CHAPTER – I

INTRODUCTION

1.1 General Background of Study

Nepal is one of the least developed countries of the world. The economic development of the country, which is reflected by the annual GDP growth rate, is also not very significant. Nepal's average GDP growth rate in recent years is around 5 percent and recently it has declined to 0.8 percent and it has also the fluctuating trend. The development of any country largely depends upon its economic development. Thus the primary goal of any nation, including Nepal is rapid economic development to promote the welfare of the people and the nation as well.

Nepal, being a developing country, is trying to embark upon the path of economic development by economic growth rate and developing all sector of economy. Even though, the process of economic development depends upon various factors, however economist are now convinced that capital formation and its proper utilization plays a vital roles. "The increase in capital has always been a sort of prime mover in the process of material growth and the rate of capital formulation has been the principal variable in setting the overall pace of economic development."(Nigam, 1976: 9) In this regard, the network of well-organized financial system of the country has great bear. It collects scattered financial resources from the masses and invests them among those engaged in economic and commercial activities of the country. In this way, financial institutions provide savers highly liquid divisible assets at a lower risk while the investor receives a large pool of resources.

Bank is a financial institution, which plays an important role in the economic development of the nation. It is the backbone as well as the foundation for the development of the country. "The business of banking is one of collecting funds from the community and extending credit (making loans) to people for useful purposes." (Edmister, 1980: 73. Its principle operations are concerned with the accumulation on the temporary idle money of the public for advancing others for expenditure. Two major task of the bank is to accept deposit from the depositors and to lend it to the borrower. Loans are essential aspect of commercial bank.

“First, income from loan contributes substantially to the revenues and profit of the bank. Second, lending money to people in the community strengthens the community-bank relationship. Third, lending money spurs business development and supports a growing economy.” (Edmister, 1980: 84)

Commercial banks are major financial institutions, which occupy quite an important place in the framework of every economy because they provide capital for the development of industry, trade and business and other resource deficit sectors by investing the saving collected as deposits. Besides this, commercial banks render numerous services to their customer in view of facilitating their economic and social life. Commercial banks, by playing active roles, have changed the economic structure of the world. Thus Commercial banks become the heart of financial system. A key factor in the development of the country is the mobilization of domestic resources and their investment for productive use to the various sectors. To make it more effective, commercial banks formulate sound investment policies, which eventually contribute to the economic of a country. The sound policies help commercial bank maximize quality and quantity of investment and thereby, achieve the own objective of profit maximization and social welfare. The banking sector has to play development role to boost the economy by adopting the growth oriented investment policy and building up the financial structure for future economic development. Formulation of sound investment policies and coordinated and planned efforts forward the forces of economic growth. “Banks are those institutions which accept deposit from the public and in turn provide credit to business and industry that directly makes a remarkable impact on the economic development of a country. To collect fund and utilize it in good investment is a very risky job. Ad-hoe investment decision leads the bank out of the business there by downing the economic growth of the country. Hence sound investment policy of a bank is another secret of a successful bank. Various people have given their view regarding the investment policy of commercial banks.” (Bhalla, 1983: 2)

Decision of investment is very tough one for any business mole. For this they have to pay a lot of consideration before taking any action .A healthy development of any bank depends heavily upon its investment policy. A good investment policy attracts borrows and lenders, which helps to increase the volume and quality of deposit ,loan and investment .Several principal have to be followed for providing loan in a commercial bank such as length of time, purpose of loan ,profit margin ,security etc. These fundamental principal of commercial banks investment are fully considered while making investment policy. Every financial institution should take full care while preparing investment functions. Investment policy should insure minimum risk and maximum profit. Commercial banks play important role in removing problems like inflation and deflation of monetary trade, tread defeat, budget deficit (created by economic problem) by capital formulation for deficits spending units. They also finance in small cottage industries and agricultural sector under priority sector investment scheme to serve the marginal people.

Every commercial bank should consider government and central bank i.e. Nepal Rastra Bank' instructions and their interest as well before preparing the investment policies. Nepalese commercial bank however lags far behind in consideration of good investment opportunities. They are more insecure and do not want to take risk by investing in crucial sectors. But formulation of good investment policy may boost their interest on different investment opportunities that may lead for the enlistment of the national economy.

Investors invest their income for future use or to satisfy the individual investor's expectations. In the market, there are three types of investment alternatives, preferred by investors. So it says there are three types of investors .First those who want to take risk or risk taker, second those who doesn't want to take risk and the third one, who only invest for small return. In the context of Nepal, we can mostly find the third type of investors .Investing is one of the very sensitive part for investors. Only an individual saving is not enough, because this saving means fixed deposits, which will only be single utilization. As we know drop of water makes full of pot, similarly small amount of saving makes large amount of investment. We should very careful while investment, cause there is always risk and return characteristics behind investment policy. Without return investment become ineffective. Investment can help various sector of the nation like society, business, organization, and infrastructure and so on.

Investing is being used for describing all kinds of activities in financial world. Some of these activities are antithesis of investing; some have nothing to do with investing while very few actually are investing. People have among many motivates for investing. Some people invest in order to gain sense of power or prestige while others invest for monetary advantage. In the former motive, often the control of corporate empires is a driving motivate. According to William N Geotzmann, people are willing to "invest to make something happen that might not, otherwise people could invest to build a museum, to finance low income housing or to re-claim urban neighborhoods which has not an economic value. For most investors, however, their interest in investments is largely pecuniary to earn a return on their money.

1.2 Institutional Introduction

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

Introduction to Nepal Credit & Commerce Bank Ltd. (NCC Bank Ltd.)

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

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

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

TECHNOLOGY

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

OUR GLOBAL CONNECTION

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

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

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

Our services across the globe include remittance, draft arrangement, import and export business, guarantee etc.

DEPOSIT PRODUCT

Platinum Fixed Deposit Account

Shuva Laxmi Plus Bhachat Khata

Jestha Nagarik Suraksha Khata

Mahila Suraksha Khata

Saving Plus

Bal Suraksha Khata

Karmachari Bachat Khata

Retirement Fund

Shareholders' Deposit Account

Normal Saving Account

Karodpati Bachat Khata

LOAN PRODUCT

Housing Loan	Overdraft	Bridge gap loan
Hire purchase loan	Loan against gold	Priority sector loan
Vehicles loan	Term loan	Deprived sector loan
Easy loan	Cash credit	Trust receipt loan
Education loan	Export credit	Bills purchased
Demand loan	Consortium loan	Personal loan
LC	Guarantee	

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

Nepal industrial and Commercial Bank Limited (NIC Asia Bank) which commenced its operation on 21st 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 65percent of the shares while 35percent is held by general public. NIC Asia Bank Ltd.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 20 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 Asia Bank Ltd.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 UK – The Banker. This if 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 various 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 Pure Silver

NIC USD Super Savings Account 365 Days Banking

NIC Shareholders Saving Account	NIC Ghar Subidha
NIC Business Account	NIC SMS Banking
NIC Super Deposit	NIC SME Trade & Industry Loan
NIC Sikshya Kosh	NIC Sajilo Karza (NSKza)
NIC Pure Gold	Karmashil Bachat Khata
NIC Small Business Loan	NIC Cash Credit

1.3 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:

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 5 years.
2. Subordinated term debt limited to 50percent of CC, amortized @20percent PA, issued with prior approval of NRB.
3. Hybrid capital instruments.
4. General loan loss provision to a maximum of 1.25percent of total RWA (excluding rescheduled/ restructured loan and specific provisions in respect of NPL's)
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 50percent for treatment as Tier 2 capital and limited to a maximum of 2percent of total Tier 25 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 28 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 2016/17are 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 Asia Bank Ltd. The thesis report is mainly focused on accordance of the Capital Adequacy Norms of Nepal Rastra Bank (NRB) by NIC Asia Bank.

1.4 Statement of the Problem

Banking and Financial Statistics shows that, there is more than Rs. 426080.3 millions of amount deposited in various commercial banks of the country by the end of fiscal year 2016/17. But if the banks go bankrupted, what will happen to the depositors to get back theirs 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 Asia Bank.

NRB issued a new set of Unified Directives applicable to all financial institutions on to be applicable from FY 2012/13. 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.

But for the strictly implementation of Capital adequacy Norms for F/Y 2016/17, The Nepal Rastra Bank as the Banker's of the Bank has been further amended to the requirement of 6.0 percent in the form of core capital fund and 10percent in the form of Total Capital fund by modification of the capital adequacy Norms for Nepalese 'A' class commercial Banks.

1.5 Objectives of the Study

The main objectives of Association between Capital Adequacy and Profitability Performance of Sample Commercial Banks in Nepal Comparative study of NCC Bank Ltd. and NIC Asia Bank Ltd are as follows:

- To analyze the Capital fund of selected commercial banks.
- To examine the Risk weighted Asset and Deposit trend of NCC Bank and NIC Asia Bank Ltd
- To examine the relation of Capital Fund to the other stakes of the bank.
- To analyze the credit trend taken by NCC Bank and NIC Asia Bank Ltd to fulfill the requirements as per these norms.

1.6 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. 426080.3 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 thought it is not impossible.

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

1.7 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 Fiscal years. 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 Asia Bank Ltd. for the implementation of Capital adequacy Norms.

