'STUDY OF CAPITAL ADEQUACY IN COMMERCIAL BANKS DIRECTED BY NEPAL RASTRA BANK'

(Application and impact in Rasriya Banijya Bank, Nepal Bank Limited, and Nabil Bank Limited)

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DECLARATION

I hereby declares that the work reported in this thesis entitled 'STUDY OF CAPITAL ADEQUACY IN COMMERCIAL BANKS DIRECTED BY NEPAL RASTRA BANK' submitted to office of the Dean, Faculty of Management, Tribhuvan University is my original work for the partial fulfillment of the requirement for the Master of Business Studies (MBS) under the Supervision of Prof Kamal Das Manandhar, and Kiran Thapa, Shanker Dev Campus.

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ABBREVIATIONS

A.D. Anno Domini

A/C Account

AIG Accord Implementation Group

ATM Automated Teller Machine

BAFIA Bank and Financial Institutions Act

BIS Bank for International Settlement

BS Bank Supervision

CAELS Capital adequacy, asset quality, earnings, liquidity and

sensitivity

CAMELS Capital adequacy, asset quality, management aspects,

earnings, liquidity and sensitivity

CAR Capital Adequacy Ratio

FIs Financial Institutions

FY Fiscal Year

G 10 Group of Ten

G7 Group of seven

GDP Gross Domestic Product

Govt. Government

IMF International Monetary Fund

Jan. January

Nabil Nepal Arab Bank Limited

NBBL Nepal Bangladesh Bank Limited

NBL Nepal Bank Limited

NEPSE Nepal Stock Exchange

NGBL Nepal Grindlays Bank Limited

NGO Non Government Organization

NIBL Nepal Investment Bank Ltd.

NIC Nepal Industrial and Commercial Bank Limited

NPA Non Performing Assets

NRB Nepal Rastra Bank

NSBI Nepal SBI Bank Limited

Oct. October

P/L Profit and Loss

PCA Prompt Corrective Actions

QIS 5 Fifth Quantitative Impact Study RBB Rastriya Banijya Bank Limited'

RBS Risk Based Supervision

SCBL Standard Chartered Bank Nepal Limited

Tier 1 Core Capital

Tier 2 Supplementary Capital

TRWA Total Risk Weighted Assets

TRWE Total Risk Weighted Exposures

UK United Kingdom

USA United States of America

Chapter I

INTRODUCTION

1.1 Background Information

Banking sector is an important part of the national economy. Banks take deposits, support the payment system and provide the largest source of funds on the market. Safe and sound banking system is of crucial importance for the financial stability and sustainable development. Nepal has a special characteristic of bank dominated financial sector. As the domestic capital and stock markets are in the initial stage of development, the banking sector largely dominates the entire financial sector.

There is a significant growth in the number of banks in Nepal in the last two decades. At the beginning of the 1980s when the financial sector was not liberalized, there were only two commercial banks. During 1980s, there were only few banks. After the liberalization in the 1990s, financial sector has made a progress both in term of the number of banks and financial institutions and their branches. As on Mid July 2008, the number of commercial banks is 25 based on the applications for establishment of new banks as well as for the up-gradation of other financial institution, the number is likely to grow in the near future as well.

The first conventional bank in Nepal was the Nepal Bank Limited, established in 1937 A.D. followed by Rastriya Banijya Bank in 1966 A.D. These two banks are the pioneers of the Nepalese Banking industry. They have the largest network and they have their operations even in remote areas of the country. Rastriya Banijya Bank is fully owned by the Government while the Government has controlling stake in Nepal Bank Limited. As the financial market was barred for private investors till the mid 1980s, these two banks were the only players in the banking industry. The economic liberalization policy adopted in the mid 1980s brought about a surge in the banking industry. A large number of banks were established and the number continues to grow

even today

Over the past 20 years, Nepalese financial sector has become deeper and the number and type of financial intermediation has grown rapidly. Within this period, the Nepalese financial sector has grown significantly both in terms of business volume as well as size of assets and market. Nepal has a reasonably diversified financial sector, as evidenced by the number and variety of institutions that play an active role in this sector, relative to Nepal's small and underdeveloped economic base.

Nepal Rastra Bank (NRB), the central bank of Nepal, established in April 26, 1956, under the NRB Act 2012 is the sole authority for licensing and supervising banks and financial institutions in Nepal. The Act has empowered Nepal Rastra Bank to grant license to banks and financial institutions as well as to monitor, inspect and supervise them. The Act also empowers NRB to undertake resolution measures in order to protect the interest of depositors. NRB has the authority even to revoke licenses incase of violation of prudential norms and relevant laws and regulations.

NRB's regulatory and supervisory regime is limited to the commercial banks, Development banks, Finance companies, Micro-credit development banks, saving and credit co-operatives and non-government organizations licensed by Nepal Rastra Bank. The following table depicts the types and number of financial institution licensed by NRB by mid-July 2008.

