CHAPTER 1
INTRODUCTION

1.1 Background of the study

Capital Adequacy refers to the Percentage ratio of a financial institution's primary capital to its assets (loans and investments), used as a measure of its financial strength and stability. According to the Capital Adequacy Standard set by Bank for International Settlements (BIS), banks must have a primary capital base equal at least to eight percent of their assets: a bank that lends 12 dollars for every dollar of its capital is within the prescribed limits (www.businessdictionary.com).

Capital is one of the most important components for every organization. Actually, no organization can exist without capital. Without capital, it is not possible to set up any type of business whether it is general store or a big business house. Every organization is started with a zero position and only come into existence when the promoters, owners or shareholders finance on it as capital. Every organization should have enough capital to run business.

Commercial banks play vital role in capital formation as the bank have obligations to mass people, its depositors. Thus, the banks should hold and adequate capital to secure the interest of depositors.

Capital Adequacy has become one of the most significant factors for assessing the soundness of banking sector. Raising and utilization of funds are the primary functions of commercial banks. As such, commercial bank collects a large amount of deposits from general public. The depositors think that depositing their money in bank is safe and relaxing. But, what does happen if the bank doesn’t have enough capital funds to provide a buffer against future, unexpected losses? Therefore, capital must be sufficient to protect a bank’s

depositors and counterparties from the risks like, credit and market risks. Otherwise, the banks will use all the money of depositors in their own interest and depositors will have to suffer loss.

After the restoration of multiparty democracy, several commercial banks made a way to business in Nepal. At present, commercial bank holds a large share of economic activities of the country. Stock market has been dominated by commercial banks since a decade. Everyday, we can see trading of large amount of stock transactions of commercials banks. Not only in the stock market, but commercial banks have also been major contributors to the revenue of the country. They have been paying a large amount of tax every year. Banking sector has become a mainstay of the economy of the country.

Establishment of commercial banks is governed by Bank and Financial Institutions Act and Company Act. However, Nepal Rastra Bank (NRB), as a regulatory body for banks and financial institutions, has right to specify the capital requirements, and other requirements. Being the central bank of Nepal, NRB has the responsibility to give special attention to the interest of depositors.

Capital is the cash or goods used to generate income either by investing in a business or a different income property. Whereas the capital adequacy ratio is percentage ratio of a financial institution's primary capital to its assets (loans and investments), used as a measure of its financial strength and stability.

NRB issued Unified Directives to be complied by all financial institutions of the country. The Directives consist of 16 volumes. The NRB Directive no. 1 states about the Capital Adequacy Norms for financial institutions indicating the requirements of maintaining the Capital Fund to the prescribed ratios. The directives are said to be based on the internationally accepted norms of Basel Committee. The Basel Committee on banking supervision is a committee of

banking supervisory authorities which was established by the central bank governors of the group of ten countries in 1975. It consists of senior representatives of bank supervisory authorities and central banks from Belgium, Canada, France, Germany, Italy, Japan, Luxembourg, the Netherlands, Sweden, Switzerland and the United Kingdom and the United States. It usually meets at the bank for international settlements in Basel, Switzerland, where its permanent secretariat is located.

1.2 Introduction to Nepal Rastra Bank (NRB)

Nepal Rastra Bank (NRB), the Central Bank of Nepal, was established in 1956 under the Nepal Rastra Bank Act, 1955, to discharge the central banking responsibilities including guiding the development of the embryonic domestic financial sector. Since inception, there has been a significant growth in both the number and the activities of the domestic financial institutions.

To reflect this dynamic environment, the functions and objectives of the Bank have been recast by the new NRB Act of 2002, the preamble of which lays down the primary functions of the Bank as:

- To formulate necessary monetary and foreign exchange policies to maintain the stability in price and consolidate the balance of payments for sustainable development of the economy of Nepal;
- To develop a secure, healthy and efficient system of payments;
- To make appropriate supervision of the banking and financial system in order to maintain its stability and foster its healthy development; and
- To further enhance the public confidence in Nepal's entire banking and financial system.

The Bank is eminently aware that, for the achievement of the above objectives in the present dynamic environment, sustained progress and continued reform of the financial sector is of utmost importance. Continuously aware of this

great responsibility, NRB is seriously pursuing various policies, strategies and actions, all of which are conveyed in the annual report on monetary policy.
The vision of the NRB is to become "A modern, dynamic, credible and effective Central Bank". Its mission is to maintain macro-economic stability through sound and effective monetary, foreign exchange and financial sector policies. (www.nrb.org)

1.3 Introduction to Nepal Industrial & Commercial Bank Limited (NIC Bank)

NIC Bank, which commenced operation on 21 July 1998, is the first commercial bank in the country to be capitalised at Rs. 500 million. The bank was promoted by some of the prominent business houses of the nation.

The current shareholding pattern of the bank constitutes of promoters holding 65% and general public holding 35%. NIC Bank is one of the most widely held banking companies in Nepal with close to 35,000 shareholders. The shares of the bank are actively traded in Nepal Stock Exchange with current market capitalisation of Rs. 2.976 million.

Within 14 years of commencing business, the bank has grown rapidly with 36 branches throughout the country with few more in the pipeline. All branches are inter-connected through V-Sat and capable of providing online, real time transactions.

The bank is the first commercial bank in Nepal to be ISO 9001:2000 certified for quality management system. The bank is run by professionals and believes in the highest standards of corporate governance.

NIC Bank's organizational structure is designed to support its business goals, and is flexible while at the same time seeking to ensure effective control and

supervision and consistency in standards across all businesses. The organizational structure is divided into five major areas viz. Consumer Banking, Business Banking, Special Assets Management, Treasury and Corporate Centre. The bank is committed to provide financial services to its patrons through efficient and cost effective service delivery through its consumer, business banking and treasury divisions.

The bank believes in continuously offering new and value added services to its customers with commitment to quality and value to its clients. Accordingly, the bank has been in the forefront in launching innovative and superior products with unique customer friendly features with immense success. Following are the few products which have been playing vital role in the overall success of the bank winning the hearts of, hundreds of customers:

NIC Life Savings Accounts
NIC Shikshya Kosh
NIC Happy Saving Account
NIC Shareholder Savings Account
NIC Consumer Banking
NIC Mero Bachat
NIC Super Deposit A/C
NIC Social Account
NIC Cash Card
NIC SME Banking
NIC Saving Plus
NIC Business A/C
NIC Karmashil Bachat Khata
NIC Fixed Deposit

1.4 Statement of Problem

Banking and Financial Statistics (mid July 2009) shows that, there are more than Rs. 563,277.90 millions of amount deposited in various commercial banks of the country by the end of fiscal year 2062/63. But if the banks go bankrupted, what will happen to the depositors of such money? Thus, an adequate Capital Fund is required to safeguard the money of depositors. The adequacy of Capital Fund is the most important aspect of the bank. The bank should pay attention to many things for the adequacy of capital. The study has main focus on the Capital Fund of the NIC Bank.

NRB issued a new set of Unified Directives applicable to all financial institutions on 2062-03-29 to be applicable from FY 2062/63 and now recently has lunched new unified directives in mid July 2010 .NRB claims that these directives are based on the Internationally Accepted Banking Norms of Basel committee. Previously, there used to be separate directives for commercial banks, finance companies and other financial institutions.

The Capital Adequacy ratio is derived on the basis of Total Risk Weighted Assets. The Capital Adequacy Ratios to be maintained by commercial banks are as follows in the FY 2067/68:

Core Capital Fund	:	6% of the Total Risk Weighted Assets
Total Capital Fund	:	10% of the Total Risk Weighted Assets

But before the FY 2067/68, this requirement had been minimum requirement of 5.5% in the form of Core Capital Fund and 11% in the form of Total Capital Fund by issuing a notification by NRB.

1.5 Objective of the Study

The main objectives of the study are as follows:

- To find out the Capital Adequacy status of NIC Bank.
- To analyse the significance and impact of NRB Capital Adequacy Norms on commercial banks.
- To make necessary suggestions and recommendations.

1.6 Significance of the Study

The study will have a significant importance in the present context of banking business in Nepal. Commercial banks have collected more than Rs. 291,245.50 millions of Deposit. We can observe that there is a lack of adequate investment opportunity of funds. In such a situation, these Deposits have to be protected by

the adequate Capital Fund of respective commercial banks. In fact, the banks should have adequate Capital Fund apart from the deposits of public to make investments.

Presently, raising capital is a tough task. The growing NPAs, being the main headache of commercial banks, meeting the Capital Adequacy is very tough, though it is not impossible.

This thesis may not be new study in the field of banking sector but the thesis shall of course present some results which will reflect the capital structure and position of commercial banks in Nepal.

1.7 Focus of Study

The study is based on the Capital Funds of the commercial banks which are supposed to be adequate as the NRB Directive no. 1 which is related with Capital Adequacy Norms for commercial banks. The norms basically emphasize on the basic requirement of the Capital Fund that a commercial bank should possess. The fundamental objective of the norm is to safeguard the interest of the depositors. As per the norm, Capital Fund has been divided into two categories i.e. Core Capital Fund and Supplementary Capital Fund.

At present, there are total 32 commercial banks in Nepal and few of them are still on the pipeline. The Capital Fund and Deposit collection up to the end of the fiscal year 2067/068 are shown in Appendix A. Keeping in view of the striving commercial banks, the thesis report, as case study, analyzes the matters, issues and problems related to capital funds of NIC Bank Limited. The thesis report is mainly focused on accordance of the Capital Adequacy Norms of Nepal Rastra Bank (NRB) by NIC Bank.

1.8 Limitation of the Study

The study is limited to the Capital Fund and Capital Adequacy Norms for commercial banks. Since, it is not possible to take all commercial banks as sample, the thesis analyses the data and information of NIC Bank. The data and

information over the period of 5 fiscal years commencing from FY 2063/64 to FY 2067/68 is used in the study.

Balance Sheets, Profit and Loss Accounts and other Financial Statements are considered as basic source of data. Thus, the study will be mainly based on the secondary data collected from various sources. However, some primary data will also be derived from the analysis of questionnaire prepared for the research study.

For the literature review, various newspapers, journals, unpublished thesis works and nevertheless, the internet will be adequately referred. However, the literature review will be limited to very few articles and research works due to unavailability of sufficient such matters and adequate time.

1.9 Theoretical Framework

The primary and independent variable that will be considered in this research study is the Capital Fund of the NIC Bank. The variables, which are supposed to be dependent, are Deposit and Credit of the bank.

There are relationships between Deposit and Credit. The significance of the relationship will be tested in the analytical chapter i.e. Chapter 4. The positive correlation is expected in the relations. The higher the Deposit, the higher the chances of providing more Credits as well.

1.10 Structure of the Report

The structure of the thesis study comprises a total of 5 chapters which have been briefly described as follows:

Chapter 1: Introduction

To start the thesis report, this chapter includes the background of the study, meaning, functions and importance of a central bank, introduction to NRB, introduction to NIC bank, statement of problem, objective of the study,

limitation of the study, theoretical framework and problem hypothesis. This chapter has been targeted to help the reader to understand get the rhythm of the subject matter of the thesis report.

Chapter 2: Review of Literature

This chapter includes conceptual review, review of NRB Capital Adequacy Norms and review of empirical works. For this purpose, various books, journals and periodicals as well as internet have been adequately utilized.