The data and information over the period of 5 fiscal years commencing from 2012/13 to F/Y 2016/17 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.

For the literature review, various newspapers, journals, unpublished thesis works and nevertheless, the website 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. This study is mainly based on credit risk of selected commercial banks.

1.8 Organization of the Study

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

Chaper-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 NCC Bank Ltd. and introduction to NIC Asia 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-II: 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-III: 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-IV: Data Presentation and Analysis

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-V: 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

LITERATURE REVIEW

2.1 Conceptual Review

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.

Resenberg (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.

Encyclopedia 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 conductive 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 its 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, and 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 portion 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” (Encyclopedia Britannica, 2002).

“Banking is 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 owner's equity.

The efficient functioning of markets requires participants to have confidence in each other's stability and ability to transact business. Capitals rules help foster this confidence because they require each member of the financial community to have, among other things, adequate capital.

This capital must be sufficient to protect a financial organization's depositors and counterparties from the risks of the institutions on balance sheet and off- balance sheet risks. Top of the list are credit and market risks, not surprisingly, banks are required to set aside capital to cover these two main risks. Capital standards should be designed to allow a firm to absorb its loses, and in the worst case, to allow a firm to wind down its business without loss to consumers, counterparties and without disrupting the orderly functioning of financial markets.

Minimum capital fund standards are thus a vital tool to reducing systematic risk. They also play a central role in how regulators supervise financial institutions. But capital requirements have so far tended to be simple mechanical rules rather than applications of sophisticated risk adjusted models. Such capital standard is widely known as capital adequacy.

Patheja (2013) 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 (2012) 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 2012 and was implemented by 2013. The committee had issued New Basel Capital Accord, which should have been implemented by 2014 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. Accumulated Profit/Loss Account
6. Capital Redemption Reserve
7. Capital Equalization Reserve
8. Other Free Reserves

The Following items shall be deducted for the purpose of calculation of the Core Capital.

1. Goodwill
2. Excess amount of Investment in shares and debenture of organized institutions than prescribed by NRB (Directive No.8)
3. Entire amount of investment made in share and debenture of organized institutions having a financial interest.
4. Fictitious Assets

The Supplementary Capital consists of the following components of capital.

a. General Loan Loss Provision

Under this head, provision made only against the Pass Loan shall be included. The full amount of excess provisioning made against the pass, substandard, doubtful and bad than those prescribed by NRB, as well as loan loss provision made against restructuring and rescheduling loan can be included as the additional loan loss provision under supplementary capital.

However, the total of above loan loss provisioning amount shall not exceed 1.25 percent of the total Risk Weighted Assets.

b. Assets Revaluation Reserve

The amount of Assets Revaluation Reserve can be included for the purpose of calculating Supplementary Capital, subject up to 2 percent of the Total Supplementary Capital, inclusive the amount of this Reserve.

c. Hybrid Capital Instruments

This includes the following instruments:

1. Unsecured, fully paid up instruments which are subordinated to (priority of payment) depositors and creditors and available to absorb losses as well as convertible into ordinary capital.
2. Instruments, which are non –redeemable at the option of the holder except with the approval of Nepal Rastra Bank.

However, the licensed institutions can not hold (purchase) Hybrid Capital Instrument issued by another licensed institutions.

d. Unsecured Subordinated Term Debt

It includes unsecured and subordinated debt instruments (priority of payment after the depositors) with a minimum maturity term of over five years and limited life redeemable preference shares. To reflect the diminishing value of these instruments, a discount (amortization) factor of 20 percent during the last five years shall be applied.

The issue of these instruments shall not exceed 50 percent of their core capital.

- Exchange Equalization Fund maintained by the licensed institutions authorized to deals in foreign exchange transactions.
- Additional amount of Loan Loss Provision maintained in excess of requirement.
- Provision for Possible Loss on Investment and Investment Adjustment Fund.

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 (2014) has claimed that capital adequacy aims at setting minimum level of capital as a function of risks. Thus, capital should be risk based.

Maisel (2012) “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 “Far”, 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:

Capital Adequacy Ratio = $\frac{Total\ Capital\ Fund}{Total\ Risk\ \mathrm{Z}Weighted\ Assets} x100\%$

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.

Core Capital	: 6% of the risk weighted assets
Total Capital fund	: 10% of the risk weighted assets

Requirements have not been prescribed for Supplementary Capital and focus has been made for Core Capital. So, it is required to fulfill the requirement foe 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:

Capital Fund Ratio = $\dfrac{\text{Core Capital}\,\Gamma\,\text{Supplementary Capital}}{Sum\ of\ Risk\ \mathrm{Z} Weighted\ Assets}\,x100\%$

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.

The failure on part of the banks to meet the provision of this capital adequacy framework shall be considered as a violation of the NRB directives and shall attract stipulated actions. The nature of the enforcement action largely depends on the degree of the capital adequacy of the bank. The trigger points and the prescribed action have determined as follows:

1. CAR below 10% and equal or above 9% suspension of opening new branch.

- Prohibition from establishing new branches.
- Prohibition from declaring dividends.
- Submit a capital plan for recapitalization of the bank.
- Interaction with the senior management on corrective course of action.

2. CAR below 9% and equal or above 6%

- Action required under category 1.
- Suspension of lending, investment and credit extension activities.
- Prior approval of NRB for acquiring, through purchase or lease, additional fixed assets.
- Prior approval of NRB for establishing new business lines.
- Other actions under Nepal Rastra Bank Act 2058
- Other actions under Bank and Financial Institution Act 2063

3. CAR below 6% and equal or above 3%

- Action required under category 2.
- Restriction on deposit mobilization
- Prohibition from acquiring, through purchase or lease, additional fixed assets
- Restrictions on paying incentives, severance package, management fee, or other discretionary compensation to directors or officers without prior approval of NRB.
- Restriction on SLF.
- Other actions under NRB Act 2058.
- Other actions under Bank and Financial Institution Act 2063.

4. CAR below 3% and equal or above 10%

- Action required under category 3.
- Restrictions on salary increments, recruitments and promotions.
- Action to directors and chief executive if capital position doesn't improve in six month after initiating action under this category.

- Others actions under NRB Act 2058.
- Other actions under Bank and Financial Institution Act 2063.

5. CAR below 1%

- Action required under category 4.
- Declare the bank as problem and initiate actions under Section 86 of NRB Act.
- Suspend existing board of directors and chief executive of the and bring in new board and management.
- Initiate steps to dilute the ownership of the existing shareholders.
- Other actions under NRB Act 2058.
- Other actions under Bank and Financial Institution Act 2063.

The trigger points and stipulated action are applicable uniformly to all banks within the scope of this framework. However, NRB may allow certain exceptions in the following cases:

1. Branch expansion is targeted in the rural parts of the country where the banking facility is not available in a competitive manner.
2. Banks that are already under the restructuring processes.
3. Banks whose management and operation is taken under the direct control of NRB.
4. Banks those are too big to fail in the national context.

2.3 Empirical Review

2.3.1 Review of Articles and Reports

Keijser and Haas (2014) 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, H.R. (2014) 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.

Stokes (2014) 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 (2014) 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 can not 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.

Pandey, L.P. (2014) 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.

Khatiwada, T.R. (2014) 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 neighboring 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 can not 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. (2015) 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 clarify the role of government and central bank.

Khatiwada, N,K. (2015) 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 affiliate, 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' financial derivatives. 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 Previous Thesis

Pathak, G.K. (2014), 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 depositor's 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. (2014), 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 2053/054, it was highest i.e. 101.40% and has been in the decreasing trend in the succeeding years. The average ratio is 35.69. Also, the ration of shareholders fund in relation to total assets shows that average ratio is 21.22%. it is concluded that its ratio are found decreasing throughout the study period.

Pandey, A.K. (2014) has given conclusion regarding the capital adequacy of HBL during his study period, i.e. as a poush end 2058 as the capital fund stood at R. 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. 12690.60 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.

Kadel, S. (2014), 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.

Sapkota, U.P. (2014), 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.

Agrawal, S.K. (2014), 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. (2015), 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.

Shivakoti, I.P. (2015), 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.

Karmacharya, R.P. (2015) 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.

Ranjit, R. (2015), 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.

Kothari, R. (2016) he summarized commercial bank in of Nepal are bounded by NRB directives and currently bounded by unified directives issued for all financial institutions. The directives no.1 has set norm on capital adequacy for commercial banks. Every commercial bank has to meet the requirements of capital adequacy as stated by the directives. Capital adequacy is the portion of capital fund with regard to risk weighted assets that a commercial bank holds.

Basnet, G.B. (2016) he analyzed the capital fund is highly depending up on share capital. He recommended to the commercial bank to follow optimal capital structure which maximizes the market value to the firm. Commercial bank in of Nepal are bounded by NRB directives and currently bounded by unified directives issued for all financial institutions. The directives no.1 has set norm on capital adequacy for commercial banks. He showed the continuously fulfilling the capital adequacy of the NIC Asia Bank Ltd. as per the NRB directives.

2.4 Research Gap

Most of researcher's 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 Asia Bank Ltd. and NCC Bank together in specific. So, this study is conducted to make a specific review of capital adequacy norms with a specific case of NIC Asia Bank Ltd. and NCC 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 Asia Bank Ltd. and NCC bank together.

