

**A Study on
Capital Adequacy Directives of Nepal Rastra Bank
and its impact on
Nepal Industrial and Commercial Bank Ltd. &
Nepal Credit & Commerce Bank Ltd.**

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*In partial fulfillment of the requirement for the degree of
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DECLARATION

I hereby declare that the work reported in this thesis entitled "**A Study on Capital Adequacy Directives of NRB and its impact on NIC Bank Ltd. & NCC Bank Ltd.**" submitted to Nepal Commerce Campus, Faculty of Management, Tribhuvan University is my original work done in the form of partial fulfillment of the requirement for the Master's Degree in Business Studies (MBS) under the supervision of **Mr. Sushil Bhakta Mathema & Mr. Surya Devkota** of Nepal Commerce Campus.

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VIVA VOCE SHEET

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Entitled:

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NIC Bank Ltd. & NCC Bank Ltd.**

And found the thesis to be the original work of the student and written according to the prescribed format. We recommend the thesis to be accepted as partial fulfillment for the degree of

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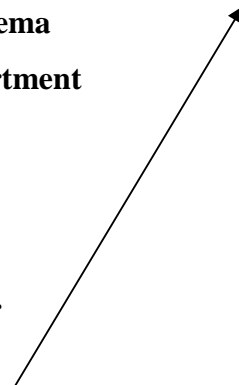
**A Study
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*has been prepared as approved by this Department in the prescribed format of the Faculty of
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Mekh Bahadur Khadka

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Table of Contents

Viva Voice Sheet

Recommendation

Declaration

Acknowledgements

Table of Contents

List of Tables

List of Figures

Abbreviation

	Page No.
Chapter –One: Introduction	1-9
1.1 Background of the study	1
1.1.1 Focus of the study	4
1.2 Introduction to Nepal Rastra Bank (NRB)	4
1.3 Introduction to NIC Bank Ltd.	5
1.4 Introduction to NCC Bank Ltd.	6
1.5 Statement of problem	7
1.6 Objectives of the study	8
1.7 Significance of study	8
1.8 Limitation of study	8
1.9 Organization of the study	9
Chapter-Two: Literature review	11-30
2.1 Conceptual Review	11
2.1.1 Origin and Development of Banks	11
2.1.2 Development of Central Bank	12
2.1.3 Meaning of Central Bank	12
2.1.4 Importance & Functions of Central Banks	13
2.1.5 Meaning of Commercial Banks	14
2.1.6 Overview: Capital and Capital Adequacy	15

2.2	Review of NRB Capital Adequacy Norms for Commercial Banks	19
2.3	Empirical Review	23
2.3.1	Review of Articles and Reports	23
2.3.2	Review of Thesis Works	26
2.4	Research Gap	30
Chapter Three: Research Methodology		31-35
3.1	Research Design	31
3.2	Population and Sample	31
3.3	Data Collection Procedure	32
3.4	Data Analysis Tools	32
	3.4.1 Financial Tools	32
	3.4.1.1 Ratio Analysis	32
	3.4.1.2 Statistical Tools	34
Chapter-Four: Data Presentation and analysis		36-62
4.1	Presentation of Data	36
4.1.1	Capital Fund	36
4.1.1.1	Capital Fund of NIC Bank & NCC Bank	37
4.1.2	Risk-Weighted Assets of NIC Bank & NCC Bank	40
4.1.3	Deposit Trend of NIC Bank & NCC Bank	43
4.1.4	Credit Trend of NIC Bank & NCC Bank & National Total	45
4.2	Ratio Analysis	47
4.2.1	Capital Adequacy Ratio of NIC Bank & NCC Bank	47
4.2.2	Capital to Deposit Ratio	51
4.2.3	Credit/ Deposit (CD) Ratio	54
4.3	Statistical Analysis	57
4.3.1	Correlation co-efficient	57
4.4	Significance and impact of NRB Capital Adequacy Norms on commercial banks	58

4.5	Major Findings	59
Chapter-Five: Summary, Conclusion and Recommendations		63-65
5.1	Summary	63
5.2	Conclusion	63
5.3	Recommendations	64
Bibliography		
Annexes		

List of Tables

Table 4.1	Capital Fund of NIC Bank
Table 4.2	Capital Fund of NCC Bank
Table 4.3	Risk-Weighted Assets of NIC Bank
Table 4.4	Risk-Weighted Assets of NCC Bank
Table 4.5	Deposit Collection Trend of NIC Bank, NCC Bank and National Total
Table 4.6	Credit Trend of NIC Bank, NCC Bank and National Total
Table 4.7	Capital Adequacy Ratio of NIC Bank
Table 4.8	Capital Adequacy Ratio of NCC Bank
Table 4.9	Capital to Deposit Ratio of NIC Bank
Table 4.10	Capital to Deposit Ratio of NCC Bank
Table 4.11	C/D Ratio of NIC Bank
Table 4.12	C/D Ratio of NCC Bank
Table 4.13	Correlation Co-efficient

List of Figures

- Figure 4.1 Trend of Capital Fund of NIC Bank
- Figure 4.2 Trend of Capital Fund of NCC Bank
- Figure 4.3 Trend of RWA of NIC Bank
- Figure 4.4 Trend of RWA of NCC Bank
- Figure 4.5 Trend of Deposit Collection of NIC Bank & NCC Bank against Total National Collection
- Figure 4.6 Credit Trends of NIC Bank & NCC Bank against Total National Collection
- Figure 4.7 Trend of Capital Adequacy Ratio of NIC Bank
- Figure 4.8 Trend of Capital Adequacy Ratio of NCC Bank
- Figure 4.9 Trends of Capital to Deposit Ratio of NIC Bank
- Figure 4.10 Capitals to Deposit Ratio of NCC Bank
- Figure 4.11 C/D Ratio of NIC Bank
- Figure 4.12 C/D Ratio of NCC Bank

ABBREVIATIONS

ADB/N	Agriculture Development Bank Nepal
CAR	Capital Adequacy Ratio
C/D Ratio	Capital to Deposit Ratio
NBBL	Nepal Bangladesh Bank Limited
NBL	Nepal Bank Limited
NCC Bank	Nepal Credit and Commerce Bank Limited
NGBL	Nepal Grindlays Bank Limited (now SCBNL)
NIBL	Nepal Investment Bank Limited
NIC Bank	Nepal Industrial and Commercial Bank Limited
NPA	Non Performing Assets
NRB	Nepal Rastra Bank
RBBL	Rastriya Banijya Bank Limited
Rs.	Rupees
RWA	Risk Weighted Assets
SCBNL	Standard Figureered Bank Nepal Limited
TRWA	Total Risk Weighted Assets

CHAPTER 1

INTRODUCTION

1.1 Background of the study

Nepal is a landlocked country with an agro-based economy. The country is divided into three parts (i.e. mountains, hills, and Terai region) with its geographical natural. Nepal is one of the least developed and very poor countries in the world. More than 90% of the people are still in rural areas and most of them are deprived of minimum physical facilities, which is necessary for human being. Nepalese economy is dependent on traditional agriculture. Agriculture sector contributes only 40% total GDP and is main supplier of raw materials to industries. Development of agriculture sector helps not only to solve the problem of unemployment but also help in the economic development of country.

Agriculture is still the backbone of Nepalese economy. Economic development is not possible without agricultural development. National Planning commission has given more emphasis to this sector. But the real picture of this section is very poor. This is because Nepal has not been able to provide basic facilities to the –farmers like irrigation, electricity and transportation. Despite being second richest in water resources in the world we are compelled to pay dear charges in the world. It provides employment opportunities to more than 80% of labor forces however; it contributes just 40% of Gross domestic product.

The government of Nepal formulated a policy to develop possible agro-based industries for at least to substitute import of industrial and consumable goods. The basic goal of government policy was self-sufficiency where saw other way to generate revenue by operating industrial unit and creation of employment opportunities through this sector.

Financial section is the lifeblood of the commercial and industrial activities. So commercial bank and other financial institutions can play a vital role in giving a direction to economy's development by financing the requirement of trade and industry in country. They collect the saving from community and transfer to the require section of trade and industries, so that banking section development is necessary to economy development in the overall development

of the banking system in Nepal, the Tejarath Adda' maybe regarded as the father of modern banking institution and for a quite a long time. It delivered as the father of modern banking institution and for a quite a long time. It delivered a good service to government employees as well as to general public, however, the concept of modern financial institutions in Nepal was introduced when late former bank, Nepal Bank Limited in 1994 B.S. Before establishment of Nepal Bank Limited, People fulfilled their credit needs from unorganized market of private money lenders. Presently, there are thirty two commercial banks operating their financial activities in the different part of country. They provide modern banking facilities like ATM Card, Debit and Credit Card to their Valuable customers.

Banking is a spread business, which lives from the difference between receiving and paying interest on capital. To generate an income bank attempts to keep high interest rates on its services while securing cheap access to the capital. Hence the price of financing determines its structure. As equity predominantly perceived to be more expensive than debt, it is plausible, that banks maintain high ratios of debt trying to lever up its earnings. In this context it is also understandable why bank executives build an opposition against strengthened capital requirements, which imply substantial raise in equity. Their claims do not seem wrong, but the question is how they define expensiveness and at which cost comes the "cheapness" of debt.

The problem of optimal capital structure is not new. The first thorough research on the subject started with the article of M. Miller and F. Modigliani in the American Economic Review: "The Cost of Capital, Corporation Finance and the Theory of Investment". The economists illuminated the fact, that whatever financial structure the firm might have, it is completely irrelevant to its value, which depends only on the income from its assets. This statement sounds contradictory to the managers' behavior, who compose their bank balance sheet according to the price for capital resources. That is however consistent with the theory. The Miller and Modigliani Irrelevance Theorem (M&M henceforth) holds only under certain assumptions, such as operating in perfect financial markets, with no transaction or bankruptcy costs, no taxes, symmetric information or any other arbitrage allowing frictions. As such ideal conditions are only theoretically possible, the proposition is better used as a scale to measure market distortions. In other words, which of the prerequisites may fail in order the capital structure to matter? Having an answer to this question and modifying the corresponding parameters, it is possible to steer the form of funding. The most common mechanisms that authorities apply to banks are taxes and deposit guarantees.

Under the current regulatory framework, debt has two major advantages over equity. First, debt possesses the advantage of tax shield and second, it provides a safety net, as the government gives subsidies and therefore is taking over a portion of risk. That allows banks to pay investors less and thus to generate more income. Lacking such favorable characteristics, equity is perceived to be more expensive. It is true, but cannot be generalized. One has to distinguish between social and private costs. The same conditions do not have the same implications for banking executives and for shareholders; the correlation of their individual interests is often negative. It is also important to mention the time perspective. In the short term, benefits of cheap financing may outweigh the risk concerns. But in the long term, the probability of default will rise, making leveraged structure highly fragile and expensive. Many economists point out that the system designed today gives the management incentives to pile up debt and to shun equity, and thereby setting the economic system on the brink of failure. It is therefore very interesting to follow the evolution of capital regulation from the roots

NRB issued Unified Directives to be complied by all financial institutions of the country. The Directives consist of 17 volumes. The NRB Directive no. 1 states about the Capital Adequacy Norms for bank and financial institutions indicating the requirements of maintaining the Capital Fund to the prescribed ratios. The directives are said to be based on the internationally accepted norms of Basel-2 Committee, which is the advanced form of Basel-1. The Basel Committee on banking supervision is a committee of banking supervisory authorities, which was established by the central bank governors of the group of ten countries in 1975. It consists of senior representatives of bank supervisory authorities and central banks from Belgium, Canada, France, Germany, Italy, Japan, Luxembourg, the Netherlands, Sweden, Switzerland and the United Kingdom and the United States. It usually meets at the bank for international settlements in Basel, Switzerland, where its permanent secretariat is located.

