

CHAPTER I

INTRODUCTION

1.1 Background of the Study

Nepal is said to be a stone between two boulders. She is surrounded by China to the North and India to East, West and South, is one of the least developed countries in the world which is directing her efforts in accelerating the pace of her economic development. Being land locks country. Nepal is located between the latitude 26°22' North to 32°27' South and longitude 80°4 East to 88°12 West. The average length being 885 km from East to West and average breadth is about 193 km from North to South and area is about 147,181 sq. km.

Human activities are normally directed towards the well being of the people. Energy and efforts devoted by people of the society aims to enhancing material benefit to the community. To enable people to enjoy the material benefit is possible only when base of production is expanded. In other words this requires economic growth of the nation. The economy of Nepal is survived by agricultural sector. The agricultural sector contributes over 40% to the GDP of the country. Over 80% of the population is dependent up on the agriculture. Therefore, major contribution of Government of Nepal has been the development and advancement of agriculture sector. But still, there has always been scarcity of finance in this sector. To some extent, the establishment of Agriculture Development Bank has provided the support to the farmers to raise the required capital. Also, various programs like micro finance programs, cooperative programs have been introduced in various villages of Nepal which has definitely helped locals to finance their agricultural inputs.

To growth the economic development of the country needs formation of adequate capital, for that motive, commercial banks can play a major role. 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 level and only come into existence when the promoters, owners or shareholders are initiation for investing their capital on business. Every organization should have enough capital to run business.

Although the businesses are the major sources of capital, they also have to raise capital to run business. Especially, the banks Capital plays the vital role because it has obligations to mass people, its depositors and society as a whole. Thus, the banks should hold an 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, Nepal Rastra Bank as a Banker's Bank has make rule of capital adequacy so that every Commercial Bank have 11% on Capital Adequacy Ratio from F/Y 2065/66. 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. It is to be noted that as per Banking and Financial Statistics of the NRB for the FY ending 2062/63, the commercials banks of Nepal have collected more than Rs. 291,245.50 millions of deposit from depositors and invested Rs. 176,820.30 millions in the form of Loans and Advances. Such a big amount of money should have to be secured and NRB has the major responsibility to protect it.

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-2 Committee, which is the advanced form of Basel-1. 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)

As the leader of monetary market, Nepal Rastra Bank (NRB) was established in 1956 to discharge the central banking responsibilities including guiding the development of the embryonic domestic financial sector and to controls, regulates and supervises the activities of commercial Banks as well in Nepal. Since then, there has been a huge 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 the new Act has been enacted and established in 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 the Kingdom 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; mobilizing Capital and managing public debts, issue of Nepali Currency Note and Coins 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 which provides a comprehensive review and evaluation of the previous monetary policy and justification and the analysis of the following year's monetary policy. The re-engineering of the NRB itself is one of the critical components of the reform agenda. To improve the financial sector legislative framework, some new Acts have already come out and there have been amendments to some existing Acts. Enactments of the draft legislations on bank and financial institutions, secured transactions, insolvency, Assets Management Company and anti-money laundering are expected to be soon materialized, all with the goal of strengthening the financial sector through building on its healthy development and improved stability.

These activities which are performed by the Bank are concern with the present and future challenges of the financial system more competently. This dynamic and proactive approach to the financial system, especially with its increasing openness and competitive process in the context of growing global financial environment, should ensure a sustained progress and stability of the financial system under NRB's guidance and leadership, for contributing substantially to the sustained development of the economy of Nepal.

As a central Bank in Nepal, it has 12 branches throughout the kingdom of Nepal including the head office at Baluwatar and the main banking office at Thapathali in Kathmandu.

As per the Nepal Rastra Bank Act, 2058, the objectives of NRB are stated as follows:

- a) To formulate and maintain appropriate monetary and foreign exchange policy for stable price and balance of payments situation required for sustainable economic development.
- b) To manage the required liquidity and stability of banking and financial sectors.
- c) To develop secure, healthy and efficient payment system.
- d) To monitor, supervise and evaluate banking and financial system within the country.
- e) To provide the necessary financial data to the Government of Nepal

As per the Nepal Rastra Bank Act. 2058 following are the rights, duties and functions:

- a) To issue currency notes and coins in the market.
- b) To formulate and implement necessary monetary policy for price stability.
- c) To formulate and implement foreign exchange policy.
- d) To determine the foreign exchange rate adjustment regime.
- e) To operate and manage foreign exchange reserves.
- f) To issue license to commercial banks and financial institutions for carrying out financial transactions and regulate, inspect, supervise and monitor such transactions.
- g) To function as the banker, advisor and financial agent of Nepal Government.
- h) To function as a bank of commercial banks and financial institutions, and as a lender of last resort.
- i) To establish, promote and regulate the systems of payments, clearing and settlements: and

- j) To carry out other important functions as necessary towards realizing the objectives enjoyed by the Act.

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

Nepal Industrial and Commercial Bank Limited (NIC Bank), which commenced its operation on 21 July 1998, is the first Commercial Bank in the Country to be capitalized at NPR 500 million. The Bank was promoted by some of the prominent business houses of the Country.

The current shareholding pattern of the Bank constitutes of promoters holding 65% of the shares while 35% is held by general public. NIC Bank is one of the most widely held Banking companies in Nepal, with over 32,000 shareholders. The shares of the Bank are actively traded in Nepal Stock Exchange with current market capitalization of about NPR 6,270 million. It has 16 Branches all over the country of Nepal which are inter-connected through V-Sat and are capable of providing real time on-line transactions.

The Bank is the first Commercial Bank in Nepal to have received ISO 9001:2000 Certification for quality management system. Furthermore, NIC Bank became the 1st Bank in Nepal to be provided a line of credit by International Finance Corporation (IFC), an arm of World Bank Group under its Global Trade Finance Program.

Besides this award, the Bank has also been awarded the “Bank of Year 2007-Nepal” by the world renowned financial publication of The Financial Times U.K. - The Banker. This is the fruit of the Bank’s outstanding performance backed by belief and support of its customers towards the Bank.

To sustain the competitive environment, the Bank launches the following 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 USD Super Savings Account

NIC Ghar Subidha

NIC Auto Loan

NIC Small Business Loan

NIC Cash Card

NIC SMS Banking

Commercial Bachat Khata

NIC Travel Loan

1.4 Focus of the 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. As per the directives ratio of capital is as follows:

Institution	Capital Fund	Core Capital
“KA” ”Kha” “Ga”	5.5	11.00
“Gha”	4.0	8.0

Elements of Core Capital:

1. Paid up equity capital
2. Irredeemable non-cumulative preference shares Share premium
3. Proposed bonus share
4. Statutory general reserve
5. Retained earnings available for distribution to share holders

6. Un-audited current year cumulative profit, after all provisions including staff bonus and taxes. Where provisions are not made, this amount shall not qualify.
7. Capital Redemption Reserves created in lieu of redeemable instruments.
8. Capital Adjustment reserves created in respect of increasing the capital base of the bank.
9. Dividend Equalization Reserves.
10. Other free reserves
11. Any other type of reserves notified by NRB from time to time

Elements of Supplementary Capital:

1. Cumulative and /or redeemable preference share with maturity equal or greater than 5Yrs.
2. Subordinated term debt limited to 50% of CC, amortized @ 20% PA, issued with prior approval of NRB
3. Hybrid capital instruments
4. General loan loss provision to a maximum of 1.25% of total RWA (excluding rescheduled/restructured loan and specific provisions in respect of NPLs)
5. Investment adjustment reserves created as a cushion for adverse price movements in bank's investments.
6. Revaluation reserves often serve as a cushion against unexpected losses but may not be fully available to absorb unexpected losses due to the subsequent deterioration in market values and tax consequences of revaluation. Therefore, revaluation reserves will be eligible up to 50% for treatment as Tier 2 capital and limited to a maximum of 2% of total Tier 2 capital subject to the condition that the reasonableness of the revalued amount is duly certified by the internal auditor of the bank.

7. Exchange equalization reserves created by banks as a cushion for unexpected losses arising out of adverse movements in foreign currencies.
8. Other reserves
9. Any other type of reserves notified by NRB from time to time.

Deductions from Core Capital:

Deductions are exempted from considering risk weight calculations for credit risk:

1. Losses and cumulative losses
2. Book value of goodwill
3. Fictitious assets
4. Equity investments in licensed institutions (with exemptions from deduction to certain institutions but included on RWA calculations)
5. Investment in equity with financial interest
6. Investments in equity in excess of the prescribed limits.
7. Investments arising out of underwriting commitments that have not been disposed within a year from the date of commitment.
8. Reciprocal crossholdings of bank capital artificially designed to inflate the capital position of the bank.
9. Any other items as stipulated by Nepal Rastra Bank, from time to time

At present, there are total 25 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 2006/07 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.

1.5 Statement of Problem

Banking and Financial Statistics (mid July 2007) shows that, there are more than Rs. 291,245.50 millions of amount deposited in various commercial banks of the country by the end of fiscal year 2063/64. But if the banks go bankrupted, what will happen to the depositors to get back their amount with commit return? 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. 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:

Core Capital Fund	:	5.5% of the Total Risk Weighted Assets
Total Capital Fund	:	11% of the Total Risk Weighted Assets

But for the strictly implementation of Capital adequacy Norms for F/Y 2065/2066, The Nepal Rastra Bank as the Banker's of the Bank has been further amended to the requirement of 5.5% in the form of Core Capital Fund and 11% in the form of Total Capital Fund by modification of the Capital adequacy Norms for Nepalese 'A' Class Commercial Banks.