Unified Directives for Financial Institutions has been issued as applicable from F/Y 2016/17 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 Asia Bank Ltd. and NCC 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 its briefly mentioned below.

3.1 Research Design

This study research covers the capital funds of commercial banks taking the data and information of NIC Asia Bank Ltd. and NCC Bank Ltd. 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. Reason of selecting these two banks out of 28 commercial banks is, these two banks are similar in public views. But the performances of two banks are not the same.

3.2 Population and Sample

There are total 28 commercial banks presently operating in Nepal. Collecting the data of these entire commercial banks is not possible. Hence, NIC Asia Bank Ltd. and NCC Bank Ltd. have been selected for the case study. Thus, the population of the study comprises of all these commercial banks and the sample of NIC Asia Bank Ltd and NCC Bank. These two banks are selected because both banks are almost established at the same time and this thesis is prepared to evaluate the performance of the both banks.

3.3 Data Collection Procedure

To study the thesis easier, necessary information and data are collected from secondary sources. For the collection of secondary data and information, Unified Directives of Nepal Rastra Bank, Annual report of NIC Asia Bank Ltd and NCC Bank, various publications of Nepal Rastra Bank, magazines, the other publications and the internet (website: www.nrb.org.np, www.nicasiabank.com.np, www.nccbank.com.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.

Financial Tools

3.4.1. 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 Asia Bank Ltd and NCC Bank separately. 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 expousers. 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 = $\frac{Total\ \ Capital\ Fund}{TRWA} x\ 100\%$

To measure the adequacy of Core Capital = $\frac{Core\ \ Capital}{TRWA} x\ 100\%$

To measure the supplementary Capital = $\frac{Supplementary\ \ Capital}{TRWA} x\ 100\%$

b. Capital to Deposit Ratio

The Capital to Deposit Ratio is an important tool in measuring capital adequacy of banks. But this ratio can not 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

$$= \frac{Total\ \ Capital\ Fund}{Total\ \ Deposit\ \ Collected}\ x\ 100\%$$

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:

$$= \frac{Total\ \ Credit}{Total\ Deposit\ \ Collected}\ x\ 100\%$$

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.

d. Non performing loan/ Total loan ratio

Non performing loan to total loan ration examines the bank's loan performance capability. It measures the ratio of non performance loan in total loan. More non performance loan to total loan ratio means that bank providing loan to the non productive sector and vice versa.

The non performing loan to total loan ratio is derived by the following formula.

$$= \frac{Non \quad perfor \min g \; loan}{Total \; loan} \; x \; 100\%$$

3.4.2 Statistical Tools

The following statistical tool is used to analyze the data:

a. Karl Pearson Correlation Analysis

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

$$r = \frac{N \quad XY \; \mathrm{Z}(\quad X)(\quad Y)}{\sqrt{N \quad X^2 \; \mathrm{Z}(\quad X)^2}\sqrt{N \quad Y^2 \; \mathrm{Z}(\quad Y)^2}}$$

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:

$$r = \frac{XY}{\sqrt{\quad X^2}\sqrt{\quad Y^2}}$$

Where,

$$X = \int X \;\; \mathrm{Z}\,\overline{X}\,/$$

Y = $\int Y \, Z \overline{Y} A$

CHAPTER – IV

DATA PRESENTATION AND ANALYSIS

This Chapter deals with the presentation, analysis and interpretation of relevant data and information of NIC Asia Bank Ltd and NCC 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 Three.

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).

4.1 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 Asia Bank Ltd and NCC Bank have been illustrated hereinafter.

4.1.1 Capital Fund of NIC Asia Bank Ltd and NCC Bank

From the inception period, the capital of the NIC Asia Bank Ltd was Rs. 500,000,000.00. The capital has been increased to Rs. 600,000,000.00 in the F/Y 2012/13 by issuing 20Percent bonus shares (10:2) out of the accumulated profit and in the same year, bonus share of 10Percent (i.e. 10:1) had been proposed. The bonus shares have already been distributed during the F/Y 2013/14.

Nepal Credit & Commerce Bank Ltd. (NCC Bank) formally registered as Nepal – Bank of Ceylon Ltd. it was the first private sector Bank with the largest authorized capital of NRS. 1,000 million. The name of the Bank was changed to Nepal Credit & Commerce Bank Ltd. (NCC Bank) on 10th September, 2002, due to transfer of shares and management of the Bank from Bank of Ceylon, an undertaking of Government of Sri Lanka to Nepalese Promoters.

The Capital funds of NIC Ban and NCC 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 2012/13 to FY 2016/17.

Table 4.1

Capital Fund of NCC Bank and NIC Asia Bank Ltd over the period of Five Years

(Rs. In million)

Fiscal Year	Core Capital		Supplementary Capital		Total Capital Fund	
	NCC Bank	NIC Asia Bank Ltd	NCC Bank	NIC Asia Bank Ltd	NCC Bank	NIC Asia Bank Ltd
2012/13	255.85	619.78	52.96	39.58	308.81	659.36
2013/14	(373.62)	680.14	117.69	50.84	(255.93)	730.99
2014/15	(574.91)	912.31	-	296.80	(574.91)	1209.11
2015/16	634.90	1293.75	97.99	321.96	732.89	1615.71
2016/17	881.34	1649	113.18	305.92	994.52	1954.92

(Source: Annual Reports of NCC Bank and NIC Asia Bank Ltd)

In the last five years period, the Capital Fund of NIC Asia Bank Ltd has seen steady growth keeping aside FY 2014/15, 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 2014/15. The Capital Fund of NIC consisted of Core Capital of Rs. 619.78 million and Supplementary Capital of Rs. 39.58 million totaling Rs. 659.36 million at the end of the FY 2012/13. The Capital Fund has increased to Rs. 1954.92 million consisting of Core Capital of Rs. 1649 million and Supplementary Capital of Rs. 305.92 million by the end of the FY 2016/17.

The total Capital fund of the NCC Bank in FY 2012/13 is 308.81 million totaling the 255.85 million core capital and 52.96 million supplementary capitals. During the FY 2013/14 and FY 2014/15 core capital was negatively increased which resulted the negative total capital fund. Capital fund was increased remarkably in FY 2014/15 and 2015/16 respectively which was the positive increment of banks performance regarding the capital adequacy of the bank.

The same information can be depicted in the chart below.

Figure 4.1

Trend of Capital Fund of NIC Asia Bank Ltd and NCC 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 of NIC Asia Bank Ltd is in increasing trend but Supplementary Capital is fluctuating. The Supplementary Capital has risen dramatically during the FY 2014/15 resulting into similar rise in the Capital Fund.

Core Capital and supplementary capital of NCC bank both are in decreasing trend in FY 2013/14 and FY 2014/15 but from the FY 2015/16 it shows the increment both in core capital and supplementary capital fund.

The increment in the Capital Fund shows that Banks have 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 0Percent , 10Percent , 20Percent , 50Percent and 100Percent according to their nature of risk bearing, which is based on the standard of Basel Committee.

The Risk- Weighted Assets of NIC Asia Bank Ltd and NCC Bank have been illustrated in Table 4.2. The table shows Risk- Weighted Assets of the banks over the period of last five years from FY 2012/13 to FY 2016/17.

Table 4.2

Risk- Weighted Assets of NIC Asia Bank Ltd and NCC Bank over the period of Five Years

(Rs. In million)

Fiscal Year	Balance Sheet Items		Off- Balance Sheet Items		Total Risk Weighted Assets	
	NCC Bank	NIC Asia Bank Ltd	NCC Bank	NIC Asia Bank Ltd	NCC Bank	NIC Asia Bank Ltd
2012/13	6624.54	4100.93	868.53	671.71	7493.07	4772.64
2013/14	6456.29	5184.71	936.25	314.72	7392.54	5499.44
2014/15	5622.89	9566.46	673.67	339.08	6296.56	9905.54
2015/16	5846.85	11824.28	762.13	496.85	6608.98	12321.13
2016/17	7551.19	15012.32	1432.66	727.85	8983.85	15740.17

(Source: Annual Reports of NCC Bank and NIC Asia Bank Ltd)

The TRWA of the NIC Asia Bank Ltd 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. 4772.64 million during FY 2012/13 with Balance Sheet items amounting to Rs. 4100.93 million and Off-Balance Sheet items amounting to Rs. 671.71 million. By FY 2016/17, The TRWA increased to Rs. 15740.17 million with Rs. 15012.32 million as Balance Sheet items and Rs. 727.85 million as Off- Balance Sheet item.

The TRWA, Balance Sheet items and Off- Balance Sheet items of the NCC Bank have been fluctuating. The TRWA of the bank was Rs. 7493.07 million during FY 2012/13 with Balance sheet items amounting to Rs. 6624.54 million and Off- balance sheet items amounting to Rs. 868.53 million. By FY 2016/17 the TRWA increased to Rs. 8983.85 million with Rs. 7551.19 million as Balance Sheet items and Rs. 1432.66 million as Off- Balance Sheet Item.

The same information can be depicted in the chart below.

Figure 4.2

Trend of RWA of NIC Asia Bank Ltd and NCC Bank

The figure 4.2 shows the increasing trend of RWA in the five years period from FY 2012/13 to FY 2016/17 of NIC Asia Bank Ltd. The Trend is similar with Balance sheet items but Off-Balance sheet items show fluctuating trend. Similarly, it shows the fluctuating trend of the RWA of NCC Bank during 2012/13 to FY 2016/17. The trend is similar with the balance sheet items, off-balance sheet items and total risk weighted assets.