1.1.1 Focus of the study

The study is based on the capital funds of the banks which is supposed to be adequate as per the NRB directive no. 1, which is related with the 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 norms is to safeguard the interest of the depositors. As per these norms, bank capital has been divided into two categories which are generally known as Tier-1 and Tier-2. At present, there are total 32 commercial banks in Nepal. Keeping in the view of the striving commercial banks, the thesis report, as case study, analyzes the matters, issues and problems related to capital funds of NIC Bank and NCC Bank. The thesis report is mainly focused on accordance of the capital adequacy norms of Nepal Rastra Bank (NRB) by these commercial banks.

1.2 Introduction to Nepal Rastra Bank (NRB)

Nepal Rastra Bank is the central bank of Nepal. NRB was established in 1955 under the Nepal Rastra Bank Act, 2012 BS. Now, NRB is running under a new act – Nepal Rastra Bank Act, 2058 BS. Before 1955, the functions of a central bank were performed by the government itself. NRB is the only authority to issue Nepalese Rupees currency. It has right to fix exchange rates with other convertible currencies. However, the exchange rates are extremely depended upon the Indian currency. Being the central bank of the country, the ownership of NRB is with Government of Nepal. But, the management of NRB is not controlled by Government of Nepal. NRB has 12 branches throughout the Kingdom of Nepal including the Head Office at Baluwatar and the Main Banking Office at Thapathali in Kathmandu. NRB has been established as the regulatory body for banks and financial institutions of Nepal. So, it has right to constitute rules and regulations to be followed by banks and financial institutions in the country. All the banks and financial institutions operate under the regulations of NRB. The establishment of such institutions is also in discretion of NRB. To regulate the operations of commercial banks, NRB has issued various directives which include capital adequacy norms to be followed by commercial banks. As per the Nepal Rastra Bank Act, 2058 BS the objectives of NRB are stated as follows:

- a) To formulate and maintain appropriate monetary and foreign exchange policy for stable price and balance of payments situation required for sustainable economic development;
- b) To manage the required liquidity and stability of banking and financial sectors;
- c) To develop secure, healthy, and efficient payment system;
- d) To monitor, supervise and evaluate banking and financial system; and
- e) To enhance trust of citizens in overall banking and financial system within the country.

As well as, Nepal Rastra Bank Act, 2058 BS has prescribed the rights, duties and functions of NRB as follows:

- a) To issue currency notes and coins in the market;
- b) To formulate and implement necessary monetary policy for price stability;
- c) To formulate and implement foreign exchange policy;
- d) To determine the foreign exchange rate adjustment regime;
- e) To operate and manage foreign exchange reserves;
- f) To issue license to commercial banks and financial companies for carrying out financial transactions and regulate, inspect, supervise and monitor such transactions;

- g) To function as the banker, advisor and fiscal agent of Government of Nepal
- h) To function as a bank of commercial banks and financial institutions, and as a lender of last resort;
- i) To establish, promote and regulate the systems of payments, clearing and settlements; and
- j) To carry out other important functions as necessary towards realizing the objectives enjoined by the Act.

1.3 Introduction to Nepal Industrial & Commercial Bank Ltd.(NIC Bank)

Nepal Industrial & Commercial Bank Limited (NIC Bank) commenced its operation on 21 July 1998 from Biratnagar. The Bank was promoted by some of the prominent business houses of the country. The current shareholding pattern of the Bank constitutes of promoters holding 51% of the shares while 49% is held by the general public. NIC Bank has over 34,000 shareholders. The shares of the Bank are actively traded in Nepal Stock Exchange with current market capitalization of about NPR 10,493 million. The Bank has grown rapidly with 36 branches throughout the country while several branches are planned to be opened this year. All branches are inter-connected through optical fiber as well as V-Sat and are capable of providing real time on-line transactions.

NIC Bank was the first commercial bank in Nepal to have received ISO 9001:2000 certification for its Quality Management System standard in the year 2006. The Bank has recently been certified under the upgraded ISO 9001:2008 standards for the Bank's Quality System on Commercial Banking Activities for the first time in Nepal. 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 the Bank's Letter of Credit and Guarantee to be accepted/ confirmed by more than 200 banks worldwide. To add to these achievements, 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. This is the fruit of the Bank's outstanding performance backed by belief and support of its customers towards the Bank. 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 a 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 asset growth, in tandem with strengthening the credit culture as well as strategic marketing 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, Special Assets Management, Treasury and Liability Marketing and Transaction Banking all of which are supported by the corporate center. The Bank is committed towards providing financial services to its patrons by the means of efficient and cost effective service delivery through its Transaction Banking, Consumer Banking, Business Banking and Treasury divisions. Consumer Banking

comprises of consumer lending, retail credit products and banking services for individuals with dedicated teams. Consumer Banking services include home loans, auto loans, personal loans, education loans, travel loans, etc. Liability Marketing & Transaction Banking comprises 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, etc. Business Banking group comprises of corporate banking business including credit products and other banking services. It also includes corporate transaction banking, trade finance services, foreign exchange and corporate financing solutions including project & infrastructure finance, working capital & term loan 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 exposure to 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 corporate communications.

1.4 Introduction to Nepal Credit & Commerce Bank Limited (NCC Bank)

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

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

At present, NCC Bank provides banking facilities and services to rural and urban areas of the country through its 22 branches. The Bank has developed corresponding agency relationship with more than 150 International Banks having worldwide network.

CAPITAL STRUCTURE

Authorized Capital - Rs. 2 Billion

Issued Capital - Rs. 2 Billion

Paid up Capital - Rs. 1.4 Billion

The Bank is using Pumori Plus, the most commonly used software by Nepalese Banks. The Bank offers Any Branch Banking Service (ABBS) in all 22 branches. Telex and SWIFT are other modes of communication for efficient and effective transmission of information. In order to facilitate the customers with state of art technology, Bank is providing Debit Card facilities under the SCT (Smart Choice Technology) Network jointly in consortium with 40 other member

Banks. This facility enables the customers to withdraw cash from any of the 167 ATM Terminals located at different parts of the country and to purchase goods from more than 743 shopping complexes and departmental stores under POS arrangement.

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

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

The bank is globally connected through various prominent Banks in Asia, Europe and North America like American Express Bank, Standard Figureered Bank, UBAF etc. Bank's services across the globe include remittance, draft arrangement, import and export business, guarantee etc.

1.5 Statement of problem

An adequate Capital Fund is required to safeguard the money of depositors. The adequacy of Capital Fund is the most important aspect of the bank. The bank should pay attention to many things for the adequacy of capital. The study has main focus on the Capital Fund of the NIC Bank and NCC Bank.

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

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

Core Capital Fund	:	6.0 % of the Total Risk Weighted Assets
Total Capital Fund	:	10.0 % of the Total Risk Weighted Assets

1.6 Objectives of the study

The main objectives of the study are as follows:

- a. To examine the Capital Adequacy of NIC Bank Ltd. & NCC Bank Ltd.
- b. To examine the relation of Capital Fund to the other stakes of the bank
- c. To analyze the steps taken by NIC Bank Ltd. & NCC Bank Ltd to fulfill the requirements as per these norms
- d. To analyze the impact of NRB Capital Adequacy Norms on commercial banks, and
- e. To make necessary suggestions and recommendations

1.7 Significance of the study

The study mainly focuses on how Commercial banks provide the safeguard of general public huge amount of deposit to invest it on productive sectors. We can observe that there is a lack of adequate investment opportunity of funds. In such a situation, these Deposits have to be protected by the adequate Capital Fund of respective commercial banks. In fact, the banks should have adequate Capital Fund apart from the deposits of public to make investments.

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

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

1.8 Limitations of the study

The study is limited to the Capital Fund and Capital Adequacy Norms amended of Basel II by Nepal Rastra Bank for commercial banks for strictly implementation it on F/Y 2065/66. Since, it is not possible to take all commercial banks financial data as sample, so the thesis is prepared on the basis of data of NIC Bank Ltd. & NCC Bank Ltd for the implementation of Capital adequacy

Norms. The data and information over the period of 5 fiscal years commencing from FY 2064/65 to FY 2068/69 is used in the study.

Balance Sheets, Profit and Loss Accounts and other Financial Statements are considered as basic source of data. Thus, the study will be mainly based on the secondary data collected from various sources.

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

1.9 Organization of the study

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

Chapter 1: Introduction

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

Chapter 2: Review of Literature

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

Chapter 3: Research Methodology

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

Chapter 4: Presentation and Analysis of data

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

Chapter 5: Summary, Conclusions and Recommendations

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

CHAPTER 2

LITERATURE REVIEW

2.1 Conceptual Review

2.1.1 Origin and Development of Banks

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

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

To begin to the modern banking system, Nepal Bank Limited was established in 1937 as the first bank of the country. Nepal Bank Limited dominated the financial sector such as the Merchant, The Goldsmith and The Moneylender of the country whose sole trader activities was established in the Country. This bank played a major role to boost up the Nepalese economy during that period. Nepal Rastra Bank was established in 1955 as central bank of Nepal, which was very essential for Nepalese economy. The second commercial bank, Rastriya Banijya Bank was established in 1965 under the Rastriya Banijya Bank Act, 2022 with full ownership of the Government of Nepal.

2.1.2 Development of Central Bank

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

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

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

2.1.3 Meaning of Central Bank

The central Bank is the apex bank in a country, which controls, regulates, and supervises the monetary and banking structure. It is owned by the government of the country.

Vaidya (1997), has stated that the central bank is the apex bank in a country that controls all monetary system and banking structure.

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

Clark (1999), has expressed the central bank as bank that often carries out government economic policy, influences interest and exchange rates and monitors the activities of commercial and merchant banks. In this way it functions as the government's banker and is the lender of the last resort to the banking system.

Encyclopaedia Britannica (2002), defines Central Bank as an institution that is charged with regulating the size of a nation's money supply, the availability and cost of credit, and the foreign-

exchange value of its currency. Regulation of the availability and cost of credit may be non selective or may be designed to influence the distribution of credit among competing uses. The principal objectives of a modern central in carrying out these functions are to maintain monetary and credit conditions conducive to a high level of employment and production, a reasonably stable level of domestic prices, and an adequate level of international reserves.

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

2.1.4 Importance & Functions of Central Banks

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

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

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

Objectives between a central bank and other commercial banks are different. The main objective of a central bank is to assist the government to implement economic politics without any profit

motive, where as the main objectives of other banks is to earn profit by mobilizing funds collected from the general public. As well as the central bank plays the role of guardian and parents to other commercial banks.

