research team to hunt for the new areas of opportunity. All these facts, be it very general and simple, can increase the profit.

2. The proportion of non-performing assets on total loan and advances of the bank is above the standard level. It should be less than 5% to be graded as internationally 'A' grade commercial bank. In the Nepalese context too, NPA should be within the single digit to be considered as satisfactory. The NPA level of the bank is higher than these standards. So, the management of the bank should give its due attention to manage the NPA level within the satisfactory level.

3. Bank can gain more Net Profit if it can reduce its non-performing asset. Because non-performing asset decrease Net profit of the bank. On the basis of findings, the bank has large amount of loan being apportioned as non-performing assets (NPA). Therefore, there

is an urgent need to workout a suitable mechanism through which the default loans can be realized.

4. Regarding NPA, the bank must focus on credit risk management. The thorough analysis of the project and feasibility studies before granting credit facility can reduce the default. In addition to this, corporate ethics and a strong corporate culture with high degree of awareness of credit risk should be present. As a prerequisite, establishing adequate policies and procedures is advisable.

5. To lower the magnitude of non-performing assets, and to effect necessary reform in the debt recovery, the bank should initiate steps on establishing Assets Management Corporation (AMC) and on strengthening the capacity of Debt Recovery Tribunal.

6. Loan default in commercial bank is the result of various factors such as lack of the necessary skills for the project appraisal, political influences, improper collateral evaluation, irregular supervision and lack of entrepreneurial attitude. The proper scrutiny of the documents presented is the must for preventing any critical conditions in the future. Political backing is highly prevailing in each and every sectors of Nepalese investment. Commercial banks should always keep a distance from these influences.

7. Portfolio management of bank assets basically means allocation of funds into different components of banking assets having different degrees of risk and varying rate of return in such a way that the conflicting goal of maximum yield and minimum risk can be achieved. So, portfolio condition should be examined from time to time and attention should be given to maintain equilibrium in the portfolio condition as far as possible. The bank should make continuous efforts to explore new, competitive and high yielding investment opportunities to optimize its investment portfolio.

8. The bank should be careful in increasing net profit in a real sense to maintain the confidence of shareholders, depositors, its customers and the general public. Although the sources of fund and its utilization have been increasing and also the total income of the bank has been increasing he satisfactory level, the bank has not been able to gain the optimum profit in compare to its contemporary banks. Therefore the bank is recommended to decrease the expenses by controlling the operating expenses as well as by collecting the interest free deposits.

9. The bank is recommended to adopt innovative approach for 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 this 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.

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Annex

Annexure-A1

Liquid assets ratio

Fiscal years	2060/61	2061/62	2062/63	2063/64	2064/65
Total liquid assets	3130.09	3780.54	5296.47	6130.38	5448.32
Total assets	4095.18	4832.60	6660.78	6918.08	6427.70
Ratio(%)	76.43%	78.23%	79.52%	88.61%	84.76%

Annexure-A2

Cash and bank balance to current assets ratio

Fiscal years	2060/61	2061/62	2062/63	2063/64	2064/65
Cash &bank balance	546.09	670.26	970.39	662.70	783.96
Current assets	3130.09	3780.54	5296.47	6130.38	5448.32
Ratio(%)	17.45%	17.73%	18.32%	10.81%	14.39%

Annexure-A3

Cash and bank balance to total deposit ratio

Fiscal years	2060/61	2061/62	2062/63	2063/64	2064/65
Cash &bank balance	546.09	670.26	970.39	662.70	783.96
Total deposit	3708.97	4294.10	5987.70	6630.94	6619.58
Ratio(%)	14.72%	15.61%	16.21%	10%	11.84%

Annexure-A4

Investment on government securities to current assets ratio

Fiscal years	2060/61	2061/62	2062/63	2063/64	2064/65
Government securities	199.66	315.24	511.94	324.73	551.59
Current assets	3130.09	3780.54	5296.47	6130.38	5448.32
Ratio(%)	6.38%	8.34%	9.67%	5.30%	10.12%

Annexure-A5

Loan and advances to current assets ratio

Fiscal years	2060/61	2061/62	2062/63	2063/64	2064/65
Loan and advances	2878.29	3396.41	4717.30	6011.90	5899.16
Current assets	3130.09	3780.54	5296.47	6130.38	5448.32
Ratio(%)	91.96%	89.84%	89.06%	98.07%	108.27%