4.1.3 Deposit Trend of NCC Bank and NIC Asia Bank Ltd

Deposits from general public by lunching different kinds of product are 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 Asia Bank Ltd and NCC Bank could not remain in the business world without collecting deposits. The banks have its own policies to lure deposits from general public. In this matter, NIC Asia Bank Ltd has few successful schemes like NIC life Saving Accounts, NIC Shikshya Kosh, NIC Super Deposit and Karmashil Bachat Khata. These products have really played important role in the swift collection of deposit for the bank.

Similarly, NCC Bank has other kind of schemes like Platinum Fixed Deposit, Shuvalava Plus Bachat Khata, Jestha Nagarik Suraksha Khata, Mahila Suraksha Khata, Bal Suraksha Khata, Karmachari Bachat Khata, Retirement Fund, Shareholders Deposit Account, Normal Saving Account, Karodpati Bachat Khata etc.

The deposit collection trend of NIC Asia Bank Ltd and NCC bank for last five years can be viewed in the Table 4.3 which also includes the national total and the share of NIC Asia Bank Ltd and NCC Bank on it.

Table 4.3

Deposit Collection Trend of NIC Asia Bank Ltd, NCC Bank and National Total over the period of five years

(Rs. In million)

Fiscal Year	NCC Bank	NIC Asia Bank Ltd	National Total	Share of NCC Bank %	Share of NIC Asia Bank Ltd %
2012/13	6630.94	6243.30	284115.20	2.33	2.19
2013/14	6619.58	8765.80	327925.30	2.02	2.67
2014/15	6500.34	10068.30	391152.60	1.66	2.57
2015/16	7320.23	13078.50	508905.70	1.44	2.56
2016/17	9127.75	15579.90	596897.60	1.53	2.61

(Source: Annual Reports of NCC Bank and NIC Asia Bank Ltd)

The Table shows that NIC Asia Bank Ltd has been gradually increasing the deposit collection in last five fiscal years. It can be seen that NIC Asia Bank Ltd has a very small share in the total national deposit collections. This is because the bank was established during the end of FY 2016/17 and a newly established bank can not be expected to contribute a lot.

In the FY 2012/13, the bank was able to collect Rs. 6243.30 million of deposit against the national total of Rs. 284115.20 million thus contributing 2.19 Percent . The collection ratio decreased slightly during FY 2014/15 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. 15579.90 million of deposit by the end of FY 2016/17 against national total of Rs. 596897.60 thus making contribution of 2.61 Percent .

The table shows that NCC bank has been decreasing the deposit collection in first three fiscal years and gradually increasing thereafter. It can be seen that NCC bank has a very small share in the total national deposit collections.

In the FY 2012/13, the bank was able to collect Rs. 6630.94 million of deposit against the national total of Rs. 284115.20 million thus contributing 2.33 Percent . The collection ratio was negatively increased during FY 2013/14with decrease in contribution to national total as well. But after that, the bank has never turned back and has shown gradual increment. The bank was able to collect Rs. 9127.75 million of deposit by the end of FY 2016/17 against national total of Rs. 596897.60 thus making contribution of 1.53 Percent.

The deposit collection made by NIC Asia Bank Ltd, NCC bank and the national total deposit collection has been illustrated in the figure below.

Figure 4.3

Trend of Deposit Collection of NIC Asia Bank Ltd and NCC Bank against Total National Collection.

The Figure shows very negligible contribution of NIC Asia Bank Ltd and NCC Bank regarding the national total deposit collection. But the signs of NIC Asia Bank Ltd 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. But the deposit of NCC bank is decreasing from FY 2012/13 to FY 2016/17 and then increase in FY 2016/17.

4.1.4 Credit Trend of NIC Asia Bank Ltd and NCC 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 Asia Bank Ltd and NCC Bank is to provide credit facility. The lending trend of NIC Asia Bank Ltd and NCC 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 NCC Bank, NIC Asia Bank Ltd and National Total over the period of five years.

Fiscal Year	NCC Bank	NIC Asia Bank Ltd	National Total	Share of NCC Bank %	Share of NIC Asia Bank Ltd %
2012/13	5419.73	4910.98	209053.70	2.59	2.35
2013/14	4643.26	6902.19	230424.70	2.02	3.00
2014/15	3707.64	9128.93	291605.80	1.27	3.13
2015/16	4417.86	11459.38	391537.70	1.13	2.93
2016/17	6858.19	13359.76	437871.40	1.57	3.05

(Source: Annual Reports of NCC Bank and NIC Asia Bank Ltd)

The Table 4.4 shows gradual increment in the flow of credit by NIC Asia Bank Ltd during past 5 years and similar with the percentage of contribution to the national total credit. The bank was able to flow Rs. 4910.98 million of loans during the year 2012/13 against the national total or Rs. 209053.70 million with contribution of 2.35 Percent to the national total. Similarly, the bank was able to flow Rs. 9, 128.93 million of loans during the year 2014/15 against the national total of Rs. 291605.80 million with contribution of 3.13 Percent but this contribution percentage went slightly down to 2.93 Percent during 2015/16 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 13359.76 million against the national total of Rs. 437871.40 million with making contribution of 3.05 Percent .

The Table 4.4 shows Fluctuation in the flow of credit by NCC bank during past 5 years and has been decreasing with the percentage of contribution to the national total credit. The bank was able to flow Rs. 5419.73 million of loans during the year 2012/13 against the national total of Rs. 209053.70 million with contribution of 2.59 Percent to the national total. The bank was able to flow Rs. 6858.19 million of loans during the year 2016/17 against the national total of Rs. 437871.40 million with contribution of 1.57 Percent . it shows that bank has not enough capacity to flow the loan to its clients. Compared to the previous years, the bank was able to increase the loan flow in FY 2016/17.

The credit flow of NIC Asia Bank Ltd and NCC bank along with national total credit flow has been illustrated in the figure below.

Figure 4.4

Credit Trend of NCC Bank and NIC Asia Bank Ltd against Total National Collection

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

4.2 Ratio Analysis

The following ratios are used to evaluate the financial statements of NIC Asia Bank Ltd and NCC bank regarding the capital adequacy and capital fund.

4.2.1 Capital Adequacy Ratio of NIC Asia Bank Ltd and NCC 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 2012/13 to FY 2016/17.

Table 4.5

Capital Adequacy Ratio of NIC Asia Bank Ltd and NCC Bank over the period of Five Years

(Rs. In million)

Fiscal Year	Percentage of Core Capital		Percentage of Supplementary Capital		Percentage of Total Capital Fund	
	NCC Bank %	NIC Asia Bank Ltd %	NCC Bank %	NIC Asia Bank Ltd %	NCC Bank %	NIC Asia Bank Ltd %
2012/13	3.41	12.99	0.71	0.83	4.12	13.82
2013/14	(5.05)	12.37	1.59	0.92	(3.46)	13.29
2014/15	9.13	9.21	0.00	3.00	(9.13)	12.21
2015/16	9.61	10.50	1.48	2.61	11.09	13.11
2016/17	9.81	10.48	1.26	1.94	11.07	12.42

Detail Calculations shown in Appendix F

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

FY 2013/14 : Core Capital 5.5Percent and Total Capital 11Percent of RWA

FY 2015/16 : Core Capital 5.5Percent and Total Capital 11Percent of RWA

FY 2016/17 : Core Capital 6.0Percent and Total Capital 10Percent of RWA

In the FY 2012/13, the NCC bank has total capital fund at 20.90Percent of Risk Weighted Assets with the NRB requirement of 9Percent and this has significantly gone down to 13.54Percent by FY 2014/15. The NRB requirement was 5.5Percent Core Capital and Total Capital Fund 11Percent 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 transaction 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 Asia Bank Ltd has been performing well enough to comply with the NRB requirement without failure at any point of time.

In the FY 2012/13, the NCC bank has Total Capital Fund at 4.12 Percent of Risk Weighted Assets with NRB requirement of 11Percent and this has significantly gone down to (9.13 Percent) by FY 2014/15. The NRB requirement was 5.5Percent Core Capital and Total Capital Fund 11Percent of Risk Weighted Assets and they have not been adequately complied with. It has been performing well enough to comply with the NRB requirement without failure during the FY 2015/16 and FY 2016/17. The Capital Fund is 11.09 Percent and 11.07 Percent of total Risk Weighted Assets respectively during the FY 2015/16 and FY 2016/17 with the NRB requirement of 11Percent .

The same information can be depicted in the chart below.