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

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

2.1.5 Meaning of Commercial Banks

The Banks, which perform all kinds of banking business, are known as Commercial Banks. Generally Commercial banks deal with finance, trade and Commerce. Rosenberg (1982) has stated commercial bank as an organization Figureered either by the Comptroller of the Currency and known as` a national bank or Figureered by the state in which it will conduct the business of banking. A commercial bank generally specializes in demand deposits and commercial loans.

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

"Bank is an institution that deals in money and substitutes and provides other financial services. Banks accept deposits and make loans and derive a profit from the difference in the interest rates paid and charged and other gains, respectively. Some banks also have the power to create money. Commercial bank is a bank with the power to make loans that, at least in part, eventually become new demand deposits. Because a commercial bank is required to hold only a fraction of its deposits as reserves, it can use some of the money on deposit to extend loans. When a borrower

receives a loan, his checking account is credited with the amount of the loan; total demand deposits are thus increased until the loan is repaid. As a group, then, commercial banks are able to expand or contract the money supply by creating new demand deposits." (**Encyclopaedia Britannica, 2002**)

"Banking 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, 2010**)

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

2.1.6 Overview: Capital and Capital Adequacy

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

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

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

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

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

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

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

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

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

The **Core Capital** consists of the following components of capital:

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

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

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

The **Supplementary Capital** consists of the following components of capital:

(a) General Loan Loss Provision

Under this head, provision made only against the Pass Loan shall be included.

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

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

(b) Assets Revaluation Reserve

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

(c) Hybrid Capital Instruments

This includes the following instruments:

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

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

(d) Unsecured Subordinated Term Debt

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

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

(e) Exchange Equalization Fund maintained by the licensed institutions authorized to deal in foreign exchange transactions.

(f) Additional Amount of Loan Loss Provision maintained in excess of requirement.

(g) Provision for Possible Loss on Investment and Investment Adjustment Fund.

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

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

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

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

The Capital Adequacy Ratio is calculated by the following formula:

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

2.2 Review of NRB Capital Adequacy Norms for Commercial Banks

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

The norms have prescribed the minimum capital fund requirement, on the basis of the risk-weighted assets. The banks are required to maintain following prescribed proportion of minimum capital fund on the basis of risk weighted assets as applicable from the date 01/04/2065 B.S:

Core Capital : 6% of the risk weighted assets

Total Capital Fund : 10% of the risk weighted assets

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

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

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

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

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

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

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

In the event of non-fulfillment of Capital Adequacy Ratio by any bank, the Board of Directors of the bank shall submit the adequate reasons for not being able to maintain the required capital fund and capital plan or program prepared to fulfill the capital fund requirements within 35 days. NRB shall direct the bank to fulfill the requirements as per submitted capital plan or program and within the time limit prescribed. The bank is not allowed to distribute dividends and bonus shares in such context.

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

- a) CAR below 10% and equal or above 9% Suspension of opening new branch.
 -) Prohibition from establishing new branches.
 -) Prohibition from declaring dividends.
 -) Submit a capital plan for recapitalization of the bank.
 -) Interaction with the senior management on corrective course of action.
- b) CAR below 9% and equal or above 6%
 -) Action required under category 1.
 -) Suspension of lending, investment and credit extension activities.
 -) Prior approval of NRB for acquiring, through purchase or lease, additional fixed assets;
 -) Prior approval of NRB for establishing new business lines;
 -) Other actions under Nepal Rastra Bank Act 2058.
 -) Other actions under Bank and Financial Institution Act 2063.
- c) CAR below 6% and equal or above 3%
 -) Action required under category 2.

-) Restriction on deposit mobilization
 -) Prohibition from acquiring, through purchase or lease, additional fixed assets;
 -) Restrictions on paying incentives, severance packages, management fee, or other discretionary compensation to directors or officers without prior approval of NRB.
 -) Restriction on SLF.
 -) Other actions under NRB Act 2058.
 -) Other actions under Bank and Financial Institution Act 2063.
- d) CAR below 3% and equal or above 1%.
-) Action required under category 3.
 -) Restrictions on salary increments, recruitments and promotions.
 -) Action to directors and chief executive if capital position doesn't improve in six month after initiating action under this category.
 -) Others actions under NRB Act 2058.
 -) Other actions under Bank and Financial Intuition Act 2063.
- e) CAR below 1%
-) Action required under category 4.
 -) Declare the bank as problem and initiate actions under Section 86 of NRB Act.
 -) Suspend existing board of directors and chief executive of the and bring in new board and management.
 -) Initiate steps to dilute the ownership of the existing shareholders.
 -) Other actions under NRB Act 2058.
 -) Other actions under Bank and Financial Institution Act 2063.

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

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

2.3 Empirical Review

2.3.1 Review of Articles and Reports

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 short-run. Or they do not prefer to go for additional share issue simply because they will also have to pay the same dividend as the past to the holders of shares so issued. This becomes the more difficult as the business is not going to expand commensurately. The difficulty is understandable now when every banker is complaining of the lack of new investment projects.

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 ca best function in these capacities by remaining independent from government fiscal policy and therefore uninfluenced by political concerns of any regime. The central bank should also be completely divested of any commercial banking interests.

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

2.3.2 Review of Thesis Works

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 totaling 9% in all. However, according to the Directives, a shortfall in the supplementary capital can be fulfilled by the surplus in core capital. Therefore, in case of HBL, the bank can use excess of Rs. 184.92 million core capital to compensate for the shortfall. But still the bank requires another Rs. 72.6 million to meet the requirement of supplementary capital. Pandey has suggested that HBL should increase the capital base from Rs. 1070 million by at least Rs. 115 million to meet the capital adequacy ratio. For this, the bank should try to increase its supplementary capital as it falls short by Rs. 73 million. The bank should increase its core capital in order to expose itself to more credit risk.

Karmacharya. (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 Figureered 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, (2010), 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 Figureered 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 (2009), 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, (2008), in his study of capital and assets structure of Nepal Industrial Development Corporation (NIDC), has concluded that the financial soundness of a company as well as its strength depends largely upon the capital and assets structure. The capital structure presents its resource capacity and viability whereas the assets structure presents its worthiness. The composition of the capital and assets holds the utmost importance so far the successful and thriving operation of NIDC. Shivakoti prefers the long-term borrowing in form of capital and uses it in long-term loan as assets. The fixed assets, investment in shares and debentures, current assets and liabilities, share capital, reserve and surplus are other components associated with capital and assets structure of NIDC. Shivakoti found that the contribution of different components of capital and assets structure in EBIT of NIDC to be less satisfactory. The relation is positive which showed EBIT was increasing with other variables correlated but the low degree of correlation between them meant the relationship between these EBIT and other variables lack closeness in its increasing trend.

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

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

2.4 Research Gap

Most of researcher study concentrates the NRB directives relating to its purpose and impact to the financial institution by generalized it. Few of them have gone specific about capital adequacy norms but none of them have written over the capital adequacy norms taking NIC Bank & NCC Bank in specific. So, this study is conducted to make a specific review of capital adequacy norms with a specific case of NIC Bank & NCC Bank.

The study is focused on capital adequacy norms fulfilled by the bank and its impact upon it. The study certainly gives clear picture of the compliance of the capital adequacy norms by NIC Bank & NCC Bank and its impact on the bank with reference to the analytical study of Capital Fund, Deposit and Credit.

CHAPTER 3

RESEARCH METHODOLOGY

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

3.1 Research Design

mention descriptive and analytical research design here

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

3.2 Population and Sample

There are total 32 commercial banks presently operating in Nepal. Collecting the data of these entire commercial banks is not possible. Hence, NIC Bank & NCC Bank 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 & NCC Bank.

3.3 Data Collection Procedure

To study the Thesis easier, necessary information and data are collected from both primary sources and secondary as well. For the primary information, research interview and questionnaire are used. The research interview questionnaire, as shown in Appendix, was set to interview bank officials. The research questionnaire as shown in Appendix is 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 & NCC Bank, various publications of Nepal Rastra Bank, magazines, the other publications and the internet (website www.nrb.org.np, www.nicbank.com.np, www.nccbank.com.np) have been used. Also, for other related information, various books and periodicals have been referred from library and some that the researcher self has.

3.4 Data Analysis Tools

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

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

3.4.1 Financial Tools

3.4.1.1 Ratio Analysis

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

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

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

(a) Capital Adequacy Ratio

Capital Adequacy Ratio is the foremost tool to analyze the competency of a Commercial Bank to maintain the Capital Fund as per the norms of Nepal Rastra Bank. Actually, the fundamental objective of this study is to examine Capital Adequacy of NIC Bank & NCC Bank.

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

To measure the adequacy of Total Capital Fund:

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

To measure the adequacy of Core Capital:

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

To measure the supplementary Capital:

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

(b) Capital to Deposit Ratio

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

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

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

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

(c) Credit / Deposit Ratio

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

The CD Ratio is derived by the following formula:

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

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

3.4.2 Statistical Tools

The following statistical tool is used to analyze the data:

(a) Karl Pearson Correlation Analysis

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

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

Where,

N = Number of pairs in observation

X = Product of the first variable

Y = Product of the second variable

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

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

Where,

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

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

CHAPTER 4

DATA PRESENTATION AND ANALYSIS

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

4.1 Presentation of Data

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

4.1.1 Capital Fund

It consists of two types of components viz. Core Capital and Supplementary Capital. Hence, the Total Capital Fund of a bank is derived by adding these two components of capital and subtracting some components from Core Capital as above mention. The Capital Fund of NIC Bank & NCC Bank has been illustrated hereinafter.

4.1.1.1 Capital Fund of NIC Bank & NCC Bank

The capital funds of NIC Bank & NCC Bank have been tabulated in Table 4.1& 4.2 which shows the capital fund of the banks over the period of five fiscal years, i.e., from FY 2064/65 to FY 2068/69.