1.6 Objectives of the Study

The main objectives of the study are as follows:

- ❖ To study and analyze the significance and impact of NRB Capital Adequacy Norms on Commercial Banks
- ❖ To evaluate the Capital Adequacy of NIC Bank.
- ❖ To examine the relation of Capital Fund to the other stakes holder of the bank
- ❖ To analyze the activities of NIC Bank to fulfill the requirements as per these norms; and
- ❖ To provide necessary suggestions on the basis of study results.

1.7 Significance of the Study

The study mainly focuses on how Commercial banks provide the safeguard of general public huge amount of deposit to invest it on productive sectors in the context that they 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.

1.8 Limitations of the Study

The study is limited to the Capital Fund and Capital Adequacy Norms amended of Basel II by Nepal Rastra Bank for commercial banks for strictly

implementation it on F/Y 2065/66. Since, it is not possible to take all commercial banks financial data as sample, so the thesis is prepared on the basis of data of NIC Bank Limited for the implementation of Capital adequacy Norms. The data and information over the period of 5 fiscal years commencing from FY 2059/60 to FY 2063/64 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 Structure of Study

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, and 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, Conclusion 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 II

REVIEW OF LITERATURE

2.1 Conceptual Review

A literature review is an essential part of the studies. It is a way to discover what other researchers have covered and left in the area. A critical review of the literature helps the researcher to develop through understanding and insight into previous research works that relates to the present study. It is also a way to avoid investigation problems that have already been definitely answered. Thus literature review is the process of locating, obtaining, reading and evaluating the research literature in the area of the student's interest.

2.1.1 Origin and Development of Banks

The origin of the Commercial banking can be traceable in the early times of human history. As public enterprises banking made its first appearance in Italy in 1157, when the 'Bank of Venice' was established. Then 'Bank of Barcelona' was established in 1401, 'Bank of England' was established in 1694 as a joint stock bank to enlarge the concept of private banking.

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 such as the Merchant, The Goldsmith and The Moneylender of the country whose sole trader activities was established in the Country. 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.

2.1.2 Development of Central Bank

In 1894, the Bank of England was converted into the central bank of England. This was done by establishing the Governor and the Company of the Bank of England. At present, this bank is known as the Central Bank of England.

Shekhar & Shekhar (1998) have stated that after the World War I and the consequent chaotic monetary conditions brought home to many countries the imperative necessity of establishing a centralized institution capable of creating and maintaining equilibrium in the monetary sphere.

In September 1920, an International Financial Conference was held at Brussels, which pointed out that those countries which had not yet established a central bank and were the spring of 1922, the Genoa Conference also indicated the need of central bank. Then after, there came a wave of establishing central banks by several countries.

2.1.3 Meaning of Central Bank

The central Bank is the apex bank in a country, which controls, regulates, and supervises the monetary and banking structure. It is owned by the government of Nepal. **Vaidya (1997)** has stated that the central bank is the apex bank in a country that controls all monetary system and banking structure.

Rosenberg (1982) has defined the central bank as a banker's bank and a bank holding the main body of bank reserves of a nation and the prime reservoir of credit. (E.g. Bank of England, Bank of France)

Clark (1999) 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.

Encyclopaedia Britannica (2002) defines 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.

2.1.4 Importance & Functions of Central Banks

As a apex Bank of Nepal to observe the overall economic indicator, it is difficult to mention it's important and functions. **Shekhar& Shekhar (1998)** comment that it is difficult to lay down any hard and fast rule regarding the functions of a central bank. The powers and the range of functions of central banks vary from country to country.

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.

2.1.5 Meaning of Commercial Banks

The Banks which perform all kinds of banking business are known as Commercial Banks. Generally Commercial banks deal with finance, trade and Commerce .**Rosenberg (1982)** has stated 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.

Clark (1999) has defined 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.

"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 and other gains,

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.

2.1.6 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**)

Rosenberg (1982) has defined 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-requirements 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 losses, 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.

Patheja (1994) has defined banks 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.

Verma and Malhotra (1993) have indicated that 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.

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 are the items which are deducted from **Core Capital** while calculating:

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.

Clark (1999) has defined 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.

Besis (1998) has claimed that capital adequacy aims at setting minimum level of capital as a function of risks. Thus, capital should be risk based.

Maisel (1981) "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".

The Capital Adequacy Ratio is calculated by the following formula:

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

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 were 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 2062/63:

Core Capital : 5.5% of the risk weighted assets

Total Capital Fund : 11% 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 fulfill 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 weighted 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 weighted 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:

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

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-fulfillment 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 fulfill the capital fund requirements within 35 days. NRB shall direct the bank to fulfill 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 fulfill the minimum Capital Fund within the specified period, NRB may initiate any of the following actions:

- a) Suspension of opening new branch.
- b) Suspension of access to refinancing facilities of Nepal Rastra Bank
- c) Restriction on lending activities of the bank.
- d) Restriction on accepting new deposits.
- e) Initiation of any other actions by exercising the authority under Section 100 of Nepal Rastra Bank Act, 2058.

2.3 Empirical Review

2.3.1 Review of Articles and Reports

Keijser and Haas (2001) have summarized, as the Basel Capital Accord of 1988 was an important first milestone in the regulatory treatment of collateralized 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.

(Lamsal, M.,2003,1-3) stated that the commercial banks with seven directives issued in two installments 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.

Pandey, L.P. (2003) stressed that one of the main objectives of a commercial bank is to safeguard the money of depositors. With the low capital adequacy rate, the banks were previously lending from the money of the depositors because the capital comprised a very small portion of the total risk-weighted assets. However, the returns the shareholders or promoters were reaping were quite high. The risk of the depositors was too high. **Pandey** further put forward that a good banking system is, therefore, a sine qua non for maintaining financial equilibrium in the country. And, NRB's efforts in this direction are really praiseworthy.

Stokes (2003) has mentioned that banks hold capital in excess of reserve requirements to provide a buffer against future, unexpected losses. Such losses are brought about by the credit, market, and operational risks inherent in the business of lending money. Problems created by an insolvent bank are important enough that bank regulators enforce minimum capital standards on banks in an effort to safeguard depositors and ensure the ongoing viability of the financial system. However, from a bank's perspective holding idle capital is an expensive safeguard against risk because the bank's shareholders demand

a return on their investment and idle capital provides no such return. For this reason bankers and regulators can have divergent options about the amount of capital a banks should hold making the problem of determining a bank's risk-based capital a complex and important question.

Heakal (2003) has written that the central bank has been described as "the lender of the last resort", which means that the central bank is responsible for providing its economy with funds when commercial banks cannot cover a supply shortage. In other words, the central bank prevents the country's banking system from failing. However, the primary goal of central banks is to provide their countries' currencies with price stability by controlling inflation. A central bank also acts as the regulatory authority of a country's monetary policy and is the sole provide and printer of notes and coins in circulation. Time has proven that the central bank ca best function in these capacities by remaining independent from government fiscal policy and therefore uninfluenced by political concerns of any regime. The central bank should also be completely divested of any commercial banking interests.

(Khatiwada, Y.R., 2004, I & II) has further written that Nepal initiated financial sector reform back in 1980s with donor initiative and assistance. In this process, some progress was made in terms of re-capitalization of the government banks, divestment, branch consolidation, introduction of new regulatory and prudential norms and cleaning up the balance sheets of bad loan loaded banks. But the reform process was stalled in the later 1990s due to political instability and the government's priority in areas other than the financial system. In between, the country observed, from very close by, the financial crisis in the neighbouring region. Keeping in mind the financial crisis and its effect in the Asian region, the Nepal Rastra Bank is now focusing its

attention on the reform measures in the financial sector as a drive towards new financial architecture.

Khatiwada emphasized various reform measures. One of the measures was increasing capital base and revising capital adequacy. Khatiwada stressed that experience has shown that undercapitalized financial institutions are the ones that are first attacked by the speculators and hedgers at the time of crisis and create contagious effect on the other institutions as well. Besides, undercapitalized financial institutions cannot gain credibility and corporate growth even in normal items. This requires that financial institutions are adequately capitalized and possess resilience against attacks by dealers and customers. In this context, the capital adequacy norms are being revised upward as per the Basel Capital Accord. But increasing the capital base for loss making government owned financial institutions is not easy without involving private sector in the equity capital.

Shah, P.B. (2005) concluded that being the central bank of the nation, Nepal Rastra Bank has to be active by playing important role for monetary and financial stability. Central bank should always be eager to achieve the public faith towards bank and financial institutions enabling them being disciplined, well organized, healthy and competent by providing effective regulation and supervision to appropriate utilization and mobilization of financial resources by increasing financial saving rate by raising financial stability. Also, central bank should always be willing to safeguard the interest of depositors and investors to accomplish the financial stability. Constant financial stability leads to the accomplishment of monetary stability. As the tools for monetary policy are applied through financial sector, the efficiency of monetary policy depends on effectiveness of financial sector. Balanced growth of financial sector helps monetizing of economy. Various drawbacks; like, managerial ineffectiveness,

organizational difficulty, contrary financial situation; make the long-term stability of financial sector suspicious. Failure of any one financial institution leads the destructive impact to whole financial sector and such impact will be spread to other countries from the countries where capital accounts are fully convertible. So, the concept of financial system of the country should be boosting and healthy for achieving higher economic growth by steadying macro economic stability has been globally supported. The financial sector reform program in Nepal can also be taken in the same background. Since, it is not possible to achieve financial stability without the commanding role of regulation and supervision, new program of financial sector reform program should play role regarding structural reformation / transformation and organizational structure in existing banks and financial institutions by clarifying the role of government and central bank.