Chapter 3: Research Methodology

Research Design, Sample Selection, Sources of Data, Data Collection Procedure, Tools for Analysis of the Study and Limitations of the Methodology have been included in this chapter.

Chapter 4: Presentation and Analysis of data

This chapter illustrates the collected data into a systematic format. The analysis of those data is also included in this chapter. As well as, interpretation of analysis has also been done in this chapter.

Chapter 5: Summary, Conclusions and Recommendations

In this chapter, the summary of the entire thesis has been comprised. This chapter further describes the major findings of the thesis. Conclusions of the study have also been included in this chapter. As well as, possible and viable recommendations has also been presented in this chapter.

CHAPTER 2
REVIEW OF LITERATURE

Review of literature comprises of previous research concerned with this study with a view for supplement the present research, such review adds to the dimension of the study; in this chapter. Focus has been made on the review of literature relevant to the investment policy of finance companies this chapter deals with review of books, reports articles and unpublished publications.
This chapter is divided into two parts:

2.1 Conceptual Review

2.1.1 Overview: Capital and Capital Adequacy

"Capital is a stock of resources that may be employed in the production of goods and services and the price paid for the use of credit or money, respectively." *(Microsoft Encarta Reference Library, 2003)*

Capital in relation with banking as a long-term debt plus owners' equity. The efficient functioning of markets requires participants to have confidence in each other's stability and ability to transact business. Capital-rules help foster this confidence because they require each member of the financial community to have, among other things, adequate capital. This capital must be sufficient to protect a financial organization’s depositors and counterparties from the risks of the institution’s on-balance sheet and off-balance sheet risks. Top of the list are credit and market risks; not surprisingly, banks are required to set aside capital to cover these two main risks. Capital standards should be designed to allow a firm to absorb its loses, and in the worst case, to allow a firm to wind down its business without loss to consumers, counterparties and without disrupting the orderly functioning of financial markets.

Minimum capital fund standards are thus a vital tool to reducing systematic risk. They also play a central role in how regulators supervise financial institutions. But capital requirements have so far tended to be simple mechanical rules

rather than applications of sophisticated risk-adjusted models. Such capital standard is widely known as capital adequacy. *(Rosenberg, 1982)*

Capital as common stock plus surplus plus undivided profits plus reserves for contingencies and other capital reserves. In addition since a bank's loan-loss reserves also serves as a buffer for absorbing losses, a broader definition of bank capital include this account. (Patheja,1994, *Financial management of commercial banks, Delhi)*

The general public is interested in the higher profitability and safety of the funds of a bank, because the public expects the shareholders to assume all the risks. Lower profitability of a bank fills the faith of the prospective depositors and all their incentive for investing in the various deposit schemes. (Verma and Malhotra (1993) *(Funds management in commercial banks, New Delhi)*

The Basel Committee sets a standard for all the banking norms, which will be accepted by central banks of all big industrialist countries. Regarding the capital funds the committee has issued the Basel Capital Accord. The first Basel Capital Accord was issued in 1988 and was implemented by 1992. The committee had issued New Basel Capital Accord which should have been implemented by 2006 to overcome the drawbacks of the present capital accord. Central banks of developing and underdeveloped countries follow these standards. NRB also follow these standards and accordingly sets standard for commercial banks in Nepal.

According to the Unified Directive issued by NRB, the bank capital has been categorized into two parts: Core Capital and Supplementary Capital.

The Core Capital consists of the following components of capital:

1. Paid Up Capital
2. Share Premium
3. Irredeemable Preference Shares
4. General Reserve Fund
5. Cumulative Profit / Loss
6. Capital Redemption Reserve
7. Capital Adjustment Fund
8. Other Free Reserves

Following items should be deducted while determining Core Capital:

1. Goodwill
2. Investment made in the shares and debentures of the companies crossing the limit prescribed by NRB (Directive No. 8)
3. Total investment made in shares and debentures of those companies where financial interest prevails
4. Fictitious Assets

The Supplementary Capital consists of the following components of capital:

1. General Loan Loss Provision
2. Assets Revaluation Reserve
3. Hybrid Capital Instruments
4. Subordinated Term Debt
5. Exchange Equalization Reserve
6. Additional Loan Loss Provision
7. Investment Adjustment Reserve

The total of Core Capital and Supplementary Capital is considered for calculating Capital Adequacy Ratio. The Capital Adequacy Ratio is based on total Risk-Weighted Assets.

Capital adequacy as legal requirement that a financial institution (such as bank) should have enough capital to meet all its obligations and fund the services it offers.*(Clark, 1999)*

Capital adequacy aims at setting minimum level of capital as a function of risks. Thus, capital should be risk based. (Besis 1998, *Risk management in banking*)

"Capital is adequate either when it reduces the chances of future insolvency of an institution to some predetermine level of alternately when the premium paid by the banks to an insurer is "fair", that is, when it fully covers the risks borne by the insurer. Such risks, in turn, depend upon the risk in the portfolio selected by the bank, on its capital and on terms of the insurance with .reference to when insolvency will be determined and what loss will be paid". (Maisel , 1981, *Risk and capital adequacy in commercial banks, Chicago)*

The Capital Adequacy Ratio is yielded by the following formula:

$$\text{Capital Adequacy Ratio} = \frac{\text{Total Capital Fund}}{\text{Total Risk-Weighted Assets}} \times 100\%$$

2.1.2 Origin and Development of Bank

There are different views regarding the origin of bank. Some people say that the term “bank” derived from the Latin word “bancus”. Some say that it is the outcome of French word “banque”.It is also said that the word bank has been derived from Italian word “banca”, which means a bench for keeping monetary records. Other group of people also concludes that bank has a German origin. Hence the concept of banking has been varying from time to time.

It can be referred from the history that a crude form of bank started in the ancient Vedic Era because the word like deposits, pledges, policy of loan and interest rates can be traced out from “Manu smites”. As a result of collapse of Roman Empire in about 15th and 16th century in commercial and trading sector

were provided by communities, who were also known as the ancestors of the modern bank. These major communities were:

a. The merchant Banker
b. The Gold Smiths
c. The Money Lender

The modern banking practice was originated from Europe. The first bank called 'Bank of Venice' was established in Venice in 1157. Then 'Bank of Barcelona' was established in 1401 and 1407 'Bank of Genoa' was established.n1694 the 'Bank of England' was established as a joint stock bank.

Nepal has a long history of using money. History unveils that the first Nepali coins to be introduced were *Manank* during the reign of the King Mandev and *Gunank* during the reign of the King Gunakamdev. Afterwards the coins were reintroduced during the reign of Amshuverma. After the unification of Nepal, the great King Prithivi Narayan Shah started the coin *Mohar*. The *Taksar* was established in 1789 to issue coins scientifically. In 1876, during Rana Regime an office named *Tejarath Adda* was established in Kathmandu to provide loans against deposit of gold and silver. But the office did not have right to accept deposits.

To begin to the modern banking system, Nepal Bank Limited was established in 1937 as the first bank of the country. Nepal Bank Limited dominated the financial sector of the country for almost 30 years without any competitor. This bank played a major role to boost up the Nepalese economy during that period. Nepal Rastra Bank was established in 1955 as central bank of Nepal which was very essential for Nepalese economy. The second commercial bank, Rastriya Banijya Bank was established in 1965 under the Rastriya Banijya Bank Act, 2022 with full ownership of the Government of Nepal.

The History of Banking begins with the first prototype banks of merchants of the ancient world, which made grain loans to farmers and traders who carried goods between cities. This began around 2000 BC in Assyria and Babylonia. Later, in ancient Greece and during the Roman Empire, lenders based in temples made loans and added two important innovations: they accepted deposits and changed money. Archaeology from this period in ancient China and India also shows evidence of money lending activity.

Banking, in the modern sense of the word, can be traced to medieval and early Renaissance Italy, to the rich cities in the north such as Florence, Venice and Genoa. The Bardi and Peruzzi families dominated banking in 14th century Florence, establishing branches in many other parts of Europe. Perhaps the most famous Italian bank was the Medici bank, established by Giovanni Medici in 1397.

The development of banking spread from northern Italy through Europe and a number of important innovations took place in Amsterdam during the Dutch Republic in the 16th century and in London in the 17th century. During the 20th century, developments in telecommunications and computing caused major changes to banks operations and let banks dramatically increase in size and geographic spread. The Late-2000s financial crisis caused many bank failures, including of some of the world's largest banks, and much debate about bank regulation. (www.wikipedia.org)

Functions of a central bank may include:

- Implementing monetary policies.
- Determining Interest rates
- Controlling the nation's entire money supply
- The Government's banker and the bankers' bank ("lender of last resort")
- Managing the country's foreign exchange and gold reserves and the Government's stock register

- Regulating and supervising the banking industry
- setting the official interest rate used to manage both inflation and the country's exchange rate and ensuring that this rate takes effect via a variety of policy mechanisms

2.1.3 Meaning of Central Bank

A central bank is fundamentally a chief bank of a given nation. The essential responsibilities of the central bank include issuing and maintaining a stable influx of currency, ensuring optimal employment, and keeping inflation under control. Other tasks of the central bank consist of holding deposits on the reserves of other banks, as well as overseeing lending and exchange practices of commercial lenders. The central bank also plays a vital role of reserving the nation's emergency funds. It is the national institution that monitors all financial and monetary procedures and policies.

Glenlake Publishing Co Ltd and AMACOM American Management Association has expressed the central bank as bank that often carries out government economic policy, influences interest and exchange rates and monitors the activities of commercial and merchant banks. In this way it functions as the government's banker and is the lender of the last resort to the banking system. Clark (1999) *International Dictionary of Banking and Finance,* New York

Central Bank as an institution that is charged with regulating the size of a nation's money supply, the availability and cost of credit, and the foreign-exchange value of its currency. Regulation of the availability and cost of credit may be non selective or may be designed to influence the distribution of credit among competing uses. The principal objectives of a modern central in carrying out these functions are to maintain monetary and credit conditions conducive to a high level of employment and production, a reasonably stable level of domestic prices, and an adequate level of international reserves.

Central bank is an institution which is charged with the responsibility of managing the expansion and contraction of the volume of money in the interest of the general public welfare. It is also a banker's bank and holding reserves of the country and ultimate reservoir of credit. Hence, central bank is the regulating authority for commercial banks, and other banks and financial institutions. *Encyclopaedia Britannica (2002)*

2.1.4 Importance and Functions of Central Banks

The most important and the earliest functions to be discharged by a central bank is that of acting as a bank of issue. As well as it is a banker's bank. The central bank also acts as a lender of the last resort. In case of any problems and emergency to any of the banks operating under it, central bank comes forward to rescue them temporarily from such problems. It also plays the role of an agent, an advisor and banker to the Government. Central bank is a custodian of the nation's metallic reserves and controller of currency.

A central bank has sole right to issue national currency notes. It controls money flow in the market by imposing monetary policy. It issues notes after full analysis of unemployment, inflation, economic growth, etc. of the country. Central bank is the holder of all the Government balances. It is the holder of all the reserves of the other banks and financial institutions in the country.

Objectives between a central bank and other commercial banks are different. The main objective of a central bank is to assist the government to implement economic politics without any profit motive, where as the main objectives of other banks is to earn profit by mobilizing funds collected from the general public. As well as the central bank plays the role of guardian and parents to other commercial banks.