Table 1.1: Number of Licensed Financial Institutions

S.N.	Type of financial Institutions	Class	Number
1	Commercial Banks	A	25
2	Development Banks	В	58
3	Finance Companies	С	78
	•		
4	Micro Credit Development Banks	D	12
5	Saving and Credit Co-operatives	Non-classified	16
6	Non-Government Organizations	Non-classified	46
	Total		235

In the past, the business of bank supervision was focused on validating bank's transactions, particularly the value of loan portfolios, which have been historically the principal source of problems for banks. In the process, supervisors would go through the balance sheet, assuring themselves that a bank's assets and liabilities were essentially as stated and that its reserves and net worth were real. Traditional forms of supervision are important regulatory tools but have some severe limitations. In particular, they are labor intensive and narrow in focus, as they look at many transactions to assess the condition of individual financial institutions at a point in time. They were focused on detecting minor mistakes rather than overall financial soundness and risk management aspect of the banks. Traditional supervision provides a snapshot of an institution's condition at a point in time. It is transaction-oriented and usually more labor intensive than risk-based supervision, thereby straining the scarce resources of most regulators.

Stability of the financial system has become the central challenge to bank regulators and supervisors throughout the world. Supervisory authorities all over the world are gradually moving towards adopting risk-based supervision. There is now a growing stress to adopt a more risk focused comprehensive approach, which is likely to contribute positively in the supervisory function. Though scrutiny of systems and procedures prevailing in supervised bank is an integral part of on-site inspection, there is scope for more focus on the risk profile of the banks. Supervisory bodies in the world are seeking more focused, responsive and tailored approach to supervision.

Nepal Rastra Bank (NRB) is committed to adopt the best supervisory methods and practices and has been constantly endeavoring to enhance the sophistication and efficiency levels of its supervisory processes. In line with this philosophy, NRB has been continually updating the rules, regulations as well as the supervisory practices to deliver effective supervision.

1.2 Focus of the Study

The current supervisory process adopted by the Bank Supervision Department (BSD) is

applied uniformly to all supervised institutions i.e., commercial banks. The current approach is largely on-site inspection supplemented by off-site monitoring and the supervisory follow-up and action commences with the detailed findings of annual financial inspection. The process is based on CAMELS/CAELS approach where capital adequacy, asset quality, management aspects, earnings, liquidity and sensitivity to market risk are assessed keeping in view the legal requirements of the Acts and directives. The on-site inspections are conducted, to a large extent with reference to the audited balance sheet dates and cut-off dates of financial years. The off-site surveillance plays a supplemental role. While in several external jurisdictions, the supervisory process extensively leverages on the work done by others, such as the internal and external auditors, the use made of these resources in Nepal is rather limited. This is gradually changing with the introduction of Long Form Audit Report.

As outlined in monetary policy, NRB would be developing an overall plan for moving towards risk-based supervision (RBS). The RBS will be a regime in which NRB's resources will be directed towards the areas of greater risk to its supervisory objectives. Risk-based supervision saves regulatory resources and helps to promote a more safe and sound financial system. It saves resources because it focuses regulatory resources on areas of highest risk and usually requires substantially less transaction testing. By getting institutions to manage risks as opposed to correcting symptoms of problems, as is often the case with traditional supervision, supervisors should focus their actions on correcting causes of problems and thereby requiring improvements in management practices and management systems. The risk-based supervision will not be transaction based. It will be systems based inspection by the regulator/supervisor. In this approach, the regulator and supervisor will go into details of the systems and procedures for managing and controlling risks.

Risk-based supervision is an enhancement of top-down supervision. In the top-down approach, problems are identified and defined, and the root causes for the problems are addressed. It focuses examination resources on an overall financial analysis of the financial institution under review, and it documents and tests policies, procedures, systems, and management practices. When problems are disclosed, corrective actions are directed toward correcting the causes of the problems, not just the symptoms. If problems are identified that, in the opinion of the supervisor, significantly impact the

safety and soundness of the institution, then bottom-up examination techniques may be necessary to quantify the problems in order to assess the adequacy of capital and liquidity.

The Core Principles for Effective Banking Supervision, promulgated by the Basel Committee on Banking Supervision, set out the minimum standards that are considered necessary for effective supervision. Core Principles have been used by countries as a benchmark for assessing the quality of their supervisory systems and for identifying future work to be done to achieve a baseline level of sound supervisory practices. Experience has shown that self-assessments of countries' compliance with the Core Principles have proven helpful for the authorities, in particular in identifying regulatory and supervisory shortcomings and setting priorities for addressing them.

