A Thesis Report on

Capital Adequacy Norms and its Impact Regarding NRB Unified Directives – A Case Study of Nepal Industrial & Commerce Bank Limited

Submitted by: Sradha Tamang Roll No. 230/060 Shanker Dev Campus Kathmandu, Nepal

Submitted to Faculty of Management Tribhuvan University Kathmandu, Nepal

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RECOMMENDATION

This is to certify that the Thesis

Submitted by Sradha Tamang

Entitled

Capital Adequacy Norms and its Impact Regarding NRB Unified Directives – A Case Study of Nepal Industrial & Commerce Bank Limited

has been prepared as approved by the department in the prescribed format of faculty of management. This is forwarded for examination.

Dr. Shilu Bajracharya (Thesis Supervisor) Prof. Bishweshor Man Shrestha (Head of Research Department) Prof. Dr. Kamal Deep Dhakal (Campus Chief)

VIVA-VOCE SHEET

We have conducted the viva-voce examination of the dissertation presented

by

Sradha Tamang

Entitled

Capital Adequacy Norms and its Impact Regarding NRB Unified Directives – A Case Study of Nepal Industrial & Commerce Bank Limited

and found the thesis to be original work of the student and written according to the prescribed format. We recommend the dissertation to be accepted as partial fulfilment of the requirement of Master of Business Studies (MBS).

VIVA-VOCE COMMITTEE

Head Research Department	
Member (Thesis Supervisor)	
Member (External Expert)	

DECLARATION

I declare that this dissertation work entitled "Capital Adequacy Norms and its Impact Regarding NRB Unified Directives – A Case Study of Nepal Industrial & Commerce Bank Limited" is entirely my own work and wherever any material is used from other sources, it is fully cited and reference has been given with appropriate acknowledgement.

Sradha Tamang Roll No. 230/060 Shanker Dev Campus Kathmandu, Nepal Date:

Acknowledgement

This thesis report on "Capital Adequacy Norms and its Impact Regarding NRB Unified Directives – A Case Study of Nepal Industrial & Commerce Bank Limited" was prepared by me as a partial fulfilment of the requirement of the degree of Masters in Business Studies (MBS), Tribhuvan University courses.

While working on the project, I have derived knowledge on various aspects of the mentioned subject, inspiration and support from various eminent persons, who must be credited with whatever merit it may have.

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Introduction

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

The Nepalese economy has witnessed a satisfactory rebound in FY 2064/2065 recording the highest GDP growth in the past 7 years following some improvements seen in the political climate. The GDP at factor cost and producer's price is estimated to have grown by 5.6% and 4.7% respectively (as against 2.6% and 3.2% respectively in the previous year) attributed primarily to the improved performance of agriculture and non-agriculture sector are reported to have grown by 5.7% and 5.6% respectively vis-à-vis 1% and 4.1% recorded the preceding year. The satisfactory performance by the agricultural sector was primarily due to surge in paddy production supported by favourable weather condition, (NIC 2064/65). However, the growth rate declined in 2065/66.

1.1. Background

Agriculture dominated the economy of Nepal. The agricultural sector contributes over 33% to the GDP of the country. Over 80% of the population is dependent on the agriculture. Therefore, major contribution of Government of Nepal (GON) has been the development and advancement of agriculture sector. But, still there has always been scarcity of finance in this sector. In the late 1980s, it was the livelihood for more than 90 percent of the population--although only approximately 20 percent of the total land area was cultivable--and accounted for, on average, about 60 percent of the GDP and approximately 75 percent of exports. Since the formulation of the Fifth Five-Year Plan (1975-80), agriculture has been the highest priority because economic growth was dependent on both increasing the productivity of existing crops and diversifying the agricultural base for use as industrial inputs, *(Economic Survey, 2007)*.

To some extent, the establishment of Agriculture Development Bank has provided the support to the farmers to raise the required capital. Also, various programs like microfinance programs, cooperative programs have been introduced in various villages of Nepal which has definitely helped local to finance them.

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

Although the businesses are the major sources of capital, they also have to raise capital to run business. Especially, the bank capital has significant role to play as the banks have obligations to mass people, its depositors. Thus, the banks should hold an adequate capital to secure the interest of depositors.

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Capital Adequacy has become one of the most significant factors for assessing the soundness of banking sector. Raise and utilization of funds are the primary functions of commercial banks. As such, commercial bank collects a large amount of deposits from general public. The depositors think that depositing their money in bank is safe and relaxing. But, what does happen if the bank doesn't have enough capital funds to provide a buffer against future, unexpected losses? Therefore, capital must be sufficient to protect a banks depositors and counterparties from the risks like, credit and marker risks. Otherwise the banks will use all the money of depositors in their own interest and depositors will have to suffer loss.

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

Establishment of commercial banks is governed by Bank and Financial Institutions Act, 2063 and Company Act, 2063. However, Nepal Rastra bank (NRB), as a regulatory body for banks and financial institutions, has right to specify the capital requirements, and other requirements. Being the central bank of Nepal, NRB has the responsibility to give special attention to the interest of depositors. It is to be noted that as per Banking and Financial Statistics of the NRB for the FY ending 2064/65/(Mid-July 2008, No49), Based on the published figures as on 15 July 2008, the commercials banks of Nepal have collected more than NPR. 421.52 billion of deposit from depositors.(Economic survey, 2008) Such a big amount of money should have to be secured and NRB has the major responsibility to protect it. NRB issued Unified Directives to be complied by all financial institutions of the country. The Directives consist of sixteen volumes. The NRB Directive no. 1 states about the Capital Adequacy Norms for financial institutions indicating the requirements of maintaining the Capital Fund to the prescribed ratios. The directives are said to be based on the internationally accepted norms of Basel committee. The Basel committee on banking supervision is a committee of banking supervisory authorities which was established by the central bank governors of the group of ten countries in 1975. It consists of senior representatives of bank supervisory authorities and central banks from Belgium, Canada, France, Germany, Italy, Japan, Luxembourg, the Netherlands, Sweden, Switzerland and the United Kingdom and the United States. It usually meets at the bank for international settlements in Basel, Switzerland, where its permanent secretariat is located, (www.nrb.org.np/banksupervision).

1.2. Focus of the Study

The study will be 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, bank capital has been divided into two categories i.e. Primary Capital Fund and Secondary Capital Fund. By the end of the FY 2064/65, there are total 20 commercial banks in Nepal and few of them are still on the pipeline. Keeping in view of the striving commercial banks, the thesis report, this study, will analyze the matters, issues and problems related to capital funds of NIC Bank. The thesis report is mainly focused on accordance of the Capital Adequacy Norms of Nepal Rastra Bank (NRB-Unified Directives 2062).

1.3. Introduction to Nepal Rastra Bank (NRB)

Nepal Rastra Bank (NRB), the Central Bank of the Kingdom of Nepal, was established in 1956 to discharge the central banking responsibilities including guiding the development of the embryonic domestic financial sector. 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 have been recast by the new NRB Act of 2002,the preamble of which lays down the primary functions of the Bank as: to formulate necessary monetary and foreign exchange policies to maintain the stability in price and consolidate the balance of payments for sustainable development of the economy of 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; 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 and financial institutions. the draft legislations on bank secured

transactions, insolvency, Assets Management Company and anti-money laundering are expected to be soon materialized, all with the goal of strengthening the financial sector through building on its healthy development and improved stability.

These activities convey the commitment of the NRB for addressing 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.

Being the central bank of the country, the ownership of NRB is with the Government of Nepal but, the management of NRB is not controlled by it. NRB has 12 branches throughout the kingdom of Nepal including the head office at Baluwatar and the main banking office at Thapathali in Kathmandu.

1.4.<u>Introduction to Nepal Industrial & Commercial Bank</u> Limited (NIC Bank)

NIC Bank, which commenced operation on 21 July 1998, is the first commercial bank in the country to be capitalised at Rs. 500 million. The bank is promoted by some of the prominent business houses of the country. Promoters hold 65% of the shares while the remaining 35% is held by the general public. NIC Bank is one of the most widely held companies in Nepal with early 32,000 shareholders. The share of the Bank are actively traded in Nepal Stock Exchange with market share capitalization of about NPR 12,119 million as at the year ended 15 July 2008.

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Within 10 years of commencing business the Bank has grown rapidly with 12 branches throughout the country while at least 4 more are planned this year. All branches 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 be ISO 9001:2000 certified for Quality Management System. Furthermore, NIC Bank became the 1st bank in Nepal to be provided a line of credit by International Finance Corporation (IFC), an arm of World Bank Group under its Global Trade Finance Program enabling our Letters of Credit to be accepted/confirmed by more than 200 banks worldwide. The Bank has also been awarded the "Bank of the Year 2007- Nepal" by the world - renowned financial publication of The Financial Times, U.K.- The Banker. Th e Bank believes that these recognitions are a testimony to its success, robust growth and the transparency and professionalism it has consistently displayed in its business. The Bank is run by professionals and believes in the highest standards of corporate governance.

The Board of Directors of the Bank is supported by the management team, which comprises of young, enthusiastic professionals. The Bank has successfully embarked on a multi-pronged strategy of consolidation, administrative streamlining, human resource up-skilling, strategic cost management, focused non-performing assets management, balance sheet and treasury management and controlled assets growth, in tandem with strengthening the credit culture as well as strategic management and sales.

NIC Bank's organizational structure is designed to support its business goals. However, it is flexible enough in seeking to ensure effective control and supervision and consistency in standards across all businesses at the same time. The organization structure is divided into five major areas viz Consumer Banking, Business Banking, Risk Management, Treasury and Liability Marketing & Transaction Banking all of which are supported by the corporate center. The Bank is committed towards providing financial services to its patrons through efficient and cost effective service delivery through its Transaction Banking, Consumer Banking, Business Banking and Treasury divisions. Consumer banking comprises consumer lending, retail credit products and transaction banking services for individuals. Consumer loans include home loans, auto loans, personal loans, education loans, travel loans, etc. Liability Marketing & Transaction Banking comprises of a range of institutional and personal deposit products and transaction banking services including debit cards, ATMs, safe deposit lockers, payment services, drafts, remittance, SMS Banking, Travelers' Cheques, bullion trading, etc.

Business banking group comprises corporate as well as SME (small & medium enterprises) banking business including credit products and other banking services. It also includes transaction banking, trade finance services, foreign exchange and corporate financing solutions including project & infrastructure finance, working capital & term credit, structured financing, syndication, cash management and advisory services. Special Assets Management division is responsible for managing non-performing and restructured loans. Treasury is responsible for management of liquidity and market risk, mobilization of resources, balance sheet management, pricing, investor relations and international operation. The Bank's Treasury Division

offers a full range of Risk management and Cash Management products and provides effective treasury advisory services. Further, Treasury also leverages its strong relationships with financial institutions to provide a wide range of banking services.