As a regulatory body of all other banks and financial institutions, a central bank is the origin of all banking policies under which all the banks are suppose to

operate. Therefore, a central bank guides and assists in operating banking system as a whole. A central bank has full authority to interfere in the banking market i.e. to all banks in terms of implementing its policies. It can penalize the banks in case they go out of the central bank's policy or the termination of the license and also can restrict their working dimensions to a large extent.

A central bank is also important in the context to co-ordinate with different international institutions such as International Monetary Fund (IMF) etc. It works under the supervision and guidance of such institution to develop the monetary system of a country. (Shekhar & Shekhar,1998)

2.1.5 Meaning of Commercial Bank

An institution which accepts deposits, makes business loans, and offers related services. Commercial banks also allow for a variety of deposit accounts, such as checking, savings, and time deposit. These institutions are run to make a profit and owned by a group of individuals, yet some may be members of the Federal Reserve System. While commercial banks offer services to individuals, they are primarily concerned with receiving deposits and lending to businesses. (www.investorwords.com)

Commercial bank as an organization chartered either by the Comptroller of the Currency and known as a national bank or chartered by the state in which it will conduct the business of banking. A commercial bank generally specializes in demand deposits and commercial loans. *(Rosenberg 1982)*

Commercial bank as bank that concentrates on cash deposit and transfer services to the general public, often to be found on the High Street. It may be joint-venture bank or a private bank. *(Clark 1999)*

"Bank is an institution that deals in money and substitutes and provides other financial services. Banks accept deposits and make loans and derive a profit from the difference in the interest rates paid and charged, respectively. Some

banks also have the power to create money. Commercial bank is a bank with the power to make loans that, at least in part, eventually become new demand deposits. Because a commercial bank is required to hold only a fraction of its deposits as reserves, it can use some of the money on deposit to extend loans. When a borrower receives a loan, his checking account is credited with the amount of the loan; total demand deposits are thus increased until the loan is repaid. As a group, then, commercial banks are able to expand or contract the money supply by creating new demand deposits." *(Encyclopaedia Britannica, 2002)*

"Banking, the business of providing financial services to consumers and businesses. The basic services a bank provides are checking accounts, which can be used like money to make payments and purchase goods and services; savings accounts and time deposits that can be used to save money for future use; loans that consumers and businesses can use to purchase goods and services; and basic cash management services such as check cashing and foreign currency exchange. Commercial banks specialize in loans to commercial and industrial businesses. Commercial banks are owned by private investors, called stockholders, or by companies called bank holding companies." *(Microsoft Encarta Reference Library, 2003)*

The main objective of a commercial bank is to earn profit by collecting the fund scattered around the general public, and mobilizing it. So, the main functions of commercial banks happen to be collecting deposits from general public and lending loans to various economic sectors that require financing. Commercial banks make profit by charging a bit higher interest rate in loans than they pay to depositors. So the main source of income of commercial banks is interest income.

2.2 Review of NRB Capital Adequacy Norms For Commercial Banks

With an objective to develop a healthy, competent and secured banking system for economic prosperity of the country and to safeguard the interest of depositors, NRB issued the directive no.1 regarding minimum capital fund to be maintained by commercial banks. NRB issued these capital adequacy norms by using the power given by Bank and Financial Institutions Act (BAFIA). These norms are issued under the Provision 79 of Nepal Rastra Bank Act, 2002 for developing and regulating banking system.

The norms have prescribed the minimum capital fund requirement, on the basis of the risk-weighted assets. The banks are required to maintain following prescribed proportion of minimum capital fund on the basis of risk weighted assets as applicable from the FY 2064/65:

Core Capital : 6% of the risk weighted assets

Total Capital Fund : 10% of the risk weighted assets

Requirements have not been prescribed for Supplementary Capital and focus has been made for Core Capital. So, it is required to fulfil the requirement for Core Capital and excess of Core Capital over the requirement can be utilized to meet the overall requirement of Total Capital Fund.

As stated earlier, for the purpose of calculation of Capital Fund, the capital of the banks is divided into two components Core Capital and Supplementary Capital. Core Capital consists of share capital, share premium, non-redeemable preference shares, general reserve fund and accumulated profit/loss. Supplementary capital consists of general loan loss provision, exchange equalization reserve, assets revaluation reserve, hybrid capital instruments, unsecured subordinated term debt, interest rate fluctuation fund, and other free reserves. The sum of these two components is considered to be total capital fund.

For the purpose of calculation of capital fund, the risk-weighted assets have been classified into two parts – On-Balance Sheet Risk-Weighted Assets and Off-Balance Sheet Risk-Weighted Items. The weightage of the risk assigned to them are shown in the Appendix B and Appendix C respectively. The amount of risk-weighted assets calculated by multiplying the amount of the asset with the weightage assigned to them and the total of which will be extracted for the purpose of calculation of capital adequacy ratios.

As per the norms, the capital fund ratio would measure the total capital fund on the basis of total risk-weighted assets. The capital fund ratio shall be determined as follows:

$$\textbf{Capital Fund Ratio} = \frac{\text{Core Capital + Supplementry Capital}}{\text{Sum of Risk-Weighted Assets}} \times 100\%$$

The sum of risk-weighted assets is the sum of total on-balance sheet risk-weighted assets and total off-balance sheet risk-weighted items.

The banks shall, at the end of Ashoj (mid October), Poush (mid January), Chaitra (mid April) and Ashad (mid July) of each fiscal year, prepare the Statements of Capital Fund and other relevant statements on the basis of the financial statements as per the prescribed Form No. 1.1 and Form No. 1.2 and submit to the Banking Operations Department and Inspection and Supervision Department of this bank within one month from the end of each quarter. The prescribed Form no. 1.1 and 1.2 are illustrated in Appendix D and Appendix E respectively.

In the event of non-fulfilment of Capital Adequacy Ratio by any bank, the Board of Directors of the bank shall submit the adequate reasons for not being able to maintain the required capital fund and capital plan or program prepared to fulfil the capital fund requirements within 35 days. NRB shall direct the bank to fulfil the requirements as per submitted capital plan or program and

within the time limit prescribed. The bank is not allowed to distribute dividends and bonus shares in such context.

If any bank does not fulfil the minimum Capital Fund within the specified period, NRB may initiate any of the following actions:

- Suspension of opening new branch.
- Suspension of access to refinancing facilities of Nepal Rastra Bank
- Restriction on lending activities of the bank.
- Restriction on accepting new deposits.
- Initiation of any other actions by exercising the authority under Section 100 of Nepal Rastra Bank Act, 2058, what are as follows.

Punishment for Violation of Bank's Regulation:

1. In case any commercial bank or financial institution licensed from the Bank, violates an order or directive issued by the Bank under this Act or under the regulation or bye-laws framed thereunder, the Bank may impose one or more of the following punishment to such commercial bank or financial institution:-

- Giving reprimand or written warning;
- Obtain an undertaking from Board of Directors for adopting reformative measures;
- Issuing written order to end up frequent violations, to abstain from such violation and to adopt reformative measures;
- Suspend or terminate the services of the Bank's employee;
- Prohibit commercial bank or financial institution to distribute dividend to its shareholders;
- Prohibit commercial bank or financial institution to accept deposits or to grant loan and advance;
- Imposing full or partial restriction on the transaction of business of the commercial bank or financial institution;

- Suspend or revoke license of the commercial bank or financial institution.

2. Where a Director or official or employee of a licensed commercial bank or financial institution violates an order or directive issued by the Bank under this Act or under the regulation or bye-law framed there under or in cases where, they have acted against the interest of the depositor or general public or where they failed to submit the documents, particulars, data required by the Bank or the inspecting or supervising official within the time prescribed, the Bank may impose the following punishments to such Director, official or employee:-

- Giving reprimand or written admonition;
- Suspending;
- Imposing a cash fine not exceeding five hundred thousand rupees;
- Giving order to the Board of Directors of concerned commercial bank or financial institution to stop payment of all benefits including remuneration and allowances;
- Giving order to the Board of Directors of the concerned commercial bank or

Financial institution to remove Directors from his office of Director or to terminate the services of officer or employee. *(Nepal Rastra Bank Act, 2058)*

2.2.1 Review of Articles and Journal

Rana (2001) alerts commercial banks of the directives issued by Nepal Rastra Bank on 2001. The article gives bird's eye view of major changes made in the new directive and suggests measures to be taken by commercial ban to comply with the new directives. Mr. Rana has highlighted the following points in his article.

- Capital adequacy ratio for commercial bank prescribed by Nepal Rastra Bank is even higher than the requirements in india.
- Classification of loans and advances into four category instead of six categories prescribed earlier.
- Foresee capital adequacy position for a number of years ahead and initiate measures for increasing the capital if required.
- Strengthen bank's monitoring and follow-up department. Time has come to inculcate financial discipline to the customers. A number of interaction programs should be organized with credit customers so that NRB'S new directives could be explained to them.

Keijser and Haas (2001) "*Financial collateral and capital adequacy requirements" Retrieved February 20, 2007* have summarised as the Basel Capital Accord of 1988 was an important first milestone in the regulatory treatment of collateralised transactions. However, the role played by risk mitigating factors in this Accord, such as the use of financial collateral, is still rather limited. The same holds for the European Directives and national regulations derived from the Basel Accord. The use of a wider range of collateral will be allowed in the new Accord and the banks will be able to choose either the comprehensive or the simple approach for the treatment of collateral. Whereas the simple approach resembles the current Basel substitution methodology in its treatment of collateral, the comprehensive approach is more innovative. It assigns a central role to collateral haircuts, which may be used on banks' own internal estimates of collateral volatility. By making a wider range of collateral available for credit risk mitigation and making the calculation of risk-weighted assets more risk-sensitive, the revision of the Basel Accord is intended further to align regulatory capital which banks must hold and their actual economic risk structure.

Shrestha (2003) in her article "*Impact and Implementation of Nepal Rastra Bank (NRB)'s Guidelines (Directives) on commercial banks has mentioned*

impact of NRB directives on commercial banks. She presented that all the changes in NRB Directives made both positive and negative impacts on the commercial banks. It clears the new directives issued by NRB make good impact to more than bad impact on the various aspect of the banks. It can be seen that the provision has been changed and the increased provisioning amount has decreased the profitability of commercial banks. Apart from, loan exposure has been cut down to customers due to the borrower limits have been through down by NRB. Therefore reduction in loan amount result to decrease the interest incomer from loans, which will decrease the profits of the banks in coming years. Decreasing profitability push towards lesser dividends to the shareholders and less bonus to employees. Not only the negatives sides but also there are positive sides of new directives. Recently the problems of banks are increasing operating cost and decreasing loan amount resulting decrease in profits of the banks but it shows it is only for short time there because the directives are more effective to protect the banks from bad loans, which protect the banks from bankruptcy as well as protection of deposits of depositors, Increase in capital adequacy ration strengthen the banks financial position, loan related provision will made safety of loans expect the risk reducing provision would protect the bank form liquidation. Above all it can be concluded that newly issued directives are more effective that previous one although it has brought some problems towards banks. To increase the decreasing profits of the banks, they should research the alternatives like more investment in other business, bank should adopt new technology according to the demand to time and must not depend on only interest income for profit.