Annexure-B1

Loan and advances to total deposit ratio

Fiscal years	2060/61	2061/62	2062/63	2063/64	2064/65
Loan and advances	2878.29	3396.41	4717.30	6011.90	5899.16
Total deposit	3708.97	4294.10	5987.70	6630.94	6619.58
Ratio (%)	77.60%	79.09%	78.78%	90.66%	89.12%

Annexure-B2

Total investment to total deposit ratio

Fiscal years	2060/61	2061/62	2062/63	2063/64	2064/65
Total investment	283.23	411.83	573.98	400.34	591.64
Total deposit	3708.97	4294.10	5987.70	6630.94	6619.58
Ratio(%)	7.64%	9.59%	9.59%	6.04%	8.94%

Annexure-B3

Loan and advances to total working fund ratio

Fiscal years	2060/61	2061/62	2062/63	2063/64	2064/65
Loan and advances	2878.29	3396.41	4717.30	6011.90	5899.16
Total working fund	4095.18	4832.60	6660.78	6918.08	6427.70
Ratio (%)	70.28%	70.28%	70.82%	86.90%	91.78%

Annexure-B4

Investment on government securities to total working fund ratio

Fiscal years	2060/61	2061/62	2062/63	2063/64	2064/65
Government securities	199.66	315.24	511.94	324.73	551.59
Total working fund	4095.18	4832.60	6660.78	6918.08	6427.70
Ratio (%)	4.88%	6.52%	7.69%	4.69%	8.58%

Annexure-B5

Investment on shares and debenture to total working fund ratio

Fiscal years	2060/61	2061/62	2062/63	2063/64	2064/65
Shares and debentures	126.07	151.07	151.07	166.42	166.42
Total working fund	4095.18	4832.60	6660.78	6918.08	6427.70
Ratio (%)	3.08%	3.13%	2.27%	2.41%	2.59%

Annexure-C1

Non –performing loan to total loan and advances ratio

Fiscal years	2060/61	2061/62	2062/63	2063/64	2064/65
NPA	11.54	700.83	600.05	519.26	1274.92
Loan and advances	2878.29	3396.41	4717.30	6011.90	5899.16
Ratio (%)	40.11%	20.63%	12.72%	8.64%	21.89%

Annexure-C2

Loan loss provision to loan and advances ratio

Fiscal years	2060/61	2061/62	2062/63	2063/64	2064/65
Loan loss provision	558.02	399.15	445.67	592.17	1240.33
Loan and advances	2878.29	3396.41	4717.30	6011.90	5899.16
Ratio (%)	19.39%	11.75%	9.45%	9.85%	21.29%

Annexure-D1

Return on total working fund ratio

Fiscal years	2060/61	2061/62	2062/63	2063/64	2064/65
Net Profit	(397.17)	81.80	3.41	(5.16)	(569.74)
Total working fund	4095.18	4832.60	6660.78	6918.08	6427.70
Ratio (%)	9.69%	1.69%	0.05%	(0.75%)	(8.86%)

Annexure-D2

Return on loan and advances ratio

Fiscal years	2060/61	2061/62	2062/63	2063/64	2064/65
Net Profit	(397.17)	81.80	3.41	(5.16)	(569.74)
Loan and advances	2878.29	3396.41	4717.30	6011.90	5899.16
Ratio (%)	(13.80%)	2.41%	0.07%	(0.09%)	(9.66%)

Annexure-D3

Total interest earned on total working fund ratio

Fiscal years	2060/61	2061/62	2062/63	2063/64	2064/65
Total interest earned	307.71	437.18	486.83	541.85	562.78
Total working fund	4095.18	4832.60	6660.78	6918.08	6427.70
Ratio (%)	7.51%	9.05%	7.31%	7.83%	8.76%

Annexure-E1

Credit Risk ratio

Fiscal years	2060/61	2061/62	2062/63	2063/64	2064/65
Total loan and advances	2878.29	3396.41	4717.30	6011.90	5899.16
Total working fund	4095.18	4832.60	6660.78	6918.08	6427.70
Ratio (%)	70.28%	70.28%	70.82%	86.90%	91.78%