Table 4.1
Capital Fund of NIC Bank

Rs. In Million			
Fiscal Year	Core Capital	Supplementary Capital	Total Capital Fund
2064/65	1,294.00	320.00	1,614.00
2065/66	1,649.00	306.00	1,955.00
2066/67	1,750.00	260.00	2,010.00
2067/68	2,165.00	367.45	2,532.45
2068/69	2,169.70	208.40	2,378.10

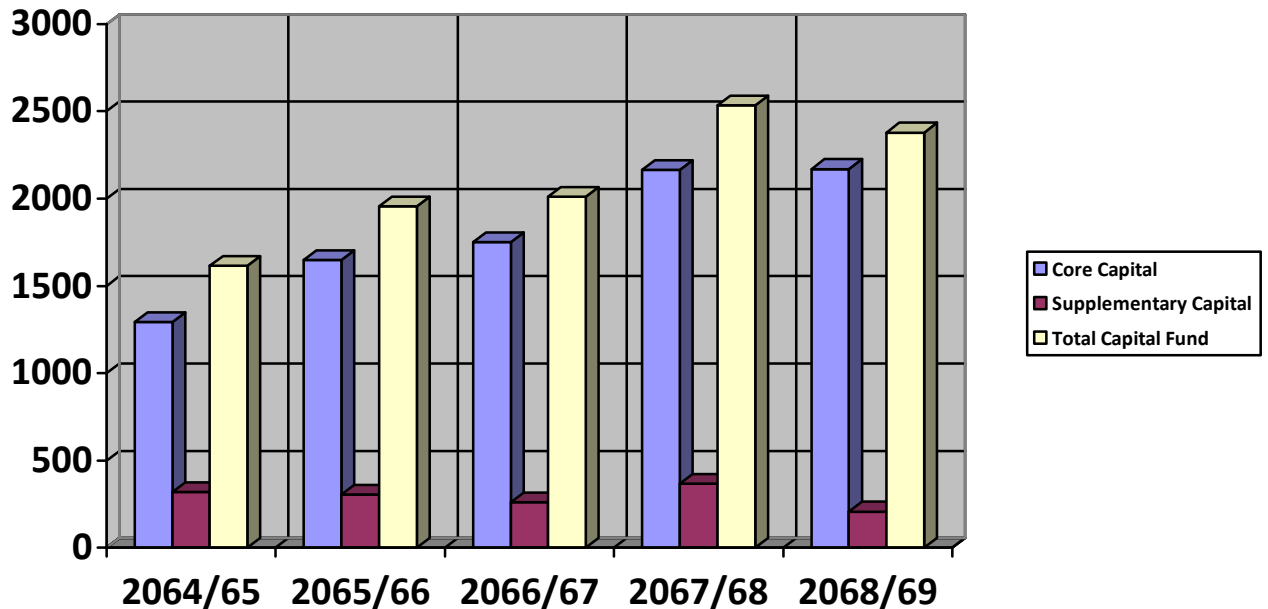
(Source : Annual Reports of NIC Bank from FY 2064/65 to 2068/69)

In the last five years period, the Capital Fund of NIC Bank has seen in increasing trends except in 2068/69. The core capital, supplementary capital and the total capital fund of the bank was Rs. 1294 Million, Rs. 320 Million and Rs. 1614 Million respectively on FY 2064/65, which is reached to Rs. 2165 Million, Rs. 367.45 Million and Rs. 2532.45 Million respectively on FY 2067/68. This shows the growth prospects of the bank. And in 2068/69 total capital fund is reached to 2378.10 million. It is due to reduction in supplementary capital.

The same information can be depicted in the Figure as below.

Figure 4.1
Trend of Capital Fund of NIC Bank

Rs. In Million



The Figure 4.1 shows the increasing trend of Capital Fund of the bank during last five fiscal years except 2068/69. The trend shows that Core Capital, Supplementary capital and total capital fund of the bank is increasing steadily during last fiscal year 2064/65 to 2067/68. But there is slightly decline in supplementary capital and total capital fund in 2068/69

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.

Table 4.2**Capital Fund of NCC Bank**

Rs. In Million

Fiscal Year	Core Capital	Supplementary Capital	Total Capital Fund
2064/65	635.00	49.00	684.00
2065/66	881.00	113.00	994.00
2066/67	1,356.00	135.00	1,491.00
2067/68	1,579.00	90.00	1,669.00
2068/69	1,768.00	133.00	1901.00

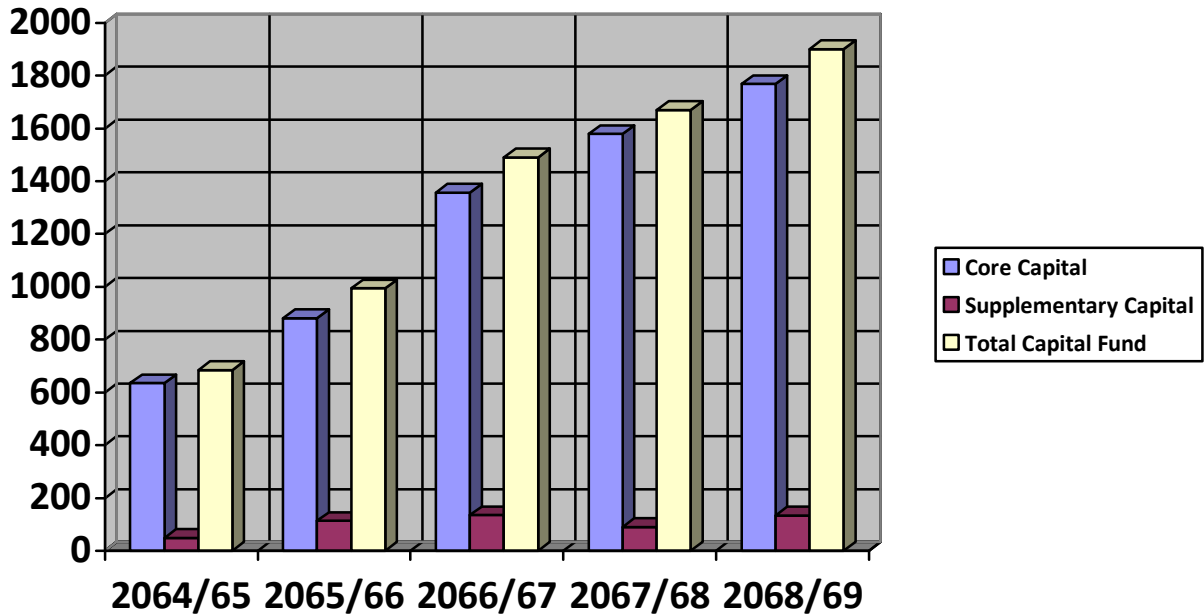
(Source : Annual Reports of NCC Bank from FY 2064/65 to 2068/69)

In the last five years period, the Capital Fund of NCC Bank has seen in increasing trends. At the end of FY 2064/65 the total capital fund of the bank was 684.00 million. From the FY 2064/65 both core capital and supplementary capital of the bank is increasing steadily. The total capital of the bank has reached to Rs. 1901.00 million on FY 2068/69.

The same information can be depicted in the Figure as below.

Figures 4.2**Trend of Capital Fund of NCC Bank**

Rs. In Million



The Figure 4.2 shows the increasing trend of Capital Fund of the bank during last five fiscal years. The trend shows that Core Capital, Supplementary capital and total capital fund of the bank is least on FY 2064/65. But the bank has able to raise the capital fund dramatically from the FY 2065/66.

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

4.1.2 Risk-Weighted Assets

The Risk-Weighted Assets are derived by calculating the amount from the respective balance sheet and off-balance sheet items with the prescribed weighted. The assets are categorized into five types while assigning weighted to them. NRB has assigned weighted of 0%, 10%, 20%, 50% and 100% according to their nature of risk bearing, which is based on the standard of Basel Committee.

The Risk-Weighted Assets of NIC Bank has been illustrated in Table 4.2.1. The table shows Risk-Weighted Assets of the bank over the period of last five years from FY 2063/64 to FY 2067/68.

Table 4.3
Risk-Weighted Assets of NIC Bank

Rs. In Million

Fiscal Year	Credit Risk	Operational Risk	Market Risk	Total Weighted Risk Exposures
2064/65	12,394.00	515.00	89.00	12,998.00
2065/66	15,021.00	647.00	73.00	15,741.00
2066/67	14,620.00	851.00	88.00	15,559.00
2067/68	16,069.00	1,127.00	55.00	17,251.00
2068/69	17,965.00	1,415.00	53.00	19,433.00

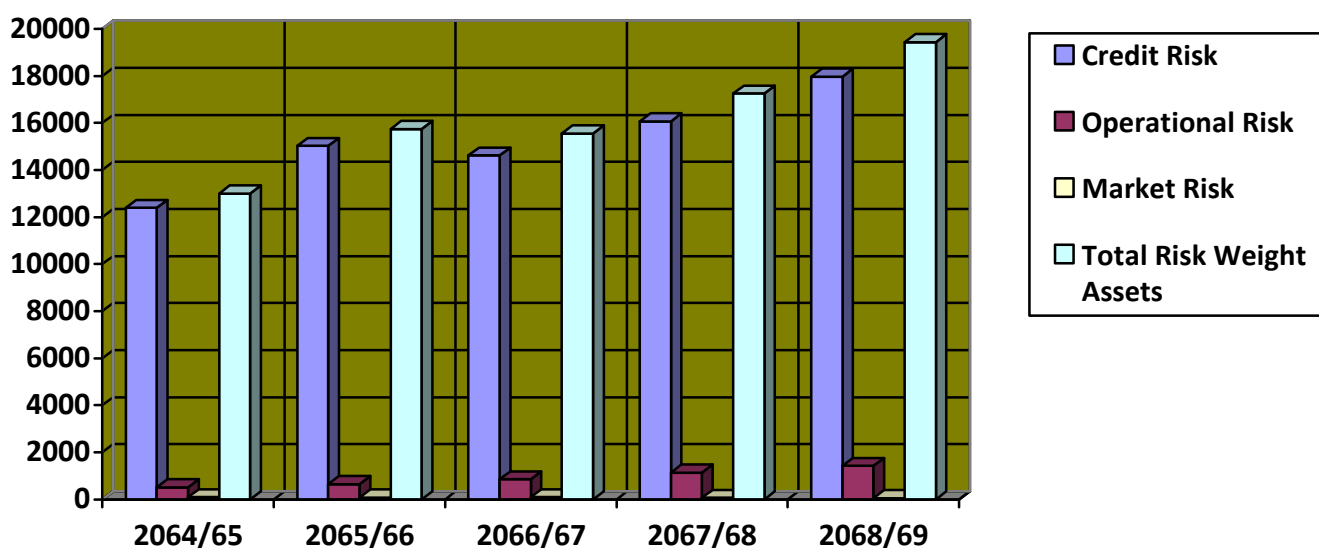
(Source : Annual Reports of NIC Bank from FY 2064/65 to 2068/69)

The TRWA of the bank has been fluctuating during the last five years period. Similar is in the case with credit risk and market risk have been fluctuating. The TRWA of the bank was Rs. 12998 million at the end of F/Y 2064/65. At the end of FY 2068/69, the exposures on credit risk is Rs. 18,954 million, operational risk is Rs. 1415 million and on market risk is Rs. 58 million.

The same information can be depicted in the Figure below.

Figure 4.3
Trend of RWA of NIC Bank

Rupees in million



The Figure 4.3 shows the fluctuating trend of RWA in the five years period from FY 2064/65 to FY 2068/69.