Lamsal, H.R. (2003) *NRB Directives: Bankers plea for lighter strictures. New Business Age, 1(3), pp.31-35* (2001, July) stated that the commercial banks with seven directives issued in two instalments asking banks to start complying with the new strictures by mid-July 2001 or face grave consequences. NRB claims that these are based on the internationally accepted banking norms of Basel committee. Lamsal has opined that banks are expected to be disparate to meet

the targets of capital adequacy norms since the consequences the banks have to face in case of non-compliance are very strict. And for this purpose they will have to issue additional shares, which is not possible for them in the short-run. Or they do not prefer to go for additional share issue simply because they will also have to pay the same dividend as the past to the holders of shares so issued. This becomes the more difficult as the business is not going to expand commensurately. The difficulty is understandable now when every banker is complaining of the lack of new investment projects.

2.2.2 Review of Thesis Works

Pathak, G.K. (2000), "*Capital structure and profitability: a comparative study between Nepal Indosuez Bank Ltd. (NIBL) and Nepal Grindlays Bank Ltd. (NGBL)"* in his thesis, has found the capital adequacy ratios of NIBL and NGBL are fluctuating in nature over the period of his study. Pathak has further concluded that both the banks have been maintaining capital adequacy ratio as directed by the central bank in order to safeguard the depositors' interest. However, it is found from student's t-test that NIBL has higher capital adequacy ratio than that of NGBL on average. It can be concluded that NIBL has maintained excess capital fund to safeguard the depositor's interest.

Sapkota, R. (2002), "*A study of capital and assets structure management of Nepal Bank of Ceylon Limited"* in his study on capital and assets structure management of Nepal Bank of Ceylon Ltd., has found that the ratio of shareholder's fund to total deposit ratio reveals that in the year 2053/54, it was highest i.e. 101.40% and has been in the decreasing trend in the succeeding years. The average ratio is 35.69. Also, the ration of shareholders' fund in relation to total assets shows that average ratio is 21.22%. It is concluded that its ratio are found decreasing throughout the study period.

Pandey, A.K. (2002) *"Nepal Rastra Bank Directives, their implementation & impact on the commercial banks- a case study of Himalayan Bank Ltd. (HBL)."* has

given conclusion regarding the capital adequacy of HBL during his study period, i.e., as of Poush end 2058 as the capital fund stood at Rs. 1070 million comprising of Rs. 756 million core capital and Rs. 314 million of supplementary capital. The total risk weighted assets of HBL is equal to Rs. 12690.6 million. Therefore, the capital adequacy of the bank stood at 8.43% of the total risk weighted assets. Core capital is 5.96% and the supplementary capital is 2.47% of total risk weighted assets. Hence, Pandey has concluded that HBL has surplus of Rs. 184.92 million of core capital and a shortfall of Rs. 257.08 million of supplementary capital. The standard required to be maintained by HBL as per NRB by July 16, 2002 is 4.5% in each case totalling 9%in all. However, according to the Directives, a shortfall in the supplementary capital can be fulfilled by the surplus in core capital. Therefore, in case of HBL, the bank can use excess of Rs. 184.92 million core capital to compensate for the shortfall. But still the bank requires another Rs. 72.6 million to meet the requirement of supplementary capital. Pandey has suggested that HBL should increase the capital base from Rs. 1070 million by at least Rs. 115 million to meet the capital adequacy ratio. For this, the bank should try to increase its supplementary capital as it falls short by Rs. 73 million. The bank should increase its core capital in order to expose itself to more credit risk.

Sapkota, U.P. (2004), "*A study on fund mobilizing policy of Standard Chartered Bank Nepal Limited."* in his study on fund mobilizing policy of Standard Chartered Bank Nepal Ltd. (SCBNL), has found that liquidity position of SCBNL was not satisfactory. Loans and advances, cash and bank balance ratio seemed too weak than that of NBBL and HBL. Investment on share and debenture and interest earning power on total working fund also seemed weak in condition than that of NBBL and HBL. The relation of investment and loans and advances with deposits seemed positive and the relation of net profit with outside assets (investment and loans and advances) seemed positive. At last, Sapkota concluded that in overall condition SCBNL seemed in satisfactory

position in comparison to NBBL and HBL. Since SCBNL used to provide less loans and advances in comparison to its total deposits, Sapkota has strongly recommended for following a liberal lending policy so that more percentage of deposits can be invested in different profitable sectors as well as towards loans and advances as a significant factor this affects the net profit of the bank. Subsequently, a skilful administration is the most for these assets because negligence may become a reason for liquidity crisis and bankruptcy.

Karmacharya, R.P. (2005) "S*tudy on capital structure of joint-venture commercial banks and NRB Directives issued in regards to thereof"* has expressed that the financial soundness as well as its strength of the company depends upon the large extent on the composition of the capital structure and assets. Capital structure of the company presents its resource capacity and ability of its present worthiness. In the study, he has found that all the banks in his study follow the requirements of NRB Directives regarding capital adequacy. The capital structure of studied banks is highly leveraged. Thus, Karmacharya has recommended that the proportion of debt and equity capital should be decided keeping in mind that effort of tax advantages and financial distress. The banks are required to maintain improved capital structure by increasing equity base i.e., issuing more equity capital, expanding general reserve and retaining more earnings. With this improvement, it will compromise among the conflicting factors of cost and risk. As mandated by NRB, for the operation in overall Nepal, a commercial bank should have capital base of Rs. 500 million. Hence, the banks should raise its paid-up capital to Rs. 500 million as soon as possible.

Shrestha, T.R. (2005), "*A comparative study on investment practice of joint-venture commercial banks"* in his study has stated that in a situation when the existing financial institutions, especially government owned commercial banks were unable to supply credit timely and carry capital market activities, private joint venture commercial banks have contributed a lot. The overall performances of joint venture commercial banks are satisfactory and NRB has

to play more active role to enhance the operation. The analysis of liquidity position of sample joint venture commercial banks (Nabil Bank Ltd., Standard Chartered Bank Ltd. and Nepal SBI Bank Ltd.) has satisfactory outcomes. Initially, the major part of these banks was consisting of business and industrial loan: this is the indication of investment on productive sector. Nowadays, these banks are slowly turning towards hire purchase and housing financing.

Strengthening and institutionalization of the commercial banks is very important to have a meaningful relationship between commercial banks and national development through shift of credit to productive industrial sectors. At the same time, the series of reforms such as consolidation of commercial banks, directing attention to venture capital financing, appropriate risk return trade off by linking credit to timely repayment schedules, avoiding imperfections, allowing flexibility in lending, one window service from NRB, need of a strong supervision and monitoring from NRB, diversity scope of activities for commercial banks, professional culture within commercial banks, etc. All these are necessary to ensure better future performance of commercial banks that have already been established and growing in Nepal.

When the government adopted liberal policy, as a result, .any commercial banks especially joint venture banks increased rapidly i.e. Himalayan Bank Ltd., Nepal SBI Bank Ltd. and Nepal Greenland Bank Ltd., etc. These banks are mainly concentrated themselves on financing foreign trade, commerce and industry and other sectors. Banking helps to mobilize the small savings collectively to the huge capital investment though the banking is considered as the platform of money market.

2.3 Research Gap

Research gap is the difference between previous work done and the present work. Earlier studies dealt about NRB Directives as a whole and generalized the matter about the objectives, purpose and impact of the directives to the

commercial banks and financial institutions. Very few of them have gone specific about capital adequacy norms but none of them have written over two phases of the capital adequacy norms taking NIC Bank in specific. So, this study is conducted to make a specific review of capital adequacy norms with a specific case of NIC Bank. It may be the case that the bank is not very old, so, many studies regarding this bank have not been made compared to other elder commercial banks. As such, this study might be a novelty one with reference to the study of the capital adequacy norms of NIC Bank.

More over, his study gives more relative and accurate conclusion that past research. The study takes five year from 2063-2068 which is not included by the past researcher.

CHAPTER 3
RESEARCH METHODOLOGY

Research Methodology can be understood as a science of studying how research has been done. This chapter looks into the Research Design, Nature and Sources of Data, Data Collection Procedure and Tools and Technique of Analysis. For the purpose of achieving the objectives of the study, the applied methodologies are used. The research methodology used in the present study is briefly mentioned below.

3.1 Research Design

This study research attempts to analyze the Capital Funds of commercial banks taking the data and information of NIC Bank Ltd. (NIC). The research design is basically focused on analytical study. Ratio Analysis, Correlation Analysis and Comparative Analysis of the ratios have been done for analyzing the research. The research examines the relationship of Capital Fund to various other stakes, like Deposits, Credits, etc.

3.2 Population and Sample

There are total 32 commercial banks presently operating in Nepal. Collecting the data of these entire commercial banks is not possible. Hence, NIC Bank Ltd. has been selected for the case study. Thus, the population of the study comprises of all these commercial banks and the sample of NIC Bank.

3.3 Data Collection Procedure

The data and information are collected from both the primary and secondary sources. For the primary information, research interview and questionnaire are used. The research interview questionnaire, as shown in Appendix A, was set to interview bank officials. The research questionnaire as shown in Appendix C was set for bank account holders who are known as depositors in this thesis report.

For the collection of secondary data and information, Unified Directives of Nepal Rastra Bank, Annual Reports of NIC Bank, various publications of Nepal Rastra Bank, magazines, the other publications and the internet (website www.nrb.org.np) have been used. Also, for other related information, various books and periodicals have been referred from library and some that the researcher self has.

3.4 Data Analysis Tools

Before analyzing the data, the data and information have been presented systematically in the formats of Tables, Graphs and Charts which will explain a lot about the data and information collected.

For the analysis of the research study, the following financials tools and statistical tools are used.

3.4.1Financial Tools

3.4.1.1 Ratio Analysis

Ratio Analysis is the best tool for financial analysis. Ratios can be taken as expression of relationships between two items or group of items and therefore may be calculated in any number and ways so far meaningful co-relationship is obtainable.

In general, the Ratio Analysis is used as a benchmark for evaluating the financial position and performance of a firm.

The following ratios related to the banks are used to analyze the data:

- **Capital Adequacy Ratio**

Capital Adequacy Ratio is the foremost tool to analyze the Capital Fund of a bank. Actually, the fundamental objective of this study is to examine Capital Adequacy of NIC Bank.

The Capital Adequacy Ratio is based on Total Risk-Weighted Assets (TRWA) of the bank. Capital Adequacy Ratios are a measure of the amount of a bank's capital expressed as a percentage of its risk weighted credit exposures. This ratio is used to examine adequacy of Total Capital Fund and Core Capital, which is yielded by the following formulas:

To measure the adequacy of Total Capital Fund: $\frac{\text{Total Capital Fund}}{\text{TRWA}} \times 100\%$

To measure the adequacy of Core Capital: $\frac{\text{Core Capital}}{\text{TRWA}} \times 100\%$

- **Credit / Deposit Ratio:**

The Credit / Deposit Ratio (CD Ratio) is a major tool to examine the liquidity of a bank. CD Ratio measures the ratio of fund that a bank has utilized in credit out of the total deposit collected. More the CD Ratio more the effectiveness of the bank to utilize the fund it collected.

The CD Ratio is derived by the following formula: $\frac{\text{Total Credit}}{\text{Total Deposit Collected}} \times 100\%$

Further, comparative analysis of the ratios of the bank with average industry ratios were also made to check the significance of the ratios of the bank in the industry as a whole.