Figure 4.5

Trend of Capital Adequacy Ratio of NIC Asia Bank Ltd and NCC Bank

The Figure 4.5 displays decreasing trend of the Capital Adequacy Ratios of the NIC Asia Bank Ltd and NCC Bank. The Percentage of Total Capital fell sharply during the FY 2012/13 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. Percentage of the capital fund highly fluctuated of NCC Bank. Total capital and core capital is negative in FY 2013/14and FY 2014/15 then increased in FY 2015/16 and FY 2016/17. Supplementary capital is positive during the 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 can not 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 Asia Bank Ltd and NCC Bank

Fiscal Year	Capital to Deposit Ratio	
	NCC Bank %	NIC Asia Bank Ltd %
2012/13	4.66	10.56
2013/14	-3.87	8.34
2014/15	-8.84	12.01
2015/16	10.01	12.35
2016/17	10.90	12.55

Detail Calculations shown in Appendix G

As per Table 4.6, The Capital to Deposit Ratio of NIC Asia Bank Ltd is in decreasing trend. The ratio was 10.56 Percent during FY 2012/13 and got slightly decreased to 8.34 Percent during FY 2013/14. The bank then had increased in the ratio from 12.01 Percent to 12.35 Percent during FY 2015/16 and after that the ratio has been increasing consistently reaching to 12.55 Percent during FY 2016/17.

And the Capital to deposit ratio of the NCC Bank was decreased in first three fiscal years and then increased thereafter. Capital to deposit ratio of NCC Bank was 4.66 Percent in FY 2012/13 and decreased to -3.87 Percent and -8.84 Percent respectively in FY 2013/14 and FY 2014/15. From the FY 2015/16, Bank was able to increase the ratio to 10.01 Percent in FY 2015/16 and 10.90 Percent in FY 2016/17.

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 banks for the period for five years from FY 2012/13 to 2016/17.

Table 4.7

Credit/ Deposit Ratio of NIC Asia Bank Ltd and NCC Bank

Fiscal Year	Credit/ Deposit Ratio	
	NCC Bank %	NIC Asia Bank Ltd %
2012/13	81.73	78.66
2013/14	70.14	78.74
2014/15	57.04	90.67
2015/16	60.35	87.62
2016/17	75.14	85.75

Detail Calculations shown in Appendix C.

The Table 4.7 shows a quite consistent CD Ratios of the NIC Asia Bank Ltd in the past five years period beginning from FY 2012/13 to FY 2016/17. The Ratio has been ranging from 78 Percent to about 91 Percent 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 78.66 Percent intact during FY 2012/13 with slight increase in the following year. The ratio then fell to 87.62 Percent during FY 2015/16 and 85.75 Percent during FY 2016/17 compared to FY 2014/15.

Similarly, the ratios of the NCC Banks have been ranging from 57 Percent to 82 Percent with few fluctuations. In FY 2012/13, CD ratio was 81.73 Percent and fell down to 70.13 Percent and 57.04 Percent in the following two fiscal years. Then ratio was increased in FY 2015/16 and FY 2016/17, i.e. 60.35 Percent and 75.14 Percent respectively compared to the previous two years.

4.2.4 Non performing Loan to Total Loan Ratio

A Loan is non performing when payments of interest and principal are past due by 90 days or more, or at least 90 days of interest payments have been capitalized, refinanced or delayed by agreement, or payments are less than 90 days overdue, but there are other good reasons to doubt that payments will be made in full. Bank regulatory definition non-performing loans consist of (a) other real estate owned which is that taken by foreclosure or a deed in lieu of foreclosure, (b) loans that are 90 days or more past due and still accruing interest, and (c) loans which have been placed on non accrual (i.e. loans for which interest is no longer accrued and posted to the income statement).

Table 4.8

Nonperforming loan/Total loan Ratio of NIC Asia Bank Ltd and NCC Bank

Fiscal Year	Total Non Performing Loan		Total Loan		Non-performing Loan/Total Loan Ratio	
	NCC Bank	NIC Asia Bank Ltd	NCC Bank	NIC Asia Bank Ltd	NCC Bank %	NIC Asia Bank Ltd %
2012/13	519.26	185.43	6011.90	4909.36	8.64	3.78
2013/14	1289.90	179.55	5899.16	6902.12	21.87	2.60
2014/15	1606.87	101.14	5122.22	9128.65	31.37	1.11
2015/16	867.32	96.17	5281.05	11465.33	16.42	0.84
2016/17	197.07	129.18	7183.68	13915.85	2.74	0.93

(Source: Annual Reports of NCC Bank and NIC Asia Bank Ltd)

The Table 4.8 shows that NIC Asia Bank Ltd issued nonperforming loan in minimum ratio. Nonperforming loan to total loan ration has been decreasing every year from 3.78 Percent in FY 2012/13 to 0.93 Percent in FY 2016/17. The Nonperforming loan to total loan ration of NCC bank has increased up to the level of 31.37 Percent in FY 2014/15 and decreasing then after. In FY 2016/17 it is 2.74 Percent which is the lowest ratio during the study period.

The same information can be depicted in the chart below.

Figure 4.6

Trend of Nonperforming loan to Total loan Ratio of NIC Asia Bank Ltd and NCC Bank

Figure 4.6 displays the trend of nonperforming loan to total loan ratio of NIC Asia Bank Ltd and NCC bank. Trend of the NIC Asia Bank Ltd is in decreasing trend whereas the trend of the NCC bank is increased up to FY 2014/15 and then in the decreasing trend.

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 coefficients are presented below in the Table 4.9.

Table 4.9

Correlation Coefficients

Correlation between	NCC Bank	NIC Asia Bank Ltd
Capital & Deposit	0.76	0.87
Capital & Credit	0.78	0.99

(Source: Annual Reports of NCC Bank and NIC Asia Bank Ltd)

The calculated correlation co-efficient between Deposit & Capital and Credit & Capital are positive. Therefore, it can be said that Deposit and Credit components of a banks are positively correlated with the bank's Capital Fund. Here, we can see that all co-efficient 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 with increment in capital. In the case of NCC bank, correlation co-efficient are positive but not satisfactory level because correlation co-efficient is not near to 1.

4.4 Comparative Analysis of Significance of Ratios of the banks with that of Industry Average.

In this section, the Capital Adequacy, Credit to Deposit and CD Ratios of the banks 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 biasness 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 5 years only due to lack of adequate data and as such, comparative analysis of 5 years was only possible.

The Industry average ratios and the ratios of NIC Asia Bank Ltd and NCC Bank of the period of 5 years have been illustrated below.

Table 4.10

Comparison between Total Commercial Banks Capital Adequacy Ratios and that of the NIC Asia Bank Ltd and NCC Bank

Fiscal Year	Commercial Banks Average Ratio %	Ratios of NCC Bank %	Ratios of NIC Asia Bank Ltd %
2012/13	(6.33)	4.12	13.82
2013/14	(5.30)	(3.46)	13.29
2014/15	(1.71)	(9.13)	12.21
2015/16	4.04	11.09	13.11
2016/17	4.34	11.07	12.42

Detail Calculations shown in Appendix F

Table 4.10 shows that all the ratios of the bank in the study period of 5 years are up and above the total commercial banks average. The total commercial banks average was (6.33 Percent) during FY 2012/13 whereas the ratio with the bank was comfortably high with 13.82 Percent. Similarly, the ratios of the bank were higher as compared to that of the Total commercial banks average in the following years as well. During FY 2016/17, the total commercial banks average ratio was 4.34 Percent whereas the ratio for the bank was 12.42 Percent .

The Total Commercial Banks average was (6.33Percent) during FY 2012/13 whereas the ratio of the NIC Asia Bank Ltd and NCC bank were comfortably high with 13.82 Percent and 4.12 Percent respectively. Similarly, the ratios of the NIC Asia Bank Ltd were higher as compared to that of the Total Commercial banks average in the following years as well. During FY 2016/17, the total commercial banks average ratio was 4.34 Percent whereas the ratio for the bank was 12.42 Percent. But the ratios of the NCC bank in FY 2013/14and 2014/15 were (3.46 Percent) and (9.13 Percent). Ratios were increasing thereafter and 11.07 Percent in FY 2016/17.

Therefore, with comfortably higher ratios of the NIC Asia Bank Ltd as compared to that of the Total commercial banks average, it can be said that capital adequacy ratios of the NIC Asia Bank Ltd are better but NCC Bank was not maintaining the capital adequacy ratio in first three years and then after maintaining as per NRB requirement.

Table 4.11

Comparison between Industry Average Capital Funds to Deposit Ratios of the NIC Asia Bank Ltd and NCC Bank

Fiscal Year	Industry Average Ratio %	Ratios of NCC Bank %	Ratios of NIC Asia Bank Ltd %
2012/13	(3.20)	4.66	10.56
2013/14	(2.28)	-3.87	8.34
2014/15	1.76	-8.84	12.01
2015/16	5.07	10.01	12.35
2016/17	6.37	10.90	12.55

Detail Calculations shown in Appendix G

Table 4.10 shows that all the ratios of the NIC Asia Bank Ltd in the study period of 5 years are up and above the industry average but of the NCC bank were in decreasing trend in first three years and then after increasing as compared to industry average. The industry average was (3.20 Percent) during FY 2012/13 whereas the ratio with the bank was comfortably high with 10.56 Percent. Similarly, the ratios of the NIC Asia Bank Ltd were higher as compared to that of the industry average in the following years as well. During FY 2016/17, the industry average ratio was 6.37 Percent whereas the ratio for the bank was 12.55 Percent. Ratio of the NCC Bank was 4.6 Percent in FY 2012/13 and gone down to (8.84 Percent) in FY 2014/15. Ratio of the NCC bank was also higher as compared to that of the industry average in FY 2016/17.