Khatiwada, N.K. (2005) enlightened that recent financial crisis have revealed a number of data deficiencies, notably in pledged assets, deposits held in financially weak domestic banks and their foreign affiliates, valuation practices leading to bank valuation of assets being significantly different from market values and complicating assessments of the realizable value of reserve assets. Similarly, public information is lacking in many countries on the off-balance-sheet activities of the authorities that can affect foreign currency resources. There was a lack of information on the authorities' financial derivatives activities. Also was observed that inadequate information of actual and potential foreign liabilities of the monetary authorities and central government. Financial sector reform envisages for measures for mitigating this information and data gap problem as well.

2.3.2 Review of Thesis Works

Pandey, A.K. (2002) 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 totaling 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.

Karmacharya, R.P. (2005) 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.

Sapkota, U.P. (2004), 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 must for these assets because negligence may become a reason for liquidity crisis and bankruptcy.

Pathak, G.K. (2000), 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), 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.

Agrawal, S.K. (2004), in his study on deposit and investment position of Yeti Finance Company Ltd., has concluded that the major objective of the financial institution is to transfer capital between saver and those who need it. Such institutions are established with the aim of further intensifying the participation of assisting industries and private sector in regular supply of funds. Financial institutions serve as a financial intermediaries, transfer money and securities between firm and saver that create a new financial product. Agrawal further commented that the major classes of financial intermediaries are commercial banks, mutual saving bonds, credit unions and pension funds, life insurance companies and finance companies. Within a short span of time, they are showing encouraging trend in the financial sector, both in collecting and investing funds. They are able to tap even smaller amount of saving from public and investing in different production sectors.

Shrestha, T.R. (2004), 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.

Ranjit, R. (2006), in his study has indicated that capital funds have positive and significant relation with both deposit and loans. That means increase or decrease in capital fund increases or decreases deposits as well as loans. However, the degrees of relationship were different. But relation of capital with profit was negative and insignificant that indicated least change in profit is due to capital fund or capital fund is least responsible in changing profit. Bank should increase capital fund to increase the capital fund ratio in according to increase in deposits.

Shivakoti, I.P. (2005), in his study of capital and assets structure of Nepal Industrial Development Corporation (NIDC), has concluded that the financial soundness of a company as well as its strength depends largely upon the capital and assets structure. The capital structure presents its resource capacity and viability whereas the assets structure presents its worthiness. The composition of the capital and assets holds the utmost importance so far the successful and thriving operation of NIDC. Shivakoti prefers the long-term borrowing in form of capital and uses it in long-term loan as assets. The fixed assets, investment in shares and debentures, current assets and liabilities, share capital, reserve and surplus are other components associated with capital and assets structure of NIDC. Shivakoti found that the contribution of different components of capital and assets structure in EBIT of NIDC to be less satisfactory. The relation is positive which showed EBIT was increasing with other variables correlated but the low degree of correlation between them meant the relationship between these EBIT and other variables lack closeness in its increasing trend.

Kadel, S. (2002), in his study on financial performance of NGBL and HBL, has concluded as many commercial banks have been competing with each other in their business. 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 Grindlays 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.

2.4 Research Gap

Most of researcher study concentrates the NRB directives relating to its purpose and impact to the financial institution by generalized it. Few of them have gone specific about capital adequacy norms but none of them have written over 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.

Unified Directives for Financial Institutions has been issued as applicable from FY 2062/63, so, it can be said that this study should be new one incorporating the capital adequacy norms of such new directives. The study is focused on capital adequacy norms fulfilled by the bank and its impact upon it. The study has also reviewed few important items like Capital Fund, Deposit and Credit, which have important role to play in the capital adequacy requirements. Moreover, the study has incorporated the views and opinions of the bank officials with the help of questionnaires regarding capital adequacy requirements set by NRB. In addition to that, the study has been able to incorporate the views of the depositors regarding the safety of their deposits and other factors relating to the deposit with the help of appropriate questionnaires. The study certainly gives clear picture of the compliance of the capital adequacy norms by NIC Bank and its impact on the bank with reference to the analytical study of Capital Fund, Deposit and Credit.

CHAPTER III

RESEARCH METHODOLOGY

Research Methodology can be understood as a science of studying how research has been done i.e. what kinds of tools to be used while preparing it. 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 covers 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 25 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 NIC Bank Ltd. Is taken as sample on the basis of good performance i.e. Bank of the year 2007.

Also, through the research questionnaire, various responds of the respondents have been considered as sample for the study. 11 bank officials have been

interviewed with a questionnaire prepared as in Appendix N. There are total 67 respondents of the Research Questionnaire for Depositors as shown in Appendix O.

3.3 Data Collection Procedure

To study the Thesis easier, necessary information and data are collected from both primary sources and secondary as well. For the primary information, research interview and questionnaire are used. The research interview questionnaire, as shown in Appendix N, was set to interview bank officials. The research questionnaire as shown in Appendix O 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.

3.4.1 Financial Tools

3.4.1.1 Ratio Analysis

Ratio Analysis is the best tool for financial analysis which is the 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:

(a) Capital Adequacy Ratio

Capital Adequacy Ratio is the foremost tool to analyze the competency of a Commercial Bank to maintain the Capital Fund as per the norms of Nepal Rastra 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 calculated 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:

$$\frac{\text{Core Capital}}{\text{TRWA}} \times 100\%$$

To measure the supplementary Capital:

$$\frac{\text{Supplementary Capital}}{\text{TRWA}} \times 100\%$$

TRWA

(b) Capital to Deposit Ratio:

The Capital to Deposit Ratio is an important tool in measuring capital adequacy of banks. But this ratio cannot reflect the capital adequacy of a bank.

It is agreed by many researchers that the Capital to Deposit Ratio has enjoyed the longest use of any ratio devised to measure and determine capital adequacy.

The Capital to Deposit Ratio is derived by the following formula:

$$\frac{\text{Total Capital Fund}}{\text{Total Deposit collected}} \times 100\%$$

(c) 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 analyze the data:

(a) 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.

$$r = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{[N \sum X^2 - (\sum X)^2]} \sqrt{[N \sum Y^2 - (\sum Y)^2]}}$$

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:

$$r = \frac{\sum xy}{\sqrt{\sum x^2} \cdot \sqrt{\sum y^2}}$$

Where,

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

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

CHAPTER IV

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:

- (1) Presentation of Data
- (2) Ratio Analysis
- (3) Statistical Analysis
- (4) Comparative Analysis of Significance of the Ratios of the bank with that of the Industry Average
- (5) Impact of Capital Adequacy Norms
- (6) Study of Perception of Depositors

4.1 Presentation of Data

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

It consists of two types of components viz. Core Capital and Supplementary Capital. Hence, the Total Capital Fund of a bank is derived by adding these two components of capital and subtracting some components from Core Capital as above mention. 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. The capital has been increased to Rs. 600,000,000.00 in the FY 2062/63 by issuing 20% bonus shares (10:2) out of the accumulated profit and in the same year, bonus share of 10% (i.e. 10:1) had been proposed. The bonus shares have already been distributed during the FY 2063/64.

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 2059/60 to FY 2063/64.

Table 4.1

Capital Fund of NIC Bank over the period of five years from FY 2059/60 to FY 2063/64

(Rs. in million)

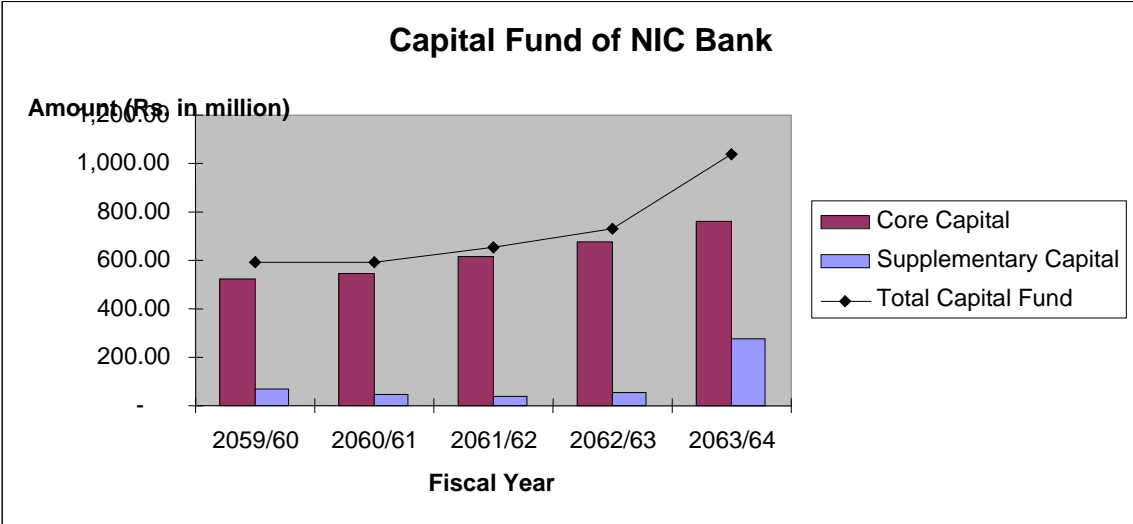
Fiscal Year	Core Capital	Supplementary Capital	Total Capital Fund
2059/60	523.39	66.38	589.78
2060/61	549.43	45.09	594.51
2061/62	616.78	39.58	656.36
2062/63	680.14	50.84	730.99
2063/64	761.13	275.71	1,036.84

(Source: Annual Reports of NIC Bank)

In the last five years period, the Capital Fund of NIC has seen steady growth keeping aside FY 2062/63, where a sharp increment has been observed. The Core Capital of the bank has seen consistent growth whereas fluctuation has been seen in the Supplementary Capital with dramatic increment in the FY 2063/64. The Capital Fund of NIC consisted of Core Capital of Rs. 523.39 million and Supplementary Capital of Rs. 66.38 million totaling Rs. 589.78 million at the end of the FY 2059/60. The Capital Fund has increased to Rs. 1,036.84 million consisting of Core Capital of Rs. 761.13 million and Supplementary Capital of Rs. 275.71 million by the end of the FY 2063/64.