Annexure-E2

Liquidity risk ratio

Fiscal years	2060/61	2061/62	2062/63	2063/64	2064/65
Cash and bank balance	546.09	670.26	970.39	662.70	783.96
Total deposit	3708.97	4294.10	5987.70	6630.94	6619.58
Ratio (%)	14.72%	15.61%	16.21%	9.99%	11.84%

F. Growth Ratios

F.1Growth Ratios of loan and advances

Bank/FY	2060/61	2061/62	2062/63	2063/64	2064/65	Growth Rate(%)
NCCB	2878.29	3396.41	4717.30	6011.90	5899.16	19.65

Growth rate can be calculated as follows:

Here,

Dn = total loans & advances in nth year

D_0 = total loans & advances in initial year

g= growth rate

We have,

$Dn = D_0 (1+g)^n$

$D_{2062/63} = D_{2058/59}(1+g)^{5-1}$

$5899.16 = 2878.29(1+g)^4$

1+g= 1.1965

g = 19.65 %

F.2Growth Ratios of total investment

Bank/FY	2060/61	2061/62	2062/63	2063/64	2064/65	Growth Rate
NCCB	**283.23**	411.83	573.98	400.34	591.64	20.22%

Growth rate can be calculated as follows:

Here,

Dn = total investment in nth year

D_0 = total investment in initial year

g= growth rate

We have,

$Dn = D_0 (1+g)^n$

$D_{2062/63} = D_{2058/59}(1+g)^{5-1}$

$591.64 = 283.23(1+g)^4$

1+g= 1.2022

g = 20.22 %

F.3Growth Ratios of deposits

Bank/FY	2060/61	2061/62	2062/63	2063/64	2064/65	Growth Rate
NCCB	3708.97	4294.10	5987.70	6630.94	6619.58	15.58%

Growth rate can be calculated as follows:

Here,

Dn = total dposit in nth year

D_0 = total deposit in initial year

g= growth rate

We have,

$Dn = D_0 (1+g)^n$

$D_{2062/63} = D_{2058/59}(1+g)^{5-1}$

$6619.58 = 3708.97(1+g)^4$

1+g= 1.1558

g = 15.58%

F.4Growth Ratios of net profit

Bank/FY	2060/61	2061/62	2062/63	2063/64	2064/65	Growth Rate
NCCB	(397.17)	81.80	3.41	(5.16)	(569.74)	(9.44%)

Here,
Dn = Net profit in nth year
D_0 = Net profit in initial year
g= growth rate
We have,

$$Dn = D_0 (1+g)^n$$
$$D_{2058/59} = D_{2062/63}(1+g)^{5-1}$$
$$(397.17) = (569.74)(1+g)^4$$
$$1+g= \quad 1.0944$$
$$g = (9.44\ \%)$$

G. Trend Analysis

G.1. Trend Analysis of Total Deposit

G.1. Trend Analysis of Total Deposit (Rs. In million)

Year (t)	Total deposit(y)	x=t-2061/61	x^2	xy	Yc =a+bx
2060/61	**3708.97**	-2	4	-7417.94	3816.64
2061/62	4294.10	-1	1	-4294.10	4632.45
2062/63	5987.70	0	0	0	5448.26
2063/64	6630.94	1	1	6630.94	6264.07
2064/65	6619.58	2	4	13239.16	7079.88
N=5	∑y=27241.29	∑x =0	$\sum x^2$=10	∑xy=8158.06	

We have,

N=5 ∑x =0, $\sum x^2$=10, ∑y=27241.29, ∑xy=8158.06

Since, ∑x =0, so $a \text{ X} \frac{Y}{N} = \frac{27241.29}{5} = 5448.26$

$$b \text{ X} \frac{XY}{X^2} = \frac{8158.06}{10} = 815.81$$

…Y= a + bx
=5448.26+815.81x

Trend values of total deposit of NCC BANK (2063/64-2067/68)

Year(t)	x	y_c = a+bx
2060/61	3	7895.69
2061/62	4	8711.50
2062/63	5	9527.31
2063/64	6	10343.12
2064/65	7	11158.93

The equation of the trend line is $Y_c \,\mathrm{X} a \Gamma bx$

G.2. Trend Analysis of loan and advances

G.2. Trend Analysis of loan and advances (Rs. In million)