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 4.12

Comparison between Industry Average CD Ratios and that of the Banks

Fiscal Year	Industry Average Ratio %	Ratios of NCC Bank %	Ratios of NIC Asia Bank Ltd %

2012/13	73.58	81.73	78.66
2013/14	70.27	70.14	78.74
2014/15	74.55	57.04	90.67
2015/16	76.94	60.35	87.62
2016/17	75.90	75.14	85.75

Detail Calculations shown in Appendix H

Table 4.12 shows that all the ratios of the NIC Asia Bank Ltd in the study period of 5 years are up and above the industry average but the ratio of the NCC bank was above in FY 2012/13 and then below than the industry average. The industry average was 73.58 Percent during FY 2012/13 whereas the ratio with the NIC Asia Bank Ltd and NCC bank were comfortably high with 78.66 Percent and 81.73 Percent. Similarly, the ratios of the NIC Asia Bank Ltd were higher as compared to that of the industry average in the following years as well. During FY 2016/17, the industry average ratio was 75.90 Percent whereas the ratio for the bank was 85.75 Percent. But the ratios of the NCC bank in the following years were decreasing as compared to that of the industry average ratio. It shows that the CD ratios of NCC bank are lower than that of the industry average ratio.

Therefore, with comfortably higher ratios of the NIC Asia Bank Ltd as compared to that of the industry average, it can be said that CD ratios of the bank are absolutely better. But in the case of NCC bank, ratios are lower than that of the industry average, it can be said that CD ratios should be increased.

4.5 Impact of Capital Adequacy Norms on NIC Asia Bank Ltd and NCC 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 Asia Bank Ltd and NCC bank. The Table 4.13 shows the increment in the capital funds of the bank in the form of amount and percentage both.

Table 4.13

Changes in Capital Fund of NIC Asia Bank Ltd and NCC Bank

Fiscal Year	Total Capital Fund		Amount Increased/ Decreased		Percentage Increased/ Decreased	
	NCC Bank	NIC Asia Bank Ltd	NCC Bank	NIC Asia Bank Ltd	NCC Bank %	NIC Asia Bank Ltd %
2012/13	308.81	659.36	-	-	-	-
2013/14	(255.93)	730.99	(564.74)	71.63	(182.88)	10.86
2014/15	(574.91)	1209.11	(318.98)	478.12	(124.64)	65.40
2015/16	732.89	1615.71	1307.8	406.60	227.48	33.62
2016/17	994.52	1954.92	261.63	339.21	35.70	20.99

(Source: Annual Reports of NCC Bank and NIC Asia Bank Ltd)

At the beginning of the study period, the NIC Asia Bank Ltd had total capital fund of Rs. 659.36 million which has been increased up to Rs. 1954.92 million and the NCC bank had total capital fund 308.81 million which has increased up to 994.52 million by the end of the FY 2016/17. the increment of NIC Asia Bank Ltd in percentage and amount are seen fluctuating and the increment of the NCC bank is negative during FY 2013/14and FY 2014/15 and the positively increased both in amount and percentage. The rate of increments in amount is variable as the increment during 2013/14was Rs. 71.63 million followed by sharp increment of Rs. 478.12 million in the following year and same as in the case of NCC bank whereas the amount had seen negative during the same period. The increment in amount was normal with increment of Rs. 406.60 million during FY 2015/16 but a dramatic change of 478.12 million was observed by 1307.8 whereas in the previous year amount was in negative. The increment rate of NIC Asia Bank Ltd in percentage during 2013/14and 2014/15 was 10.86 Percent and 65.40 Percent respectively, and suddenly the increment decreased to 20.99 Percent during FY 2016/17. The change in the percentage change of the NCC bank were in negative as (182.88 Percent) and (124.64 Percent) during the FY 2013/14 and FY

2014/15 and then increased in the FY 2015/16 by 227.48 Percent but increment is decreased in the FY 2016/17.

On review of the financial statements of NIC Asia Bank Ltd of the FY 2013/14, 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 2014/15 was due to the establishment of the Capital adjustment reserve of Rs. 50,000,000.00 out of the profit earned. And the same way the financial statements of NCC bank of the FY 2015/16, it was found that the major reason for such increment in capital fund was due to the issuance of equity share. It constitutes the component of core capital and thus resulted into sudden increment in the capital fund. 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 Percent 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 banks in the five years period beginning from 2012/13 to 2016/17.

Table 4.14

Changes in Paid up Capital of NIC Asia Bank Ltd and NCC bank

Fiscal Year	Paid UP Capital		Amount Increased		Percentage Increment	
	NCC Bank	NIC Asia	NCC Bank	NIC Asia	NCC Bank %	NIC Asia

		Bank Ltd		Bank Ltd		Bank Ltd %
2012/13	693.55	500	-	-	-	-
2013/14	698.42	600	4.87	100	0.70	20
2014/15	699.12	660	0.7	60	0.10	10
2015/16	1399.56	944	700.44	284	100.19	43
2016/17	1399.56	1140	-	196	-	20.76

(Source: Annual Reports of NIC Asia Bank Ltd, NCC Bank from 2012/13 to 2016/17)

Table 4.5 shows the capital adequacy requirements of NRB and condition of NIC Asia Bank Ltd and NCC bank. It is very clear that the NIC Asia Bank Ltd is always ahead of the capital adequacy requirements of NRB, so , no major changes in Paid up capital has been observed apart from the FY2013/14. 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 2013/14, 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 2014/15 in the ratio 10:1 out of accumulated profits. An increment of 20.76 Percent has been observed during FY 2016/17 due to the distribution of bonus shares. Same as of the NCC bank, no major changes found during the study period except FY 2015/16. it has been observed that the paid up capital of NCC bank was increased in FY 2015/16 by 100.19 Percent , it is due to the issue of right shares of Rs 70 million. Thus, the impact of the norms caused the increment in paid up capital of the banks.

4.6 Major Findings

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

Capital Fund

Capital Fund of NIC Asia Bank Ltd has grown consistently over the study period comprising of FY 2012/13 to FY 2016/17. The bank has capital fund of Rs. 659.36 million in FY 2012/13 which increased by 10.86 Percent during FY 2013/14with capital fund amounting to Rs. 730.99 million. The bank then saw remarkable increment of 65.40 Percent with the capital fund of 1209.11 million. The increment rate of 33.62 Percent was in the following year and capital fund was 1615.71 million. FY 2016/17 has the increment rate of 20.99 Percent with capital fund amounting to Rs. 1954.92 million.

The major reason for such a high rate of increment in FY 2014/15 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.

The capital fund of the NCC bank in FY 2012/13 was 308.81 and decreased in FY 2013/14due to the decrement in core capital and it continued in the following year too. Capital fund highly increased in FY 2015/16 amounting to 732.89 due to the increment of core capital. Core capital was increased due to the issue of the right shares. In the FY 2016/17, capital fund was increased by 35.70 Percent amounting to 994.52 from Rs. 732.89 of FY 2015/16. It is observed that the increasing trend of the loss made the decrement in total capital fund in FY 2013/14and FY 2014/15.

Capital Adequacy

It is found that the NIC Asia Bank Ltd is quite successful in maintaining capital adequacy as prescribed by NRB. The bank had capital adequacy ratio of 13.82 Percent during FY 2012/13 against the NRB requirement of 9 Percent. During FY 2013/14, the bank had ratio of 13.29 Percent against the NRB requirement of 10 Percent. In the years followed, the bank had capital adequacy ratios of 12.21 Percent, 13.11 Percent against the NRB requirement of 11 Percent and 12.42 Percent against the NRB requirement of 10 Percent during the FY 2016/17.

It is found that the NCC bank is unsuccessful in maintaining capital adequacy as prescribed by NRB. The bank had capital adequacy ratio of 4.12 Percent during FY 2012/13 against the NRB requirement of 9 Percent . During FY 2013/14, the bank had ratio of -3.46Percent against the NRB requirement of 10 Percent . In the years followed, the bank had capital adequacy ratios of -9.13 Percent , 11.09 Percent against the NRB requirement of 11 Percent and 11.07 Percent against the NRB requirement of 10 Percent during the FY 2016/17.

After introduction of Unified NRB applicable i.e. FY 2013/14, NRB had prescribed capital adequacy ratio of 12 Percent but later vide circular, the capital adequacy ratio had been decreased back to 11 Percent then 10 Percent for the year only, but it was not of worry to the banks because it already had the ratios of 12.42 Percent and 11.07Percent respectively of NIC Asia Bank Ltd and NCC bank in FY 2016/17.

Risk Weighted Assets

The Risk Weighted asset is the most significant component to be considered while studying the capital adequacy norms. The NIC Asia Bank Ltd had risk weighted assets of Rs. 4472.64 million during FY 2012/13 which in the following years increased subsequently. FY 2013/14saw the increment rate of 22.30 Percent in the risk weighted assets with the amount reaching to Rs. 5499.44 million. The following year had dramatic increment of 80.11 Percent and the risk weighted assets increased to Rs. 9905.54 million. FY 2015/16 and 2016/17 had the risk weighted assets of Rs. 12321.13 million and 12321.13 million experiencing the increment rate of 24.39Percent and 27.75 Percent respectively.