The same information can be depicted in the chart below.

Figure 4.1
Trend of 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 fluctuating. The Supplementary Capital has risen

dramatically during the FY 2063/64 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 weighted. The assets are categorized into five types while assigning weighted to them. NRB has assigned weighted 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 2059/60 to FY 2063/64.

Table 4.2

**Risk-Weighted Assets of NIC Bank of Five Years from FY 2059/60- 2063/64
(Rs. in million)**

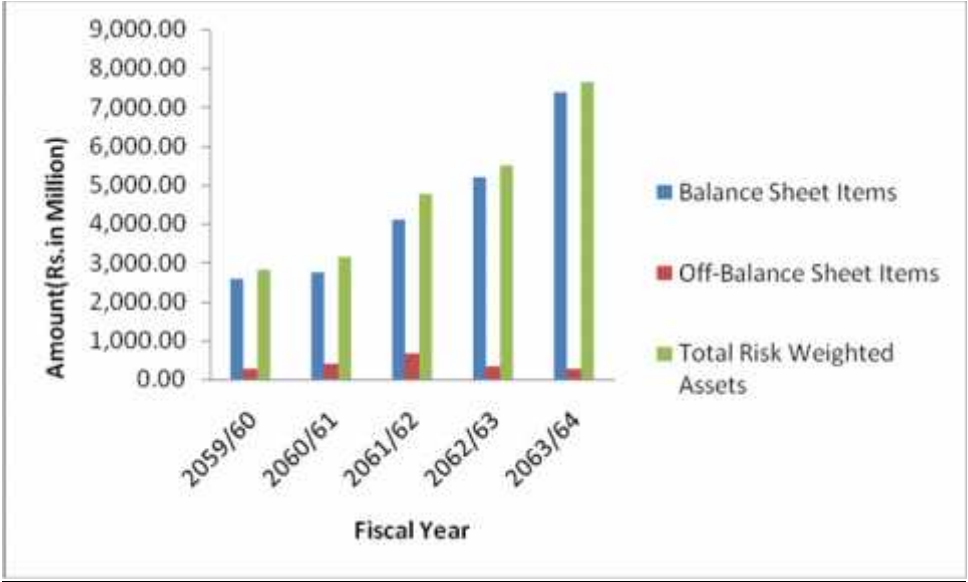
Fiscal Year	Balance Sheet Items	Off-Balance Sheet Items	Total Risk Weighted Assets
2059/60	2,565.20	257.13	2,822.33
2060/61	2,739.08	410.66	3,149.74
2061/62	4,100.93	671.71	4,772.64
2062/63	5,184.71	314.72	5,499.44
2063/64	7,380.37	275.76	7,656.13

(Source: Annual Reports of NIC Bank)

The TRWA of the bank has been increasing gradually in the last five years period. Similar is in the case with Balance Sheet Items whereas Off-Balance Sheet Items have been fluctuating. The TRWA of the bank was Rs. 2,822.33 million during FY 2059/60 with Balance Sheet Items amounting to Rs. 2,565.20 million and Off-Balance Sheet Items amounting to Rs. 257.13 million. By FY 2063/64, the TRWA increased to Rs. 7,656.13 million with Rs. 7,380.37 million as Balance Sheet Items and Rs. 275.76 million as Off-Balance Sheet Item.

The same information can be depicted in the chart below:

Figure 4.2
Trend of RWA of NIC Bank



The Figure 4.2 shows the increasing trend of RWA in the five years period from FY 2059/60 to FY 2063/64. The trend is similar with Balance Sheet Items but Off-Balance Sheet Items show fluctuating trend.

4.1.3 Deposit Trend of NIC Bank

Deposit from general public by launching different kinds of product is the main function of any Commercial Banks. 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 deposit collection trends of NIC for last five fiscal years can be viewed in the Table 4.3 which also includes the national total and the share of NIC Bank on it.

Table 4.3
Deposit Collection Trend of NIC Bank and National Total of Five Years
from FY 2059/60 - 2063/64

(Rs. in million)

Fiscal Year	NIC Bank	National Total	Share of NIC Bank
2059/60	3,165.31	205,135.30	1.54%
2060/61	3,144.32	228,736.40	1.37%
2061/62	5,146.48	258,742.30	1.99%
2062/63	6,241.38	284,115.20	2.20%
2063/64	8,765.95	327,995.18	2.67%

(Source: Annual Reports of NIC Bank and Banking & Financial Statistics 2007)

The table shows that NIC Bank has been gradually increasing the deposit collection apart from FY 2060/61 when deposit collection has slightly decreased as compared to that of the previous year. It can also be seen that NIC Bank has a very small share in the total national deposit collections. This

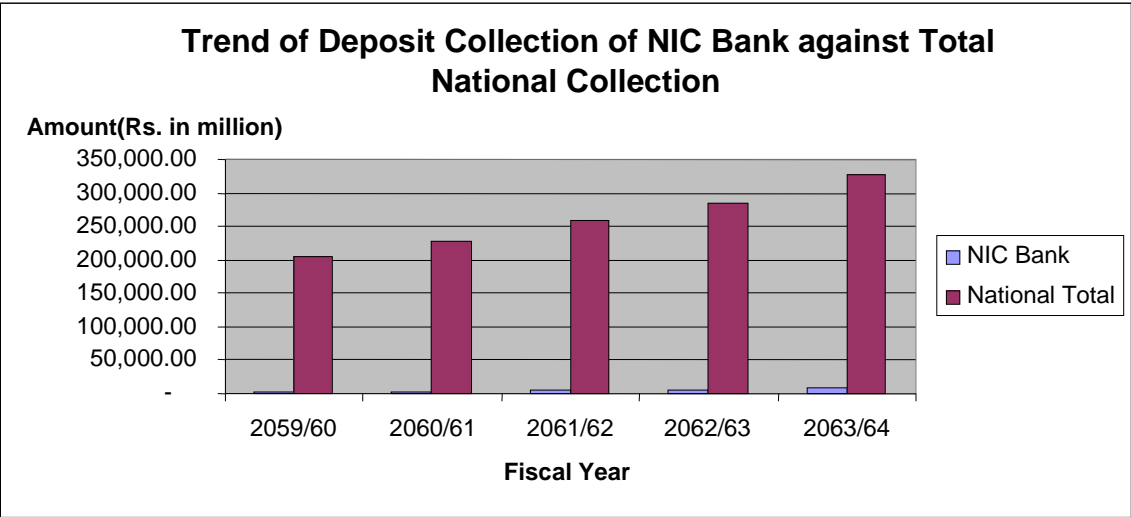
is because the bank was established during the end of FY 2054/55 and a newly established bank cannot be expected to contribute a lot.

In the FY 2059/60, the bank was able to collect Rs. 3,165.31 million of deposit against the national total of Rs. 205,135.30 million thus contributing 1.54%. The collection decreased slightly during FY 2060/61 with decrease in contribution to national total as well. But after that, the bank has never turned back and has shown steady increment. The bank was able to collect Rs. 8,765.95 million of deposit by the end of FY 2063/64 against national total of Rs. 327,995.18 thus making contribution of 2.67%.

The deposit collection made by NIC Bank and the national total deposit collection has been illustrated in the figure below.

Figure 4.3

Trend of Deposit Collection of NIC Bank against Total National Collection



The figure shows very negligible contribution of NIC Bank regarding national total deposit collection. But the signs are good as the contribution rate is

increasing and the bank in the years to come should be able to contribute well towards total national deposit collection.

4.1.4 Credit Trend of NIC 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 fulfill 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 lending trend of NIC Bank for the last five fiscal years has been illustrated in the Table 4.4 including national total lending and its share on it.

Table 4.4
Credit Trend of NIC Bank and National Total over the Period of Five Years from
FY 2059/60 to FY 2063/64

(Rs. in million)

Fiscal Year	NIC Bank	National Total	Share of NIC Bank
2059/60	2,278.99	148,390.70	1.54%
2060/61	2,419.52	165,119.10	1.47%
2061/62	3,561.14	184,389.10	1.93%
2062/63	4,711.71	209,053.70	2.25%
2063/64	6,655.96	230,509.04	2.89%

(Source: Annual Reports of NIC Bank and Banking & Financial Statistics 2007)

The Table 4.4 shows gradual increment in the flow of credit by NIC Bank during past 5 years and similar with the percentage of contribution to the national total credit. The bank was able to flow Rs. 2,278.90 million of loans during the year 2059/60 against the national total of Rs. 148,390.70 million with contribution of 1.54% to the national total but this contribution percentage went slightly down to 1.47% during 2060/61 although individual total credit flow had seen increment. With gradual increment over the period of five years, the total lending of the bank has reached 6,655.96 million against the national total of Rs. 230,509.04 million thus, making contribution of 2.89%.

The credit flow of NIC Bank along with national total credit flow has been illustrated in the figure below.