The Corporate center comprises all shared services and corporate functions including finance, secretarial, risk management, legal, human resources, branding and communications. The Compounded Annual Growth Rate (CAGR) of the Bank for the last 5 years measured under different parameters is one of the best in the industry. This shows that the Bank's performance has been consistent over the duration of five years. The 5 years CAGR of the Bank is as under

Operating Profit Growth %

ſ	50	34	5	37	35	CRG 31
	2060/61	2061/62	2062/63	2063/64	6064/65	

Net Profi t Growth %

1100110110					
163	67	(15)	64	53	CRG 56
2060/61	2061/62	2062/63	2063/64	6064/65	

Deposits Growth %

64	21	40	15	30	CRG 33
2060/61	2061/62	2062/63	2063/64	6064/65	

Risk Assets Growth %

46	31	41	32	26	CRG 35
2060/61	2061/62	2062/63	2063/64	6064/65	

Share Price Growth (NPR)

	· · · · · · · · · · · · · · · · · · ·	/			
(1)	68	36	92	35	CRG 42
2060/61	2061/62	2062/63	2063/64	6064/65	
Headcount	Growth:				
9	12	6	14	23	CRG 13
2060/61	2061/62	2062/63	2063/64	6064/65	

The Bank believes in continuously offering new and vale added services to its customers, with commitment to quality and value to its clients at the same time. Accordingly, the Bank has been in the forefront in

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lunching innovative and superior products having unique customer friendly feature with immense success.

Following are the few products of the NIC Bank, which have been playing vital role in the overall success of the bank winning the hearts of hundreds of customers:

- So NIC Life Savings Account NIC Pure Gold
- NIC Super Saving Account
- So NIC Shareholder Savings Account
- 🦇 NIC Business Account
- ဖာ NIC Super Deposit
- ᆇ Karmashil Bachat Khata
- 🦇 NIC Sikshya Kosh
- ∞ NIC Pure Gold
- ∞ NIC Pure Silver
- ᆇ 365 Days Banking
- ဖာ NIC Cash Card
- 🦇 NIC SMS Banking
- 🦇 NIC Ghar Subidha
- 🦇 NIC SME Trade & Industry Loan
- ∞ NIC Small Business Loan
- 🎐 NIC Sajilo Karja (NSKza)

MIC Life Saving Account:

This is first and only deposit product in the banking industry in the country / bundled with life insurance cover, which was lunched in 2003. The product has been a runway success with total deposits crossing the NRP 2 billion mark.

Solution NIC USD Super Saving Account:

This deposit product was lunched in 2006 bundled with a lot of facilities and has gained popularity amongst individuals who earn in foreign currencies.

So NIC Shareholder Saving Account:

The bank has also come up with unique deposit product called NIC Shareholder Saving Account for the benefit of its shareholders. The main objective of the account is to accumulate the widely scattered deposits of shareholders and provide them modern and innovate banking services plus a good return on their saving. Now shareholders will no longer be required to queue up to receive dividend payments as the same will be directly credited to their account.

Solution NIC Business Account:

The Bank introduced another unique product branded NIC Business Account in October 2007, an interest bearing account aimed at business. It is being targeted at Proprietorship firms, Partnership firms, Companies etc. That still many firms and companies do not have access to banking and these businesses also do not manage their cash effectively. NIC Business Account encourages such businesses to maintain accounts by offering interest on daily balance with lots of free and discount banking facilities.

MIC Super Deposit:

NIC Super Deposit a term deposit with a never-heard interest rate of up to 9% p.a. bundled with the flexibility of savings account is an innovative product developed by NIC Bank with simplified operational procedures. This unique product, which was lunched in June 2008, offers a unique investment opportunity, with high returns of fixed deposits with the flexibility of a saving account.

Se Karmashil Bachat Khatta:

The Bank lunched another unique savings deposit product in July 2007 branded Karmashil Bachat Khata specifically designed to provide an opportunity to save small amounts with high returns and various other facilities and cultivate banking habit. This account was developed to provide banking services to middle level working professionals and low/middle class individuals working in various private/ government/social organizations, students, retired professionals and farmers etc. This product has been very popular among the target group with 8,000 accounts already opened as of July 2008.

<u>NIC Sikshva Kosh:</u>

This deposit product was launched in 2005 with an aim to inculcate the habit of putting aside small amounts of money every now and then top ensure one's children's future university education which can be very expensive and difficult to meet if one does not plan ahead. The high interest savings account had been well appreciated by the market. The product has also been a runway success with about 8,000 depositors as of 15 July 2008. NIC Sikshya Kosh helps parents save every penny possible today to give a lump sum amount in future with lots of other benefits and also teach their children the importance of money and inculcate saving habits.

Solution NIC Pure Gold:

NIC Bank has also launched NIC Pure Gold, a-first-of-its-kind innovative product never before introduced by any bank in Nepal. Although there is a sizable demand for gold in Nepal. Nepali consumers are always uncertain of the quality available in the market. With NIC Bank importing certified 99.9% pure gold from reputed international mints/suppliers, quality is now assured. Apart from Kathmandu Valley, the Bank has made this product available from its Dharan, Biratnagar, Janakpur, Birjunj and Pokhara Branches.

The Bank also offers multiple finance options to avail loans to purchase gold and provides custodial service under which buyers may choose to keep the purchased gold safely in the Bank instead of talking the high risk of storing it at home.

Solution NIC Pure Silver:

The Bank was also the first among financial institutions in Nepal to import 99.9% pure silver granules from international mints. With the introduction of NIC Silver, NIC Bank is contributing to the silver crafts and jewellery industry to providing easy access to pure silver granules, that, too, in easy to carry packs of 10Kg.

9 365 Days Banking:

The Bank has been providing 365 Days Banking Services from its Kamaladi Branch for its Kathmandu Valley Customers providing Cash Withdrawal/Deposit, Foreign Currency Exchange and Traveler's Cheque facilities and acceptance of the applications to be processed immediately after holiday(s). The Bank has also been providing evening counter facilities from its New Road, Lalitpur, Bhaktapur, Butwal, Nepalunj and Birtamod branches.

Solution NIC Cash Card:

The Bank launched NIC Cash Card in association with Smart Choice Technologies (SCT) to access accounts through networked ATMs and PoS terminals. NIC Cash Card allows its holder to withdraw cash, inquiries balances and make payments through a wide network of ATMs and PoS terminals of SCT Network in Nepal and more then 1,000 ATMs of Punjab National Bank under FSS Network in India. NIC Cash Cards can be availed of without maintaining an account. As of 15 July 2008, amount 11,000 customers are carrying NIC Cash Card.

<u> NIC SMS Banking:</u>

The Bank lunched SMS Banking Service in 2005, which allows NIC customers to access their amounts through mobile phones for inquiring balance, viewing transaction history and request for cheque-books and statements.

MIC Ghar Subidha:

The Bank lunched a unique retail product called "NIC Ghar Subidha" in 2005, which is a personal property finance suite of products with unique features never before introduced in the Nepali market. It aims to make possible the dream of every middle class Nepali family of living in one's own house come true. With the low pricing and other features bundled in the product, a middle class family will not have to wait until retirement to fulfil its dream. The product has been another runway success with total leading under the product crossing the NPR 2 billion mark as at 15 July 2008.

So NIC SME Trade & Industry Loan:

SME T&IL is yet another innovative product under SME loans. The loan is suitable for expansion of existing business. A combination of fund based and non fund based facilities facilitates of SMEs. Per borrower exposure under the product is restricted to NPR 40 million with a cap of NPR 20 million on funds based.

Solution NIC Small Business Loan:

The Bank introduced another unique product called "NIC Small Business Loan" in 2006. The product is a unique, simple and cost effective loan to cater to the financial needs of a wide range of small and medium enterprise. It has been felt that businesses of this category generally do not have easy access to bank finance and even when it is available, cumbersome procedures, lengthy paperwork and high cost of finance become major deterring factors. The product has been designed specifically addressing these factors and offers a loan product to best suit the needs of small and medium sized businesses. People owning small businesses or self-employed professionals now no longer need to feel intimidated about going to bank for a loan.

🧇 NIC Sajilo Karja (NSKza):

NIC Sajilo Karza (NSKza) is a simple overdraft facility developed to cater to the personal financing needs of salaried individuals, selfemployed, professionals and owners of small family businesses. It is structured as a simple easy-to-use and easy-to-understand overdraft facility, which provided full flexibility for withdrawal of funds and repayment at the borrower's convenience without the need for any further bureaucratic process once the limit is set up. The major attractions of the product are very simplified loan approval process, borrower-determined usage and savings on interest cost.

1.5. Statement of the Problem

Banking and Financial Statistics (Mid July 2008) shows that, there is more than NPR. 421.52 millions of amount deposited in various commercial banks of the country by the end of fiscal year 2064/65(Economic Survey, 2008). But if the banks go bankrupt, what will happen to the depositors? Thus, an adequate capital fund is required to safeguard the money of the depositors. The adequacy of bank capital is the most important aspect of the bank. The bank should pay attention to many things for the adequacy of capital. The study will have main focus on the capital fund of the NIC Bank. NRB issued a new set of Unified Directives applicable to all financial institutions on 2063-04-14 (July 30, 2006) that was effective from FY 2062/63 (2005/06). NRB claims that these directives are based on the internationally accepted banking norms of Basel committee. Previously, there used to be separate directives for commercial banks, finance companies and other financial institutions.

The Capital Adequacy Ratio is derived on the basis of Total Risk Weighted Assets. The capital adequacy ratios to be maintained by commercial banks are as follows:

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

On the base of such scenario, there was no study conducted by the authorities or any scholars regarding the importance of such NRB Directives. There were no record of Capital Adequacy or Capital Fund most of the financial organisations. To form the capital of the bank based on the risk they perceived such importance is very much essential for profitable deployment of fund and safeguard of depositors/ investors interest Therefore, this study is essential in order to make proper decision regarding regulating the banks and financial institutes.

1.6. Objectives of the Study

The main objectives of the study will be as follows:

- ✤ To examine the Capital Adequacy of NIC Bank.
- ✤ To examine the relation of Capital Fund to the total resources of the bank
- To analyse the steps taken by NIC Bank to fulfil the requirements as per these norms;
- To analyse the significance and impact of NRB Capital Adequacy Norms on commercial banks, and
- ✤ To make necessary suggestions and recommendations

1.7. Significance of the Study

The study will have a significant importance in the present context of banking business in Nepal. Commercial banks have collected more than NPR. 421.52 millions of deposits. We can observe that there is a lack of adequate investment opportunity of funds. In such a situation, these deposits have to be protected by the adequate capital fund of respective commercial banks. In fact, the banks should have adequate capital fund apart from the deposits of public to make investments.

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

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

1.8. Limitations of the Study

The study will be limited to the Capital Fund and Capital Adequacy Norms for commercial banks. Since, it is not possible to take all commercial banks as sample, the thesis will analyse the data and information of NIC Bank. The data and information over the period of 6 fiscal years commencing from FY 2059/60 to FY 2064/65 will be used in the study. For the analysis of capital fund, only single year's data of FY 2064/65 shall been taken because the Unified NRB Directives have been introduced to be effective from FY 2064/65 only. The Unified Directives have been issued on 2062-03-29 to be applicable from the date 2062-04-01. Balance Sheets, Profit and Loss Accounts and other Financial Statements are considered as basic source of data. Thus, the study will be mainly based on the secondary data collected from various sources. However, some primary data will also be derived from the analysis of questionnaire prepared for the research study.