3.4.2 Statistical Tools

The following statistical tool is used to analyse the data:

- **Karl Pearson Correlation Analysis:**

The relation between two variables is correlated by Karl Pearson’s Correlation Co-efficient. The following is the formula proposed by Karl Pearson for calculation of correlation coefficient.

$$r = \frac{N\Sigma XY-(\Sigma X)\,(\Sigma y)}{\sqrt{N\Sigma X^2-(\Sigma X)^2}\,\sqrt{N\Sigma Y^2-(\Sigma Y)^2}}$$

Where,

N = Number of pairs in observation

X = Product of the first variable

Y = Product of the second variable

To ease the calculation, a shortcut formula has been proposed which has been used to calculate correlation coefficients in this thesis report. The shortcut formula is as follows:

$$r = \frac{\Sigma xy}{\sqrt{\Sigma x^2}.\sqrt{\Sigma y^2}}$$

Where,

$x = (X- \bar{X})$

$y = (Y-\bar{Y})$

CHAPTER 4
DATA PRESENTATION AND ANALYSIS

This chapter deals with the presentation, analysis and interpretation of relevant data and information of NIC Bank. Also, the analysis and interpretation of the information and data produced from questionnaire is also contained in this chapter. To obtain best result, the data and information have been analyzed according to the research methodology as mentioned in Chapter 3.

The main purpose of analyzing the data is to change it from an unprocessed form to an understandable presentation. The analysis of data consists of organizing, tabulating and performing statistical analysis. (Wolff & Pant, 2004) This chapter is partitioned into the sections of:

- Presentation of Data and Ratio Analysis
- Statistical Analysis
- Impact of Capital Adequacy Norms

4.1 Presentation of Data and Ratio Analysis

The collected data and information are presented. Various tables, charts and graphs are used to best present the data. The data and information has been presented in most understandable format.

4.1.1 Capital Fund

Capital Fund of a bank consists of two types of components viz. Core and Supplementary Capital. Hence, the Total Capital Fund of a bank is derived by adding these two components of capital. The Capital Fund of NIC Bank has been illustrated hereinafter.

4.1.1.1 Capital Fund of NIC Bank

From the inception period, the capital of the NIC Bank was Rs. 500,000,000.00, has been increased to Rs. 1,311,000,000.00 in the FY 2067/68.

The capital funds of NIC Bank have been tabulated in Table 4.1 which shows the capital fund of the bank over the period of five fiscal years, i.e., from FY 2063/64 to FY 2067/68.

Table 4.1
Capital Fund of NIC bank

Rs. in millions

Fiscal Year	Core Capital	Supplementary Capital	Total Capital Fund
2063/64	911.80	296.80	1208.60
2064/65	1293.75	319.90	1613.63
2065/66	1649.01	305.93	1954.94
2066/67	1750.46	260.10	2010.56
2067/68	1956.12	267.65	2223.78

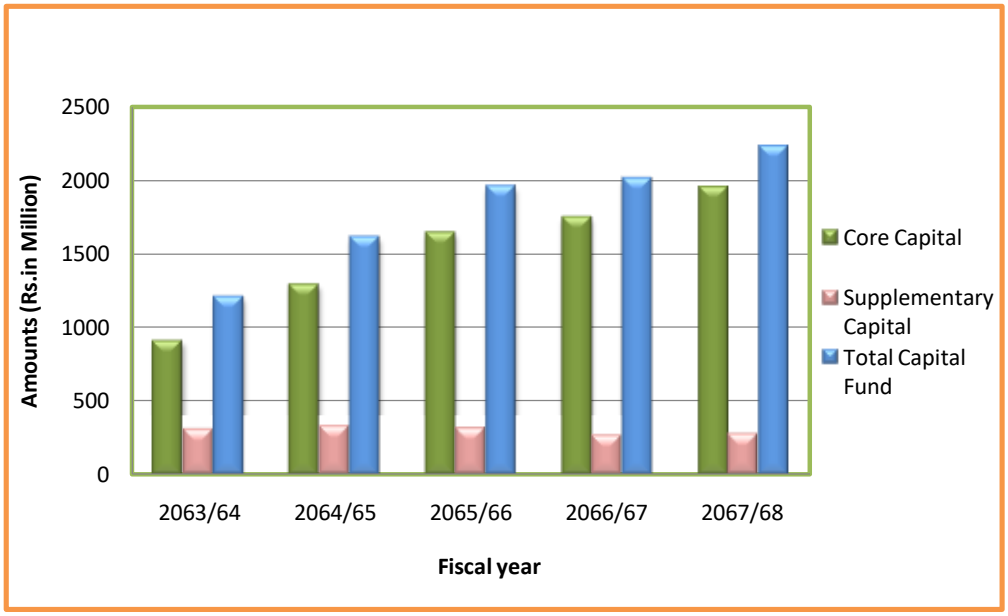
(Source: Annual Reports of NIC Bank)

In the last five years period, the Capital Fund of NIC has seen steady growth. The Core Capital of the bank has seen consistent growth except FY 2065/66, where a sharp increment has been observed, whereas fluctuation has been seen in the Supplementary Capital with gradually increment till the FY 2064/65 and slowly decrement has occurred. The Capital Fund of NIC consisted of Core Capital of Rs. 911.80 million and Supplementary Capital of Rs. 296.80 million totaling Rs. 1208.60 million at the end of the FY 2063/64. The Capital Fund has increased approximately double to Rs. 2223.78 million consisting of Core Capital of Rs. 1956.12 million and Supplementary Capital of Rs. 267.65 million by the end of the FY 2067/68.

The same information can be depicted in the chart below.

Figure 4.1

Capital Fund of NIC bank



The Figure 4.1 shows the growing trend of Capital Fund of the bank during the five fiscal years. The trend shows that Core Capital is in increasing trend but Supplementary Capital is in increasing order till FY 2064/65 and then after is in decreasing order. but we can see slightly sire in FY 2067/68. The Core Capital has risen dramatically during the FY 2065/66 resulting into similar rise in the Capital Fund.

The increment in the Capital Fund shows that NIC Bank has been trying to increase its capital base to comply with the requirements of NRB as prescribed in Capital Adequacy Norms for commercial banks.

4.1.2 Risk – Weighted Assets

The Risk-Weighted Assets are derived by calculating the amount from the respective balance sheet and off-balance sheet items with the prescribed weightage. The assets are categorized into five types while assigning weightage to them. NRB has assigned weightage of 0%, 10%, 20%, 50% and 100%

according to their nature of risk bearing, which is based on the standard of Basel Committee.

The Risk-Weighted Assets of NIC Bank has been illustrated in Table 4.2. The table shows Risk-Weighted Assets of the bank over the period of last five years from FY 2063/64 to FY 2067/68.

Table 4.2

Risk-Weighted Assets of NIC Bank

Rs. in Millions

Fiscal Year	Balance Sheet Items	Off-Balance Sheet Items	Total Risk Weighted Assets
2063/64	9566.50	339.10	9905.60
2064/65	11824.30	496.90	12321.20
2065/66	13687.23	1334.11	15021.34
2066/67	13241.90	1224.50	14466.40
2067/68	15033.11	864.93	15898.05

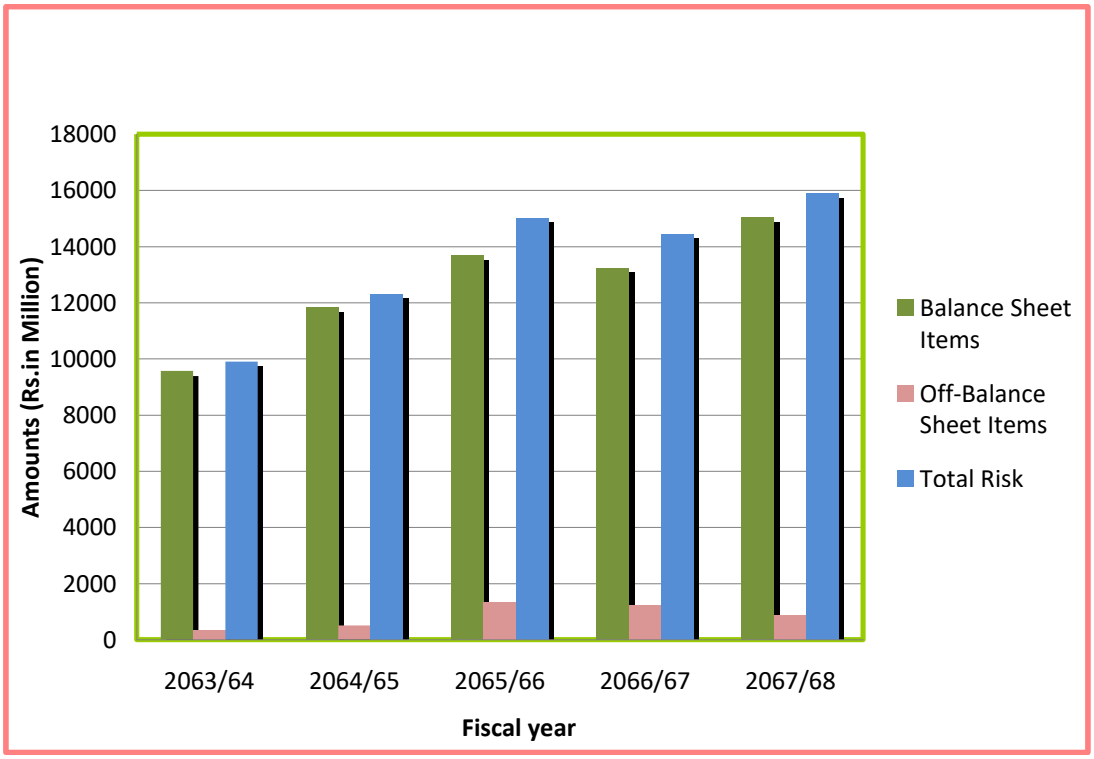
(Source: Annual Reports of NIC Bank)

The TRWA of the bank has been increasing gradually in the last four years period. Similar is in the case with Balance Sheet Items and Off-Balance Sheet Items but in last five years all are decreased, Whereas Off-Balance Sheet Items have been drastically increasing almost four times in the FY 2065/66. The TRWA of the bank was Rs. 9905.60 million during FY 2063/64 with Balance Sheet Items amounting to Rs. 95660.50 million and Off-Balance Sheet Items amounting to Rs. 339.10 million. By FY 2067/67, the TRWA increased to Rs. 15898.05 million with Rs. 15033.11 million as Balance Sheet Items and Rs864.93 million as Off-Balance Sheet Item.

The same information can be depicted in the chart below:

Figure 4.2

Risk Weighted Assets of NIC Bank



The Figure 4.2 shows the increasing trend of RWA in the four years period except last five year from FY 2063/64 to FY 2067/68. The trend is similar with Balance Sheet Items and Off-Balance Sheet Items all are increasing trend with the exception of last fifth year, from where decreasing trend has started.

4.1.3 Capital Adequacy Ratio of NIC Bank

Capital Adequacy Ratio shows the strength of a bank. The calculation of Capital Adequacy Ratios has been presented in Appendix F. The calculated Capital Adequacy Ratio is shown in the Table 4.3 for the FY 20632/64 to FY 2067/68.