Figure 4.4
Credit Trend of NIC Bank against Total National Collection

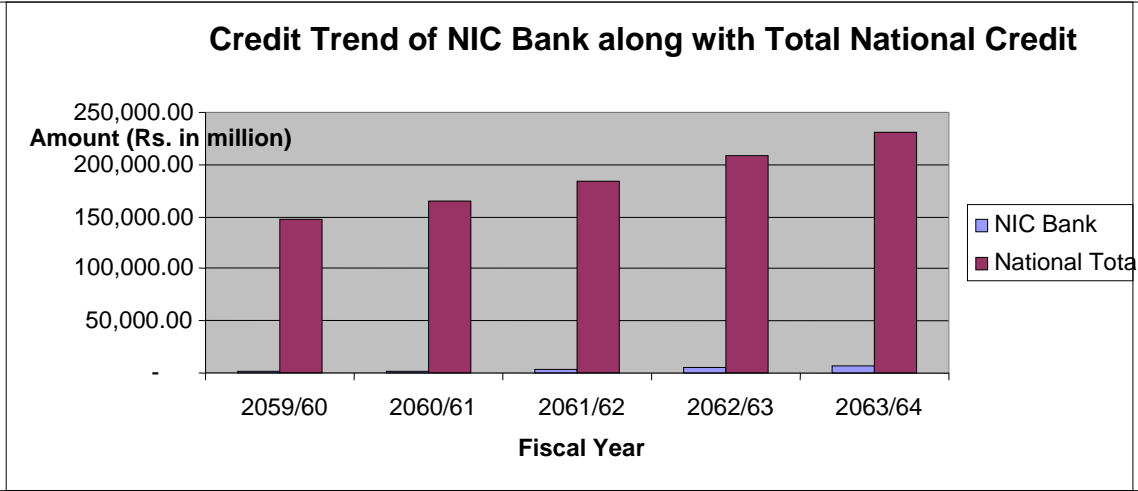


Figure 4.4 shows very small contribution of NIC Bank for total national flow of credit. As said earlier, this is because the bank is not very old and is still growing and this has been displayed by the steady growth in lending shown by the bank over the period of five years.

4.2 Ratio Analysis

The following ratios are used to evaluate the financial statements of NIC Bank in regard of the capital adequacy and capital fund.

4.2.1 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 4.5 for the FY 2059/60 to FY 2063/64.

Table 4.5
Capital Adequacy Ratio of NIC Bank over the Period of Five Years from
FY 2059/60 to FY 2063/64

(Rs. in million)

Fiscal Year	Percentage of Core Capital	Percentage of Supplementary Capital	Percentage of Total Capital
2059/60	18.54%	2.36%	20.90%
2060/61	17.44%	1.43%	18.87%
2061/62	12.92%	0.83%	13.75%
2062/63	12.37%	0.92%	13.29%
2063/64	9.94%	3.60%	13.54%

Detail calculations shown in Appendix F.

The Capital Adequacy Ratios show that the bank has been able to comply with the requirements of NRB consistently. The minimum requirements of NRB were as follows:

FY 2059/60 : Core Capital-5% and Total Capital-10% of RWA

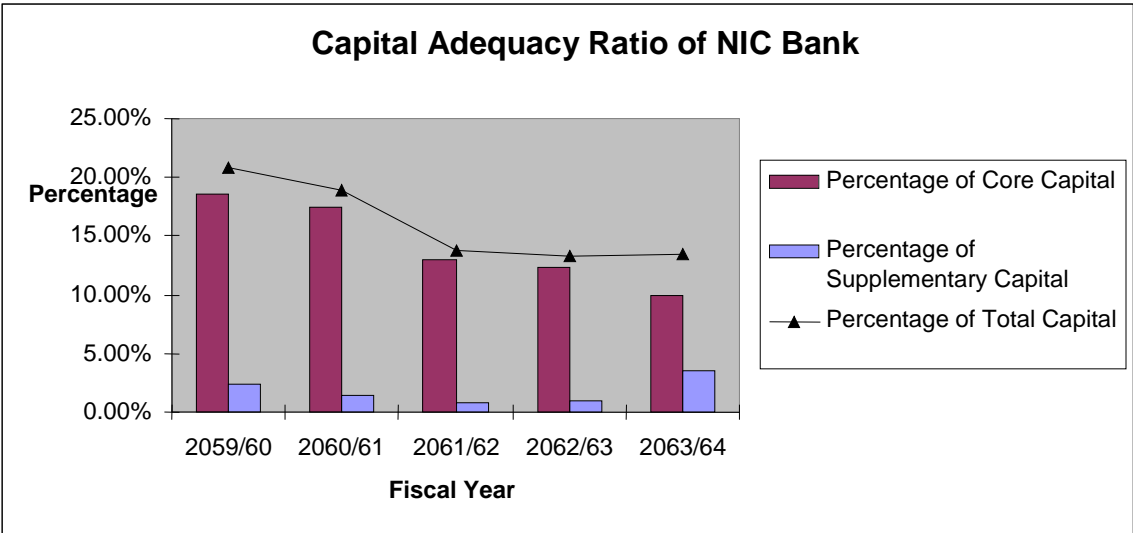
FY 2060/61 to 2062/63 : Core Capital-5.5% and Total Capital-11% of RWA

FY 2063/64 to 2064/65 : Core Capital-5.5% and Total Capital-11% of RWA

In the FY 2059/60, the bank has Total Capital Fund at 20.90% of Risk Weighted Assets with the NRB requirement of 9% and this has significantly gone down to 13.54% by FY 2063/64. The NRB requirement was 5.5% Core Capital and Total Capital Fund 11% of Risk Weighted Assets and they have been adequately complied with.

The Capital Adequacy Ratio of the bank is in decreasing 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 4.5
Trend of Capital Adequacy Ratio of NIC Bank



The Figure 4.5 displays decreasing trend of the Capital Adequacy Ratios of the NIC Bank. The Percentage of Total Capital fell sharply during the FY 2061/62 and after that there is steady decrease and similar is the case with Percentage of Core Capital. But Percentage of Supplementary Capital has fluctuated over the five years period.

4.2.2 Capital to Deposit Ratio

The Capital to Deposit Ratio has a significant role in measuring strength of capital base of a bank. Higher the ratio, safer will be the depositors but is always certain that this ratio always remains less because collection of capital cannot go parallel to the collection of deposit. Calculations of Capital to Deposit Ratios are shown in Appendix G.

Table 4.6
Capital to Deposit Ratio of NIC Bank

Fiscal Year	Capital to Deposit Ratio
2059/60	18.63%
2060/61	18.91%
2061/62	12.75%
2062/63	11.71%
2063/64	11.83%

Detail calculations shown in Appendix G.

As per Table 4.6, the Capital to Deposit Ratio of the bank is in decreasing trend. The ratio was 18.63% during FY 2059/60 and got slightly increased to 18.91% during FY 2060/61. The bank then had sharp fall in the ratio from 18.91% to 12.75% during FY 2061/62 and after that the ratio has been decreasing consistently reaching to 11.83% during FY 2063/64.

4.2.3 Credit/ Deposit (CD) Ratio

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 favored by the depositors as in case of improper investment, the depositor's fund may be on risk. Calculations of CD Ratios are shown in Appendix. Table 4.7 shows the CD Ratios of the bank for the period of five years from FY 2059/60 to FY 2063/64.

Table 4.7
Credit/Deposit Ratio of NIC Bank

Fiscal Year	Credit/Deposit Ratio
2059/60	72.00%
2060/61	76.95%
2061/62	69.20%
2062/63	75.49%
2063/64	75.93%

Detail calculations shown in Appendix H.

The Table 4.7 shows a quite consistent CD Ratios of the bank in the past five year's period beginning from FY 2059/60 to FY 2063/64. The ratio has been ranging from 69% to about 77% with few fluctuations. In an average, the bank has been able to utilize 2/3 portion of the depositors fund in the form of Credit. The ratio was 72% intact during FY 2059/60 with slight increase in the following year. The ratio then fell to 69.20% during FY 2061/62 and after that the ratio has been increasing with very negligible increment during FY 2063/64 compared to FY 2062/63.

4.3 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.

4.3.1 Correlation Co-efficient

To test the relationship between deposit and capital and between credit and capital, the correlation coefficients have been calculated by using Karl Pearson's correlation co-efficient. A detail calculation has been illustrated in Appendix I and J. The calculated values of correlation co-efficients are presented below in the Table 4.8.

Table 4.8
Correlation Co-efficients

Correlation between	Values
Capital & Deposit	0.9565
Capital & Credit	0.9666

The calculated correlation co-efficients between Deposit & Capital and Credit & Capital are positive. Therefore, it can be said that Deposit and Credit components of a bank are positively correlated with the bank's Capital Fund. Here, we can see that all co-efficients are near to 1 which indicates that the correlations seem to be nearly perfectly positive. We can say that the increase in capital causes the increase in deposit and similar will be the case with credit wit increment in capital.

4.4 Comparative analysis of significance of ratios of the bank with that of industry average

In this section, the Capital Adequacy, Credit to Deposit and CD Ratios of the bank calculated in Section 4.2 have been compared and analyzed with that of the industry average to check their significance. The industry average here refers to the average of the commercial banks excluding the data of NBL and RBB. These banks are excluded because these are the oldest state owned commercial banks with huge negative Capital Fund, huge amount of Credit and Deposit. The inclusion of the data of these banks creates business in the comparative analysis, so, exclusion of data of these banks has been made to make sensible comparison. Furthermore, the data of the ADB/N has also been excluded because this is also the state owned bank with no Capital Fund and has basically been established with the objective of developing the agriculture sector and not the profit earning motive. For the comparative analysis, the industry average could only be calculated for 4 years only due to lack of adequate data and as such, comparative analysis of 4 years was only possible.

The industry average ratios and the ratios of NIC Bank of the period of 4 years have been illustrated in the below.

Table 4.9
Comparison between Industry Average *Capital Adequacy Ratios* and that of the Bank

FY	Industry Average Ratios	Ratios of NIC Bank
2060/61	16.72%	18.87%
2061/62	12.96%	13.75%
2062/63	11.40%	13.29%
2063/64	11.34%	13.54%

Detail calculations shown in Appendix K.