Table 4.4
Risk-Weighted Assets of NCC Bank

Rs. In Million				
Fiscal Year	Credit Risk	Operational Risk	Market Risk	Total Risk Weighted Exposures
2064/65	5,762.00	680.00	51.00	6,493.00
2065/66	8,231.00	697.00	56.00	8,984.00
2066/67	9,872.00	768.00	51.00	10,691.00
2067/68	10,626.00	876.00	51.00	11,553.00
2068/69	15,276.00	876.00	53.00	16,205.00

(Source : Annual Reports of NCC Bank FY from 204/65 to 2068/69)

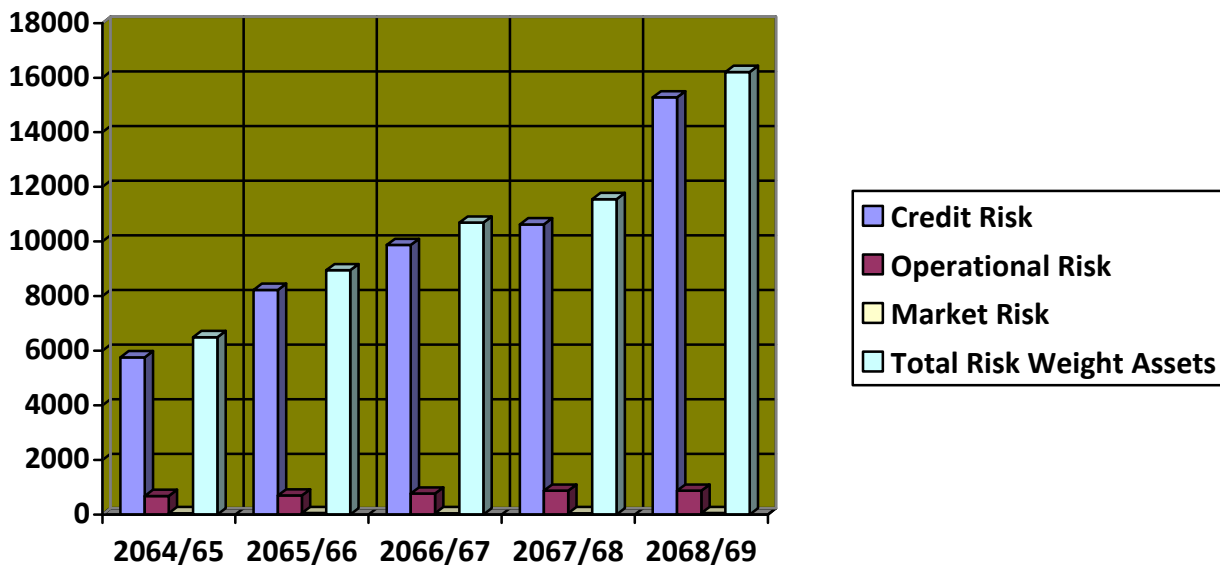
The TRWA of the bank has been in increasing trends during the last five years period. The TRWA of the bank was Rs. 6493 million at the end of F/Y 2064/65. From F/Y 2065/66 to

2068/69, the TRWA increased to Rs. 8984 million, Rs. 10691 million, Rs. 11553 and Rs. 16205 million respectively. The details of the same is presented on the graph below:

Figure 4.4

Trend of RWA of NCC Bank

Rs. In Million



The Figure shows the fluctuating trend of RWA in the five years period from FY 2064/65 to FY 2068/69.

4.1.3 Deposit Trend of NIC Bank and NCC Bank

Deposits from general public by launching different kinds of product are the main function of any Commercial Banks. Verma & Malhotra (1993) has mentioned that a commercial bank has usually access to three sources of fund: capital fund, deposits and borrowings.

It is clear that NIC Bank and NCC Bank could not remain in the business world without collecting deposits. The banks have their own policies to lure deposits from general public. In

this matter, NCC Bank has few successful schemes like NCC Saving Plus Khatat, NCC Subhalabh Plus Bachhat Khata, NCC Mahila Surakshya Bachhat Khata. NIC Bank has also few successful schemes like NIC Life Savings Accounts, NIC Social Account, NIC Business Account, NIC Super Deposit, NIC Double Deposit has played important role in the collection of deposit for the bank.

The deposit collection trends of NIC Bank and NCC Bank for last five fiscal years can be viewed in the Table 4.5 which also includes the national total deposit trend.

Table 4.5

Deposit Collection Trend of NIC Bank, NCC Bank and National Total

Rs. In Million					
Fiscal Year	Deposit of NIC Bank	Deposit of NCC Bank	National Total	Share of NIC Bank	Share of NCC Bank
2064/65	13,085.00	7,320.00	508,905.70	2.57%	1.44%
2065/66	15,580.00	9,127.70	596,897.60	2.61%	1.53%
2066/67	15,969.00	10,824.69	631,282.53	2.53%	1.71%
2067/68	18,394.00	10,951.00	687,587.88	2.68%	1.59%
2068/69	22,112.00	16,485.00	1,071,394.1	2.06%	1.54%

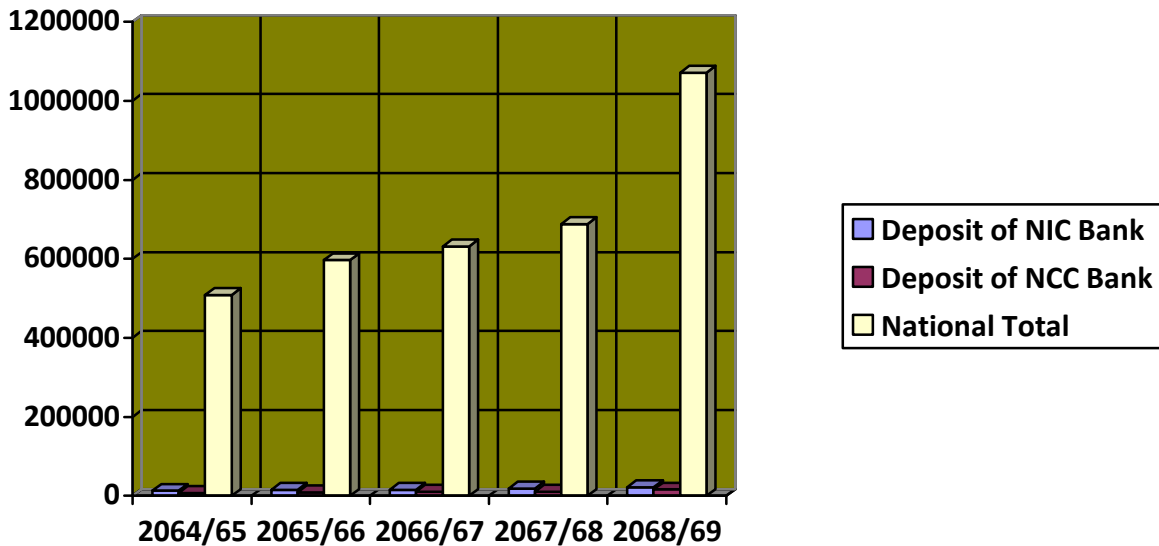
(Source : Annual Reports of NIC Bank & NCC Bank from FY 2064/65 to 2068/69 and Banking & Financial Statics 2012)

The table shows that both of the banks have been gradually increasing the deposit collection during the last five fiscal years. National total deposit level during last five years is increasing gradually. There are altogether 32 commercial banks in Nepal at present. So the shares of deposit to each bank are seen comparatively low.

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

Figure 4.5

Trend of Deposit Collection of NIC Bank & NCC Bank against Total National Collection



The figure shows very negligible contribution of NIC Bank and NCC 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, NCC Bank & National Total:

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

Being a commercial bank, one of the prime functions of the NIC bank and NCC Bank is to provide credit facility. The lending trend of NIC bank & NCC Bank for the last five fiscal years has been illustrated in the Table 4.6 including national total lending and its share on it.

Table 4.6

Credit Trend of NIC Bank, NCC Bank and National Total

Rs. In Million					
Fiscal Year	Credit of NIC Bank	Credit of NCC Bank	National Total	Share of NIC Bank	Share of NCC Bank
2064/65	11,265.00	4,417.80	391,537.70	2.88%	1.13%
2065/66	13,679.00	6,858.00	437,871.40	3.12%	1.57%
2066/67	12,732.00	7,994.72	462,242.06	2.75%	1.73%
2067/68	14,934.00	9,230.00	522,853.30	2.86%	1.77%
2068/69	17,242.00	12,901.00	779,560.90	2.21%	1.65%

(Source: Annual Reports of NIC Bank & NCC Bank from FY 2064/65 to 2068/69 and Banking & Financial Statistics 2012)

The Table 4.6 shows gradual increment in the flow of credit on national total, NIC Bank & NCC Bank during past 5 years. The NIC Bank was able to flow Rs. 11265 million of loans during the year 2064/65 against the national total of Rs. 391537.70 million with contribution of 2.88% to the national total. Similarly, the NIC Bank had flow Rs. 17242 million of loans during the year 2068/69 against the national total of Rs. 779560.90 million with contribution of 2.21%.

Further table 4.6 also shows increasing credit trends of NCC Bank. The Bank was able to flow Rs.44717.80 million of loans during the year 2064/65 against the national total of Rs. 391537.70 million with contribution of 1.13% to the national total. Similarly, credit trends of NCC Bank are on increasing trends and it becomes Rs.779560.90 million till the FY 2068/69.

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

Figure 4.6

Credit Trend of NIC Bank & NCC Bank against Total National Collection

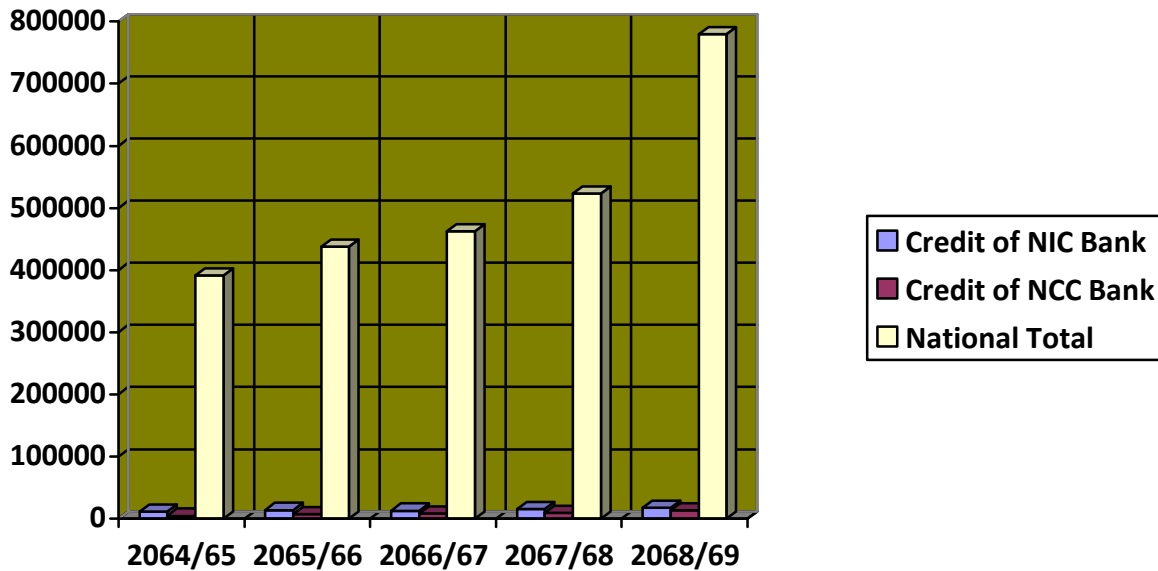


Figure 4.6 shows very small contribution of NIC Bank and NCC Bank for total national flow of credit. As said earlier, this is because the bank is not very old and is still growing and this has been displayed by the steady growth in lending shown by the bank over the period of five years.