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

1.9. Structure of Study

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

Chapter 1: Introduction

To start the thesis report, this chapter includes the background of the study, meaning, functions and importance of a central bank, introduction to NRB, introduction to NIC bank, statement of problem, objective of the study, limitation of the study, theoretical framework and problem hypothesis. This chapter has been targeted to help the reader to understand get the rhythm of the subject matter of the thesis report.

Chapter 2: Review of Literature

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

Chapter 3: Research Methodology

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

Chapter 4: Presentation and Analysis of data

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

Chapter 5: Summary, Conclusions and Recommendations

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

Literature Review

2.1 Origin and Development of Banks

The economic activities existed in every civilization of mankind in all over the world. But the modern banking practice was originated from Europe. The first bank called 'Bank of Venice' was established in Venice in 1157. Then 'Bank of Barcelona' was established in 1401 and in 1407 'Bank of Genoa' was established. In 1694 the 'Bank of England' was established as a joint stock bank, (Dahal and Dahal, 2002).

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, *(Dahal and Dahal,2002)*

To begin to the modern banking system, Nepal Bank Limited was established in 1937 as the first bank of the country. Nepal Bank Limited dominated the financial sector of the country for almost 30 years without any competitor. This bank played a major role to boost up the Nepalese economy during that period. Nepal Rastra Bank was established in 1956 as central bank of Nepal which was very essential for Nepalese economy. The second commercial bank, Rastriya Banijya Bank was established in 2022 BC under the Rastriya Banijya Bank Act, 2022 with full ownership of the His Majesty's Government.

2.2 <u>Development of Central Bank</u>

In 1894, the Bank of England was converted into the central bank of England. *(www.bankofengland.co.uk/about/history as of 2008.3.23)* 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.

The International Financial Conference held at Brussels in September 1920 and Genoa Conference held in 1922 indicated the need of central bank *Dahal and Dahal*, 2002). Then after, there came a wave of establishing central banks by several countries.

2.2.1 Meaning of Central Bank

Central bank is the national institution that monitors all financial and monetary procedures and policies. Vaidya (1997) has stated that the central bank is the apex bank in a country that controls all monetary system and banking structure.

Rosenberg (1982) has defined the central bank as a banker's bank and a bank holding the main body of bank reserves of a nation and the prime reservoir of credit. (e.g. Bank of England, Bank of France) Clark (1999) has expressed the central bank as bank that often carries out government economic policy, influences interest and exchange rates and monitors the activities of commercial and merchant banks. In this way it functions as the government's banker and is the lender of the last resort to the banking system.

Encyclopaedia Britannica (2002) defines Central Bank as an institution that is charged with regulating the size of a nation's money supply, the availability and cost of credit, and the foreign-exchange value of its currency. Regulation of the availability and cost of credit may be non selective or may be designed to influence the distribution of credit among competing uses. The principal objectives of a modern central bank in carrying out these functions are to maintain monetary and credit conditions conducive to a high level of employment and production, a reasonably stable level of domestic prices, and an adequate level of international reserves.

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

2.2.2 Importance and Functions of Central Banks

It is a difficult task to put aside the importance and functions of a central bank. Shekhar& Shekhar (1998) comment that it is difficult to lay down any hard and fast rule regarding the functions of a central bank. The powers and the range of functions of central banks vary from country to country.

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

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

Objectives between a central bank and other commercial banks are different. The main objective of a central bank is to assist the government to implement economic policies 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.

Meaning of Commercial Banks

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

2.3 Capital and Capital Adequacy: An Overview

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

Rosenberg (1982) has defined capital in relation with banking as a long-term debt plus owners' equity.

The efficient functioning of markets requires participants to have confidence in each other's stability and ability to transact business. Capital-rules help foster this confidence because they require each member of the financial community to have, among other things, adequate capital. This capital must be sufficient to protect a financial organization's depositors and counterparties from the risks of the institution's on-balance sheet and offbalance 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 (1994) has defined banks capital as common stock plus surplus plus undivided profits plus reserves for contingencies and other capital reserves. In addition since a bank's loan-loss reserves also serves as a buffer for absorbing losses, a broader definition of bank capital include this account.

Verma and Malhotra (1993) have indicated that the general public is interested in the higher profitability and safety of the funds of a bank, because the public expects the shareholders to assume all the risks. Lower profitability of a bank fills the faith of the prospective depositors and all their incentive for investing in the various deposit schemes.

The Basel Committee sets a standard for all the banking norms, which will be accepted by central banks of all big industrialist countries. Regarding the capital funds the committee has issued the Basel Capital Accord. The first Basel Capital Accord was issued in 1988 and was implemented by 1992. The committee had issued New Basel Capital Accord which should have been implemented by 2006 to overcome the drawbacks of the present capital accord. Central banks of developing and underdeveloped countries follow these standards. *(www.nrb.org.np/banksupervision)* 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. (<u>www.nrb.org.np/bfrdirectives</u> as of 2008.3.23)

The Core Capital consists of the following components of capital:

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

Following items should be deducted while determining Core Capital: (www.nrb.org.np/bfrdirectives as of 2008.3.23)

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

The Supplementary Capital consists of the following components of capital: (<u>www.nrb.org.np/bfrdirectives</u> as of 2008.3.23)

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

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

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

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

Maisel (1981) defined Capital as adequate either when it reduces the chances of future insolvency of an institution to some predetermine level of alternately when the premium paid by the banks to an insurer is "fair", that is, when it fully covers the risks borne by the insurer. Such risks, in turn, depend upon the risk in the portfolio selected by the bank, on its capital and on terms of the insurance with .reference to when insolvency will be determined and what loss will be paid. The Capital Adequacy Ratio is yielded by the following formula: (<u>www.nrb.org.np/bfrdirectives</u> as of 2008.3.23)

Capital Adequacy Ratio = <u>Total Capital Fund</u> × 100% Total Risk-Weighted Assets

2.4 <u>Review of NRB Capital Adequacy Norms for Commercial</u> 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 2063(BAFIA). These norms were issued under the Provision 79 of Nepal Rastra Bank Act, 2002 for developing and regulating banking system.

The norms have prescribed the minimum capital fund requirement, on the basis of the risk-weighted assets. The banks are required to maintain following prescribed proportion of minimum capital fund on the basis of risk weighted assets as applicable from the FY 2062/63:

Core Capital : 5.5% of the risk weighted assets

Total Capital Fund: 11% of the risk weighted assets

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

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

For the purpose of calculation of capital fund, the risk-weighted assets have been classified into two parts – On-Balance Sheet Risk-Weighted Assets and Off-Balance Sheet Risk-Weighted Items. The weightage of the risk assigned to them are shown in the Appendix B and Appendix C respectively. The amount of risk-weighted assets calculated by multiplying the amount of the asset with the weightage assigned to them and the total of which will be extracted for the purpose of calculation of capital adequacy ratios. (www.nrb.org.np/bfrdirectives as of 2008.3.23)

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: (<u>www.nrb.org.np/bfrdirectives</u> as of 2008.3.23)

Capital Fund Ratio = <u>Core Capital + Supplementary Capital</u> × 100% Sum of Risk-Weighted Assets

The sum of risk-weighted assets is the sum of total on-balance sheet riskweighted 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. (*www.nrb.org.np/bfrdiectives* as of 2008.3.23)

In the event of non-fulfilment of Capital Adequacy Ratio by any bank, the Board of Directors of the bank shall submit the adequate reasons for not being able to maintain the required capital fund and capital plan or program prepared to fulfil the capital fund requirements within 35 days. NRB shall direct the bank to fulfil the requirements as per submitted capital plan or program and within the time limit prescribed. The bank is not allowed to distribute dividends and bonus shares in such context. (<u>www.nrb.org.np/bfrdiectives</u> as of 2008.3.23)

If any bank does not fulfil the minimum Capital Fund within the specified period, NRB may initiate any of the following actions: (<u>www.nrb.org.np/bfrdiectives</u> as of 2008.3.23)

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

2.5 Review of Related Studies

Lamsal (2003) 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 shortrun. 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.

Shah (2005) concluded that being the central bank of the nation, Nepal Rastra Bank has to be active by playing important role for monetary and financial stability. Central bank should always be eager to achieve the public faith towards bank and financial institutions enabling them being disciplined, well organized, healthy and competent by providing effective regulation and supervision to appropriate utilization and mobilization of financial resources by increasing financial saving rate by raising financial stability. Also, central bank should always be willing to safeguard the interest of depositors and investors to accomplish the financial stability. Constant financial stability leads to the accomplishment of monetary stability. As the tools for monetary policy are applied through financial sector, the efficiency of monetary policy depends on effectiveness of financial sector. Balanced growth of financial sector helps monetizing of economy. Various drawbacks; like, managerial ineffectiveness, organizational difficulty, contrary financial situation; make the long-term stability of financial sector suspicious. Failure of any one financial institution leads the destructive impact to whole financial sector and such impact will be spread to other countries from the countries where capital accounts are fully convertible. So, the concept of financial system of the country should be boosting and healthy for achieving higher economic growth by steadying macro economic stability has been globally supported. The financial sector reform program in Nepal can also be taken in the same background. Since, it is not possible to achieve financial stability without the commanding role of regulation and supervision, new program of financial

sector reform program should play role regarding structural reformation / transformation and organizational structure in existing banks and financial institutions by clarifying the role of government and central bank.

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

Khatiwada (2004) has further written that Nepal initiated financial sector reform back in 1980s with donor initiative and assistance. In this process, some progress was made in terms of re-capitalization of the government banks, divestment, branch consolidation, introduction of new regulatory and prudential norms and cleaning up the balance sheets of bad loan loaded banks. But the reform process was stalled in the later 1990s due to political instability and the government's priority in areas other than the financial system. In between, the country observed, from very close by, the financial crisis in the neighbouring region. Keeping in mind the financial crisis and its effect in the Asian region, the Nepal Rastra Bank is now focusing its attention on the reform measures in the financial sector as a drive towards new financial architecture. Khatiwada emphasized various reform measures. One of the measures was increasing capital base and revising capital adequacy. Khatiwada stressed that experience has shown that undercapitalized financial institutions are the ones that are first attacked by the speculators and hedgers at the time of crisis and create contagious effect on the other institutions as well. Besides, undercapitalized financial institutions cannot gain credibility and corporate growth even in normal items. This requires that financial institutions are adequately capitalized and possess resilience against attacks by dealers and customers. In this context, the capital adequacy norms are being revised upward as per the Basel Capital Accord. But increasing the capital base for loss making government owned financial institutions is not easy without involving private sector in the equity capital.

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

Stokes (2003) has mentioned that banks hold capital in excess of reserve requirements to provide a buffer against future, unexpected losses. Such losses are brought about by the credit, market, and operational risks inherent in the business of lending money. Problems created by an insolvent bank are important enough that bank regulators enforce minimum capital standards on banks in an effort to safeguard depositors and ensure the ongoing viability of the financial system. However, from a bank's perspective holding idle capital is an expensive safeguard against risk because the bank's shareholders demand a return on their investment and idle capital provides no such return. For this reason bankers and regulators can have divergent options about the amount of capital a banks should hold making the problem of determining a bank's risk-based capital a complex and important question.