Several of the principles embrace risk-based supervision and encapsulate the concepts developed over the past twenty years. However, because the Core Principles is a brief document and covers a variety of topics, it cannot fully explain the key differences between risk-based supervision and traditional regulatory practices or provide a systematic explanation of all the basic elements that would enable a regulatory agency to implement risk-based supervision.

Although supervisory practices and processes are always evolving and improving over time, it is helpful to subject supervisory arrangements to scrutiny against internationally accepted benchmarks, and to consider where improvements can be made. To be effective, any such assessment must be undertaken. It is too easy for supervisors to assert critically that existing arrangements represent best practice when closer analysis would reveal otherwise.

Realizing the importance of the core principles, NRB with technical support from IMF has completed a self assessment which was finalized after various rounds of discussions. The assessment highlighted area which needs improvement and in order to correct those deficiencies an action plan has been prepared. Nepal Rastra Bank has already taken initiatives to address those deficiencies in accordance with the action plan.

1.2.1 Introduction of Nepal Rastra Bank

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

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

-to formulate necessary monetary and foreign exchange policies to maintain the stability in price and consolidate the balance of payments for sustainable development of the economy of Nepal;

-to develop a secure, healthy and efficient system of payments;

-to make appropriate supervision of the banking and financial system in order to maintain its stability and foster its healthy development; and

-to further enhance the public confidence in Nepal's entire banking and financial system.

The Bank is eminently aware that, for the achievement of the above objectives in the present dynamic environment, sustained progress and continued reform of the financial sector is of utmost importance. Continuously aware of this great responsibility, NRB is seriously pursuing various policies, strategies and actions, all of which are conveyed in the annual report on monetary policy.

Vision

To become "A modern, dynamic, credible and effective Central Bank"

Mission

To maintain macro-economic stability through sound and effective monetary, foreign exchange and financial sector policies.

1.2.2 Introduction of Nepal Bank Limited

Nepal Bank Limited, The first bank of Nepal was established in November 15, 1937 A.D (Kartik, 30, 1994). It was formed under the principle of Joint venture (Joint venture between govt. & general public). NBL's authorized capital was Rs. 10 million & issued capital Rs. 2.5 million of which paid-up capital was Rs. 842 thousand with 10 shareholders. The bank has been providing banking through its branch offices in the different geographical locations of the country.

Vision:

"To remain the leading financial institution of the country."

Mission:

Nepal Bank Limited seeks to provide an environment within which the bank can bring unique financial value and services to all customers. It will be a sound institution where depositors continue to have faith in the security of their funds and receive reasonable returns; borrowers are assured of appropriate credit facilities at reasonable prices; other service- seekers receive prompt and attentive service at reasonable cost; employees are paid adequate compensation with professional career growth opportunities and stockholders receive satisfactory return for their investment.

Values:

At Nepal Bank Limited believes that his banking should be based on:
Respect, service and safety for the customers we serve
Respect, reward and opportunity for the people with whom we work
Respect, cooperation and support for the economic community of Nepal

Objectives:

Nepal Bank Limited has the following objectives

- Continue to maintain leading share of banking sector with a significant presence in all major geographical areas in the country.
- Provide competitive and customer oriented banking services to all customers through competent and professional staff.
- Reclaim leadership within the national financial community.

1.2.3 Introduction of Rastriya Banijya Bank

Rastriya Banijya Bank (RBB) is the fully government owned, and is the largest commercial bank in Nepal. RBB was established on January 23, 1966 (2022 Magh 10 BS) under the RBB Act. RBB provides various banking services to a wide range of customers including banks, insurance companies, industrial trading houses, airlines, hotels, and many other sectors.

RBB has Nepal's most extensive banking network with over 118 branches. Through its branch network, RBB has been contributing to Nepal's economic development by providing banking services throughout the country.

RBB has many correspondent arrangements with major international banks all over the world that facilitate trade finance, bank-originated personal funds transfers and interbank funds transfer via SWIFT. In a bid to promote remittance business, RBB works with Western Union and International Money Express, two leading person-to-person funds transfer networks.

In addition RBB runs various programmes i.e. banking with the Poor, Micro Credit project for Women etc. to enhance the living standard of people as per the govt. directives.

As well, RBB actively delivers various government programs to people living in remote parts of the country; these programs are intended to raise living standards.

1.2.4 Introduction of Nabil Bank Limited

Nabil Bank Limited, the first foreign joint venture bank of Nepal, started operations in

July 1984. Nabil was incorporated with the objective of extending international standard modern banking services to various sectors of the society. Pursuing its objective, Nabil provides a full range of commercial banking services through its 19 points of representation across the kingdom and over 170 reputed correspondents' banks across the globe.

Nabil, as a pioneer in introducing many innovative products and marketing concepts in the domestic banking sector, represents a milestone in the banking history of Nepal as it started an era of modern banking with customer satisfaction measured as a focal objective while doing business.