The NCC bank had risk weighted assets of Rs. 7493.07 million during FY 2012/13 which in the following years decreased subsequently. FY 2013/14showed the decrement rate of 1.34 Percent in the risk weighted assets with the amount reaching to Rs. 7392.54 million. The following year had decreased by 14.82 Percent and the risk weighted assets decreased to Rs. 6296.56 million. FY 2015/16 and 2016/17 had the risk weighted assets of Rs. 6608.98

million and 8983.83 million experiencing the increment rate of 4.96 Percent and 35.93 Percent respectively.

It is really praiseworthy performance of the banks 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 Asia Bank Ltd is found to be satisfactory. The ratio was 10.56Percent during FY 2012/13 and it decreased slightly to 8.34 Percent during 2013/14. The ratio then saw increasing trend. The ratio increased to 12.01 Percent by FY 2014/15 and then further increased to 12.35 Percent during FY 2015/16. The ratio increased to 12.55 Percent by the FY 2016/17.

The capital to deposit ratio of NCC bank is not found to be satisfactory. The ratio was 4.66Percent during FY 2012/13 and it decreased to -3.87 Percent during 2013/14. The ratio then saw decreasing trend. The ratio decreased to -8.84 Percent by FY 2014/15 and then further increased to 10.01Percent during FY 2015/16. The ratio increased to 10.99Percent by the FY 2016/17.

It is accepted worldwide that an 8 Percent to 10Percent capital to deposit ratio is safe. In preview of this notion, the NIC Asia Bank Ltd had satisfactory ratios of 10.56 Percent , 8.34 Percent , 12.01 Percent ,12.35 Percent and 12.55 Percent during last 5 fiscal years but the NCC had unsatisfactory ratios of 4.66 Percent , -3.87 Percent , -8.84 Percent , 10.01 Percent and 10.90 Percent during last five years.

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 NIC Asia Bank Ltd has no satisfactory results as the ratio nagged form 78

Percent to 86 Percent . The ratio was 78.66 Percent during FY 2012/13 and it increased to 76.74 Percent during FY 2013/14. The ratio then inclined to 90.67 Percent in the following year but then the ratio has been decreasing. The ratio was 87.62 Percent during FY 2015/16 and 85.75 Percent during FY 2016/17.

The NCC bank had the same problem of utilizing the fund collected from the depositors and we can say that NCC bank has no satisfactory results as the ratio ranged from 81Percent to 75 Percent . The ratio was 81.73 Percent in FY 2012/13 and it decreased to 70.14 Percent in during FY 2013/14. The ratio then again decreased to 57.04 Percent during FY 2014/15 and the increased to 60.35 Percent and 75.14 Percent during FY 2015/16 and FY 2016/17 respectively. The ratios display that funds have been underutilized. The banks 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 banks.

Statistical Analysis

The correlation coefficients between capital and deposit and capital and credit of the NIC Asia Bank Ltd showed that they are correlated. All coefficients are more than 0.85 which is near to 1. The coefficients nearest to 1 show the relationship to be more perfect. Also, the test of hypothesis proved the existence of their relationship.

The correlation coefficients between capital and deposit and capital and credit of the NCC bank showed that they are correlated. All coefficients are less than 0.85 which is not near to 1. The coefficient nearest to 1 show the relationship to be more perfect. Also, the test of hypothesis proved the existence of their relationship is not satisfactory.

Comparative Analysis

The comparative analysis of ratios of the NIC Asia Bank Ltd 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. But the NCC bank could not maintain the capital adequacy ratio in FY 2014/15 as compared to the industry ratio. The Capital to deposit ratio is also less than the industry average in FY 2013/14and FY 2015/16. The CD ratios were also less than industry average in FY 2013/14 and FY 2015/16. The comparative study shows that the performance of the NCC bank is not so satisfactory during FY 2013/14, FY 2014/15 and FY 2015/16 respectively.

Impact Analysis

It is observed that the NIC Asia Bank Ltd 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 NCC bank has been trying to fulfill the capital requirement norms of NRB from the FY 2015/16 as compared to the previous three years during the study period.

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 Asia Bank Ltd. and NCC Bank Ltd.. 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 Asia Bank Ltd. and NCC Bank Ltd. The study showed that the capital fund of NIC Asia Bank Ltd. adequately meets the requirement of capital adequacy norms but the NCC Bank Ltd. was not able to meet the capital adequacy norms of NRB before FY 2015/16. 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. Analysis has been done to check the relationship of capital fund with deposit and credit.

5.2 Conclusion

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

The bank under study, NIC Asia Bank Ltd. is found to be successful to comply with requirement of capital adequacy norms but the NCC Bank Ltd. is found to be unsuccessful before FY 2014/15 and then able the meet the capital adequacy norms of NRB in FY 2015/16 and FY 2016/17.

The capital to deposit ratio of the NIC Asia Bank Ltd. is adequate and satisfactory than that of the NCC Bank Ltd. The CD ratio of the banks is slightly low in previous year and CD ratio is high in recent year. Banks should maintain this ratio 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 coefficients between capital and deposit and between capital and credit of NIC Asia Bank Ltd. are found to be positive and near to perfect correlation than that of the NCC Bank Ltd... 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. It shows play creative roles in this regards.

5.3 Recommendations

After through study of the researches, 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 NIC Asia Bank Ltd. under study is quite satisfactory than that of the NCC Bank Ltd.. 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 8percent to 10percent ratio may be appropriate for the ratio of capita to deposit.
- CD ratio of the NIC Asia Bank Ltd.is not very low. This showed that the bank has been effectively using the funds collected from depositors. But the CD ration of the NCC Bank Ltd. is not satisfactory as compared to the NIC Asia Bank. NCC Bank Ltd. should make effective program for the deposit collection and investment. Utilization of the depositors fund in productive sectors gives benefit to the bank. 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 capital 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.
- NCC Bank Ltd. is trying to maintain the NRB capital adequacy norm. NCC Bank Ltd. seems quite unable to maintain the capital adequacy ratio, CD ration and capital to deposit ration than that of the NIC Asia Bank. It is highly recommended to NCC Bank Ltd. to find out the source of fund and the investment sectors to utilize the fund collected from the depositors.

- 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

APPENDIX A

A. Calculation of Capital Adequacy Ratio of NIC Asia Bank Ltd

(Rs. in million)

Fiscal Year	Total Capital Fund	Core Capital	Supplementary Capital	Risk Weighted Assets
2012/13	659.36	619.78	39.58	4772.64
2013/14	730.99	680.14	50.84	5499.44
2014/15	1209.11	912.31	296.80	9905.54
2015/16	1615.17	1293.75	321.96	12321.13
2016/17	1954.92	1649.00	305.92	15740.17

B. Calculation of Capital Adequacy Ratio of NCC Bank

(Rs. in million)

Fiscal Year	Total Capital Fund	Core Capital	Supplementary Capital	Risk Weighted Assets
2012/13	308.81	255.85	52.96	4772.64
2013/14	(255.93)	(373.62)	117.69	5499.44
2014/15	(574.91)	(574.91)	-	9905.54
2015/16	732.89	634.90	97.99	12321.13

2016/17	994.52	881.34	113.18	15740.17

We have:

Ratio of Total Capital Fund = $\frac{Total\ \ Capital\ Fund}{TRWA} x\ 100\%$

Ratio of Core Capital Fund = $\frac{Core\ \ Capital}{TRWA} x\ 100\%$

Ratio of Supplementary Capital Fund = $\frac{Supplementary\ \ Capital}{TRWA} x\ 100\%$

By using above Formulas, we get the ratios as:

1. NIC Asia Bank Ltd

Fiscal Year	Percentage of Core Capital %	Percentage of Supplementary Capital %	Percentage of Total Capital Fund %
2012/13	12.99	0.83	13.82
2013/14	12.37	0.92	13.29
2014/15	9.21	3.00	12.21
2015/16	10.50	2.61	13.11
2016/17	10.48	1.94	12.42

2. NCC Bank

Fiscal Year	Percentage of Core Capital %	Percentage of Supplementary Capital %	Percentage of Total Capital Fund %
2012/13	3.41	0.71	4.12
2013/14	(5.05)	1.59	(3.46)
2014/15	(9.13)	0.00	(9.13)
2015/16	9.61	1.48	11.09
2016/17	9.81	1.26	11.07

APPENDIX B

Calculation of Ratio of Capital to Deposit

A. NIC Asia Bank Ltd

(Rs. in million)

Fiscal Year	Total Capital Fund	Deposit
2012/13	659.36	6243.30
2013/14	730.99	8765.80
2014/15	1209.11	10068.30

2015/16	1615.71	13078.50
2016/17	1954.92	15579.90

B. NCC Bank

(Rs. in million)

Fiscal Year	Total Capital Fund	Deposit
2012/13	308.81	6630.94
2013/14	-255.93	6619.58
2014/15	-574.91	6500.34
2015/16	732.89	7320.23
2016/17	994.52	9127.75

We have,

Ratio of Capital fund to Deposit = $\frac{Total\ \ Capital\ \ Fund}{Total\ \ Deposit} x\,100\%$

By using above formula, we get the ratios as:

Fiscal Year	Capital to Deposit Ratio	
	NCC Bank %	NIC Asia Bank Ltd %
2012/13	4.66	10.56
2013/14	-3.87	8.34
2014/15	-8.84	12.01
2015/16	10.01	12.35

2016/17	10.90	12.55

APPENDIX C

Calculation of Credit/ Deposit Ratio

(Rs. in million)