Heakal (2003) has written that the central bank has been described as "the lender of the last resort", which means that the central bank is responsible for providing its economy with funds when commercial banks cannot cover a supply shortage. In other words, the central bank prevents the country's banking system from failing. However, the primary goal of central banks is to provide their countries' currencies with price stability by controlling inflation. A central bank also acts as the regulatory authority of a country's monetary policy and is the sole provide and printer of notes and coins in circulation. Time has proven that the central bank can 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.

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

2.6 <u>Review of Thesis Works</u>

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

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

Sapkota (2004), in his study on fund mobilizing policy of Standard Chartered Bank Nepal Ltd. (SCBNL), has found that liquidity position of SCBNL was not satisfactory. Loans and advances, cash and bank balance ratio seemed too weak than that of NBBL and HBL. Investment on share and debenture and interest earning power on total working fund also seemed weak in condition than that of NBBL and HBL. The relation of investment and loans and advances with deposits seemed positive and the relation of net profit with outside assets (investment and loans and advances) seemed positive. At last, Sapkota concluded that in overall condition SCBNL seemed in satisfactory position in comparison to NBBL and HBL. Since SCBNL used to provide less loans and advances in comparison to its total deposits, Sapkota has strongly recommended for following a liberal lending policy so that more percentage of deposits can be invested in different profitable sectors as well as towards loans and advances as a significant factor this affects the net profit of the bank. Subsequently, a skilful administration is the must for these assets because negligence may become a reason for liquidity crisis and bankruptcy.

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

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

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

Shrestha (2004), in his study has stated that in a situation when the existing financial institutions, especially government owned commercial banks were

unable to supply credit timely and carry capital market activities, private joint venture commercial banks have contributed a lot. The overall performances of joint venture commercial banks are satisfactory and NRB has to play more active role to enhance the operation. The analysis of liquidity position of sample joint venture commercial banks (Nabil Bank Ltd., Standard Chartered Bank Ltd. and Nepal SBI Bank Ltd.) has satisfactory outcomes. Initially, the major part of these banks was consisting of business and industrial loan: this is the indication of investment on productive sector. Nowadays, these banks are slowly turning towards hire purchase and housing financing.

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

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

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

Kadel (2002), in his study on financial performance of NGBL and HBL, has concluded as many commercial banks have been competing with each other in their business. When the government adopted liberal policy, as a result, .any commercial banks especially joint venture banks increased rapidly i.e. Himalayan Bank Ltd., Nepal SBI Bank Ltd. and Nepal Grindlays Bank Ltd., etc. These banks are mainly concentrated themselves on financing foreign trade, commerce and industry and other sectors. Banking helps to mobilize the small savings collectively to the huge capital investment though the banking is considered as the platform of money market.

2.7 Research Gap

Most of the studies mentioned earlier dealt about NRB Directives as a whole and generalized the matter about the objectives, purpose and impact of the directives to the commercial banks and financial institutions. Very few of them have gone specific about capital adequacy norms but none of them have written over the capital adequacy norms taking NIC Bank in specific. So, this study is conducted to make a specific review of capital adequacy norms with a specific case of NIC Bank. It may be the case that the bank is not very old, so, many studies regarding this bank have not been made compared to other elder commercial banks. As such, this study might be a novelty one with reference to the study of the capital adequacy norms of NIC Bank.

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

Research Methodology

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

3.1 Research Design

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

3.2 Population and Sample

There are 23 commercial banks presently operating in Nepal. (<u>www.nrb.org.np/usefullinks</u> as of 2008.3.23). Collecting the data of these entire commercial banks was not possible. Hence, NIC Bank Ltd. has been selected for the case study. Thus, the population of the study comprises of all these commercial banks and the sample of NIC Bank.

Also, through the research questionnaire, various responds of the respondents have been considered as sample for the study. 11 bank officials have been interviewed with a questionnaire prepared as in Appendix N.

There are total 67 respondents of the Research Questionnaire for Depositors as shown in Appendix O.

3.3 Data Collection Procedure

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

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

3.4 Data Analysis Tools

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

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

3.4.1 Ratio Analysis

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

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

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

(a) Capital Adequacy Ratio

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

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

To measure the adequacy of Total Capital Fund:

Total Capital Fund × 100%

TRWA

To measure the adequacy of Core Capital: <u>Core Capital</u> × 100% TRWA

(b) Capital to Deposit Ratio:

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

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

The Capital to Deposit Ratio is derived by the following formula: <u>Total Capital Fund</u> × 100% Total Deposit collected

(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:

Total Credit × 100%

Total Deposit collected

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

3.4.2 Statistical Tools

The following statistical tool is used to analyse the data:

(a) Karl Pearson Correlation Analysis:

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

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

Where,

N = Number of pairs in observation

X = Product of the first variable

Y = Product of the second variable

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

$$r = \underbrace{\Sigma x y}_{\sqrt{\Sigma x^2} \cdot \sqrt{\Sigma y^2}}$$

Where, $x = (X - \overline{X})$ $y = (Y - \overline{Y})$

Data Presentation and Analysis

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

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

This chapter is partitioned into the sections of:

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

4.1 Presentation of Data

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

4.1.1 Capital Fund

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

From the inception period, the capital of the NIC Bank was Rs. 500,000,000.00. and again increased to Rs. 600,000,000.00 in the FY 2062/63. The capital has been increased to Rs. 660,000,000.00 in the FY 2064/65 by issuing 10% bonus shares.

The capital funds of NIC Bank have been tabulated in Table 4.1 which shows the capital fund of the bank over the period of six fiscal years, i.e., from FY 2059/60 to FY 2064/65.

Table 4.1 Capital Fund of NIC Bank over the period of six yearsfrom FY 2059/60 to FY 2064/65

(Rs	in	mil	lion)
(ns.	m	m	non)

Fiscal	Core	Supplementary	Total Capital
2059/60	549.43	45.09	594.51
2060/61	616.78	39.58	656.36
2061/62	680.14	50.84	730.99
2062/63	761.13	275.71	1,036.84
2063/64	912.31	296.801	1,209.11
2064/65	$1,\!293.75$	321.969	1,615.719

(Source: Annual Reports of NIC Bank)

In the last six years period, the Capital Fund of NIC has seen steady growth keeping aside FY 2064/65, 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 2064/65. The Capital Fund of NIC consisted of Core Capital of NPR. 549.43 million and Supplementary Capital of NPR. 45.09 million totalling NPR. 594.51 million at the end of the FY 2059/60. The Capital Fund has increased to NPR. 1,615.719 million consisting of Core Capital of NPR. 1,293.75 million and Supplementary Capital of NPR. 321.969 million by the end of the FY 2064/65.

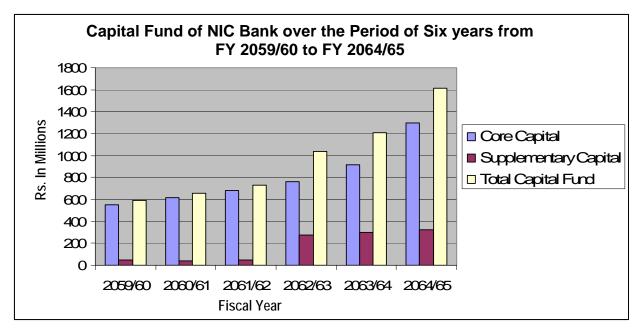


Figure 4.1 Trend of Capital Fund of NIC Bank

The Figure 4.1 shows the growing trend of Capital Fund of the bank during the six fiscal years. The trend shows that Core Capital is in increasing trend but Supplementary Capital is fluctuating. The Supplementary Capital has risen dramatically during the FY 2063/64 and FY 2064/65 resulting into similar rise in the Capital Fund.

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

4.1.2 Risk-Weighted Assets

The Risk-Weighted Assets are derived by calculating the amount from the respective balance sheet and off-balance sheet items with the prescribed

weightage. The assets are categorized into five types while assigning weightage to them. NRB has assigned weightage of 0%, 10%, 20%, 50% and 100% according to their nature of risk bearing, which is based on the standard of Basel Committee.

The Risk-Weighted Assets of NIC Bank has been illustrated in Table 4.2. The table shows Risk-Weighted Assets of the bank over the period of last six years from FY 2059/60 to FY 2064/65.

Table 4.2

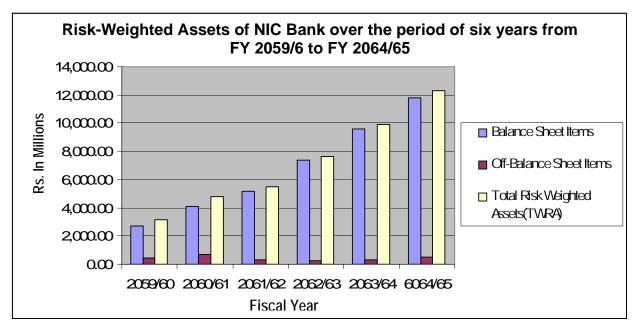
(Rs. In million)	(Rs.	In	mil	lion)
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Fiscal	Balance Sheet	Off-Balance	Total Risk Weighted
2059/60	2,739.08	410.66	3,149.74
2060/61	4,100.93	671.71	4,772.64
2061/62	5,184.71	314.72	5,499.44
2062/63	7,380.37	275.76	$7,\!656.13$
2063/64	9,565.96	339.1	9,905.10
6064/65	11,824.28	496.85	12,321.13

(Source: Annual Reports of NIC Bank)

The TRWA of the bank has been increasing gradually in the last six 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 NPR. 3,149.74 million during FY 2059/60 with Balance Sheet Items amounting to NPR. 2,739.08 million and Off-Balance Sheet Items amounting to NPR. 410.66 million. By FY 2064/65, the TRWA increased to NPR. 12,321.13 million with NPR. 11,824.28 million as Balance Sheet Items and NPR. 496.85 million as Off-Balance Sheet Item.

Figure 4.2 Trend of RWA of NIC Bank



The Figure 4.2 shows the increasing trend of RWA in the six years period from FY 2059/60 to FY 2064/65. The trend is similar with Balance Sheet Items but Off-Balance Sheet Items show fluctuating trend.

4.1.3 Deposit Trend of NIC Bank

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

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

The deposit collection trends of NIC for last six fiscal years can be viewed in the Table 4.3 which also includes the national total and the share of NIC Bank on it.

Table 4.3 Deposit Collection Trend of NIC Bank and National Totalover the period of six years from FY 2059/60 to FY 2064/65

/ T			``
(Rs. i	n m	illio	on)

Fiscal Year	NIC Bank	National Total	Share of NIC
2059/60	3,144.32	228,736.40	1.37%
2060/61	5,146.48	258,742.30	1.99%
2061/62	6,241.38	284,115.20	2.20%
2062/63	8,765.95	$327,\!925.28$	2.68%
2063/64	10,068.23	$391,\!152.60$	2.57%
2064/65	13,084.69	475,968.62	2.72%

(Source: Annual Reports of NIC Bank and Banking & Financial Statistics 2008)

The table shows that NIC Bank has been gradually increasing the deposit collection apart from FY 2059/60 when deposit collection has slightly decreased as compared to that of the previous year. It can also been seen that NIC Bank has a very small share in the total national deposit collections. This is because the bank was established during the end of FY 2064/65 and a newly established bank cannot be expected to contribute a lot.