Operations of the bank including day-to-day operations and risk management are managed by highly qualified and experienced management team. Bank is fully equipped with modern technology which includes ATMs, credit cards, state-of-art, world-renowned software from Infosys Technologies System, Banglore, India, Internet banking system and Telebanking system.

1.2 Statement of the Problem

Since last 6 months, economy meltdown of financial institutions of world has been significantly increased. The world famous businessman Lehman brothers had become an insolvent and the US government and like UK, Norway, Germany and many countries was declared to give million dollar aid to recovery the banking crisis. In Nepal, the symptom has not come from the today financial crisis but in 2006 the problem of Nepal Bangladesh Bank limited had taught about minimum requirement of capital adequacy in financial institution. Todays, the problem of Nepal Development Bank Limited taught once again how can secure depositor deposit and stakeholder. Therefore, the main problem of the world's financial institutions is when the financial institute goes to unable to return the depositor fund, crises raise in the economy not only the financial institutions because the deposits of depositor lend to the manufacturing and service sector both.

With a view of adopting the international best practices, NRB has decided to adopt capital adequacy framework based on Basel II document released by Basel Committee

on Banking Supervision. The complexity and sophistication of the Nepalese financial market didn't warrant advanced approaches like the IRB Approach or the Standardized Approach. Hence, Nepal Rastra Bank adopted the simplified standardized approach for credit risk, Basic Indicator Approach for Operational Risk and Net Open Exchange Model for the Market Risk. Reminiscent of the International convergence of capital measurements and capital standards, this framework also builds around three mutually reinforcing pillars, viz. minimum capital requirements, supervisory review process and disclosure requirements.

The first pillar aligns minimum capital requirements more closely with banks' actual underlying risks. In concept, the first pillar is similar to the existing capital framework, in that, it provides a measure of capital relative to risk. The second pillar – supervisory review process – allows supervisors to evaluate a bank's assessment of its own risks and determine whether that assessment seems reasonable. It is not enough for a bank or its supervisors to rely on the calculation of minimum capital under the first pillar. Supervisors should provide an extra set of eyes to verify that the bank understands its risk profile and is sufficiently capitalized against its risks. The third pillar – market discipline – ensures that the market provides yet another set of eyes. The third pillar is intended to strengthen incentives for prudent risk management. Greater transparency in banks' financial reporting should allow marketplace participants to better reward well-managed banks and penalize poorly managed ones.

The coming year shall see a parallel run on the capital adequacy of the banks under both Basel I and Basel II. Banks are required to compute their capital adequacy requirements, based on this framework, on a quarterly basis. The so arrived result should be reported to their respective board of directors as well as to the Nepal Rastra Bank in the prescribed formats. Any shortfall in the capital adequacy requirement in accordance with this framework shall not constitute a default during this review period. However, the failure to submit the returns stipulated in this framework shall constitute non-compliance.

The Accord Implementation Group (AIG) constituted to support the Basel II implementation is continuously monitoring and providing support to this process. This group also recommends necessary changes to the framework based on the ground of the

need and justification of such changes.

1.3 Importance of the study

The study will have a significant importance in the present context of banking business in Nepal. Commercial banks have collected more than millions of Deposits. NRB 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 study may not be new study in the field of banking sector but the thesis shall of course resent some results which will reflect the capital structure and position of commercial banks in Nepal.

1.4 Objectives of the study

The main objective of this study is to how much minimum capital adequacy require in commercial banks as well as financial institutions to keep safe and sound financial system in economy. The main objectives of the study are as follows:

- i. To examine the Capital Adequacy of NBL, RBB, and Nabil.
- To examine the relation of Capital Fund with other financial terms of NBL,RBB, and Nabil Bank
- iii. To analyze the steps taken by NBL, RBB, and Nabil to fulfill the requirements as per these norms
- iv. To analyze the implementation status of the directives given by NRB.
- v. To give necessary suggestions and recommendations

1.6 Limitations of the study

The study is limited of the capital fund and capital adequacy norms for commercial banks. Since, it is not possible to take all commercial banks as sample, the thesis will

analyze on the data and information of Rasriya Banijya Bank, Nepal Bank Limited, and Nabil Bank Limited. The data and information over the period of five fiscal years commencing from FY 2002/03 till 2007/08 are used in the study. For the analysis of capital fund, only two years data are available, i.e., of FY 2006/07 and 2007/2008. Balance sheets, p/l a/c and other financial statements are considered as basic source of data. Thus, the study is mainly based on the secondary data collected from various sources. However, some primary data has also been derived from the analysis of questionnaire prepared for the research study.