Ratio of Total Capital Fund as: $\frac{\text{Total Capital Fund}}{\text{TRWA}} \times 100\%$

Ratio of Core Capital Fund as: $\frac{\text{Core Capital}}{\text{TRWA}} \times 100\%$

Ratio of Supplementary Capital Fund as: $\frac{\text{Supplementary Capital}}{\text{TRWA}} \times 100\%$

By using this formula we can get:

Table 4.3

Capital Fund used by the Bank

Fiscal Year	Percentage of Core Capital	Percentage of Supplementary Capital	Percentage of Total Capital	CAR of NRB Total Capital Fund	CAR of NRB
2063/64	9.20%	3.00%	12.20%	11%	5.5%
2064/65	10.50%	2.60%	13.10%	11%	5.5%
2065/66	10.98%	2.04%	13.01%	10%	6%
2066/67	12.10%	1.80%	13.90%	10%	6 %
2067/68	12.30%	1.68%	13.99%	10%	6 %

(Source: Annual Reports of NIC Bank)

The Capital Adequacy Ratios show that the bank has been able to comply with the requirements of NRB consistently.

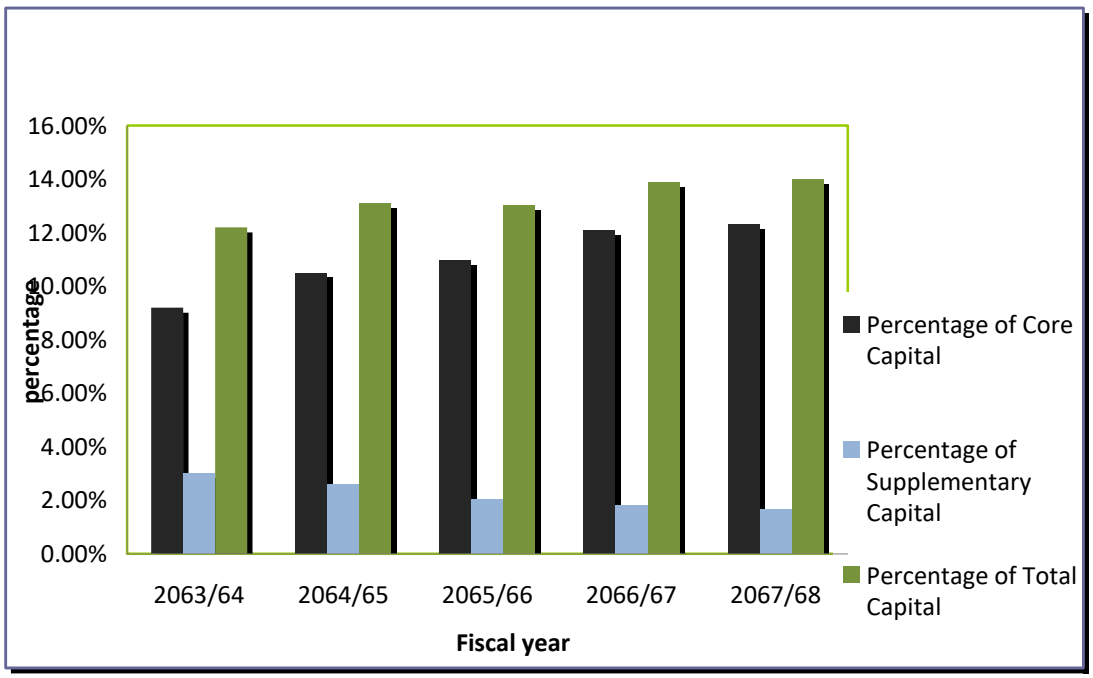
In the FY 2063/64, the bank has Total Capital Fund at 12.20% of Risk Weighted Assets with the NRB requirement of 11% and this has slightly decreased down for next four year but in the last fifth year it has at a snail's pace increased 13.99% by FY 2067/68. The NRB requirement was 6% Core Capital and Total Capital Fund 12% of Risk Weighted Assets and they have been passably complied with.

The Capital Adequacy Ratio of the bank is in increasing trend. It is obvious, as transactions of the bank increases; the Risk Weighted Assets also increases in the same manner. But this creates bank difficulty to maintain capital fund as required by the NRB as capital do not increase often and the performance of the bank (i.e. earning of profit) has major role to play to comply with the NRB requirements. As such, it is evident that NIC Bank has been performing well enough to comply with the NRB requirement without failure at any point of time.

The same information can be depicted in the chart below.

Figure 4.3

Capital Fund used by the NIC Bank



The Figure 4.3 displays Total Capital Fund at 12.20% of Risk Weighted Assets and this has slightly increased down for next four year but in the last fifth year it has at a snail's pace increased 13.99% by FY 2067/68. But Percentage of Supplementary Capital has gradually decreased over the five years period.

4.1.4 Deposit & Loan & Advances Analysis of NIC Bank

Being the main function of a commercial bank, every commercial bank collects deposit from general public. Verma & Malhotra (1993) has mentioned that a commercial bank has usually access to three sources of fund: capital fund, deposits and borrowings.

It is clear that NIC Bank could not remain in the business without collecting deposits. The bank has its own policies to lure deposits from general public. In this matter, NIC Bank has few successful schemes like NIC Life Saving Accounts and NIC Shikshya Kosh. These products have really played important role in the swift collection of deposit for the bank.

The main source of income of a bank is interest income from extending credit facility to its clients. Most of the funds available in the bank either in the form of capital or deposit is utilized for providing credit facility. The commercial banks are inspired with the motive of gaining profit and to fulfil this objective, they should widely manage and improve banking sector. Much attention should be paid to the extension of the quality of the credit facility although quantity of the facility should also be considered.

Being a commercial bank, one of the prime functions of the NIC bank is to provide credit facility.

The deposit and loan & advances for last five fiscal years can be viewed in the Table 4.4.

Table 4.4

Deposit and Loan & Advances of NIC Bank

Rs. In Million

Fiscal Year	Deposit Collection	Loan & Advances	Credit/Deposit Ratio
2063/64	10068.23	8941.40	88.81%
2064/65	13084.70	11264.70	86.09%
2065/66	15580.00	13679.40	87.80%
2066/67	15970.00	12732.00	79.72%
2067/68	18394.35	14933.94	81.19%

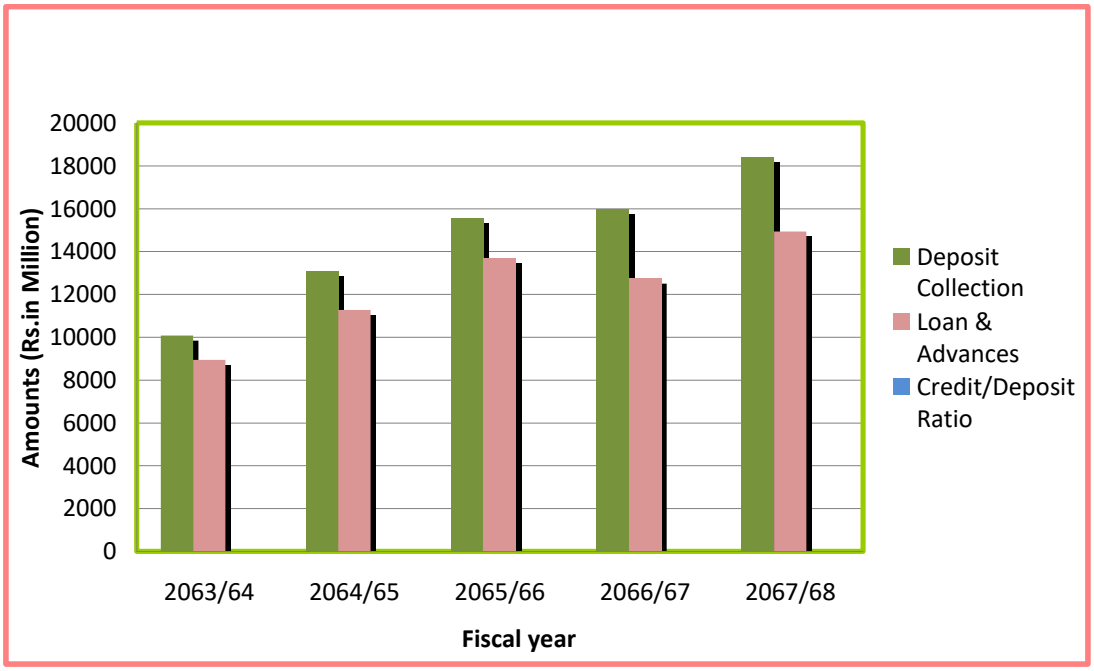
(Source: Annual Reports of NIC Bank)

The table shows that NIC Bank has been gradually increasing the deposit collection apart from FY 2067/68 when deposit collection has little bit increased as compared to that of the previous year.

In the FY 2063/64, the bank was able to collect Rs 10068.32 million of deposit. The collection increased steadily till the FY 2065/66 but in the in the end of FY 2066/67 the deposit collection decreased tiny bit, which is Rs. 15,970 million. In the FY 2067/68 the drastic increment in deposit collection can be seen it has been rosen to 18394.55 from 15970.00 millions. The Table 4.4 shows gradual increment in the flow of credit by NIC Bank during past 3 years and at the end of last fourth year it has modest. At the fifth year the credit flow has been increased to 14933.94. The deposit and loan & advances made by NIC Bank have been illustrated in the figure below.

Figure 4.4

Deposit and Loan & Advances of NIC Bank



The Credit/Deposit (CD) Ratio is a major tool to examine the liquidity of the bank. It also measures the performance of the bank in terms of resources utilization irrespective of the quality of utilization. Higher the CD Ratio better is the performance regarding deposit utilization whereas such high ratio may not be favoured by the depositors as in case of improper investment, the depositor's fund may be on risk.

Ratio of Credit to Deposit as: $\frac{\text{Total Credit}}{\text{Total Deposit}} \times 100\%$

The Table 4.4 shows a fluctuating CD Ratios of the bank in the past five years period, beginning from FY 2063/64 to FY 2067/68. The ratio has been ranging from 88.81% to about 81.91% with fluctuations in between years. In an average, the bank has been able to utilize 4/5 portion of the depositors fund in the form of Credit. The ratio was 88.81% intact during FY 2063/64 with increase in the following year. The ratio then fell to 86.09% during FY 2064/65 and after that the ratio has been increasing with very negligible increment

during FY 2065/66, and then after next year has been decreasing with significant decline during FY 2066/67. The slight increase can be seen in FY 2067/68 to 81.91 comparing to the CD ratio of FY 2066/67. (i.e: 79.72)

4.2 Statistical Analysis

Statistical Analysis is carried out for better understanding of the collected data and information. The result of the statistical analysis is enumerated in the following section.

- **Correlation Co-Efficient**

To test the relationship between deposit and loan & advances the correlation coefficients have been calculated by using Karl Pearson's correlation co-efficient. A detail calculation has been illustrated in appendix G. The calculated values of correlation co-efficient are presented under:

Correlation co-efficient of Deposit on loan & advances, $r = 0.9816$

The calculated correlation co-efficient between Deposit and Loan & Advances are positive. Therefore, it can be said that Deposit and Credit components of a bank are positively correlated with each others. Here, we can see that co-efficient is near to 1 which indicates that the correlations seem to be nearly perfectly positive. We can say that the increase in deposit causes the increase in loan & advances.