In the FY 2059/60, the bank was able to collect NPR. 3,144.32 million of deposit against the national total of NPR. 228,736.40 million thus contributing 1.37%. End of FY 2064/65 against national total of NPR. 475,968.62 thus making contribution of 2.72%. Though the deposit was more than that of previous year, the contribution to the national total was slightly less.

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

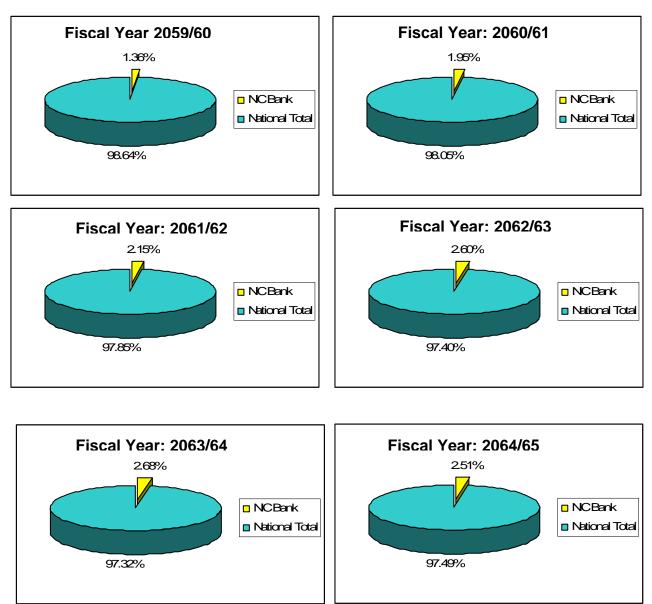


Figure 4.3 Trend of Deposit Collection of NIC Bank against Total National Collection

The figure shows very negligible contribution of NIC Bank regarding national total deposit collection. But the signs are good as the contribution rate is increasing and the bank in the years to come should be able to contribute well towards total national deposit collection.

4.1.4 Credit Trend of NIC Bank

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

Being a commercial bank, one of the prime functions of the NIC bank is to provide credit facility. The lending trend of NIC Bank for the last six fiscal years has been illustrated in the Table 4.4 including national total lending and its share on it.

Table 4.4Credit Trend of NIC Bank and National Total over the
period of six years from FY 2059/60 to FY 2064/65

Fiscal Year	NIC Bank	National Total	Share of NIC
	MIC Dallk	National Iotal	
2059/60	2,419.52	165,119.10	1.47%
2060/61	3,561.14	184,389.10	1.93%
2061/62	4,711.71	209,053.70	2.25%
2062/63	6,655.96	230,424.74	2.89%
2063/64	8,941.40	291,605.76	3.06%
2064/65	11,264.68	333,064.06	3.38%

(Rs. in million)

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

The Table 4.4 shows gradual increment in the flow of credit by NIC Bank during past 6 years and similar with the percentage of contribution to the national total credit. The bank was able to flow NPR. 2,419.52 million of loans during the year 2059/60 against the national total of NPR. 165,119.10 million with contribution of 1.47% to the national total. Individual total credit flow had seen increment. With gradual increment over the period of six years, the total lending of the bank has reached 11,264.68 million against the national total of NPR. 333,064.06 million thus, making contribution of 3.38%.

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

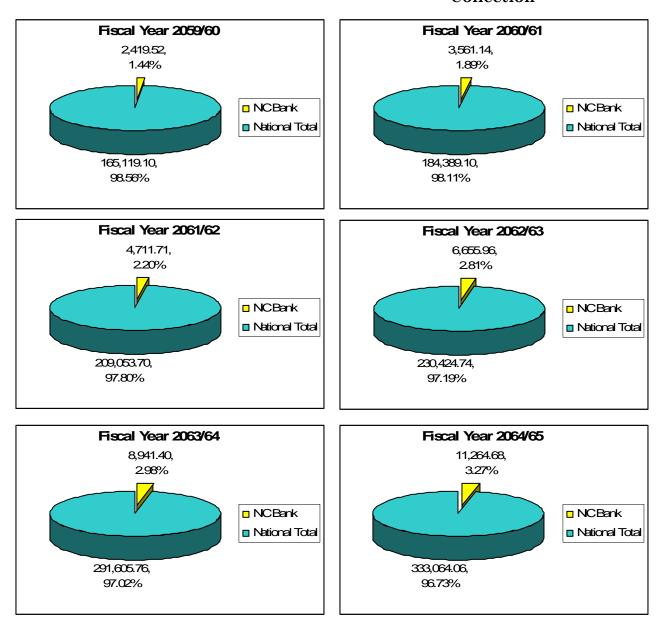


Figure 4.4 Credit Trend of NIC Bank against Total National Collection

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

4.2 Ratio Analysis

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

4.2.1 Capital Adequacy Ratio of NIC Bank

Capital Adequacy Ratio shows the strength of a bank. The calculation of Capital Adequacy Ratios has been presented in Appendix F. The calculated Capital Adequacy Ratio is shown in the Table 4.5 for the FY 2058/59 to FY 2063/64.

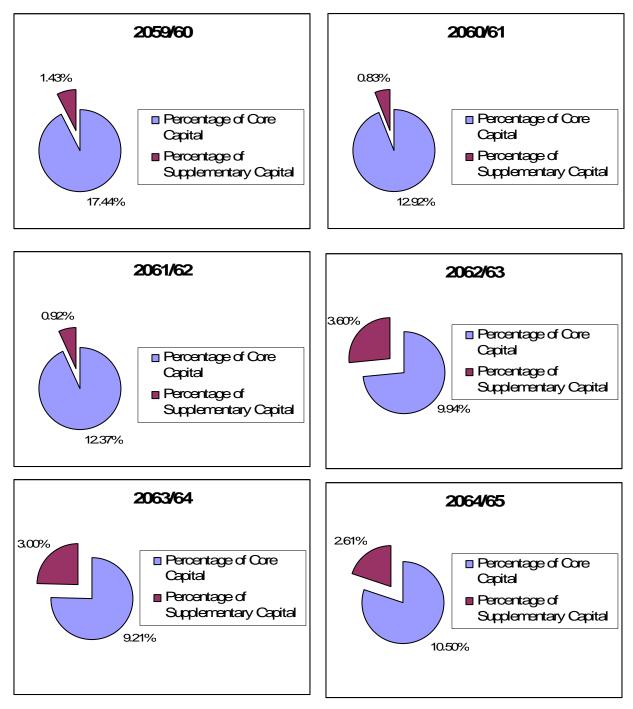
Table 4.5Capital Adequacy Ratio of NIC Bank over the period of
six years from FY 2058/59 to FY 2063/64

(Rs. In million)

Fiscal	Percentage of	Percentage of	Percentage of
Year	Core Capital	Supplementary Capital	Total Capital
2059/60	17.44%	1.43%	18.87%
2060/61	12.92%	0.83%	13.75%
2061/62	12.37%	0.92%	13.29%
2062/63	9.94%	3.60%	13.54%
2063/64	9.21%	3.00%	12.21%
2064/65	10.50%	2.61%	13.11%

Detail calculations shown in Appendix F.

Figure 4.4 Capital Adequacy Ratio of NIC Bank over the period of six years from FY 2058/59 to FY 2063/64



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

FY 2059/60: Core Capital-5% and Total Capital-10% of RWAFY 2060/61 to 2064/6 : Core Capital-5.5% and Total Capital-11% of RWA

In the FY 2059/60, the bank has Total Capital Fund at 18.87% of Risk Weighted Assets with the NRB requirement of 10% and this has significantly gone down to 13.11% by FY 2064/65. The NRB requirement was 5.5% Core Capital and Total Capital Fund 11% of Risk Weighted Assets and they have been adequately complied with.

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

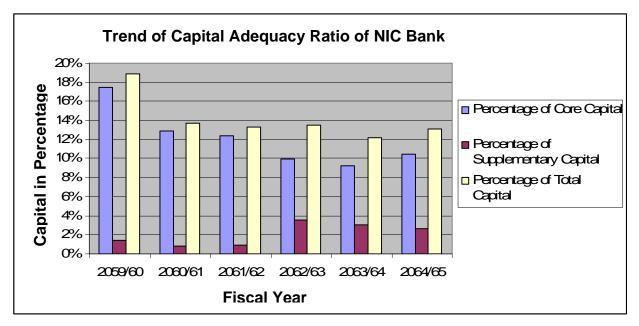


Figure 4.5 Trend of Capital Adequacy Ratio of NIC Bank

The Figure 4.5 displays decreasing trend of the Capital Adequacy Ratios of the NIC Bank. The Percentage of Total Capital fell sharply during the FY 2060/61 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 six years period.

4.2.2 Capital to Deposit Ratio

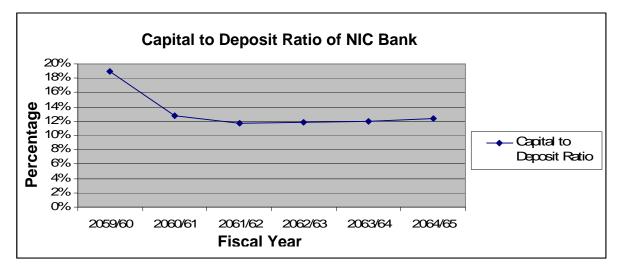
The Capital to Deposit Ratio has a significant role in measuring strength of capital base of a bank. Higher the ratio, safer will be the depositors but is always certain that this ratio always remains less because collection of capital cannot go parallel to the collection of deposit. Calculations of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

 Table 4.6 Capital to Deposit Ratio of NIC Bank

Fiscal Year	Capital to Deposit Ratio
2059/60	18.91%
2060/61	12.75%
2061/62	11.71%
2062/63	11.83%
2063/64	12.00%
2064/65	12.35%

Detail calculations shown in Appendix G.

Figure 4.6 Capitals to Deposit Ratio of NIC Bank



As per Table 4.6, fluctuation has been seen in the Capital to Deposit Ratio of the bank. The ratio was 18.91% during FY 2059/60 and got slightly increased to 12.75% during FY 2060/61. The bank then had sharp fall in the ratio from 18.91% to 12.75% during FY 2060/61. The ratio again decreased during FY 2061/62 but it was in increasing trend in the next two years reaching to 12.35% during FY 2064/65.