For the literature review various newspaper, journals, unpublished thesis works nevertheless the internet have been referred. However, the literature review has been limited to few articles and research works due to unavailability of sufficient such matters even after very hard quest. Among the 25 commercial bank in Nepal, the research is based only 3 banks. Thus the result drawn from this study may or may not be applicable to other commercial bank of Nepal. NRB has issued a list of ten directives to the commercial banks. But here, only the directives relating to capital adequacy, loan classification and provisioning are selected for the research study. The findings of this research are based on interviews and secondary data received from NRB. The study is limited to two years period i.e. 2064 and 2065.

This study has the following limitations:

- The time period selected for this study is five years.
- All details records for the study have been received as primary and secondary data relating only to respected banks.
- This study is focused on the format of only MBS thesis reports.
- Time and resources constraint also limited the study.

1.7 Organization of the Study

According to study, the research work has been classified into five chapters.

CHAPTER 1 Introduction

It is an initial phase of research which is incorporated background, importance of the

study, objectives of the study, scope and limitations of the study.

CHAPTER 2 Review of literature

This chapter concern about income and expenditure, sales planning, profit planning and conceptual setting and review of related thesis to highlight the related terms and to present the available information about previous related studies.

CHAPTER 3 Research Methodology

This chapter includes introduction, research design, sources and nature of data, data collection instruments, statistical tools that are used for the study.

CHAPTER 4 Data presentation, Analysis, & Interpretation

In this chapter, the data collected are presented, tabulated as required by the research objectives. Data are here interpreted and analyzed with the help of various analytical tools and techniques.

CHAPTER 5 Summary, Conclusion and Recommendations

This chapter is the last chapter for this research. In this chapter, summary and conclusion are drawn from the study. It also includes valuable recommendations and suggestions to the company on the basis of the study.

CHAPTER II

REVIEW OF LITERATURE

Review of literature is a way to discover what other research in the area stated problem has uncovered. It provides foundation for present study, establishes a point of departure for future research, avoids needles duplication of costly effort, and reveals areas of needed research. It enables the researcher to know about what research has been done in the subject, what theories have been advanced the approach taken by other researchers and shows gap to fill through the proposed research.

In this chapter, the focus has been made on the review of literature relating to capital adequacy and its impact on commercial banks. This study is very much based on past knowledge which is the key of present knowledge. This chapter helps as adequate feedback to broaden the information and to base the inputs of study. Therefore, the review of literature has its own importance.

2.1 Conceptual Frame Work

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

Nepal has a long history of using money. History unveils that the first Nepali coins to be introduced were Manank during the reign of the king Mandev and Gunank during the reign of the king Gunakamadev. Afterwards the coins were reintroduced during the reign of Amshuverma. After the unification of Nepal, the great king Prithivi Narayan Shah started the coin Mohar. The Taksar was established in 1789 to issue coins scientifically. In 1876, during Rana Regime an office named Tejarath Adda was

established in Kathmandu to provide loans against deposit of gold and silver. But the office did not have right to accept deposits.

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

2.1.1 THE BANKING SECTOR

The banking sector is an important part of the national economy. Banks take deposits, support the payment system and provide the largest source of funds on the market. Safe and sound banking system is of crucial importance for the financial stability and sustainable development. Nepal has a special characteristic of bank dominated financial sector. As the domestic capital and stock markets are in the initial stage of development, the banking sector largely dominates the entire financial sector.

The first conventional bank in Nepal was the Nepal Bank Limited, established in 1937 A.D. followed by Rastriya Banijya Bank in 1966 A.D. These two banks are the pioneers of the Nepalese Banking industry. They have the largest network and they have their operations even in remote areas of the country. Rastriya Banijya Bank is fully owned by the Government while the Government has controlling stake in Nepal Bank Limited. As the financial market was barred for private investors till the mid 1980s, these two banks were the only players in the banking industry. The economic liberalization policy adopted in the mid 1980s brought about a surge in the banking industry. A large number of banks were established and the number continues to grow even today.

Table 2.1: List of Commercial Banks in Nepal (Mid July 2008)