Table 4.9 shows that all the ratios of the bank in the study period of 4 years are up and above the industry average. The industry average was 16.72% during FY 2060/61 whereas the ratio with the bank was comfortably high with 18.87%. Similarly, the ratios of the bank were higher as compared to that of the industry average in the following years as well. During FY 2063/64, the industry average ratio was 11.34% whereas the ratio for the bank was 13.54%.

Therefore, with comfortably higher ratios of the bank as compared to that of the industry average, it can be said that Capital Adequacy Ratios of the bank are better.

Table 4.10
Comparison between Industry Average *Capital Fund to Deposit Ratios*
and that of the Bank

FY	Industry Average Ratios	Ratios of NIC Bank
2060/61	10.24%	18.91%
2061/62	9.37%	12.75%
2062/63	9.56%	11.71%
2063/64	10.34%	11.83%

Detail calculations shown in Appendix L.

Table 4.10 shows that all the ratios of the bank in the study period of 4 years are up and above the industry average. The industry average was 10.24% during FY 2060/61 whereas the ratio with the bank was comfortably high with 18.91%. Similarly, the ratios of the bank were higher as compared to that of the industry average in the following years as well. During FY 2063/64, the industry average ratio was 10.34% whereas the ratio for the bank was 11.83%.

Therefore, with comfortably higher ratios of the bank as compared to that of the industry average, it can be said that Capital Fund to Deposit Ratios of the bank are certainly better.

Table 4.11

Comparison between Industry Average *CD Ratios* and that of the Bank

FY	Industry Average Ratios	Ratios of NIC Bank
2060/61	63.84%	76.95%
2061/62	64.83%	69.20%
2062/63	69.91%	75.49%
2063/64	68.46%	75.93%

Detail calculations shown in Appendix M.

Table 4.11 shows that all the ratios of the bank in the study period of 4 years are up and above the industry average. The industry average was 63.84% during FY 2060/61 whereas the ratio with the bank was comfortably high with 76.95%. Similarly, the ratios of the bank were higher as compared to that of the industry average in the following years as well. During FY 2063/64, the industry average ratio was 68.46% whereas the ratio for the bank was 75.93%.

Therefore, with comfortably higher ratios of the bank as compared to that of the industry average, it can be said that CD Ratios of the bank are absolutely better.

4.5 Impact of Capital Adequacy Norms on NIC Bank

4.5.1 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 4.12 shows the

increment in the capital funds of the bank in the form of amount and percentage both.

Table 4.12
Changes in Capital Fund of NIC Bank (Rs. in million)

Fiscal Year	Total Capital Fund	Amount Increased	Percentage Increment
2059/60	589.78	-	-
2060/61	594.51	4.73	0.80%
2061/62	656.36	61.85	10.40%
2062/63	730.99	74.62	11.37%
2063/64	1,036.84	305.85	41.84%

Source :(Annual Report of NIC Bank Limited)

At the beginning of the study period, the bank had total capital fund of Rs. 589.78 million which has been increased up to Rs. 1,036.84 million by the end of the FY 2063/64. Both the increment in percentage and amount are seen fluctuating. The rate of increments in amount is variable as the increment during 2060/61 was Rs. 4.73 million followed by sharp increment of Rs. 61.85 million in the following year. The increment in amount was normal with increment of Rs. 74.62 million during FY 2062/63 but a dramatic change of 305.85 million was observed during FY 2063/64. Similarly, the increment rate in percentage during 2061/62 and 2062/63 was 10.40% and 11.37% respectively, and suddenly the increment rose to 41.84% during FY 2063/64.

On review of the financial statements of the FY 2063/64, it was found that the major reason for such dramatic increment in capital fund was due to the issuance of Unsecured Subordinated Term Debt amounting to Rs. 200 million. This term debt constitutes the component of supplementary capital and thus, resulted into sudden increment in the capital fund. The reason for sharp

increment in capital fund during FY 2060/61 was due to the establishment of the Capital Adjustment Reserve of Rs. 50,000,000.00 out of the profit earned. This has been done to meet the capital requirement of NRB that commercial banks should have paid up Capital of Rs. 1 billion.

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

4.5.2 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 4.13 shows the changes in the paid up capital of the bank in the five years period beginning from 2058/59 to 2062/63.

Table 4.13
Changes in Paid Up Capital of NIC Bank (Rs. in million)

Fiscal Year	Paid Up Capital	Amount Increased	Percentage Increment
2058/59	500.00	-	-
2059/60	500.00	-	0.00%
2060/61	500.00	-	0.00%
2061/62	500.00	-	0.00%
2062/63	600.00	100.00	20.00%
2063/64	660.00	60.00	10.00%

Table 4.5 shows the capital adequacy requirements of NRB and condition of NIC Bank and it is very clear that the bank is always ahead of the capital adequacy requirements of NRB, so, no major changes in Paid Up Capital has been observed apart from the FY 2062/63. It has always been a major advantage that the bank has been established with strong capital base of Rs. 500 million and thus, has always helped it to meet the NRB requirements. During FY 2062/63, paid up capital was increased with the distribution of bonus shares in the ratio 5:1. 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 2063/64 in the ratio 10:1 out of accumulated profits.

An increment of 20% has been observed during FY 2062/63 due to the distribution of bonus shares. Thus, the impact of the norms caused the increment in paid-up capital of the bank.

4.5.3 Study of response of Officials of NIC Bank

Regarding the impact of capital adequacy norms, a simple questionnaire was developed as shown in Appendix N. A total number of eleven officials participated in the queries.

The questionnaire revealed the opinions that bank officials held towards the capital fund and capital adequacy. All the officials unanimously agreed that the central bank should issue capital adequacy norms for commercial banks. All respondents answered that an adequate capital fund will always help to safeguard the interest of depositors.

However, in some questions, the officials found to be disagreeing. Out of eleven, seven respondents answered that the capital adequacy ratio

prescribed by NRB is perfect while remaining answered that it is high. It seemed that officials are not quite satisfied with the prescribed capital adequacy ratio. Especially, the officials at Credit Department were unsatisfied because the norms have straight relation with flow of credit as it contains the major portion of the risk weighted assets and as such, the quality of the credit makes great difference in capital adequacy norms. This has created as a yardstick to measure the efficiency of the officials involved in credit flowing but has also provided a sense of fear to work freely. All the respondents said that it is necessary to bring changes in capital adequacy norms from time to time. Seven respondents answered that the weighted on risk weighted assets prescribed by NRB are just OK while others said that it needs revision.

Officials of the bank had unanimous thoughts that they can increase both components of capital subsequently to cope up with the NRB requirements.

4.5.4 Study of Perception of Depositors on Commercial Banks

To study the perception of depositors a questionnaire was developed as shown in Appendix O. A total number of 67 depositors responded to the questionnaire.

While responding to the why they deposit their money in a bank, 55.22% respondents answered that they deposit their money in a bank for security reason, 25.37% said that to earn interest, 8.96% deposits money to meet the official purpose. 4.48% were of the opinion that they deposit money in a bank for social status and 5.97% referred to other reasons.

Out of the 67 respondents, 46.27% said that physical security arrangement of a bank is most important to make a depositor's money safe, 23.88% agreed that an adequate capital is required to make a depositor's money safe. 17.91% of

the respondents opine that profitability of the bank is important whereas 11.94% referred to the status of the bank as most important.

41.79% respondents think that a bank should pay an attractive interest rate to attract more deposits, 17.91% urged to arrange proper security, 13.43% insist on to achieve a good profit. But only 16.42% advised to maintain adequate capital fund while the remaining 10.45% referred to other reasons that attract deposits to a bank.

4.6 Major Findings of the Study

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: Capital Fund of NIC Bank has grown consistently over the study period comprising of FY 2059/60 to FY 2063/64. The bank had capital fund of Rs. 589.78 million in FY 2059/60 which increased slightly by 0.80% during FY 2060/61 with capital fund amounting to Rs. 594.51 million. The bank then saw remarkable increment of 10.40% with the capital fund of 656.36 million. The increment rate of 11.37% was in the following year and capital fund was 730.99 million. FY 2063/64 had the dramatic increment rate of 41.84% with capital fund amounting to Rs. 1,036.84 million.

The major reason for such a high rate of increment in FY 2063/64 was due to the substantial increment in the supplementary capital. During the year, Unsecured Subordinated Term Debt amounting to Rs. 200 million had been issued forming part of the supplementary capital, which made huge difference in the overall increment rate of the capital fund during that year.

Capital Adequacy: It is found that the bank is quite successful in maintaining capital adequacy as prescribed by NRB. The bank had capital adequacy ratio

of 20.90% during FY 2059/60 against the NRB requirement of 9%. During FY 2060/61, the bank had ratio of 18.87% against the NRB requirement of 10%. In the years followed, the bank had capital adequacy ratios of 13.75%, 13.29% and 13.54% against the NRB requirement of 11%.

After introduction of Unified NRB Directives on 2062-03-29 to be applicable from 2062-04-01 i.e. FY 2062/63, NRB had prescribed capital adequacy ratio of 12% but later vide circular, the capital adequacy ratio had been decreased back to 11% for the year only. But it was not of worry to the bank because it already had the ratio of 13.54%.

Risk Weighted Assets: The risk weighted assets is the most significant component to be considered while studying the capital adequacy norms. The bank had risk weighted assets of Rs. 2,822.33 million during FY 2059/60 which in the following years increased subsequently. FY 2060/61 saw the increment rate of 11.60% in the risk weighted assets with the amount reaching to Rs. 3,149.74 million. The following year had dramatic increment of 51.52% and the risk weighted assets increased to Rs. 4,772.64 million. FY 2062/63 and 2063/64 had the risk weighted assets of Rs. 5,499.44 million and 7,656.13 million experiencing the increment rate of 15.24% and 39.22% respectively.