4.2.3 Credit/ Deposit (CD) Ratio

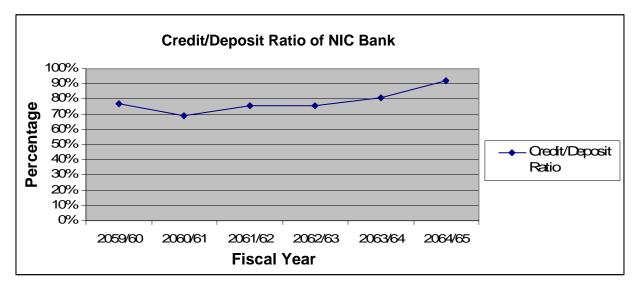
The Credit/Deposit (CD) Ratio is a major tool to examine the liquidity of the bank. It also measures the performance of the bank in terms of resources utilization irrespective of the quality of utilization. Higher the CD Ratio better is the performance regarding deposit utilization whereas such high ratio may not be favoured 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 H. Table 4.7 shows the CD Ratios of the bank for the period of six years from FY 2059/60 to FY 2064/65.

Table 4.7 Credit/Deposit Ratio of NIC Bank

Fiscal Year	Credit/Deposit Ratio
2059/60	76.95%
2060/61	69.20%
2061/62	75.49%
2062/63	75.93%
2063/64	80.81%
2064/65	91.78%

Detail calculations shown in Appendix H.

Figure 4.7 Credit/Deposit Ratio of NIC Bank



The Table 4.7 shows a quite consistent CD Ratios of the bank in the past six year's period beginning from FY 2059/60 to FY 2064/65. The ratio has been ranging from 69% to about 91.78% 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 76.95% intact during FY 2059/60 with slight increase in the following year. The ratio then fell to 69.20% during FY 2060/61 and after that the ratio has been consistently increased reaching 91.78% during FY 2064/65.

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 coefficient are presented below in the Table 4.8.

Correlation between	Values
Capital & Deposit	0.98
Capital & Credit	0.99

Table 4.8 Correlation Co-efficient

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

4.4 <u>Comparative Analysis of Significance of Ratios of the Bank with</u> that of Industry Average

In this section, the Capital Adequacy, Capital to Deposit Ratio and Credit to Deposit Ratio of the bank calculated in Section 4.2 have been compared and analyzed with that of the industry average to check their significance. The industry average here refers to the average of the commercial banks excluding the data of NBL and RBB. These banks are excluded because these are the oldest state owned commercial banks with huge negative Capital Fund, huge amount of Credit and Deposit. The inclusion of the data of these banks creates 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 Bank of the period of 5 years have been calculated in Appendix K and illustrated below.

Table 4.9Comparison between Industry Average Capital AdequacyRatios and that of the bank

FY	Industry Average Ratios	Ratios of NIC Bank
2059/60	16.72%	18.87%
2060/61	12.96%	13.75%
2061/62	11.40%	13.29%
2062/63	11.34%	13.54%
2063/64	10.14%	12.20%

Detail calculations shown in Appendix K. (Department of Industry did not published 2064/65 yet)

Figure 4.9 Comparison between Industry Average *Capital Adequacy Ratios* and that of the bank

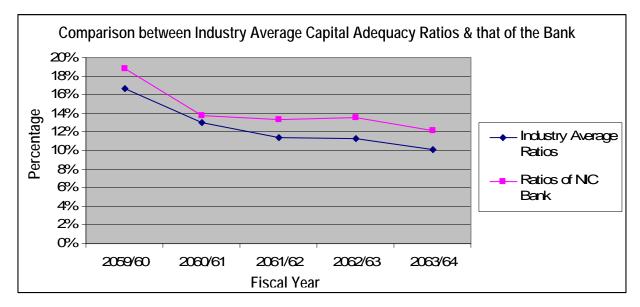


Table and figure 4.9 shows that all the ratios of the bank in the study period of 5 years are up and above the industry average. The industry average was

16.72% during FY 2059/60 whereas the ratio with the bank was comfortably high with 18.87%. Similarly, the ratios of the bank were higher as compared to that of the industry average in the following years as well. During FY 2063/64, the industry average ratio was 10.14% whereas the ratio for the bank was 12.20%. Therefore, with comfortably higher ratios of the bank as compared to that of the industry average, it can be said that Capital Adequacy Ratios of the bank are better.

Table 4.10 Comparison between Industry Average Capital Fund toDeposit Ratios and that of the bank

FY	Industry Average Ratios	Ratios of NIC Bank
2059/60	10.24%	18.91%
2060/61	9.37%	12.75%
2061/62	9.56%	11.71%
2062/63	10.34%	11.83%
2063/64	9.38%	12.00%

Detail calculations shown in Appendix L.

Figure 4.10 Comparison between Industry Average *Capital Fund to Deposit Ratios* and that of the bank

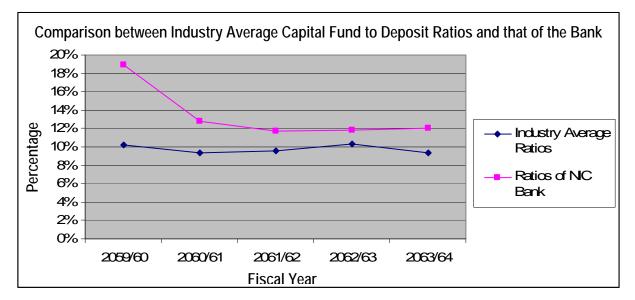
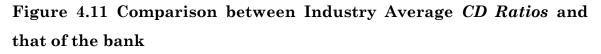


Table & figure 4.10 shows that all the ratios of the bank in the study period of 5 years are up and above the industry average. The industry average was 10.24% during FY 2059/60 whereas the ratio with the bank was comfortably high with 18.91%. Similarly, the ratios of the bank were higher as compared to that of the industry average in the following years as well. During FY 2063/64, the industry average ratio was 9.38% whereas the ratio for the bank was 12.00%. Therefore, with comfortably higher ratios of the bank as compared to that of the industry average, it can be said that Capital Fund to Deposit Ratios of the bank are certainly better.

Table 4.11 Comparison between Industry Average *CD Ratios* and that of the bank

FY	Industry Average Ratios	Ratios of NIC Bank
2059/60	63.84%	76.95%
2060/61	64.83%	69.20%
2061/62	69.91%	75.49%
2062/63	68.46%	75.93%
2063/64	71.51%	88.81%

Detail calculations shown in Appendix M.



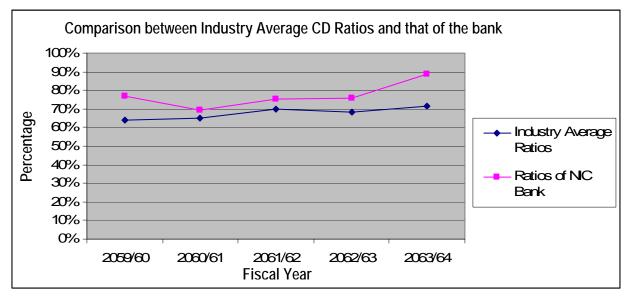


Table 4.11 shows that all the ratios of the bank in the study period of 5 years are up and above the industry average. The industry average was 63.84% during FY 2059/60 whereas the ratio with the bank was comfortably high with 76.95%. Similarly, the ratios of the bank were higher as compared to

that of the industry average in the following years as well. During FY 2063/64, the industry average ratio was 71.51% whereas the ratio for the bank was 88.81%. Therefore, with comfortably higher ratios of the bank as compared to that of the industry average, it can be said that CD Ratios of the bank are absolutely better.

4.5 Impact of Capital Adequacy Norms on NIC Bank

4.5.1 Study of Changes in Capital Fund

The Capital Adequacy Norms have greater impact on changes in capital fund of commercial banks. Table 4.1 has already presented the components of capital that are included in capital fund of NIC Bank. The Table 4.12 shows the increment in the capital funds of the bank in the form of amount and percentage both.

Table 4.12 Changes in Capital Fund of NIC Bank

Fiscal	Total Capital	Amount	Percentage
Year	Fund	Increased	Increment
2059/60	594.51	4.73	0.80%
2060/61	656.36	61.85	10.40%
2061/62	730.99	74.62	11.37%
2062/63	1,036.84	305.85	41.84%
2063/64	1208.61	171.77	16.57%
2064/65	1613.63	313.780	

At the beginning of the study period, the bank had total capital fund of Rs. 589.78 million which has been increased up to Rs. 1,208.61 million by the end of the FY 2063/64. Both the increment in percentage and amount are seen fluctuating. The rate of increments in amount is variable as the increment

during 2059/60 was Rs. 4.73 million followed by sharp increment of Rs. 61.85 million in the following year. The increment in amount was normal with increment of Rs. 74.62 million during FY 2061/62 but a dramatic change of 305.85 million was observed during FY 2062/63. Similarly, the increment rate in percentage during 2060/61 and 2061/62 was 10.40% and 11.37% respectively, and suddenly the increment rose to 41.84% during FY 2062/63. With an increment of 16.57%, the total capital fund has reached to 1208.61 million in FY 2063/64.

On review of the financial statements of the FY 2063/64, it was clearly seen that major reason for increment in capital fund was mainly due to huge portion of Proposed Bonus Shares and General Reserve Fund. Similarly during Fiscal Year 2062/63, it was found that the major reason for such dramatic increment in capital fund was due to the issuance of Unsecured Subordinated Term Debt amounting to Rs. 200 million. This term debt constitutes the component of supplementary capital and thus, resulted into sudden increment in the capital fund. The reason for sharp increment in capital fund during FY 2060/61 was due to the establishment of the Capital Adjustment Reserve of Rs. 50,000,000.00 out of the profit earned. This has been done to meet the capital requirement of NRB that commercial banks should have Paid - Up Capital of Rs. 2 billion. The impact of the norms thus caused the bank to increase capital fund to meet the NRB requirements.

4.5.2 Study of Changes in Paid Up Capital

It has been observed in Table 4.12 that the capital base has been increased to meet the NRB requirements. Since, the capital adequacy norms require that the core capital should at least be 50% of the capital base; the bank has been trying to increase its core capital. The major portion of the core capital is paid up capital, so, the table 4.13 shows the changes in the paid up capital of the bank in the six years period beginning from 2058/59 to 2063/64.

 Table 4.13 Changes in Paid Up Capital of NIC Bank

(Rs.	in	mil	llion))
(IUD)	***	11111		

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

Table 4.5 shows the capital adequacy requirements of NRB and condition of NIC Bank and it is very clear that the bank is always ahead of the capital adequacy requirements of NRB, so, no major changes in Paid Up Capital has been observed apart from the FY 2062/63. It has always been a major advantage that the bank has been established with strong capital base of Rs. 500 million and thus, has always helped it to meet the NRB requirements. During FY 2062/63, paid up capital was increased with the distribution of bonus shares in the ratio 5:1. This has been done by the bank as a step to meet the NRB requirement of capital base of Rs. 2 billion. An increment of 20% has been observed during FY 2062/63 due to the distribution of bonus shares. During FY 2063/64, paid up capital of the bank increased by NPR 60 million and has reached to NPR 660 million due to payment of 10% bonus shares in the FY 2063/64.