Year (t)	Loan and advances(y)	X=t-2061/61	X^2	xy	Yc =a+bx
2060/61	2878.29	-2	4	-5756.58	2849.28
2061/62	3396.41	1-	1	-3396.41	3715.00
2062/63	4717.30	0	0	0	4580.72
2063/64	6011.90	1	1	6011.90	5446.44
2064/65	5899.16	2	4	11798.32	6312.16
	∑y=22903.60	∑x =0	$\sum x^2=10$	∑xy=8657.23	

We have,

N=5 ∑x =0, $\sum x^2=10$, ∑y=22903.60, ∑xy=8657.23

Since, ∑x =0, so $a \,\mathrm{X} \frac{Y}{N} = \frac{22903.60}{5} = 4580.72$

$$b \,\mathrm{X} \frac{XY}{X^2} = \frac{8657.23}{10} = 865.72$$

…Y= a + bx

=4580.72+865.72x

Trend values of loan and advances of NCC BANK (2063/64-2067/68)

Year(t)	x	$y_{c = a+bx}$
2064/65	3	7177.88
2065/66	4	8043.60
2066/67	5	8909.32
2067/68	6	9775.04
2068/69	7	10640.76

The equation of the trend line is $y_{c = a+bx}$

G.3. Trend Analysis of Total investment

G.3. Trend Analysis of Total investment (Rs. In million)

Year (t)	Total investment(y)	x=t-2060/61	x^2	xy	Yc =a+bx
2060/61	**283.23**	-2	4	-566.46	331.14
2061/62	411.83	-1	1	-411.83	391.67
2062/63	573.98	0	0	0	452.20
2063/64	400.34	1	1	400.34	512.73
2064/65	591.64	2	4	1183.28	573.26
N=5	∑y=2261.02	∑x =0	$\sum x^2$=10	∑xy=605.33	

We have,

We have,

N=5 ∑x =0, $\sum x^2$=10, ∑y=2261.02, ∑xy=605.33

Since, ∑x =0, so a X $\frac{Y}{N} = \frac{2261.02}{5}$ = 452.20 b X $\frac{XY}{X^2} = \frac{605.33}{10}$ =60.53

…Y= a + bx
=452.20+60.53x

Trend values of total investment of NCC BANK (2063/64-2067/68)

Year(t)	x	$y_{c = a+bx}$
2064/65	3	633.79
2065/66	4	694.32
2066/67	5	754.85
2067/68	6	815.38
2068/69	7	875.91

The equation of the trend line is $y_{c = a+bx}$

G.4 Trend Analysis of Loan Loss Provision

G.4. Trend Analysis of Loan Loss Provision (Rs. In million)

Year (t)	Loan Loss Provision(y)	X=t-2060/61	X^2	xy	Yc =a+bx
2060/61	558.02	-2	4	-1116.04	335.55
2061/62	399.15	-1	1	-399.15	491.31
2062/63	445.67	0	0	0	647.07
2063/64	592.17	1	1	592.17	747.93
2064/65	1240.33	2	4	2480.66	958.59
N=5	∑y=3235.34	∑x=0	$\sum x^2$=10	∑xy=1557.64	

We have,

N=5 ∑x =0, $\sum x^2$=10, ∑y=3235.34, ∑xy=1557.64

Since, ∑x =0, so $a \text{X} \frac{Y}{N} = \frac{3235.34}{5} = 647.07$ $b \text{X} \frac{XY}{X^2} = \frac{1557.64}{10} = 155.76$

…Y= a + bx

=647.07+155.76x

Trend values of Net Profit of NCC BANK (2063/64-2067/68)

Year(t)	x	$y_{c = a+bx}$
2064/65	3	1114.35
2065/66	4	1270.11
2066/67	5	1425.87
2067/68	6	1581.63
2068/69	7	1737.39

The equation of the trend line is $y_{c = a+bx}$

H. Coefficient of correlation analysis

H.1 Coefficient of correlation between total deposit and loan and advances
Coefficient of correlation between total deposit and loan and advances

Fy	Deposit (X)	Loan and advances(Y)	**x= X -** $\bar{X}$	**y= Y -** $\bar{Y}$	xy
2060/61	3708.97	2878.29	-1739.29	-1702.32	2960828.153
2061/62	4294.10	3396.41	-1154.16	-1184.20	1366756.272
2062/63	5987.70	4717.30	539.44	136.69	73736.0536
2063/64	6630.94	6011.90	1182.68	1431.29	1692758.057
2064/65	6619.58	5899.16	1171.32	1318.55	1544443.986
	ϕx=27241.29	ϕy=22903.06			ϕxy=7638522.522