		•	•
S.	Name	Operation	Head Office
N.	Name	Date (A.D.)	
1	Nepal Bank Limited (NBL)	1937/11/15	Kathmandu
2	Rastriya Banijya Bank (RBB)	1966/01/23	Kathmandu
3	NABIL Bank Limited (NABIL)	1984/07/16	Kathmandu
4	Nepal Investment Bank Limited (NIBL)	1986/02/27	Kathmandu
5	Standard Chartered Bank Nepal Ltd. (SCBN)	1987/01/30	Kathmandu
6	Himalayan Bank Limited (HBL)	1993/01/18	Kathmandu
7	Nepal SBI Bank Limited (NSBI)	1993/07/07	Kathmandu
8	Nepal Bangladesh Bank Limited (NBBL)	1993/06/05	Kathmandu
9	Everest Bank Limited (EBL)	1994/10/18	Kathmandu
10	Bank of Kathmandu Limited (BOK)	1995/03/12	Kathmandu
11	Nepal Credit and Commerce Bank Ltd.	1996/10/14	Siddharthanagar
11	(NCCBL)	1//0/10/14	Siddharthanagar
12	Lumbini Bank Limited (LBL)	1998/07/17	Narayangadh
13	Nepal Industrial & Commercial Bank Ltd. (NIC)	1998/07/21	Biratnagar
14	Machhapuchhre Bank Limited (MPBL)	2000/10/03	Pokhara
15	Kumari Bank Limited (KBL)	2001/04/03	Kathmandu
16	Laxmi Bank Limited (LXBL)	2002/04/03	Birgunj
17	Siddhartha Bank Limited (SBL)	2002/12/24	Kathmandu
18	Agriculture Development Bank	2006/03/16	Kathmandu
19	Global Bank Limited	2007/01/02	Birgunj
20	Citizens Bank International Ltd.	2007/06/21	Kathmandu
21	Prime Commercial Bank Ltd.	2007/09/24	Kathmandu
22	Sun Rise Bank Ltd.	2007/10/12	Kathmandu
23	Bank of Asia Nepal Ltd.	2007/10/12	Kathmandu
24	Development Credit Bank Ltd.	2001/01/23	Kathmandu
25	NMB Bank Ltd.	1996/11/26	Kathmandu
	ı	1	

(Source: Banking and Financial Statistics (Mid-July 2008, No.51)

2.1.2 Development of Commercial Bank

There is a significant growth in the number of banks in Nepal in the last two decades. At the beginning of the 1980s when the financial sector was not liberalized, there were only two commercial banks. During 1980s, there were only few banks. After the liberalization in the 1990s, financial sector has made a progress both in term of the number of banks and financial institutions and their branches. As on Mid July 2008, the number of commercial banks is 25 based on the applications for establishment of new banks as well as for the up-gradation of other financial institution, the number is likely to grow in the near future as well.

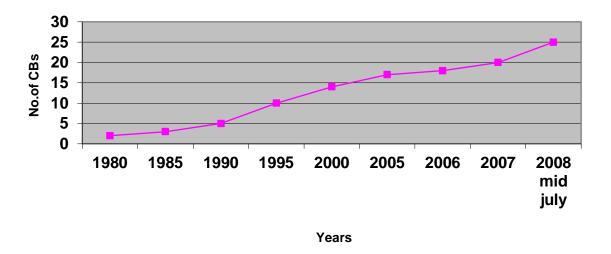


Figure 2.1: Number of Commercial Banks

2.1.3 Bank and Supervision

The major function of banks is to act as financial intermediaries. They act as a repository for the savings of those who spend less than their income, and as a source of borrowed funds for those whose spending exceeds their income. In playing this role, banks facilitate real resource transfers amongst different groups of people, in accordance with their different needs and preference. Also banks play an important role in making savings available to those with productive investment opportunities.

Similarly, banks are an important source of liquidity for an economy. This is inherent in the payments services provided by the banking system, insofar as deposits held for transactions' purposes must be available for transfer on demand.

A unique feature of banks is that they have a low ratio of own' (shareholders') funds to borrowed funds (deposits). This inherent imbalance between 'own' funds and 'borrowed' funds in a bank's overall funding mix presents some potential problems. Because banks' shareholders have only a small amount of their own funds at stake, there is an underlying incentive for banks to tend toward risk taking activities with the fund of depositors and outsiders. In fact, shareholders' losses are limited to the amount of their (relatively small) investment and banks' depositors bear any remaining loss. In short, banks shareholders, in the absence of supervisory requirements and constraints, would potentially have access to large profit opportunities, but with limited downside risk to themselves.

Bank failures can disrupt the flow of credit to local communities, interfere with the operation of the payments system and reduce the money supply. These effects can be long-lasting. The past has shown that although the cost of supervision is high, the cost of poor supervision is even higher. The cost of bank failure to the society as a whole is higher than the private cost (the loss to the shareholders), which is the compelling reason for supervising banks. Official supervisors have a role in this regard mostly because banks' depositors are generally not well placed to monitor the portfolio behavior of banks nor to enforce compliance with the terms of the notional covenant depositors have with their bank.

Banking supervision is basically concerned with constraining the risks which banks can take in using other people's money; money which they have borrowed on the basis of a representation that it will be repaid in full together with interest at the rate contracted. These reasons call for an independent supervisory body to conduct a direct assessment of the overall condition of the banking institutions with regular review of the bank's financial position, system and controls, risk management practices and the compliance with the relevant regulatory requirements. Nepal Rastra Bank_is the supervisory body of all the licensed institutions that carry banking transaction.