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.

Capital to Deposit Ratio: The capital to deposit ratio of NIC Bank is found to be satisfactory. The ratio was 15.79% during FY 2059/60 and it increased slightly to 15.90% during 2060/61. The ratio then saw decreasing trend. The

ratio decreased to 9.71% by FY 2061/62 and then further decreased to 8.015 during FY 2062/63. The ratio went down to 6.84% by the FY 2063/64.

It is accepted worldwide that an 8% to 10% capital to deposit ratio is safe. In purview of this notion, the bank had satisfactory ratios of 15.79%, 15.90%, 9.71% and 8.01% during last 4 fiscal years but the ratio has just gone below satisfactory level to 6.84% in the FY 2063/64. Thus, in total, the bank had satisfactory capital to deposit ratio over the study period.

Credit/Deposit (CD) Ratio: 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. In this regard, the bank has no satisfactory results as the ratio ranged from 69% to 77%. The ratio was 72% during FY 2059/60 and it increased to 76.95% during FY 2060/61. The ratio then declined to 69.20% in the following year but then the ratio has been increasing. The ratio was 75.49% during FY 2062/63 and 75.93% during FY 2063/64.

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.

Statistical Analysis: The correlation co-efficient between capital and deposit and capital and credit of the bank showed that they are correlated. All co-efficient are 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.

Comparative Analysis: The comparative analysis of ratios of the bank for checking significance with that of average industry ratios showed that the performance of the bank is very satisfactory. The Capital Adequacy Ratios, Capital to Deposit Ratios and CD Ratios of the bank were better than that of the industry average. So, it was found that the bank is doing quite well and their ratios are quite significant as compared to that of the industry average ones.

Impact Analysis: It is observed that the bank has been complying with the requirement of the capital adequacy norms of NRB. The bank has been increasing its capital fund to meet the capital adequacy requirement. The officials of the bank feel that NRB, as a central bank, should set the capital adequacy norms. They all agree that these norms are required to safeguard the interest of depositors. The officials are not quite convinced with the prescribed ratios. Some of them say that the ratios are reasonable and some say that it is not perfect. However, the majority of them opine that these norms are acceptable.

Perception of Depositors: It has been found that the majority of the depositors deposit their money in bank for security of their money. But they do not seem to be aware of the capital fund of the commercial bank where they are depositing their money. Only 23.88% of the respondents are aware of the fact of the necessity of adequate capital fund to safeguard their money. Also, majority of the respondents say that attractive interest rate is required to attract deposits to commercial banks. It has been studied that depositors in Nepal are not aware of the fact of capital adequacy of a bank, which is very essential to safeguard their deposit.

CHAPTER V

SUMMARY, CONCLUSION & RECOMMENDATIONS

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 adequately meet the requirement of capital adequacy norms. Capital Adequacy ratios have been calculated to check the adequacy as per the norms. Capital-to-Deposit Ratio and CD Ratio, which are key ratios of commercial banks, have also been checked. Analyses have been done to check the relationship of capital fund with deposit and credit.

The thesis studies the responses of 11 bank officials received through research interview. Also, the perception of 67 depositors has also been studied through the questionnaire.

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 sated 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 adequately. However, some bank officials are not satisfied with the provisions.

The capital-to-deposit ratio of the bank is adequate and satisfactory. The CD ratio of the bank is very low 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-efficients between capital and deposit and between capital and credit are found to be positive and near to perfect correlation. The test of hypothesis revealed that the capital and deposit are correlated. Also, the test brought to light that credit and capital are also 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 Recommendations

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.
- ❖ Capital-to-deposit ratio of the bank under study is quite satisfactory. There is lack of standard on such type of ratio. Therefore, NRB should set appropriate standard for such ratio to be maintained by commercial banks. An 8% to 10% ratio may be appropriate for the ratio of capita-to-deposit.

- ❖ CD ratio of the bank is very low. 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 capita-to-deposit and 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

Commercial Banks

1. Nepal Bank Ltd.	2. Rastriya Banijya Bank.
3. Agriculture Development Bank Ltd.	4. NABIL Bank Ltd.
5. Nepal Investment Bank Ltd.	6. Standard Chartered Bank Nepal Ltd.
7. Himalayan Bank Ltd.	8. Nepal SBI Bank Ltd.
9. Nepal Bangladesh Bank Ltd.	10. Everest Bank Ltd.
11. Bank Of Kathmandu Ltd.	12. Nepal Credit and Commerce Bank Ltd
13. Lumbini Bank Ltd.	14. Nepal Industrial and Commercial Bank Ltd.
15. Machhapuchhre Bank Ltd.	16. Kumari Bank Ltd.
17. Laxmi Bank Ltd.	18. Siddhartha Bank Ltd.
19. Global Bank Ltd.	20. Citizens Bank International Ltd.
21. Prime Bank Ltd.	22. Sunrise Bank Ltd.
23. Bank of Asia Nepal Ltd.	24. Development Credit Bank
25. Nepal Merchant Bank	

Source: Banking and Financial Statistics (2008)

APPENDIX B

Risk Weighted 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 C

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 D

Table of Capital Fund (Directives Form No. 1.1)

Particulars	Previous Quarter	This Quarter
<p>(A) Core Capital</p> <p>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</p> <p>Less: - Goodwill - Investment over the prescribed limit - Fictitious Assets - Investment made in shares of company having financial interest</p>		
<p>(B) Supplementary Capital</p> <p>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</p>		
<p>(C) Total Capital Fund (A+B)</p>		
<p>(D) Minimum Capital Fund to be maintained on the basis of Risk Weighted Assets</p> <p>Capital Fund (..... percentage) Core Capital (.....percentage)</p>		
<p>Capital Fund (Excess/Deficit) (by.....percentage) Core Capital (Excess/Deficit) (by.....percentage)</p>		

APPENDIX E

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 F

Calculation of Capital Adequacy Ratio

(Rs. in million)

Fiscal Year	Total Capital Fund	Core Capital	Supplementary Capital	Risk Weighted Assets
2059/60	589.78	523.39	66.38	2,822.33
2060/61	594.51	549.43	45.09	3,149.74
2061/62	656.36	616.78	39.58	4,772.64
2062/63	730.99	680.14	50.84	5,499.44
2063/64	1,036.84	761.13	275.71	7,656.13

We have;

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 above formulas, we get the ratios as:

Fiscal Year	Percentage of Core Capital	Percentage of Supplementary Capital	Percentage of Total Capital Fund
2059/60	18.54%	2.36%	20.90%
2060/61	17.44%	1.43%	18.87%
2061/62	12.92%	0.83%	13.75%
2062/63	12.37%	0.92%	13.29%
2063/64	9.94%	3.60%	13.54%

APPENDIX G

Calculation of Ratio of Capital to Deposit

(Rs. in million)

Fiscal Year	Total Capital Fund	Deposit
2059/60	589.78	3,165.31
2060/61	594.51	3,144.32
2061/62	656.36	5,146.48
2062/63	730.99	6,241.38
2063/64	1,036.84	8,765.95

We have;

Ratio of Capital Fund to Deposit as:

$$\frac{\text{Total Capital Fund}}{\text{Total Deposit}} \times 100\%$$

By using above formula, we get the ratios as:

Fiscal Year	Capital to Deposit Ratio
2059/60	18.63%
2060/61	18.91%
2061/62	12.75%
2062/63	11.71%
2063/64	11.83%

APPENDIX H

Calculation of Credit/Deposit Ratio

(Rs. in million)

Fiscal Year	Credit	Deposit
2059/60	2,278.99	3,165.31
2060/61	2,419.52	3,144.32
2061/62	3,561.14	5,146.48
2062/63	4,711.71	6,241.38
2063/64	6,655.96	8,765.95

We have;

Ratio of Credit to Deposit as:

$$\frac{\text{Total Credit}}{\text{Total Deposit}} \times 100\%$$

By using above formula, we get the ratios as:

Fiscal Year	Credit/Deposit Ratio
2059/60	72.00%
2060/61	76.95%
2061/62	69.20%
2062/63	75.49%
2063/64	75.93%

APPENDIX I

Calculation of Correlation Coefficient of Deposit on Capital

(Rs. in million)

Fiscal Year	Total Capital Fund	Deposit
2059/60	589.78	3,165.31
2060/61	594.51	3,144.32
2061/62	656.36	5,146.48
2062/63	730.99	6,241.38
2063/64	1,036.84	8,765.95

Let the variable Capital be X and Deposit be Y

	X	Y	x=(X- \bar{X})	y=(Y- \bar{Y})	xy	x ²	y ²
	589.78	3,165.31	-131.92	-2,127.38	280,643.97	17,402.89	4,525,745.66
	594.51	3,144.32	-127.19	-2,148.37	273,251.18	16,177.30	4,615,493.66
	656.36	5,146.48	-65.34	-146.21	9,553.36	4,269.32	21,377.36
	730.99	6,241.38	9.29	948.69	8,813.33	86.30	900,012.72
	1,036.84	8,765.95	315.14	3,473.26	1,094,563.16	99,313.22	12,063,535.03
Σ=	3608.48	26,463.44	-	-	1,666,825.00	137,249.02	22,126,164.43

$$\bar{X} = \frac{\Sigma X}{N} = \frac{3608.48}{5} = 721.70$$

$$\bar{Y} = \frac{\Sigma Y}{N} = \frac{26463.44}{5} = 5292.69$$

Now,

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

$$= \frac{1666825}{\sqrt{137249.02} \cdot \sqrt{22126164.43}} = 0.9565$$

∴ Correlation co-efficient of Deposit on Capital, $r = 0.9565$

APPENDIX J

Calculation of Correlation Coefficient of Credit on Capital

(Rs. in million)