4.2 Ratio Analysis

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

4.2.1 Capital Adequacy Ratio of NIC Bank and NCC Bank

The minimum requirements of Capital Adequacy Ratio for NRB requirements were as follows:

FY 2060/61 to 2062/63: Core Capital-6% and Total Capital-12% of RWA

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

FY 2065/66 to Till Date: Core Capital-6.0% and Total Capital-10% of RWA

Capital Adequacy Ratio shows the strength of a bank. The calculation of Capital Adequacy Ratios has been presented in Appendix. The calculated Capital Adequacy Ratio is shown in the Table 4.7 for the FY 2063/64 to FY 2067/68.

Table 4.7

Capital Adequacy Ratio of NIC Bank

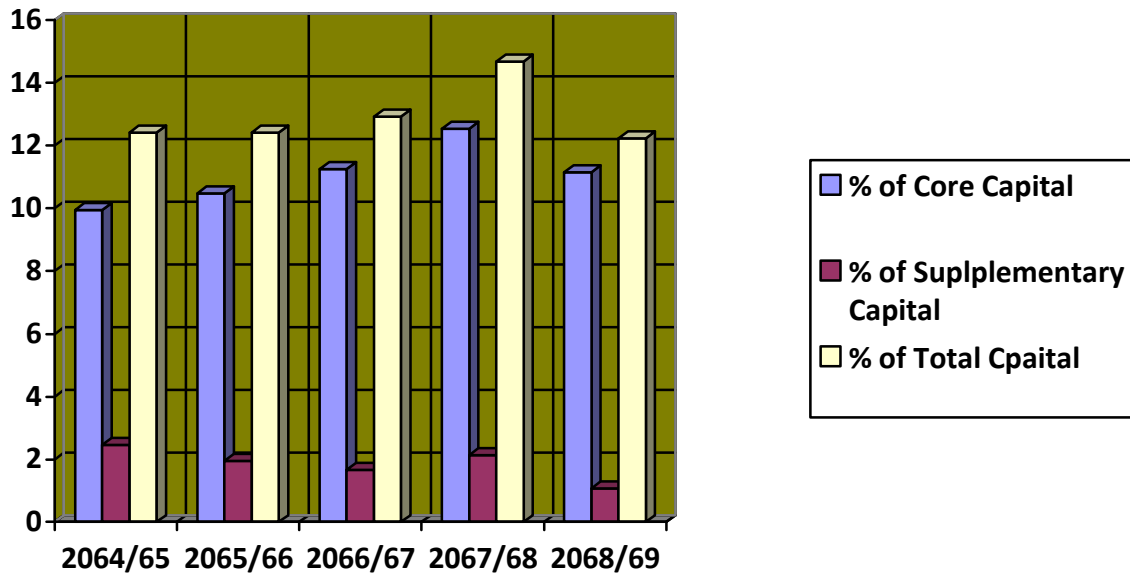
Rs. In Million			
Fiscal Year	% of Core Capital	% of Supplementary Capital	% of Total Capital
2064/65	9.95	2.46	12.41
2065/66	10.48	1.94	12.42
2066/67	11.25	1.67	12.92
2067/68	12.55	2.13	14.68
2068/69	11.16	1.08	12.24

(Source : Annual Reports of NIC Bank from FY 2064/65 to 2068/69)

Above table shows that though the total CAR of the NIC Bank is on increasing trends during the period of 2064/65 to 2067/68. But it is slightly reduction in 2068/69. However above analysis also shows that the bank has successful to maintain the CAR as per the requirement of NRB. The portion of core capital is very excellent on capital mix and it shows the strength of the bank.

The same information can be depicted in the Figure below.

Figure 4.7



Trend of Capital Adequacy Ratio of NIC Bank

The Figure 4.7 displays trend of the Capital Adequacy Ratios of the NIC Bank during last five years and with the norms of NRB Directives.

Table 4.8**Capital Adequacy Ratio of NCC Bank**

Rs. In Million

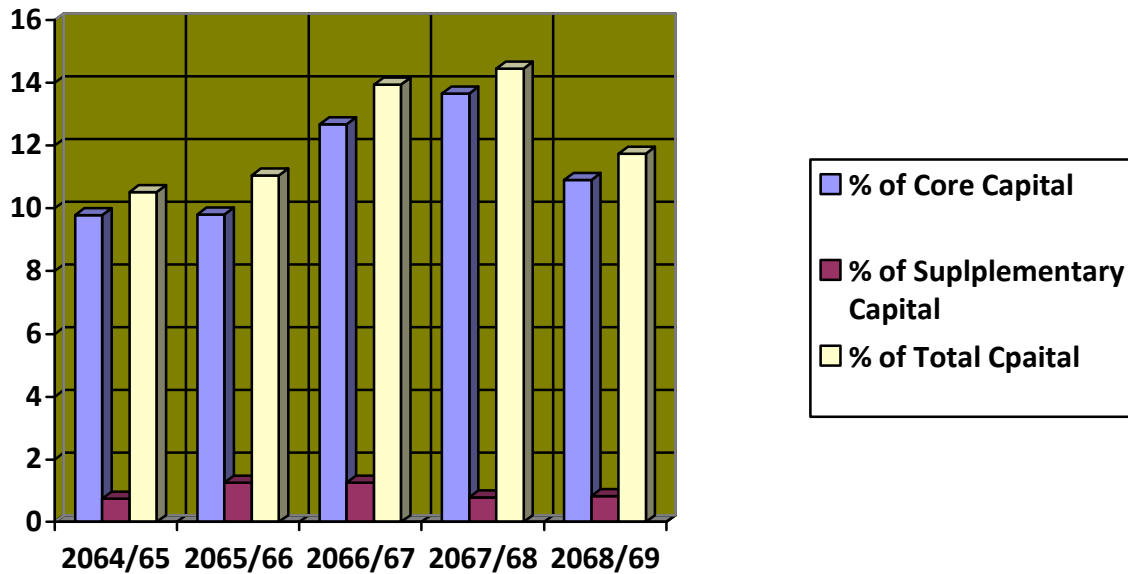
Fiscal Year	% of Core Capital	% of Supplementary Capital	% of Total Capital
2064/65	9.78	0.75	10.53
2065/66	9.81	1.26	11.06
2066/67	12.68	1.26	13.95
2067/68	13.67	0.78	14.45
2068/69	10.91	0.83	11.74

(Source : Annual Reports of NCC Bank from FY 2064/65 to 2068/69)

From the FY 2064/65, the bank has been able to maintain CAR as per the requirement of NRB Directives. At present the CAR of NCC Bank is in increasing except in 2068/69. 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 NCC Bank has been performing well enough to comply with the NRB requirement at present.

The same information can be depicted in the Figure below.

Figure 4.8



Trend of Capital Adequacy Ratio of NCC Bank

The Figure 4.8 displays the increasing trend of the Capital Adequacy Ratios of the NCC Bank during the period of last five years. The figures also prove that the weight of core capital on total CAR is very good which justifies the strength of the bank.

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. The details of capital to deposit ratio of NIC Bank & NCC Bank are presented below:

Table 4.9
Capital to Deposit Ratio of NIC Bank

Fiscal Year	Core Capital	Deposit	Rs. In Million
			Capital to Deposit Ratio
2064/65	1,294.00	13,085.00	9.89%
2065/66	1,649.00	15,580.00	10.58%
2066/67	1,750.00	15,969.00	10.96%
2067/68	2,165.00	18,394.00	11.77%
2068/69	2,169.70	22,111.90	9.81%

(Source : Annual Reports of NIC Bank from FY 2064/65 to 2068/69)

The above table shows that the capital to deposit ratio of NIC Bank is on increasing trends which except in 2068/69. This shows the growth of the bank and safer of the depositors. But in 2068/69 there is slightly reduction in the ration due to drastically increase in deposit. above figures are presented on the below Figure.

Figure 4.9
Trends of Capital to Deposit Ratio of NIC Bank

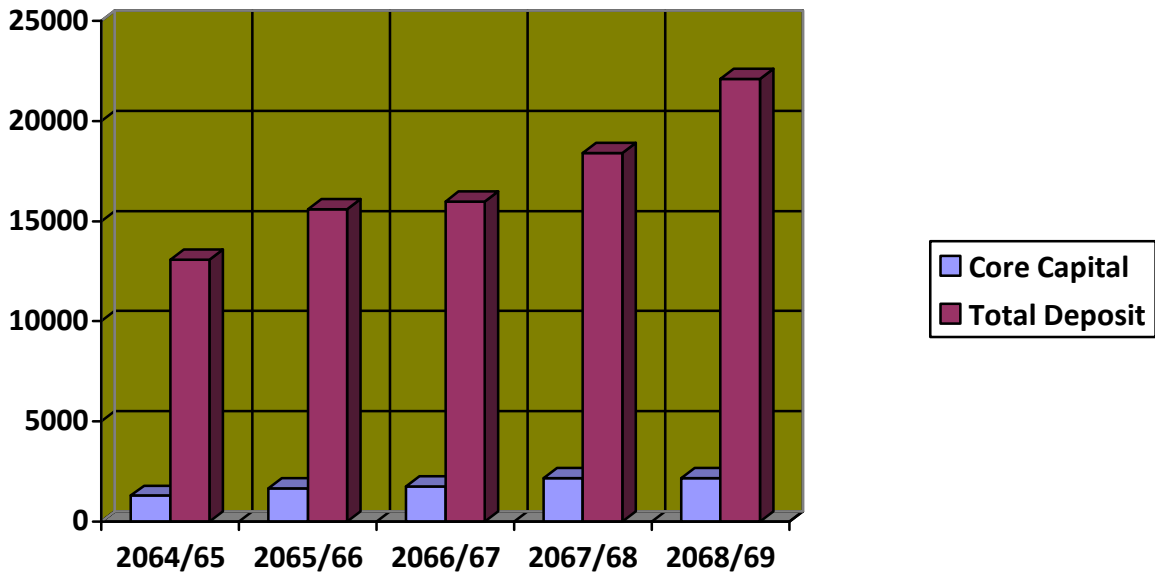


Table No. 4.10

Capital to Deposit Ratio of NCC Bank

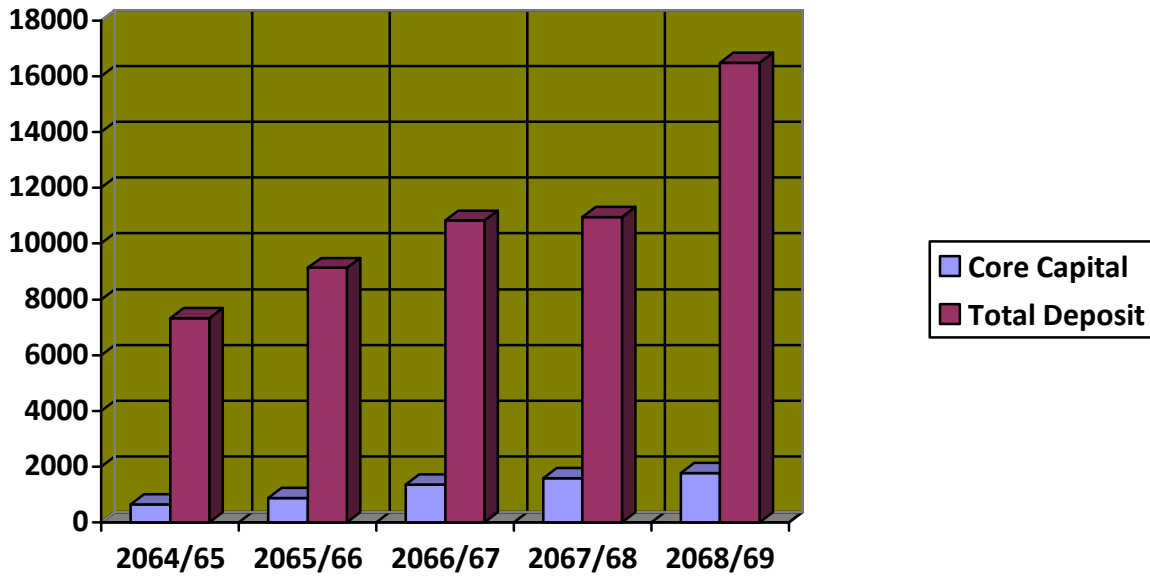
Rs. In Million			
Fiscal Year	Core Capital	Deposit	Capital to Deposit Ratio
2064/65	635.00	7,320.00	8.67%
2065/66	881.00	9,127.70	9.65%
2066/67	1,356.00	10,824.69	12.53%
2067/68	1,579.00	10,951.00	14.42%
2068/69	1,768.00	16,485.00	10.72%