Fiscal Year	Credit		Deposit	
	NIC Asia Bank Ltd	NCC Bank	NIC Asia Bank Ltd	NCC Bank
2012/13	4910.98	5419.73	6243.30	6630.94
2013/14	6902.19	4643.26	8765.80	6619.58
2014/15	9128.93	3707.64	10068.30	6500.34
2015/16	11459.38	4417.86	13078.50	7320.23
2016/17	13359.76	6858.19	15579.90	9127.75

We have:

Ratio of Credit to Deposit = $\frac{Total\ \ Credit}{Total\ \ Deposit}\, x\ 100\%$

By using above formula, we get the ratios as:

Fiscal Year	Credit/ Deposit Ratio	
	NIC Asia Bank Ltd %	NCC Bank %
2012/13	78.66	81.73
2013/14	78.74	70.14
2014/15	90.67	57.04
2015/16	87.62	60.35
2016/17	85.75	75.14

APPENDIX D

Calculation of Correlation Coefficient of Deposit on Capital

A. NIC Asia Bank Ltd

Fiscal Year	Total Capital Fund	Deposit
2012/13	659.36	6243.30
2013/14	730.99	8765.80
2014/15	1209.11	10068.30
2015/16	1615.11	13078.50
2016/17	1954.92	15579.90

Let the variable Capital be X and Deposit be Y

	X	Y	$x = (X - \overline{X})$	$y = (Y - \overline{Y})$	xy	x^2	y^2
	659.36	6243.30	-574.66	-5836.18	3353807.53	330231.82	34060996.99
	730.99	8765.80	-503.03	-3844.97	1934127.57	253037.17	14783794.30
	1209.1	10068.3	-24.91	-1618.23	40306.87	620.41	2618668.33

	1	0					
	1615.11	13078.50	381.69	712.22	271848.68	145688.78	507257.33
	1954.92	15579.90	720.90	2612.60	1883428.57	519699.69	6825678.76
	6170.09	53735.80			7483519.21	1249277.87	58796395.71

$$\overline{X}\ \mathrm{X}\frac{X}{N} = \frac{6170.09}{5} = 1234.02$$

$$\overline{Y}\ \mathrm{X}\frac{Y}{N} = \frac{53735.80}{5} = 10747.16$$

Now,

$$r\ \mathrm{X}\frac{xy}{\sqrt{\ \ x^2}\sqrt{\ \ y^2}}$$

$$\mathrm{X}\frac{7483519.21}{\sqrt{1249277.87}\sqrt{58796395.71}}\ \mathrm{X}0.87$$

Correlation co-efficient of Deposit on Capital r=0.87

B. NCC Bank

Fiscal Year	Total Capital Fund	Deposit
2012/13	308.81	6630.94
2013/14	-255.93	6619.58
2014/15	-574.91	6500.34
2015/16	732.89	7320.23
2016/17	994.52	9127.75

Let the variable Capital be X and Deposit be Y

	X	Y	$x\ \mathrm{X}(X\ \mathrm{Z}\overline{X})$	$y\ \mathrm{X}(Y\ \mathrm{Z}\overline{Y})$	xy	x^2	y^2
	308.81	6630.94	67.734	-608.83	-41238.36	4587.89	370671.53
	-255.93	6619.58	-497.006	-620.19	308237.16	247014.96	370671.53
	-574.91	6500.34	-815.986	-739.43	603362.90	665833.15	546753.77
	732.89	7320.23	491.814	80.462	39572.34	241881.01	546753.77
	994.52	9127.75	753.444	1887.98	1422488.71	567677.86	3564476.03
	1205.38	36198.84			2332422.75	1726994.88	5399326.63

$\overline{X}\ \mathrm{X}\frac{X}{N}$ = $\frac{1205.3}{5}$ = 241.076

$$\bar{Y} \, \mathrm{X} \frac{Y}{N} = \frac{36198.84}{5} = 7239.768$$

Now,

$$r \, \mathrm{X} \frac{xy}{\sqrt{\quad x^2}\sqrt{\quad y^2}}$$

$$\mathrm{X} \frac{2332422.75}{\sqrt{1726994.88}\sqrt{5399326.63}} \, \mathrm{X} 0.76$$

Correlation co-efficient of Deposit on Capital r=0.76

APPENDIX E

Calculation of Correlation Coefficient of Credit on Capital

A. NIC Asia Bank Ltd

(Rs. in million)

Fiscal Year	Total Capital Fund	Credit
2012/13	659.36	4910.98
2013/14	730.99	6902.19
2014/15	1209.11	9128.92
2015/16	1615.11	11459.38
2016/17	1954.92	13359.76

Let the variable Capital be X and Deposit be Y

	X	Y	$x\,X(X\,Z\overline{X})$	$y\,X(Y\,Z\overline{Y})$	xy	x^2	y^2
	659.36	4910.98	-574.66	-4241.27	2437278.59	330231.82	17988354.25
	730.99	6902.19	-503.03	-2250.06	1131842.18	253037.17	5062761.00
	1209.11	9128.92	-24.91	-23.32	580.00	620.41	543.73
	1615.11	11459.38	381.69	2307.13	880613.83	145688.78	5322858.07
	1954.92	13359.76	720.90	4207.51	3033203.82	519699.69	17703157.23
	6170.09	45761.24			7483519.21	1249277.87	46077674.28

$$\overline{X}\,X\frac{X}{N} = \frac{6170.09}{5} = 1234.02$$

$$\overline{Y}\,X\frac{Y}{N} = \frac{45761.24}{5} = 9152.25$$

Now,

$$r \text{ X} \frac{xy}{\sqrt{x^2}\sqrt{y^2}}$$

$$\text{X} \frac{7483519.21}{\sqrt{1249277.87}\sqrt{46077674.28}} \text{ X} 0.99$$

Correlation co-efficient of Creditss on Capital r=0.99

B. NCC Bank

Fiscal Year	Total Capital Fund	Credit
2012/13	308.81	5419.73
2013/14	-255.93	4643.26
2014/15	-574.91	3707.64
2015/16	732.89	4417.86
2016/17	994.52	6858.19

Let the variable Capital be X and Deposit be Y

	X	Y	$x = (X - \overline{X})$	$y = (Y - \overline{Y})$	xy	x^2	y^2
	308.81	5419.73	67.734	410.39	27797.63	4587.89	168423.24
	-255.93	4643.26	-497.006	-366.08	181941.97	247014.96	168423.24
	-574.91	3707.64	-815.986	-1301.70	1062165.71	665833.15	1694412.48
	732.89	4417.86	491.814	-591.476	-290896.18	241881.01	1694412.48
	994.52	6858.19	753.444	1848.85	1393007.95	567677.86	3418261.11
	1205.38	25046.68			2374017.08	1726994.88	7143932.54

$$\overline{X} = \frac{X}{N} = \frac{1205.3}{5} = 241.076$$

$$\overline{Y} = \frac{Y}{N} = \frac{25046.68}{5} = 5009.336$$

Now,

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

$$= \frac{2332422.75}{\sqrt{1726994.88}\sqrt{7143932.54}} = 0.78$$

Correlation co-efficient of Credit on Capital r=0.78

APPENDIX F

Calculation of Total Commercial Banks Capital Adequacy Ratios

Fiscal Year	Total Commercial Banks Capital Fund	Total Commercial Banks Risk Weighted Assets
2012/13	(19129.5)	302203.79
2013/14	(17742.1)	334756.60
2014/15	(4149.5)	242660.82
2015/16	9960.7	246551.98
2016/17	16508.3	380375.58

We have,

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

$$\frac{TotalCapitalFund}{TRWA}x100\%$$

By using above formula, we get the ratios as:

Fiscal Year	Industry Capital Adequacy Ratios %
2012/13	(6.33)
2013/14	(5.30)
2014/15	1.71
2015/16	4.04
2016/17	4.34

APPENDIX G

Calculation of Total Industry Capital Fund to Total Industry Deposit Ratio

Fiscal Year	Total Industry Capital Fund	Total Industry Deposit
2012/13	(9088.1)	284115.2
2013/14	(7461.5)	327925.3
2014/15	6901.7	391152.6
2015/16	25778.0	508905.7
2016/17	36728.3	576897.6

We have,

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

$$\frac{Total\ \ Industry\ \ Capital\ \ Fund}{Total\ \ Industry\ \ Deposit} x\, 100\%$$

By using above formula, we get the ratios as:

Fiscal Year	Industry Capital Adequacy Ratios %
2012/13	(3.20)
2013/14	(2.28)

2014/15	1.76
2015/16	5.07
2016/17	6.37

APPENDIX H

Calculation of Total Industry Credit to Total Industry Deposit Ratio

Fiscal Year	Total Industry Credit	Total Industry Deposit
2012/13	209053.70	284115.2
2013/14	230424.70	327925.3
2014/15	291605.80	391152.6
2015/16	391537.70	508905.7
2016/17	437871.40	576897.6

We have,

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

$$\frac{Total\ \ Industry\ \ Credit}{Total\ \ Industry\ \ Deposit} x\, 100\%$$

By using above formula, we get the ratios as:

Fiscal Year	Industry Capital Adequacy Ratios %
2012/13	73.58
2013/14	70.27
2014/15	74.55
2015/16	76.94
2016/17	75.90