Fiscal Year	Total Capital Fund	Credit
2059/60	589.78	2,278.99
2060/61	594.51	2,419.52
2061/62	656.36	3,561.14
2062/63	730.99	4,711.71
2063/64	1,036.84	6,655.96

Let the variable Capital be X and Deposit be Y

	X	Y	x=(X- \bar{X})	y=(Y- \bar{Y})	xy	x ²	y ²
	589.78	2,278.99	-131.92	1,646.48	217,203.13	17,402.89	2,710,883.59
	594.51	2,419.52	-127.19	1,505.95	191,541.42	16,177.30	2,267,876.95
	656.36	3,561.14	-65.34	-364.33	23,805.40	4,269.32	132,737.24
	730.99	4,711.71	9.29	786.24	7,304.19	86.30	618,176.96
	1,036.84	6,655.96	315.14	2,730.49	860,487.89	99,313.22	7,455,597.59
Σ =	3608.48	19,627.3	-	-	1,300,342.03	137,249.02	13,185,272.3
	3	3	-	-	2		2

$$\bar{X} = \frac{\Sigma X}{N} = \frac{3608.48}{5} = 721.70$$

$$\bar{Y} = \frac{\Sigma Y}{N} = \frac{19627.33}{5} = 3925.47$$

Now,

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

$$= \frac{1300342.03}{\sqrt{137249.02} \cdot \sqrt{13185272.32}} = 0.9666$$

\therefore Correlation co-efficient of Credit on Capital, $r = 0.9666$

APPENDIX K

Calculation of Industry Capital Adequacy Ratios

(Rs. in million)

Fiscal Year	Total Industry Capital Fund	Total Industry Risk Weighted Assets
2060/61	10,938.28	65,420.33
2061/62	12,270.53	94,680.02
2062/63	14,053.31	123,274.65
2063/64	18,621.75	164,212.96

We have;

Ratio of Total Industry Capital Fund to Total Industry Risk Weighted Assets as:

$$\frac{\text{Total Capital Fund}}{\text{TRWA}} \times 100\%$$

By using above formula, we get the ratios as:

Fiscal Year	Industry Capital Adequacy Ratios
2060/61	16.72%
2061/62	12.96%
2062/63	11.40%
2063/64	11.34%

APPENDIX L

Calculation of Total Industry Capital Fund to Total Industry Deposit Ratio

(Rs. in million)

Fiscal Year	Total Industry Capital Fund	Total Industry Deposit
2060/61	10,938.28	106,827.40
2061/62	12,270.53	130,941.90
2062/63	14,053.31	147,076.30
2063/64	18,621.75	180,109.80

We have;

Ratio of Total Industry Capital Fund to Total Industry Deposit as:

$$\frac{\text{Total Industry Capital Fund}}{\text{Total Industry Deposit}} \times 100\%$$

By using above formula, we get the ratios as:

Fiscal Year	Total Industry Capital Fund to Total Industry Deposit Ratios
2060/61	10.24%
2061/62	9.37%
2062/63	9.56%
2063/64	10.34%

APPENDIX M

Calculation of Industry Credit to Industry Deposit (CD) Ratio

(Rs. in million)

Fiscal Year	Total Industry Credit	Total Industry Deposit
2060/61	68,202.70	106,827.40
2061/62	84,886.80	130,941.90
2062/63	102,825.40	147,076.30
2063/64	123,298.40	180,109.80

We have;

Ratio of Total Industry Capital Fund to Total Industry Deposit as:

$$\frac{\text{Total Industry Credit}}{\text{Total Industry Deposit}} \times 100\%$$

By using above formula, we get the ratios as:

Fiscal Year	Industry CD Ratios
2060/61	63.84%
2061/62	64.83%
2062/63	69.91%
2063/64	68.46%

APPENDIX N

At First, I would like to introduce myself as a student of, Nepal Commerce Campus Tribhuvan University, MBS Final Year. In order to fulfill the partial requirement of Master Degree in Business Studies of Tribhuvan University of Nepal, I am conducting the research work entitled, **“NRB Unified Directives on Capital Adequacy Norms and its Impact With Reference to Nepal Industrial and Commercial Bank Limited”**

I have sent this questionnaire to spare some of your valuable time to provide your valuable experience, suggestions and opinions concerning with income tax system in Nepal, which will be very much appreciated if you could provide your important time for filling this questionnaire.

I assure that the information you provide me will solely be utilized in research work. I hope for your kind co-operation and support.

Yours Sincerely
Sushma Khadka

INTERVIEW QUESTIONNAIRE FOR BANK OFFICIALS

- 1) **NRB has prescribed capital adequacy ratio in its Directives No. 1 for commercial banks. Do you think it is necessary that a central bank should issue capital adequacy norms for commercial banks?**
 Yes No
- 2) **Which stakeholders' interest will be safeguarded most by adequate capital fund?**
 Depositor's Interest Shareholder's Interest
 Employees' Interest
 Others (Please Specify)
- 3) **Do you think the present capital adequacy ratio prescribed by NRB is justified?**
 Yes, it is perfect No, it is high No, it is not adequate
- 4) **Do you think the revision in capital adequacy ratio is necessary from time to time?**
 Yes, it is necessary Not at all
- 5) **The capital adequacy ratio is based on risk-weighted assets. Do you think the weightage prescribed by NRB on the on and off-balance sheet items are appropriate?**
 Yes, it is perfect Not applicable No, it needs revision
- 6) **In your opinion, which of the following steps is appropriate for your bank to follow to cope for the compliance of capital adequacy ratio?**
 We can increase core capital
 We can increase supplementary capital
 We can increase both components of capital
 Others (Please Specify)
.....

Name of Interviewee.....

Designation.....

APPENDIX N-1

Analysis of Interview Questionnaire for Bank Officials

Question No. 1	No. of Responses	Percentage
a) Yes	11	100.00%
b) No	0	0.00%

Question No. 2	No. of Responses	Percentage
a) Depositor's Interest	11	100.00%
b) Shareholder's Interest	0	0.00%
c) Employees' Interest	0	0.00%
d) Others	0	0.00%

Question No. 3	No. of Responses	Percentage
a) Yes, it is perfect	7	63.64%
b) No, it is high	4	36.36%
c) No, it is not adequate	0	0.00%

Question No. 4	No. of Responses	Percentage
a) Yes, it is necessary	11	100.00%
b) Not at all	0	0.00%

Question No. 5	No. of Responses	Percentage
a) Yes, it is perfect	0	0.00%
b) Just OK	7	63.64%
c) No, it needs revision	4	36.36%

Question No. 6	No. of Responses	Percentage
a) We can increase core capital	0	0.00%
b) We can increase supplementary capital	0	0.00%
c) We can increase both components of capital	11	100.00%
d) Others	0	0.00%

APPENDIX O

Dear Sir/Madam

At First, I would like to introduce myself as a student of, Nepal Commerce Campus Tribhuvan University, MBS Final Year. In order to fulfill the partial requirement of Master Degree in Business Studies of Tribhuvan University of Nepal, I am conducting the research work entitled, **“NRB Unified Directives on Capital Adequacy Norms and its Impact With Reference to Nepal Industrial and Commercial Bank Limited”**

I have sent this questionnaire to spare some of your valuable time to provide your valuable experience, suggestions and opinions concerning with income tax system in Nepal, which will be very much appreciated if you could provide your important time for filling this questionnaire.

I assure that the information you provide me will solely be utilized in research work. I hope for your kind co-operation and support.

Yours Sincerely
Sushma Khadka

QUESTIONNAIRE FOR BANK ACCOUNT HOLDERS

I would be most grateful if you could spare 5 minutes to answer this questionnaire.

Tick one box per question, unless otherwise indicated.

1) In which purpose do you deposit your money in a bank?

- | | |
|--|---|
| <input type="checkbox"/> For security of money | <input type="checkbox"/> For Interest Earning |
| <input type="checkbox"/> For Social Status | <input type="checkbox"/> For Official Purpose |
| <input type="checkbox"/> Others (Please Specify) | |

2) Which aspect of the bank do you think is most important one to make a depositor's money safe?

- | | |
|---|--|
| <input type="checkbox"/> Physical Security Arrangements | <input type="checkbox"/> Capital Fund |
| <input type="checkbox"/> Status | <input type="checkbox"/> Profitability |
| <input type="checkbox"/> Others (Please Specify) | |

3) What do you think a bank should do in order to attract more deposits?

- | | |
|--|--|
| <input type="checkbox"/> Arrange proper security | <input type="checkbox"/> Maintain adequate capital fund |
| <input type="checkbox"/> Achieve a good profit | <input type="checkbox"/> Pay an attractive interest rate |
| <input type="checkbox"/> Others (Please Specify) | |

Name:

Address:

Email:

Occupation:

Education:

Thank you for taking your time to complete this questionnaire.

APPENDIX O-1
Analysis of Questionnaire for bank Account Holders

Question No. 1	No. of Responses	Percentage
a) For Security of Money	37	55.22%
b) For Interest Earning	17	25.37%
c) For Social Status	3	4.48%
d) For Official Purpose	6	8.96%
e) Others	4	5.97%

Question No. 2	No. of Responses	Percentage
a) Physical Security Arrangements	31	46.27%
b) Capital Fund	16	23.88%
c) Status	8	11.94%
d) Profitability	12	17.91%
e) Others	0	0.00%

Question No. 3	No. of Responses	Percentage
a) Arrange proper security	12	17.91%
b) Maintain adequate capital fund	11	16.42%
c) Achieve a good profit	9	13.43%
d) Pay an attractive interest rate	28	41.79%
e) Others	7	10.45%