- **Impact of Capital Adequacy Norms on NIC Bank**
- **Study of Changes In Capital Fund**

The Capital Adequacy Norms have greater impact on changes in capital fund of commercial banks. Table 4.1 has already presented the components of capital that are included in capital fund of NIC Bank. The Table 4.5 shows the increment in the capital funds of the bank in the form of amount and percentage

both.NRB has decreased the CRR from 062\063, which has effect the capital fund of Banks.

Table 4.5

Changes in Capital Fund of NIC Bank

(Rs. in million)

Fiscal Year	Total Capital Fund	Amount Increased	Percentage Increment
2063/64	1208.60	-	-
2064/65	1613.63	405.03	33.51%
2065/66	1954.94	341.31	21.15%
2066/67	2010.56	55.62	2.85%
2067/68	2223.77	213.21	10.60%

(Source: Annual Reports of NIC Bank)

At the beginning of the study period, the bank had total capital fund of Rs 1208.6 million which has been increased up to Rs. 2223.77 million by the end of the FY 2067/68. Both the increment in percentage and amount are seen fluctuating. The rate of increments in amount is variable as the increment during 2065/65 was Rs. 4050.03 The increment in amount was sharp with increment of Rs. 341.31 million during FY 2065/66 but a dramatic decrease of 55.62 million was observed during FY 2066/67. Similarly, the increment rate in percentage during 2064/65 was 33.51% . The increment ratio down to 21.15% and 2.85% during FY 2065/66 and FY 2066/67 respectively. But % increment seems enthusiastic in FY 2067/68.

On review of the financial statements of the FY 2064/65, it was clearly seen that major reason for increment in capital fund was mainly due to huge portion of proposed bonus shares and general reserve fund. These are the components of core capital and thus, resulted into sudden increment in the capital fund. The reason for less increment in compare to previous year in capital fund during FY

2065/66 was due to the less issuance of Unsecured Subordinated Term Debt amounting by Rs. 40 million.

The impact of the norms thus caused the bank to increase capital fund to meet the NRB requirements.

- **Study of Changes In Paid Up Capital**

It has been observed in Table 4.12 that the capital base has been increased to meet the NRB requirements. Since, the capital adequacy norms require that the core capital should at least be 50% of the capital base; the bank has been trying to increase its core capital. The major portion of the core capital is paid up capital, so, the table 4.12 shows the changes in the paid up capital of the bank in the five years period beginning from 2063/64 to 2067/68.

Table 4.6

Changes in Paid Up Capital of NIC Bank

(Rs. in million)

Fiscal Year	Paid Up Capital	Amount Increased	Percentage Increment
2063/64	660.00	-	-
2064/65	973.90	313.9	47.56%
2065/66	1140.50	166.6	17.11%
2066/67	1311.60	171.1	15.00%
2067/68	1311.60	0	0.00%

(Source: Annual Reports of NIC Bank)

Table 4.6 shows the capital adequacy requirements of NRB and condition of NIC Bank and it is very clear that the bank is always near about of the capital adequacy requirements of NRB, so, major changes in Paid Up Capital has been observed in every year. It has always been a major disadvantage that the bank has not been established with strong capital base and thus, has to always

increase it to meet the NRB requirements. During FY 2064/65, paid up capital was increased with the distribution of bonus shares in the ratio 47.56% . This has been done by the bank as a step to meet the NRB requirement of capital base of Rs. 1 billion. The bank has further declared and distributed the bonus shares during FY 2064/65, FY 2065/66 and FY 2066/67 in the ratio 2:1,5:1and 15:1respectively out of accumulated profits.

Thus, the impact of the norms caused the increment in paid-up capital of the bank.

4.3 Major Findings

Financial institutions like banks are the replica of modernization of the society and play a vital role in the sustainable development and economic growth of the country. Commercial banks furnish necessary capital needed for trade and commerce for mobilizing the dispersed saving of the individuals and institutions. The primary functions of commercial banks are deposit collection and utilization of funds. Commercial banks collect a large amount of deposits from the general public and utilize them in potential sectors. Capital is one of the most important components for an organization. It is obvious that no organization can exist without capital. Although the banks are a major source of capital, they also have to raise capital to run businesses. Most importantly, the bank has an obligation towards its depositors therefore it should hold minimum required capital i.e. adequate capital to safeguard the interest of depositors.

This research aimed at studying capital adequacy norms for commercial banks set by NRB with primary focus on NIC bank. NRB, being a regulatory body of the nation, has the responsibility to give special attention to the interest of depositors; NRB has issued various directives to regulate commercial banks and other financial institutions. The directive number one includes the requirement of maintaining capital fund to the prescribed ratio. The norms

basically emphasized on the basic requirement of the capital fund that commercial banks should possess.

The study showed that capital fund of the bank is increasing which implies that the bank is trying to increase its capital base to comply with the requirements of the central bank in capital adequacy norms for commercial banks.
Beside this, the major findings are summarized mainly based on presentation, interpretation and analysis of five years previous data, which are as follows:

4.3.1 Major Findings of Data:

- The average Core Capital, Supplementary Capital and capital fund of the bank are1511.02, 290.07 and 1802.30 million respectively.
- The average Balance Sheet Items, Off-Balance Items and Total Risk Weighted Assets are 12670.60, 851.90 and 13522.51 million respectively.
- The average Capital Adequacy Ratio for Core Capital and Total Capital Fund are 10.02% and 13.24%
- The average Deposit Collection and Loan & Advance are 14619.49 and 12313.89 million respectively.
- The average Credit/Deposit ratio of the bank is 84.72%.
- Correlation co-efficient of Deposit on loan & advances is 0.9816.
- The average Capital Fund Increment of the bank is 13.62%.

CHAPTER 5
SUMMARY, CONCLUSION & RECOMMENDATION

5.1 Summary

This research is aimed at studying capital adequacy for commercial banks set by NRB with case study of NIC Bank. Raising and utilization of funds are the primary functions of commercial banks. As such, commercial banks collect a large amount of deposits from general public. Capital must be sufficient to protect a bank's depositors and counterparties from the risks like credit and market risks. Otherwise, the banks will use all the money of depositors in their own interest and depositors will have to suffer loss.

Being the central bank of Nepal, NRB has the responsibility to give special attention to the interest of depositors. NRB has issued various directives to regulate commercial banks. The directive no. 1 has been issued for norms on capital adequacy to be followed by commercial banks.

The thesis has been prepared with the study of capital funds of NIC Bank. The study showed that the capital fund of NIC Bank passably meet the requirement of capital adequacy norms. Capital Adequacy ratios have been calculated to check the adequacy as per the norms. CD Ratio, which is the key ratio of commercial banks, has also been checked. Analyses have been done to check the relationship of deposit with credit.

The thesis has been concentrated on the capital and capital related items of NIC Bank. The findings of the study are as follows:

Capital Fund of NIC has seen steady growth. The Core Capital of the bank has seen consistent growth except FY 2065/66, where a sharp increment has been observed, whereas fluctuation has been seen in the Supplementary Capital with gradually increment until the FY 2065/66 and slowly decrement has occurred. The Capital Fund of NIC consisted of Core Capital of Rs. 911.80 million and

Supplementary Capital of Rs. 296.80 million totalling Rs. 1208.60 million at the end of the FY 2063/64. The Capital Fund has increased approximately double to Rs. 1956.12 million consisting of Core Capital and Supplementary Capital of Rs. 267.65 totaling Rs. 2223.78 million by the end of the FY 2067/68.

On review of the financial statements of the FY 2064/65, it was clearly seen that major reason for increment in capital fund was mainly due to huge portion of proposed bonus shares and general reserve fund. Similarly during FY 2065/66, it was found that the major reason for such increment in capital fund was due to the huge portion of proposed bonus shares and general reserve fund. These are the components of core capital and thus, resulted into sudden increment in the capital fund. The reason for less increment in compare to previous year in capital fund during FY 2065/66 was due to the less issuance of Unsecured Subordinated Term Debt amounting by Rs. 40 million.

It is found that the bank is in quite hard position in maintaining capital adequacy as prescribed by NRB. The bank had capital adequacy ratio of 12.20% and 13.10% during FY 2063/64, 2064/65 against the NRB requirement of 11%. In the years followed, the bank had capital adequacy ratios of 13.01% and 13.90% and 13.99% against the NRB requirement of 12%.

The Capital Adequacy Ratio of the bank is in increasing trend. It is obvious, as transactions of the bank increases; the Risk Weighted Assets also increases in the same manner. But this creates bank difficulty to maintain capital fund as required by the NRB as capital do not increase often and the performance of the bank (i.e. earning of profit) has major role to play to comply with the NRB requirements. As such, it is evident that NIC Bank has been performing well enough to comply with the NRB requirement without failure at any point of time.

The risk weighted assets is the most significant component to be considered while studying the capital adequacy norms. The bank risk weighted asset of the bank has been increasing gradually in the last four years period. Similar is in the case with Balance Sheet Items and Off-Balance Sheet Items both in last two years all are decreased, Whereas Off-Balance Sheet Items have been drastically increasing almost four times in the FY 2065/66. The TRWA of the bank was Rs. 9905.60 million during FY 2064/65 with Balance Sheet Items amounting to Rs. 9566.50 million and Off-Balance Sheet Items amounting to Rs. 339.10 million. By FY 2067/68, the TRWA increased to Rs. 15898.05million with Rs. 15033.11 million as Balance Sheet Items and Rs. 864.93 million as Off-Balance Sheet Item.

It is really commendable performance of the bank to cope with the increasing risk weighted assets and maintain the prescribed capital fund as directed by NRB.

CD ratio is one of the most important ratios for commercial banks. This ratio shows how effectively the bank has been able to utilize its available fund collected from depositors. The ratio has been ranging from 88.81% to about 81.19% with fluctuations in between years. In an average, the bank has been able to utilize 4/5 portion of the depositors fund in the form of Credit. The ratio was 88.81% intact during FY 2063/64 with increase in the following year. The ratio then fell to 87.80% during FY 2065/66 and then after next year has been decreasing with significant decline during FY 2066/67. The ratio has been slightly increase 81.89 in FY 2067/68.

The ratios display that funds have been underutilized. The bank should be able to utilize more funds in the form of credit to generate revenue for it. But the quality of the credit should also be well considered for better financial performance of the bank.

The correlation co-efficient between deposit and credit of the bank showed that it is correlated. The co-efficient is more than 0.9 which is near to 1. The co-efficient nearest to 1 show the relationship to be more perfect. Also, the test of hypothesis proved the existence of their relationship.

5.2 Conclusion

Commercial banks of Nepal are bound by the NRB Directives and are currently bound by Unified Directives issued for all financial institutions. The directive no. 1 has set norms on capital adequacy for commercial banks. Every commercial bank has to meet the requirement of capital adequacy as stated by the directive. Capital adequacy is the portion of capital fund with regards to risk weighted assets that a commercial bank holds. Capital adequacy is required to safeguard the money of the depositors as the banks are playing with the money they collected from the depositors.

The bank under study, NIC Bank is found to be successful to comply with requirement of capital adequacy norms. Anyhow the bank is meeting the capital adequacy requirements passably. However, some bank officials are not satisfied with the provisions.

The CD ratio of the bank is average and needs to be improved immediately. Although the bank is successful to meet the capital adequacy requirement, it seems to be ineffective to fulfill other capital and deposit ratios which are also very much important in regard of safeguarding the money of the depositors. The bank should highly focus on optimum utilization of the deposits because underutilization of deposit means bearing additional cost as deposits do not come for free.