$\bar{X} = \frac{X}{N} = \frac{27241.29}{5} = 5448.26$

$\pm x \; X \sqrt{\frac{ƒX \; Z \bar{X} A}{N}} \; X \; 1218.11$

$\bar{Y} = \frac{Y}{N} = \frac{22903.06}{5} = 4580.61$

$\pm y \; X \sqrt{\frac{ƒY \; Z \bar{Y} A}{N}} \; X \; 1273.27$

$r \; X \frac{xy}{n \pm x . \pm y}$

P.Er. = 0.6745* $\frac{1-r^2}{\square N}$

$= \frac{7368522.522}{5*1218.11*1273.27}$

= 0.6745 x $\frac{0.0396}{2.236068}$

r = 0.98

∴ P. Er. = 0.01

6.P.E.r = 6*0.01
= 0.06

H.2 Coefficient of correlation between total deposit and total investment

Coefficient of correlation between total deposit and total investment

Fy	Deposit (x)	Total investment(y)	$x = X - \bar{X}$	$y = Y - \bar{Y}$	xy
2060/61	3708.97	283.23	-1739.29	-168.97	293887.83
2061/62	4294.10	411.83	-1154.16	-40.37	46593.44
2062/63	5987.70	573.98	539.44	121.78	65693.00
2063/64	6630.94	400.34	1182.68	-51.86	-61333.78
2064/65	6619.58	591.64	1171.32	139.44	163328.86
	$\sum$x=27241.29	$\sum$y=2261.02			$\sum$xy=508169.35

We have,

$$\bar{X} = \frac{X}{N} = \frac{27241.29}{5} = 5448.26 \qquad \sigma_x = \sqrt{\frac{\sum (X - \bar{X})^2}{N}} = 1218.11$$

$$\bar{Y} = \frac{Y}{N} = \frac{2261.02}{5} = 452.20 \qquad \sigma_y = \sqrt{\frac{\sum (Y - \bar{Y})^2}{N}} = 115.88$$

$$r = \frac{xy}{n\sigma_x.\sigma_y} \qquad \text{P.Er.} = 0.6745^* \frac{1-r^2}{\sqrt{N}}$$

$$= \frac{508169.35}{5*1218.11*115.88} \qquad = 0.6745 \times \frac{0.4816}{2.236068}$$

r = 0.72

$\therefore$ P. Er. = 0.15

6.P.E.r = 6*0.15

= 0.90

H.3 Coefficient of correlation between total investment and net profit

Coefficient of correlation between total investment and net profit

Fy	Total investment (x)	Net profit (y)	X=x-	Y=y-	xy
2060/61	283.23	(397.17)	-168.98	-219.80	37139.61
2061/62	411.83	81.80	-40.37	259.17	-10462.69
2062/63	573.98	3.41	121.78	180.78	22015.39
2063/64	400.34	(5.16)	-51.86	172.21	-8930.81
2064/65	591.64	(569.74)	139.44	-392.37	-54712.07
	ϕx=2261.02	ϕy= -886.86			ϕxy=-14950.58

We have,

$$\bar{X} = \frac{X}{N} = \frac{2261.02}{5} = 452.20 \qquad \sigma_x = \sqrt{\frac{\sum(X - \bar{X})^2}{N}} = 115.88$$

$$\bar{Y} = \frac{Y}{N} = \frac{-886.86}{5} = -177.37 \qquad \sigma_y = \sqrt{\frac{\sum(Y - \bar{Y})^2}{N}} = -257.59$$

$$r = \frac{xy}{n\sigma_x.\sigma_y}$$

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

$$= \frac{-14950.58}{5*115.88*-257.59}$$

$= 0.6745 \quad x \quad \frac{0.99}{2.236068}$

r = -0.10

∴ P. Er. = 0.30

6.P.E.r = 6*0.30
= 1.80

H.4 Coefficient of correlation between Loan Loss Provision and Loan and Advances.