2.1.4 Current Issues in Banking Supervision

In the past, the business of bank supervision was focused on validating bank's transactions, particularly the value of loan portfolios, which have been historically the principal source of problems for banks. In the process, supervisors would go through the balance sheet, assuring themselves that a bank's assets and liabilities were essentially as stated and that its reserves and net worth were real. Traditional forms of supervision are important regulatory tools but have some severe limitations. In particular, they are labor intensive and narrow in focus, as they look at many transactions to assess the condition of individual financial institutions at a point in time. They were focused on detecting minor mistakes rather than overall financial soundness and risk management aspect of the banks. Traditional supervision provides a snapshot of an institution's condition at a point in time. It is transaction-oriented and usually more labor intensive than risk-based supervision, thereby straining the scarce resources of most regulators.

Stability of the financial system has become the central challenge to bank regulators and supervisors throughout the world. Supervisory authorities all over the world are gradually moving towards adopting risk-based supervision. There is now a growing stress to adopt a more risk focused comprehensive approach, which is likely to contribute positively in the supervisory function. Though scrutiny of systems and procedures prevailing in supervised bank is an integral part of on-site inspection, there is scope for more focus on the risk profile of the banks. Supervisory bodies in the world are seeking more focused, responsive and tailored approach to supervision.

Nepal Rastra Bank (NRB) is committed to adopt the best supervisory methods and practices and has been constantly endeavoring to enhance the sophistication and efficiency levels of its supervisory processes. In line with this philosophy, NRB has been continually updating the rules, regulations as well as the supervisory practices to deliver effective supervision.

A) Basel Core Principles:

The Core Principles for Effective Banking Supervision, promulgated by the Basel

Committee on Banking Supervision, set out the minimum standards that are considered necessary for effective supervision. Core Principles have been used by countries as a benchmark for assessing the quality of their supervisory systems and for identifying future work to be done to achieve a baseline level of sound supervisory practices. Experience has shown that self-assessments of countries' compliance with the Core Principles have proven helpful for the authorities, in particular in identifying regulatory and supervisory shortcomings and setting priorities for addressing them. Several of the principles embrace risk-based supervision and encapsulate the concepts developed over the past twenty years. However, because the Core Principles is a brief document and covers a variety of topics, it cannot fully explain the key differences between risk-based supervision and traditional regulatory practices or provide a systematic explanation of all the basic elements that would enable a regulatory agency to implement risk-based supervision.

Although supervisory practices and processes are always evolving and improving over time, it is helpful to subject supervisory arrangements to scrutiny against internationally accepted benchmarks, and to consider where improvements can be made. To be effective, any such assessment must be undertaken. It is too easy for supervisors to assert critically that existing arrangements represent best practice when closer analysis would reveal otherwise.

Realizing the importance of the core principles, NRB with technical support from IMF has completed a self assessment which was finalized after various rounds of discussions. The assessment highlighted area which needs improvement and in order to correct those deficiencies an action plan has been prepared. Nepal Rastra Bank has already taken initiatives to address those deficiencies in accordance with the action plan.

B) Basel II, Concept and its Implication in Nepal

With a view of adopting the international best practices, NRB has decided to adopt capital adequacy framework based on Basel II document released by Basel Committee on Banking Supervision. The complexity and sophistication of the Nepalese financial market didn't warrant advanced approaches like the IRB Approach or the Standardized

Approach. Hence, Nepal Rastra Bank adopted the simplified standardized approach for credit risk, Basic Indicator Approach for Operational Risk and Net Open Exchange Model for the Market Risk. Reminiscent of the International convergence of capital measurements and capital standards, this framework also builds around three mutually reinforcing pillars, viz. minimum capital requirements, supervisory review process and disclosure requirements.

The first pillar aligns minimum capital requirements more closely with banks' actual underlying risks. In concept, the first pillar is similar to the existing capital framework, in that, it provides a measure of capital relative to risk. The second pillar – supervisory review process – allows supervisors to evaluate a bank's assessment of its own risks and determine whether that assessment seems reasonable. It is not enough for a bank or its supervisors to rely on the calculation of minimum capital under the first pillar. Supervisors should provide an extra set of eyes to verify that the bank understands its risk profile and is sufficiently capitalized against its risks. The third pillar – market discipline – ensures that the market provides yet another set of eyes. The third pillar is intended to strengthen incentives for prudent risk management. Greater transparency in banks' financial reporting should allow marketplace participants to better reward well-managed banks and penalize poorly managed ones.

The coming year shall see a parallel run on the capital adequacy of the banks under both Basel I and Basel II. Banks are required to compute their capital adequacy requirements, based on this framework, on a quarterly basis. The so arrived result should be reported to their respective board of directors as well as to the Nepal Rastra Bank in the prescribed formats. Any shortfall in the capital adequacy requirement in accordance with this framework shall not constitute a default during this review period. However, the failure to submit the returns stipulated in this framework shall constitute non-compliance.

The Accord Implementation Group (AIG) constituted to support the Basel II implementation is continuously monitoring and providing support to this process. This group also recommends necessary changes to the framework based on the ground of the need and justification of such changes.