(Source : Annual Reports of NCC Bank from FY 2064/65 to 2068/69)

The above table shows that the increasing trends of Capital to Deposit Ratio of the NCC Bank during 2064/65 to 2067/68. But there is reduction in the ratio in 2068/69. The above data is presented on the Figure as below:

Figure No. 4.10

Trends of Capital to Deposit Ratio of NCC Bank



4.2.3 Credit/ Deposit (CD) Ratio

The Credit/Deposit (CD) Ratio is a major tool to examine the liquidity of the bank. It also measures the performance of the bank in terms of resources utilization irrespective of the quality of utilization. Higher the CD Ratio better is the performance regarding deposit utilization whereas such high ratio may not be favored by the depositors as in case of improper investment, the depositor's fund may be on risk. The CD ratios of NIC Bank & NCC Bank from the period of FY 2063/64 to FY 2067/68 are presented below:

Table No. 4.11

C/D Ratio of NIC Bank

Rs. In Million

Fiscal Year	Credit	Deposit	Credit to Deposit Ratio
2064/65	11,265.00	13,085.00	86.09%
2065/66	13,679.00	15,580.00	87.80%
2066/67	12,732.00	15,969.00	79.73%
2067/68	14,934.00	18,394.00	81.19%
2068/69	17,242.00	22,112.00	77.97%

(Source : Annual Reports of NIC Bank from FY 2064/65 to 2068/69)

Above table shows that the fluctuating trends of C/D Ratio of NIC Bank Ltd during last five years. However it is more than 80% except on FY 2066/67 and 2068/69, which shows that the bank has mobilized credit based on more than industry average. The above figures are presented on below Figure.

Figure No. 4.11

Credit to Deposit Ratio of NIC Bank

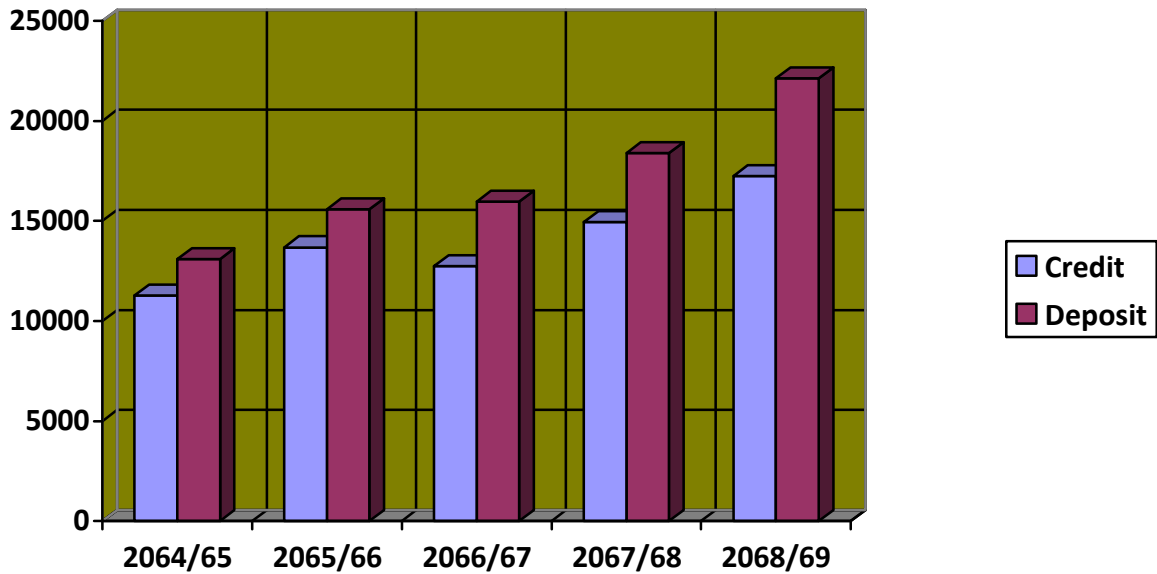


Table 4.12

C/D Ratio of NCC Bank

Rs. In Million

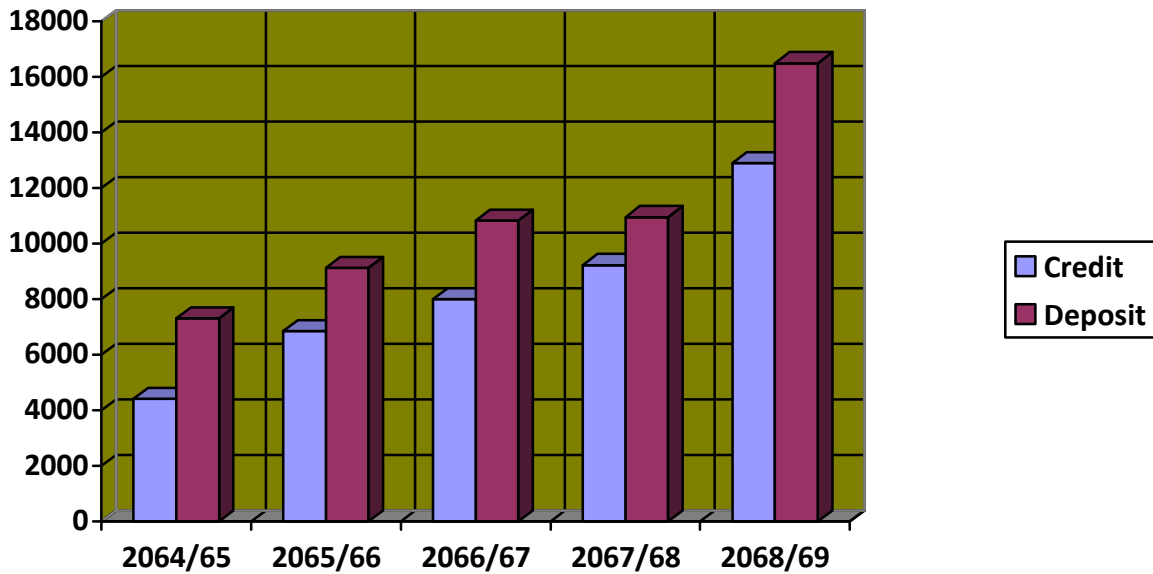
Fiscal Year	Credit	Deposit	Credit to Deposit Ratio
2064/65	4,417.80	7,320.00	60.35%
2065/66	6,858.00	9,127.70	75.13%
2066/67	7,994.72	10,824.69	73.86%
2067/68	9,230.00	10,951.00	84.28%
2068/69	12,901.00	16,485.00	78.25%

(Source : Annual Reports of NCC Bank from FY 2064/65 to 2068/69)

The above table shows that the C/D Ratio of NCC Bank is fluctuating during the last five years. Further the above table proves that the bank has been granting loans and advances less than 80% of its deposit volume except on FY 2067/68, which shows that the depositor of NCC Bank are more safer. The above figures are presented on below Figure.

Figure No. 4.12

Credit to Deposit Ratio of NCC Bank



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, the correlation coefficients have been calculated by using Karl Pearson's correlation co-efficient. A detail calculation has been illustrated in Appendix. The calculated values of correlation co-efficients are presented below in the Table.

Table 4.13

Correlation Co-efficient

Correlation between	Values
Capital & Deposit(NIC Bank)	0.9177
Capital & Deposit(NCC Bank)	0.8831

The calculated correlation co-efficient between Deposit & Capital of the both banks are positive. Therefore, it can be said that Deposit component of the both banks are positively correlated with the bank's Capital Fund. Here, we can see that correlation co-efficient of both the banks are near to 1 which indicates that the correlations seem to be nearly perfectly positive and we can say that the increase in capital causes the increase in deposit in both of the banks.

4.4 Significance and impact of NRB Capital Adequacy Norms on commercial banks

Capital Adequacy Ratio (CAR) is a ratio that regulators in the banking system use to watch bank's health, specifically bank's capital to its risk. Regulators in the banking system track a bank's CAR to ensure that it can absorb a reasonable amount of loss.

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

The norms have prescribed the minimum capital fund requirement, on the basis of the risk-weighted assets. In the event of non-fulfillment of Capital Adequacy Ratio by any bank, the Board of Directors of the bank shall submit the adequate reasons for not being able to maintain the required capital fund and capital plan or program prepared to fulfill the capital fund requirements within 35 days. NRB shall direct the bank to fulfill the requirements as per submitted capital plan or program and within the time limit prescribed. The bank is not allowed to distribute dividends and bonus shares in such context.

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

4.5 Major Findings

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

Capital Fund

In the last five years period, the Capital Fund of NIC Bank has seen in increasing trends except in 2068/69. The core capital, supplementary capital and the total capital fund of the bank was Rs. 1294 Million, Rs. 320 Million and Rs. 1614 Million respectively on FY 2064/65, which is reached to Rs. 2165 Million, Rs. 367.45 Million and Rs. 2532.45 Million respectively on FY 2067/68. This shows the growth prospects of the bank. And in 2068/69 total capital fund is reached to 2378.10 million. It is due to reduction in supplementary capital.

In the last five years period, the Capital Fund of NCC Bank has seen in increasing trends. At the end of FY 2064/65 the total capital fund of the bank was 684.00 million. From the FY 2064/65 both core capital and supplementary capital of the bank is increasing steadily. The total capital of the bank has reached to Rs. 1901.00 million on FY 2068/69.

In this ways the capital fund of the NCC bank is quite poor as compared to NIC Bank though it is seen slightly decrease in 2068/69 of NIC Bank.

Capital Adequacy

Though the total CAR of the NIC Bank is in increasing trends during the period of 2064/65 to 2067/68. But it is slightly reduction in 2068/69. However above analysis also shows that the

bank has successful to maintain the CAR as per the requirement of NRB. The portion of core capital is very excellent on capital mix and it shows the strength of the bank.