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

4.5.3 Study of Response of Officials of NIC Bank

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

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

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

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

4.6 <u>Study of Perception of Depositors on Commercial Banks</u>

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

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

Out of the 67 respondents, 46.27% said that physical security arrangement of a bank is most important to make a depositor's money safe, 23.88% agreed that an adequate capital is required to make a depositor's money safe. 17.91% of the respondents opine that profitability of the bank is important whereas 11.94% referred to the status of the bank as most important. 41.79% respondents think that a bank should pay an attractive interest rate to attract more deposits, 17.91% urged to arrange proper security, 13.43% insist on to achieve a good profit. But only 16.42% advised to maintain adequate capital fund while the remaining 10.45% referred to other reasons that attract deposits to a bank.

Main Findings and Conclusion

5.1 <u>Summary</u>

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

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

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

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

5.2 Main Findings

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

Capital Fund: Capital Fund of NIC Bank has grown consistently over the study period comprising of FY 2059/60 to FY 2064/65. The bank had capital fund of Rs. 594.51 million in FY 2059/60 which increased slightly by 10.40% during FY 2060/61 with capital fund amounting to Rs. 656.36 million. The bank then saw remarkable increment of 11.37% with the capital fund of 730.99 million. FY 2063/64 had the dramatic increment rate of 41.84% with capital fund amounting to Rs. 1,036.84 million. The major reason for such a high rate of increment in FY 2062/63 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. Also capital fund has been increased to 6,600,000,000.00 due to 10% bonus shares.

Capital Adequacy: It is found that the bank is quite successful in maintaining capital adequacy as prescribed by NRB. The bank had capital adequacy ratio of 20.90% during FY 2058/59 against the NRB requirement of 9%. During FY 2059/60, the bank had ratio of 18.87% against the NRB requirement of 10%. In the years followed, the bank had capital adequacy ratios of 13.75%, 13.29%, 13.54%, 12.20% and 13.11% against the NRB requirement of 11%.

After introduction of Unified NRB Directives on 2062-03-29 to be applicable from 2062-04-01 i.e. FY 2062/63, NRB had prescribed capital adequacy ratio of 12% but later vide circular, the capital adequacy ratio had been decreased back to 11% for the year only. But it was not of worry to the bank because it has already maintained capital adequacy ratio of 13.11% during FY 2064/65. **Risk Weighted Assets:** The risk weighted assets is the most significant component to be considered while studying the capital adequacy norms. FY 2059/60 saw the increment rate of 11.60% in the risk weighted assets with the amount reaching to Rs. 3,149.74 million. The following year had dramatic increment of 51.52% and the risk weighted assets increased to Rs. 4,772.64 million. FY 2061/62, 2062/63, 2063/64 and 2064/65 had the risk weighted assets of Rs. 5,499.44 million, 7,656.13 million, 9,905.036 million and 12,321.13 million experiencing the increment rate of 15.24%, 39.22% and 29.37% respectively. It is really commendable performance of the bank to cope with the increasing risk weighted assets and maintain the prescribed capital fund as directed by NRB.

Capital to Deposit Ratio: The capital to deposit ratio of NIC Bank is found to be satisfactory. The ratio was 18.91% during FY 2059/60. The ratio then saw decreasing trend. The ratio decreased to 12.75% by FY 2060/61 and then further decreased to 11.71 during FY 2061/62. The ratio went down to 11.83% by the FY 2062/63 and at last it increased to 12.35% in FY 2064/65.

It is accepted worldwide that an 8% to 10% capital to deposit ratio is safe. In purview of this notion, the bank had satisfactory ratios of 18.91%, 12.75%, 11.71%, 11.83% and 12.00% during last 5 fiscal years but the ratio has gone up satisfactory level to 12.35% in the FY 2064/65. Thus, in total, the bank had satisfactory capital to deposit ratio over the study period.

Credit/Deposit (CD) Ratio: CD ratio is one of the most important ratios for commercial banks. This ratio shows how effectively the bank has been able to utilize its available fund collected from depositors. In this regard, the bank has no satisfactory results as the ratio ranged from 69% to 80.81%. The ratio was 72% during FY 2058/59 and it increased to 76.95% during FY 2059/60. The ratio then declined to 69.20% in the following year but then the ratio has

been increasing. The ratio was 75.49% during FY 2061/62 and 75.93% during FY 2062/63 and 80.81 % in FY 2063/64.

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

Statistical Analysis: The correlation co-efficients between capital and deposit and capital and credit of the bank showed that they are correlated. All co-efficients are more than 0.9 which is near to 1. The co-efficients nearest to 1 show the relationship to be more perfect. Also, the test of hypothesis proved the existence of their relationship.

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

Acceptable Directives: It is observed that the bank has been complying with the requirement of the capital adequacy norms of NRB. The bank has been increasing its capital fund to meet the capital adequacy requirement. The officials of the bank feel that NRB, as a central bank, should set the capital adequacy norms. They all agree that these norms are required to safeguard the interest of depositors. The officials are not quite convinced with the prescribed ratios. Some of them say that the ratios are reasonable and some say that it is not perfect. However, the majority of them opine that these norms are acceptable. **Perception of Depositors:** It has been found that the majority of the depositors deposit their money in bank for security of their money. But they do not seem to be aware of the capital fund of the commercial bank where they are depositing their money. Only 23.88% of the respondents are aware of the fact of the necessity of adequate capital fund to safeguard their money. Also, majority of the respondents say that attractive interest rate is required to attract deposits to commercial banks. It has been studied that depositors in Nepal are not aware of the fact of capital adequacy of a bank, which is very essential to safeguard their deposit.

5.3 Conclusion

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

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

The capital-to-deposit ratio of the bank is adequate and satisfactory. The CD ratio of the bank is very low and needs to be improved immediately. Although the bank is successful to meet the capital adequacy requirement, it seems to be ineffective to fulfil other capital and deposit ratios which are also very much important in regard of safeguarding the money of the depositors. The

bank should highly focus on optimum utilization of the deposits because underutilization of deposit means bearing additional cost as deposits do not come for free.

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

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

5.4 <u>Recommendation</u>

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

- The capital fund of the bank under study is highly depending upon share capital. It is recommended to the commercial banks to follow optimal capital structure which maximizes the market value of the firm. The banks should be able to use some sort of debt financing depending upon its viability. It is notable that the bank has started the debt financing. But still debt financing is an unaccustomed source of financing for commercial banks in Nepal.
- Capital-to-deposit ratio of the bank under study is quite satisfactory.
 There is lack of standard on such type of ratio. Therefore, NRB should set appropriate standard for such ratio to be maintained by commercial

banks. An 8% to 10% ratio may be appropriate for the ratio of capitato-deposit.

- CD ratio of the bank is very low. This showed that the bank has not been effectively using the funds collected from depositors. It is recommended that the bank should concentrate more on credit and investment. The bank shall expand more branches in different places of the country and search investment opportunities there. More credit flow and investment are required to verge on the optimum CD ratio.
- The commercial banks should try to maintain appropriate capita-todeposit and CD ratios as state above. They can no way escape pointing on to the lack of the policy.
- While providing loans and advances, banks should keep in account that the fund they are going to lend is the fund of the depositors and as such, needs to focus on the quality of the investments they make.
- NRB should consult to the various bank officials before setting or resetting standards on such capital adequacy norms. The complaints and criticisms of bank officials should be considered accordingly. Consequently, an optimal standard will be ensured which will satisfy almost everyone.
- It has been found that the depositors are not aware of the fact of the necessity of adequate capital fund to safeguard their deposits. They deposit their money to any bank regardless of adequate capital fund which may endanger safety of their money. Therefore, NRB should initiate awareness programs to make the depositors aware of such fact and carefully think before depositing money in any commercial banks.

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APPENDIX A

Commercial Bank Statistics on Capital Fund and Deposits

1. Nepal Bank Ltd	(6082.40)	39007.51
2. Rastriya Banijya Bank		50346.23
3. Nabil Bank Ltd.		23342.28
4. Nepal Investment Bank Ltd.		24488.86
5. Standard Chartered Bank Nepal Ltd.		24640.39
6. Himalayan Bank Ltd.		30004.67
7. Nepal SBI Bank Ltd.		11445.29
8. Nepal Bangladesh Bank Ltd.		9463.916
9. Everest Bank Ltd.		19097.77
10. Bank of Kathmandu Ltd.		12359.05
11. Nepal Credit and Commerce Bank Ltd.		6500.331
12. Nepal Industrial and Commercial Bank Ltd.		10068.23
13. Lumbini Bank Ltd.		6024.599
14. Machhapuchchhre Bank Ltd.		9474.968
15. Kumari Bank Ltd.		10560.92
16. Laxmi Bank Ltd.		7611.653
17. Siddhartha Bank Ltd.		6625.079
18. Agricultural Development Bank		32406.93
19. Global Bank Ltd.		3023.601
20. Citizen Bank Ltd.		1553.17

(Rs. in million)

Source: Banking and Financial Statistics (Mid Jun/July 2007)

APPENDIX B

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

<u>Risk Weightage on On-Balance Sheet Assets</u>

Notes:

- For the purpose, banks listed in Top Thousand World Banks published every year in July by 'The Banker' from United Kingdom.
 Banks that do not come under above listing should be provided the risk weightage of 100%
- ** Loans other than those provided against FD, NRB Bonds, Government Bonds and Guarantee of Internationally Listed banks

APPENDIX C

<u>Risk Weightage on Off-Balance Sheet Items</u>

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

Notes:

- For the purpose, banks listed in Top Thousand World Banks published every year in July by 'The Banker' from United Kingdom.
 Banks that do not come under above listing should be provided the risk weightage of 100%
- # To assess the maturity period of Guarantee, the date from which the Guarantee has been opened should be considered

APPENDIX D

Table of Capital Fund (Directives Form No. 1.1)

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

(D) Minimum Capital Fund to be maintained	
on the basis of Risk Weighted Assets	
Capital Fund (percentage)	
Core Capital (percentage)	
Capital Fund (Excess/Deficit)	
(bypercentage)	
Core Capital (Excess/Deficit)	
(bypercentage)	

APPENDIX E

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

(Rs. in thousand)

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

Receivable-Interest from Saving Bonds-Interest			
Suspense)			
Other Assets (Other than Advance Tax Deposit)	100		
Total (A)			
Off-Balance-Sheet Items			
Bills Collection	0		
Forward Foreign Exchange Contract	10		
Guarantee having maturity period less than 6	20		
months (Full Amount)			
Guarantee issued against Counter Guarantee of	20		
Rated Licensed Institutions			
Guarantee having maturity period of more than 6	50		
months			
Bid Bond, Performance Bond and Underwriting	50		
related liabilities			
Advance Payment Guarantee	100		
Financial and Other Guarantee	100		
Irrevocable Loan Commitment	100		
Contingent Liability related to Income Tax	100		
All Other Contingent Liabilities including	100	1	
Acceptance			
Total (B)			
Total Risk Weighted Assets (A+B)			

APPENDIX F

Calculation of Capital Adequacy Ratio

(Rs. in million)

Fiscal Year	Core Capital	Supplementary	Total Capital
2059/60	549.43	45.09	594.51
2060/61	616.78	39.58	656.36
2061/62	680.14	50.84	730.99
2062/63	761.13	275.71	1,036.84
2063/64	911.81	296.801	1,208.61
2064/65	1,293.75	321.97	1,615.71

(Source: Annual Reports of NIC Bank)