Coefficient of correlation between loan loss Provision and loan and advances

Fy	Loan and advances (x)	Loan loss Provision (y)	X=x-	Y=y-	xy
2060/61	2878.29	558.02	-1702.32	-89.05	151591.596
2061/62	3396.41	399.15	-1184.20	-247.92	293586.864
2062/63	4717.30	445.67	136.69	-201.40	-27529.366
2063/64	6011.90	592.17	1431.29	-54.90	-78577.821
2064/65	5899.16	1240.33	1318.55	593.26	782242.973
	ϕx=22903.06	ϕy= 3235.34			ϕxy=1121314.25

We have,

$$\bar{X} = \frac{X}{N} = \frac{22903.06}{5} = 4580.61$$

$$\pm x \; X \sqrt{\frac{ƒX \; Z \; \bar{X} \; A}{N}} \; X \; 1273.27$$

$$\bar{Y} = \frac{Y}{N} = \frac{3235.34}{5} = 647.07$$

$$\pm y \; X \sqrt{\frac{ƒY \; Z \; \bar{Y} \; A}{N}} \; X \; 304.94$$

$$r \; X \frac{xy}{n \pm x . \pm y}$$

$$= \frac{1121314.25}{5*1273.27*304.94}$$

r = 0.58

…6.P.E.r = 6*0.20

= 1.20

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

$$= 0.6745 \quad x \quad \frac{0.6636}{2.236068}$$

∴ P. Er. = 0.20

ANNEXURE - I

Questionnaire

1. Does your Bank follow the NRB directives related to the Investment Policy of the commercial banks?

- ❑ Strongly following
- ❑ Weakly following
- ❑ Just been followed
- ❑ Has been trying to follow
- ❑ Any other……………………………….

2. Has your bank been monitored from time to time by the Central Bank about the implementation of the investment policy direction?

- ❑ Yes
- ❑ No

3. Do you think the classification directives of loans and advances and loan loss provision provided by the NRB is effective?

- ❑ Yes
- ❑ No

4. Has your bank being able to follow easily the directive regarding investing in shares and securities under the criteria of NRB?

- ❑ Yes
- ❑ No

5. With the fluctuation of interest rates as per the NRB directives, how will it affect the deposits, profits and other banks operation?

- ❑ Negative impact
- ❑ Positive impact
- ❑ No impact at all
- ❑ Any other

6. With the proper implementation of the investment policies in the banks what could be the impacts of the investments in the years to come?

- ❑ Healthy and well monitored assets of the banks
- ❑ Increased profitability of the banks
- ❑ Depositors money are fully protected

- Decreased profitability of the bank

7. Does your bank think that the current Nepal Rastra Bank's Investment policy directives are difficult to follow?

- Yes
- No

8. Do you think Central Bank think liberally while making Investment Policy directives?

- Yes
- No

9. Does the bank think that the current investment policy directives provided by the NRB should be revised or changed?

- Yes
- No

10. If the current provision is changed or revised then what will be the position of the current economic growth?

- Increase in future
- Decrease in future
- Stable
- No effect at all
- Any other

Appendix – J

Analysis of the questionnaire related to how the concerned bank has adopted the NRB directives related to the investment policy analysis.

Details of the samples and respondents of the questionnaire

Question no	No of samples	Respondents
1 to 10	25	25

Analysis of the questionnaires

Question no 1	No of respondents	In percent
Strongly following	25	100%
Weakly following	0	0
Just been followed	0	0
Has been trying to follow	0	0
Any other	0	0

Question no 2	No of respondents	In percent
Yes	25	100%
No	0	0

Question no 3	No of respondents	In percent
Yes	25	100%
No	0	0

Question no 4	No of respondents	In percent
Yes	25	100%
No	0	0

Question no 5	No of respondents	In percent
Negative impact	0	0
Positive impact	15	60%
No impact at all	10	40%

Question no 6	No of respondents	In percent
Healthy and well monitored assets of the banks	10	40%
Increased profitability of the banks	10	40%
Depositors money are fully protected	5	20%
Decreased profitability of the bank	0	0

Question no 7	No of respondents	In percent
Yes	0	0
No	25	100%

Question no 8	No of respondents	In percent
Yes	25	100%
No	0	0

Question no 9	No of respondents	In percent
Yes	15	60%
No	10	40%

Question no 10	No of respondents	In percent
Increase in future	20	80%
Decrease in future	0	0
Stable	0	0
No effect at all	5	20%
Any other	0	0