From the FY 2064/65, the bank has been able to maintain CAR as per the requirement of NRB Directives. At present the CAR of NCC Bank is in increasing except in 2068/69. 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 NCC Bank has been performing well enough to comply with the NRB requirement at present.

Risk Weighted Assets

The TRWA of NIC bank has been fluctuating during the last five years period. Similar is in the case with credit risk and market risk have been fluctuating. The TRWA of the bank was Rs. 12998 million at the end of F/Y 2064/65. At the end of FY 2068/69, the exposures on credit risk is Rs. 18,954 million, operational risk is Rs. 1415 million and on market risk is Rs. 58 million

The TRWA of NCC bank has been in increasing trends during the last five years period. The TRWA of the bank was Rs. 6493 million at the end of F/Y 2064/65. From F/Y 2065/66 to 2068/69, the TRWA increased to Rs. 8984 million, Rs. 10691 million, Rs. 11553 and Rs. 16205 million respectively.

Capital to Deposit Ratio

The capital to deposit ratio of NIC Bank is on increasing trends which except in 2068/69. This shows the growth of the bank and safer of the depositors. But in 2068/69 there is slightly reduction in the ration due to drastically increase in deposit.

There is increasing trends of Capital to Deposit Ratio of the NCC Bank during 2064/65 to 2067/68. But there is reduction in the ratio in 2068/69.

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, it is seen that the fluctuating trends of C/D Ratio of NIC Bank Ltd during last five years. However it is more than 80%, which shows that the bank has mobilized credit based on more than industry average.

The C/D Ratio of NCC Bank is fluctuating during the last five years. Further the data proves that the bank has been granting loans and advances less than 80% of its deposit volume except on FY 2067/68, which shows that the depositor of NCC Bank are more safer.

Statistical Analysis

The calculated correlation co-efficient between Deposit & Capital of the both banks are positive. Therefore, it can be said that Deposit component of the both banks are positively correlated with the bank's Capital Fund. Here, we can see that correlation co-efficient of both banks. We can say that the increase in capital causes the increase in deposit in both of the banks.

Comparative Analysis

The comparative analysis of ratios of both banks for checking significance with that of average industry ratios showed that the performances of the banks are very satisfactory. The Capital Adequacy Ratios, Capital to Deposit Ratios and CD Ratios of both banks were near to industry average. So, it was found that the both bank are doing quite well and their ratios are quite significant as compared to that of the industry average ones.

Impact Analysis

It is observed that the both banks have been complying with the requirement of the capital adequacy norms of NRB. The both banks have been increasing its capital fund to meet the capital adequacy requirement. The officials of the banks 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.

CHAPTER 5

SUMMARY, CONCLUSION & RECOMMENDATIONS

5.1 Summary

This research is aimed at studying capital adequacy for commercial banks set by NRB with case study of NIC Bank and NCC 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 and NCC Bank. The study showed that the capital fund of both Bank adequately meet the requirement of capital adequacy norms at present. 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.

5.2 Conclusion

Conclude the impact of directives of NRB

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

safeguard the money of the depositors as the banks are playing with the money they collected from the depositors.

The banks under study, NIC Bank and NCC Bank are found to be successful to comply with requirement of capital adequacy norms at present. Anyhow the banks are meeting the capital adequacy requirements adequately.

The capital-to-deposit ratio of both bank are adequate and satisfactory. The CD ratio of the NCC Bank is adequate however it is more than industry average in case of NIC Bank and needs to be improved immediately. Although both banks are successful to meet the capital adequacy requirement at present, it seems to be ineffective to fulfill other capital and deposit ratios which are also very much important in regard of safeguarding the money of the depositors. The banks 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 calculated correlation co-efficients between Deposit & Capital of the both banks are found positive. Therefore, it can be said that Deposit component of the both banks are positively correlated with the bank's Capital Fund. the correlation co-efficient of NIC Bank is near to 1 which indicates that the correlations seem to be nearly perfectly positive and correlation coefficient of NCC Bank is also near to 1 which indicates nearly perfectly positive correlation. We can conclude that the increase in capital causes the increase in deposit in both of the banks.

5.3 Recommendations

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

- ❖ The capital fund of the both banks 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 bank.
- ❖ Capital-to-deposit ratio of the both banks under study is quite satisfactory. There is lack of standard on such type of ratio. Therefore, NRB should set appropriate standard for

such ratio to be maintained by commercial banks. An 8% to 10% ratio may be appropriate for the ratio of capita-to-deposit.

- ❖ CD ratio of NIC Bank is quite more than industry average. This showed that the bank has been effectively using the funds collected from depositors more than industry average. It is recommended that the bank should concentrate call back the loans or increase on deposit level. The bank shall expand more branches in different places of the country and collect deposit from there. On the other hands the CD ratio of NCC Bank Ltd is found near to industry average. This shows that the bank has been effectively using the funds collected from the depositors.
- ❖ The commercial banks should try to maintain appropriate capita-to-deposit and CD ratios as state above. They can no way escape pointing on to the lack of the policy.
- ❖ While providing loans and advances, banks should keep in account that the fund they are going to lend is the fund of the depositors and as such, needs to focus on the quality of the investments they make.
- ❖ NRB should consult to the various bank officials before setting or resetting standards on such capital adequacy norms. The complaints and criticisms of bank officials should be considered accordingly. Consequently, an optimal standard will be ensured which will satisfy almost everyone.

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APPENDIX A

Risk Weighted on On-Balance Sheet Assets

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

Notes:

- * For the purpose, banks listed in **Top Thousand World Banks** published every year in July by '**The Banker**' from United Kingdom.
Banks that do not come under above listing should be provided the risk weight-age of 100%

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

APPENDIX B

Risk Weightage on Off-Balance Sheet Items

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

Notes:

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

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

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

APPENDIX C

Table of Capital Fund (Directives Form No. 1.1)

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

6) Additional Loan Loss Provision 7) Investment Adjustment Reserve		
(C) Total Capital Fund (A+B)		
(D) Minimum Capital Fund to be maintained on the basis of Risk Weighted Assets Capital Fund (..... percentage) Core Capital (.....percentage)		
Capital Fund (Excess/Deficit) (by.....percentage) Core Capital (Excess/Deficit) (by.....percentage)		

APPENDIX D

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

(Rs. in thousand)

On-Balance-Sheet Assets	Weight	Previous Quarter		This Quarter	
		Amount	Risk Weighted Asset	Amount	Risk Weighted Asset
Cash Balance	0				
Gold	0				
Balance at NRB	0				
Investment on Government Bonds	0				
Investment on NRB Bonds	0				
FD Loan provided against the collateral security of own FD	0				
Loan provided against the collateral security of Government Bonds	0				
Accrued Interest Amount on Saving Bonds	0				
Balance with national banks and financial institutions	20				
FD Loan provided against the collateral security of FD of other banks and financial institutions	20				
Balance with Foreign Banks	20				
Money at Call	20				
Loan provided against the guarantee of Rated licensed foreign institutions	20				
Investment made in Rated licensed foreign institutions	20				
Investment in Shares, Debentures and Bonds	100				
Other investments	100				
Loans, Advances and Bills Purchase/Discount	100				
Fixed Assets	100				
Net Interest Amount Receivable (Total Interest Receivable-Interest from Saving Bonds-Interest Suspense)	100				
Other Assets (Other than Advance Tax Deposit)	100				
Total (A)					
Off-Balance-Sheet Items					
Bills Collection	0				
Forward Foreign Exchange Contract	10				
Guarantee having maturity period less than 6 months (Full Amount)	20				
Guarantee issued against Counter Guarantee of Rated Licensed Institutions	20				

Guarantee having maturity period of more than 6 months	50				
Bid Bond, Performance Bond and Underwriting related liabilities	50				
Advance Payment Guarantee	100				
Financial and Other Guarantee	100				
Irrevocable Loan Commitment	100				
Contingent Liability related to Income Tax	100				
All Other Contingent Liabilities including Acceptance	100				
Total (B)					
Total Risk Weighted Assets (A+B)					

APPENDIX E

Calculation of Correlation Coefficient of Deposit on Capital (NIC Bank Ltd.)

Fiscal Year	Core Capital	Deposit	Capital to Deposit Ratio
2064/65	1,294.00	13,085.00	9.89%
2065/66	1,649.00	15,580.00	10.58%
2066/67	1,750.00	15,969.00	10.96%
2067/68	2,165.00	18,394.00	11.77%
2068/69	2,169.70	22,111.90	9.81%

Let the variable Capital be X and Deposit be Y

X	Y	$x = (X - \bar{X})$	$y = (Y - \bar{Y})$	xy	x^2	y^2
1,294.00	13,085.00	-511.54	-3,942.98	2016992	261673	15547091
1,649.00	15,580.00	-156.54	-1,447.98	226667	24504.8	2096646
1,750.00	15,969.00	-55.54	-1,058.98	58815.7	3084.69	1121439
2,165.00	18,394.00	359.46	1,366.02	491030	129211	1866011
2,169.70	22,111.90	364.16	5,083.92	1851360	132613	25846243
9,027.70	85,139.90			4644864	551087	46477429

$$\bar{X} = \frac{\sum X}{N} = \frac{9027.70}{5} = 1805.54$$

$$\bar{Y} = \frac{\sum Y}{N} = \frac{85139.90}{5} = 17027.98$$

Now,

$$r = \frac{\sum xy}{\sqrt{\sum x^2} \cdot \sqrt{\sum y^2}} = \frac{4644864}{\sqrt{551087} \times \sqrt{46477429}} = \frac{4644865}{742.35 \times 6817.43} = 0.9177$$

... Correlation co-efficient of Deposit on Capital, $r = 0.9177$

APPENDIX F

Calculation of Correlation Coefficient of Deposit on Capital (NCC Bank)

Fiscal Year	Core Capital	Deposit	Capital to Deposit Ratio
2064/65	635.00	7,320.00	8.67%
2065/66	881.00	9,127.70	9.65%
2066/67	1,356.00	10,824.69	12.53%
2067/68	1,579.00	10,951.00	14.42%
2068/69	1,768.00	16,485.00	10.72%

Let the variable Capital be X and Deposit be Y

X	Y	$x = (X - \bar{X})$	$y = (Y - \bar{Y})$	xy	x^2	y^2
635	7,320.00	-608.80	3,621.68	2204878	370637	13116552
881	9,127.70	-362.80	1,813.98	658111	131624	3290516
1,356.00	10,824.69	112.20	-116.99	-13126	12588.8	13686.19
1,579.00	10,951.00	335.20	9.32	3124.73	112359	86.89968
1,768.00	16,485.00	524.20	5,543.32	2905809	274786	30728419
6,219.00	54,708.39			5758797	901995	47149260

$$\bar{X} = \frac{\sum X}{N} = \frac{6219}{5} = 1243.80$$

$$\bar{Y} = \frac{\sum Y}{N} = \frac{54708.39}{5} = 10941.68$$

Now,

$$r = \frac{\sum xy}{\sqrt{\sum x^2 \cdot \sum y^2}} = \frac{5758797}{\sqrt{901995 \times 47149260}} = \frac{5758797}{949.73 \times 6866.50} = 0.8831$$

... Correlation co-efficient of Deposit on Capital, $r = 0.8831$