The correlation co-efficient between deposit and credit are found to be positive and near to perfect correlation. The test of hypothesis revealed that the deposit and credit are correlated.

The research questionnaire revealed that although the depositors are depositing their money for safety reason, they are not aware of the fact of necessity of adequate capital to safeguard their money. It seemed that they are not attracted by the capital fund of the bank but the position and status of the bank is luring them to deposit their money.

5.3 Recommendation

After thorough study of the research, the following recommendations have been proposed for consideration by the concerned persons:

- The capital fund of the bank under study is highly depending upon share capital. It is recommended to the commercial banks to follow optimal capital structure which maximizes the market value of the firm. The banks should be able to use some sort of debt financing depending upon its viability. It is notable that the bank has started the debt financing. But still debt financing is an unaccustomed source of financing for commercial banks in Nepal.
- CD ratio of the bank is average. This showed that the bank has not been effectively using the funds collected from depositors. It is recommended that the bank should concentrate more on credit and investment. The bank shall expand more branches in different places of the country and search investment opportunities there. More credit flow and investment are required to verge on the optimum CD ratio.
- The commercial banks should try to maintain appropriate CD ratios as state above. They can no way escape pointing on to the lack of the policy.
- While providing loans and advances, banks should keep in account that the fund they are going to lend is the fund of the depositors and as such, needs to focus on the quality of the investments they make.
- NRB should consult to the various bank officials before setting or resetting standards on such capital adequacy norms. The complaints and criticisms of bank officials should be considered accordingly.

Consequently, an optimal standard will be ensured which will satisfy almost everyone.

- It has been found that the depositors are not aware of the fact of the necessity of adequate capital fund to safeguard their deposits. They deposit their money to any bank regardless of adequate capital fund which may endanger safety of their money. Therefore, NRB should initiate awareness programs to make the depositors aware of such fact and carefully think before depositing money in any commercial banks.

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APPENDIX A

Risk Weightage on On-Balance Sheet Assets

On-Balance Sheet Assets	Weightage (%)
Cash Balance	0
Gold	0
Balance at NRB	0
Investment on Government Bonds	0
Investment on NRB Bonds	0
FD Loan provided against the collateral security of own FD	0
Loan provided against the collateral security of Government Bonds	0
Accrued Interest Amount on Saving Bonds	0
Balance with national banks and financial institutions	20
FD Loan provided against the collateral security of FD of other banks and financial institutions	20
Balance with Foreign Banks	20
Money at Call	20
Loan provided against the guarantee of *Rated licensed foreign institutions	20
Investment made in *Rated licensed foreign institutions	20
Investment in Shares, Debentures and Bonds	100
Other investments	100
Loans, Advances and Bills Purchase/Discount**	100
Fixed Assets	100
Net Interest Amount Receivable (Total Interest Receivable-Interest from Saving Bonds-Interest Suspense)	100
Other Assets (Other than Advance Tax Deposit)	100

Notes:

***** For the purpose, banks listed in **Top Thousand World Banks** published every year in July by **'The Banker'** from United Kingdom.

Banks that do not come under above listing should be provided the risk weightage of 100%

****** Loans other than those provided against FD, NRB Bonds, Government Bonds and Guarantee of Internationally Listed banks

APPENDIX B

Risk Weightage on Off-Balance Sheet Items

Off-Balance Sheet Assets	Weightage (%)
Bills Collection	0
Forward Foreign Exchange Contract	10
Guarantee having maturity period less than 6 months (Full Amount)#	20
Guarantee issued against Counter Guarantee of Rated* Licensed Institutions	20
Guarantee having maturity period of more than 6 months#	50
Bid Bond, Performance Bond and Underwriting related liabilities	50
Advance Payment Guarantee	100
Financial and Other Guarantee	100
Irrevocable Loan Commitment	100
Contingent Liability related to Income Tax	100
All Other Contingent Liabilities including Acceptance	100

Notes:

***** For the purpose, banks listed in **Top Thousand World Banks** published every year in July by **'The Banker'** from United Kingdom.

Banks that do not come under above listing should be provided the risk weightage of 100%

To assess the maturity period of Guarantee, the date from which the Guarantee has been opened should be considered

APPENDIX C

Table of Capital Fund (Directives Form No. 1.1)

Particulars	**Previous Quarter**	**This Quarter**
(A) Core Capital		
1) Paid Up Capital 2) Share Premium 3) Irredeemable Preference Shares 4) General Reserve Fund 5) Accumulated Profit/Loss (Up to PY) 6) Profit/Loss (Current Period) 7) Capital Redemption Reserve Fund 8) Capital Adjustment Reserve 9) Other Free Reserves **Less:** - Goodwill		
- Investment over the prescribed limit - Fictitious Assets - Investment made in shares of company having financial interest		
(B) Supplementary Capital 1) General Loan Loss Provision 2) Assets Revaluation Reserve 3) Hybrid Capital Instruments 4) Unsecured Subordinated Term Debt 5) Exchange Revaluation Reserve 6) Additional Loan Loss Provision 7) Investment Adjustment Reserve		
(C) Total Capital Fund (A+B)		
(D) Minimum Capital Fund to be maintained on the basis of Risk Weighted Assets Capital Fund (……. percentage) Core Capital (……..percentage)		
Capital Fund (Excess/Deficit) (by…….percentage)		
Core Capital (Excess/Deficit) (by…….percentage)		

APPENDIX D

Table of Risk Weighted Assets (Directives Form No. 1.2)

(Rs. in thousand)

On-Balance-Sheet Assets	Weight	Previous Quarter		This Quarter	
		Amount	Risk Weighted Asset	Amount	Risk Weighted Asset
Cash Balance	0				
Gold	0				
Balance at NRB	0				
Investment on Government Bonds	0				
Investment on NRB Bonds	0				
FD Loan provided against the collateral security of own FD	0				
Loan provided against the collateral security of Government Bonds	0				
Accrued Interest Amount on Saving Bonds	0				
Balance with national banks and financial institutions	20				
FD Loan provided against the collateral security of FD of other banks and financial institutions	20				
Balance with Foreign Banks	20				
Money at Call	20				
Loan provided against the guarantee of Rated licensed foreign institutions	20				
Investment made in Rated licensed foreign institutions	20				
Investment in Shares, Debentures and Bonds	100				
Other investments	100				
Loans, Advances and Bills Purchase/Discount	100				
Fixed Assets	100				
Net Interest Amount Receivable (Total Interest Receivable-Interest from Saving Bonds-Interest Suspense)	100				
Other Assets (Other than Advance Tax Deposit)	100				

Total (A)					
Off-Balance-Sheet Items					
Bills Collection	0				
Forward Foreign Exchange Contract	10				
Guarantee having maturity period less than 6 months (Full Amount)	20				
Guarantee issued against Counter Guarantee of Rated Licensed Institutions	20				
Guarantee having maturity period of more than 6 months	50				
Bid Bond, Performance Bond and Underwriting related liabilities	50				
Advance Payment Guarantee	100				
Financial and Other Guarantee	100				
Irrevocable Loan Commitment	100				
Contingent Liability related to Income Tax	100				
All Other Contingent Liabilities including Acceptance	100				
Total (B)					
Total Risk Weighted Assets (A+B)					

APPENDIX E

Capital Fund of NIC bank

Rs. in millions

Fiscal Year	Core Capital	Supplementary Capital	Total Capital Fund
2063/64	911.80	296.80	1208.60
2064/65	1293.75	319.90	1613.63
2065/66	1649.01	305.93	1954.94
2066/67	1750.46	260.10	2010.56
2067/68	1956.12	267.65	2223.78

(Source: Annual Reports of NIC Bank)

Risk-Weighted Assets of NIC Bank

Rs. in Millions

Fiscal Year	Balance Sheet Items	Off-Balance Sheet Items	Total Risk Weighted Assets
2063/64	9566.50	339.10	9905.60
2064/65	11824.30	496.90	12321.20
2065/66	13687.23	1334.11	15021.34
2066/67	13241.90	1224.50	14466.40
2067/68	15033.11	864.93	15898.05

(Source: Annual Reports of NIC Bank)

We have;

Ratio of Total Capital Fund as: $\frac{\textbf{Total Capital Fund}}{\textbf{TRWA}} \times 100\%$

Ratio of Core Capital Fund as: $\frac{\textbf{Core Capital}}{\textbf{TRWA}} \times 100\%$

Ratio of Supplementary Capital Fund as: $\frac{\textbf{Supplementary Capital}}{\textbf{TRWA}} \times 100\%$

By using above formulas, we get the ratios as:

Fiscal Year	Percentage of Core Capital	Percentage of Supplementary Capital	Percentage of Total Capital	CAR of NRB Total Capital Fund	CAR of NRB
2063/64	9.20%	3.00%	12.20%	11%	5.5%
2064/65	10.50%	2.60%	13.10%	11%	5.5%
2065/66	10.98%	2.04%	13.01%	10%	6%
2066/67	12.10%	1.80%	13.90%	10%	6 %
2067/68	12.30%	1.68%	13.99%	10%	6 %

(Source: Annual Reports of NIC Bank)

APPENDIX F

Calculation of Credit/Deposit Ratio

Rs. In Million

Fiscal Year	Deposit Collection	Loan & Advances	Credit/Deposit Ratio
2063/64	10068.23	8941.40	88.81%
2064/65	13084.70	11264.70	86.09%
2065/66	15580.00	13679.40	87.80%
2066/67	15970.00	12732.00	79.72%
2067/68	18394.35	14933.94	81.19%

(Source: Annual Reports of NIC Bank)

We have;

Ratio of Credit to Deposit as: $\frac{\textbf{Total Credit}}{\textbf{Total Deposit}} \times 100\%$

APPENDIX G

Calculation of Correlation Coefficient of Deposit on loan & advances

(Rs. In million)

Fiscal Year	Deposit	Loan & Advances
2063/64	10068.23	8941.40
2064/65	13084.70	11264.70
2065/66	15580.00	13679.40
2066/67	15970.00	12732.00
2067/68	18394.55	14933.94

(Source: Annual Reports of NIC Bank)

Let the variable Deposit be *X* and Loan & Advances be *Y*

X	**Y**	$x=(X-\overline{X})$	$y=(Y-\overline{Y})$	***xy***	x^2	y^2
10068.23	8941.40	-4551.27	-3368.89	15332727.99	20714058.61	11349419.83
13084.70	11264.70	-1534.80	-1045.59	1604771.53	2355611.04	1093258.45
15580.00	13679.40	960.50	1365.11	1311188.16	922560.25	1863525.31
15970.00	12732.00	1350.50	421.71	569519.36	1823850.25	177839.32
18394.55	14933.94	3775.05	2623.65	9904409.93	14251002.5	6883539.32
ΣX= 73097.48	ΣY=61551.44			Σxy=28722616.97	Σx^2 = 40067082.65	ΣY^2=21367582.23

$$\overline{X} = \frac{X}{N} = \frac{73097.48}{5} = 14619.5$$

$$\overline{Y} = \frac{Y}{N} = \frac{61551.44}{5} = 12310.29$$

Now,

$$r = \frac{\Sigma xy}{\sqrt{\Sigma x^2}.\sqrt{\Sigma y^2}} = \frac{28722616.97}{\sqrt{40067082.66}.\sqrt{21367582.23}} =$$

0.9816

Correlation co-efficient of Deposit on Capital, *r* = 0.9816