(Rs. In million)

	Balance	Off-Balance	Total Risk Weighted
Fiscal Year	Sheet Items	Sheet Items	Assets
2059/60	2,739.08	410.66	3,149.74
2060/61	4,100.93	671.71	4,772.64
2061/62	5,184.71	314.72	5,499.44
2062/63	7,380.37	275.76	7,656.13
2063/64	9,565.96	339.1	9,905.10
2064/65	11,824.79	496.85	12,321.13

(Source: Annual Reports of NIC Bank)

We have;

Ratio of Total Capital Fund as:

<u>Total Capital Fund</u> \times 100%

TRWA

Ratio of Core Capital Fund as:

<u>Core Capital</u> × 100% TRWA

Ratio of Supplementary Capital Fund as:

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

Fiscal	Percentage of	Percentage of	Percentage of	
Year	Core Capital	Supplementary Capital	Total Capital	
2059/60	17.44%	1.43%	18.87%	
2060/61	12.92%	0.83%	13.75%	
2061/62	12.37%	0.92%	13.29%	
2062/63	9.94%	3.60%	13.54%	
2063/64	9.20%	3.00%	12.20%	
2064/65	10.50%	2.61%	13.11%	

APPENDIX G

Calculation of Ratio of Capital to Deposit

(Rs. in million)

Fiscal Year	Total Capital Fund	Deposit
2059/60	594.51	3,144.32
2060/61	656.36	5,146.48
2061/62	730.99	6,241.38
2062/63	1,036.84	8,765.95
2063/64	1208.61	10,068.231
2064/65	$1,\!615.72$	13,084.69

We have;

Ratio of Capital Fund to Deposit as:

 $\underline{\text{Total Capital Fund}} \times 100\%$

Total Deposit

Fiscal Year	Capital to Deposit Ratio
2059/60	18.91%
2060/61	12.75%
2061/62	11.71%
2062/63	11.83%
2063/64	12.00%
2064/65	12.35%

APPENDIX H

Calculation of Credit/Deposit Ratio

(Rs. In million)

Fiscal Year	Credit	Deposit
2059/60	2,419.52	3,144.32
2060/61	3,561.14	5,146.48
2061/62	4,711.71	6,241.38
2062/63	6,655.96	8,765.95
2063/64	8,941.398	10,068.231
2064/65	12,008.8	13,084.7

We have;

Ratio of Credit to Deposit as:

<u>Total Credit</u> × 100% Total Deposit

Fiscal Year	Credit/Deposit Ratio
2059/60	76.95%
2060/61	69.20%
2061/62	75.49%
2062/63	75.93%
2063/64	80.81%
2064/65	91.78%

APPENDIX I

<u>Calculation of Correlation Coefficient of Deposit on Capital</u>

(Rs. In million)

Fiscal Year	Total Capital Fund	Deposit
2059/60	594.51	3,144.32
2060/61	656.36	5,146.48
2061/62	730.99	6,241.38
2062/63	1,036.84	8,765.95
2063/64	1208.61	10,068.231
2064/65	1615.72	13,084.7

Let the variable Capital be X and Deposit be Y

	X	Y	x=(X-X)	$y=(Y-\overline{Y})$	xy	x^2	y^2
	594.51	3,144.32	-379.33	-4597.52	1,743,977.26	143,891.25	21,137,190.15
	656.36	5,146.48	-317.48	-2595.36	823,974.90	100,793.55	6,735,893.53
	730.99	6,241.38	-248.85	-1506.46	374,882.57	61,926.32	2,269,421.73
	1,036.84	8,765.95	63.00	1024.11	64,518.93	3,969.00	1,048,801.29
	1208.61	10,068.23	234.77	2326.39	546,166.58	55,116.95	5,412,090.43
	1615.72	13,084.7	641.88	5342.86	3,429,474.98	412,009.93	28,546,152.97
$\Sigma =$	5843.03	46451.06	-	-	6,982,995.22	777,707.00	65,149,550.10

$$\overline{X} = \underline{\Sigma}X = \underline{5843.03} = 973.84$$

N 6

 $\overline{\mathbf{Y}} = \underline{\Sigma} \underline{Y} = \underline{46451.06} = 7741.84$ $N \qquad 6$

Now,

$$r = \underline{\Sigma x y}_{\sqrt{\Sigma x^2} . \sqrt{\Sigma y^2}}$$
$$= \underline{6982995.22}_{\sqrt{777707.00} \sqrt{65149550.10}} = 0.98$$

 \therefore Correlation co-efficient of Deposit on Capital, r=0.98

APPENDIX J

<u>Calculation of Correlation Coefficient of Credit on Capital</u>

Fiscal Year	Total Capital Fund	Credit
2059/60	594.51	2,419.52
2060/61	656.36	3,561.14
2061/62	730.99	4,711.71
2062/63	1,036.84	6,655.96
2063/64	1,208.61	8,941.398
2064/65	1,615.72	12,008.8

(Rs. In million)

Let the variable Capital be X and Deposit be Y

	X	Y	$x=(X-\overline{X})$	$y=(Y-\overline{Y})$	xy	x^2	\mathcal{Y}^2
	594.51	2,419.52	-379.33	-3,964.38	1,503,808.27	143891.25	1,571,6308.78
	656.36	3,561.14	-317.48	-2,822.76	896,169.84	100793.55	7.967,974.02
	730.99	4,711.71	-248.85	-1,672.19	416,124.48	61926.32	2,796,219.40
	1,036.84	6,655.96	63.00	272.06	17,139.78	3969.00	7,4016.64
	1,208.61	8,941.40	234.77	2,557.50	600,424.28	55116.95	6,540,806.25
	1,615.72	12,008.8	641.88	5,624.90	3,610,510.81	412009.93	31,639,500.01
Σ=	58,430.00	38,298.53			7,044,177.46	777,707.00	64,734,825.10

$$\overline{X} = \underline{\Sigma}X = \underline{58,430} = 973.84$$

 $\overline{Y} = \underline{\Sigma}\underline{Y} = \underline{38,298.53} = 6,383.09$ $N \qquad 6$

Now,

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

$$= \frac{7,044,177.46}{\sqrt{777,707.300}\sqrt{64,734,825.10}} = 0.99$$

∴ Correlation co-efficient of Credit on Capital, r = 0.99

APPENDIX K

<u>Calculation of Industry Capital Adequacy Ratios</u>

(Rs. in million)

Fiscal	Total Industry Capital	Total Industry Risk
Year	Fund	Weighted Assets
2059/60	10,938.28	65,420.33
2060/61	$12,\!270.53$	94,680.02
2061/62	$14,\!053.31$	$123,\!274.65$
2062/63	$18,\!621.75$	164,212.96
2063/64	20,297.33	200,170.91

We have;

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

 $\underline{\text{Total Capital Fund}} \times 100\%$

TRWA

Fiscal Year	Industry Capital Adequacy Ratios
2059/60	16.72%
2060/61	12.96%
2061/62	11.40%
2062/63	11.34%
2063/64	10.14%

APPENDIX L

<u>Calculation of Total Industry Capital Fund to Total Industry Deposit</u> <u>Ratio</u>

(Rs. in million)

Fiscal Year	Total Industry Capital	Total Industry Deposit
	Fund	
2059/60	10,938.28	106,827.40
2060/61	$12,\!270.53$	130,941.90
2061/62	14,053.31	147,076.30
2062/63	$18,\!621.75$	180,109.80
2063/64	20297.33	216,182.50

We have;

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

<u>Total Industry Capital Fund</u> \times 100%

Total Industry Deposit

Fiscal Year	Total Industry Capital Fund to Total Industry
	Deposit Ratios
2059/60	10.24%
2060/61	9.37%
2061/62	9.56%
2062/63	10.34%
2063/64	9.38%

APPENDIX M

Calculation of Industry Credit to Industry Deposit (CD) Ratio

(Rs. in million)

Fiscal Year	Total Industry Credit	Total Industry Deposit
2059/60	68,202.70	106,827.40
2060/61	84,886.80	130,941.90
2061/62	102,825.40	147,076.30
2062/63	$123,\!298.40$	180,109.80
2063/64	156134.60	216,182.50

We have;

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

 $\underline{\text{Total Industry Credit}} \times 100\%$

Total Industry Deposit

Fiscal Year	Industry CD Ratios
2059/60	63.84%
2060/61	64.83%
2061/62	69.91%
2062/63	68.46%
2063/64	71.51%

APPENDIX N

Tribhuvan University Faculty of Management Shanker Dev Campus Kathmandu

Study on "Capital Adequacy Norms and its impact regarding NRB Unified Directives-A Case Study of Nepal Industrial and Commercial Bank Limited"

INTERVIEW QUESTIONNAIRE FOR BANK OFFICIALS

NRB has prescribed capital adequacy ratio in its Directives No.

 for commercial banks. Do you think it is necessary that a
 central bank should issue capital adequacy norms for
 commercial banks?

 \square Yes \square No

2) Which stakeholders' interest will be safeguarded most by adequate capital fund?
□ Depositor's Interest
□ Employees' Interest

□Others (Please Specify)

3) Do you think the present capital adequacy ratio prescribed by NRB is justified?
□ Yes, it is perfect □ No, it is high □ No, it is not adequate

- 4) Do you think the revision in capital adequacy ratio is necessary from time to time?
 □ Yes, it is necessary
 □ Not at all
- 5) The capital adequacy ratio is based on risk-weighted assets. Do you think the weightage prescribed by NRB on the on and offbalance sheet items are appropriate?

 \Box Yes, it is perfect \Box Just OK \Box No, it needs revision

- 6) In your opinion, which of the following steps is appropriate for your bank to follow to cope for the compliance of capital adequacy ratio?
 - \square We can increase core capital
 - \square We can increase supplementary capital
 - $\hfill\square$ We can increase both components of capital hand in hand
 - \Box Others (Please Specify)

.....

Name of Interviewee..... Designation.....

APPENDIX N-1

Analysis of Interview Questionnaire for Bank Officials

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

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

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

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

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

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

APPENDIX O Tribhuvan University Faculty of Management Shanker Dev Campus Kathmandu

Study on "Capital Adequacy Norms and its impact regarding NRB Unified Directives-A Case Study of Nepal Industrial and Commercial Bank Limited"

QUESTIONNAIRE FOR BANK ACCOUNT HOLDERS

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

Tick one box per question, unless otherwise indicated.

1) Why do you deposit your money in a bank?

\Box For security of money	For Interest Earning
For Social Status	For Official Purpose
□ Others (Please Specify)	

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

Physical Security Arrangements	🗖 Capital Fund
□ Status	Profitability
□ Others (Please Specify)	

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

\Box Arrange proper security]]	Maintain	adequate
capital fund					
□ Achieve a good profit		Pay	an	attractive	e interest
rate					
□ Others (Please Specify)	• • • • •				

Name:
Address:
Email:
Occupation:
Education:

Thank you for taking your time to complete this questionnaire.

Sradha Tamang MBS Student Shanker Dev Campus Roll No.: 230/060 Kathmandu.

APPENDIX O-1

Analysis of Questionnaire for bank Account Holders

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

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

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