C Prompt Corrective Actions (PCA):

Basel core Principle no. 23 (Corrective and remedial powers of supervisors) states Supervisors must have at their disposal an adequate range of supervisory tools to bring about timely corrective actions, if for example, a bank is not complying with laws, regulations or supervisory decisions, or is engaged in unsafe or unsound practices, or when the interests of depositors are otherwise threatened. These tools include the ability to require a bank to take prompt remedial action and to impose penalties.

Over the past years, several countries around the world have adopted a system of prudential prompt corrective action (PCA) binding capital adequacy standards and the ability to take substantial actions against banks that failed to meet the standards. On first appearances, the adoption of PCA in the US, UK, European Union, Hong Kong, Canada, Mexico, Korea, Indonesia, India, Bangladesh, Malaysia and Brazil appear to have been extremely successful. The PCA approach of supervisor realizes that early steps in preventing banks are always better than caring troubled banks.

The supervisors and regulators in the least developed countries are also being encouraged to adopt PCA by policy analysts who explicitly call for its adoption. However, some preconditions needed for the adoption of an effective PCA include conceptual elements such as a prudential supervisory focus on minimizing public deposit losses and mandating supervisory action as capital declines. These preconditions also include institutional aspects such as greater supervisory independence and authority, more effective resolution mechanisms, better methods of measuring capital, and enhancing supervisory capabilities.

Nepal Rastra Bank has planned to adopt PCA framework through Monetary Policy for FY 2007/08 that states NRB will take actions immediately to those banks whose capital adequacy ratio falls short of the stipulated limit. The triggers and stipulated action are applicable uniformly to all banks including those within the scope of this framework. Actions range from applying restrictions on branch expansion and dividend payments; loan disbursement and deposit mobilization; increase in salary and allowances to execute actions available under Section 86 of Nepal Rastra Bank on the basis of the level of shortfalls from the regulatory capital adequacy ratios as per clause 42 of the Banks and Financial Institutions Act 2006. This framework is expected to encourage

banks to observe the minimum capital adequacy at all times.

2.1.5 Capital and Capital Adequacy

DEFINITION OF CAPITAL:

Qualifying capital consists of Tier 1 (core) capital and Tier 2 (supplementary) capital elements, net of required deductions from capital. Thus, for the purpose of calculation of regulatory capital, banks are required to classify their capital into two parts as follows:

a. Core Capital (Tier 1)

The key element of capital on which the main emphasis should be placed is the Tier 1 (core) capital, which comprises of equity capital and disclosed reserves. This key element of capital is the basis on which most market judgments of capital adequacy are made; and it has a crucial bearing on profit margins and a bank's ability to compete.

The BCBS has therefore concluded that capital, for supervisory purposes, should be defined in two tiers in a way which will have the effect of requiring at least 50% of a bank's capital base to consist of a core element comprised of equity capital and published reserves from post-tax retained earnings.

In order to rank as Tier 1, capital must be fully paid up, have no fixed servicing or dividend costs attached to it and be freely available to absorb losses ahead of general creditors. Capital also needs to have a very high degree of permanence if it is to be treated as Tier 1.

b. Supplementary Capital (Tier 2)

The Supplementary (Tier 2) Capital includes reserves which, though unpublished, have been passed through the profit and loss account and all other capital instruments eligible and acceptable for capital purposes. Elements of the Tier 2 capital will be reckoned as capital funds up to a maximum of 100 percent of Tier 1 capital arrived at,

after making adjustments. In case, where the Tier 1 capital of a bank is negative, the Tier 2 capital for regulatory purposes shall be considered as zero and hence the capital fund, in such cases, shall be equal to the core capital.

2.1.5.1 ELEMENTS OF TIER 1 CAPITAL:

- a. Paid up Equity Capital.
- b. Irredeemable non-cumulative preference shares which are fully paid-up and with the capacity to absorb unexpected losses. These instruments should not contain any clauses, which permit redemption by the holder or issuer upon fulfillment of certain condition. Banks should obtain prior approval of NRB for this kind of instruments to qualify as a component of core capital.
- c. Share Premium
- d. Proposed Bonus Equity Share
- e. Statutory General Reserve.
- f. Retained Earnings available for distribution to shareholders.
- g. Un-audited current year cumulative profit, after all provisions including staff bonus and taxes. Where provisions are not made, this amount shall not qualify as Tier 1 capital.
- h. Capital Redemption Reserves created in lieu of redeemable instruments.
- i. Capital Adjustment reserves created in respect of increasing the capital base of the bank.
- j. Dividend Equalization Reserves.
- k. Other free reserves
- 1. Any other type of reserves notified by NRB from time to time for inclusion in Tier 1 capital

2.1.5.2 ELEMENTS OF TIER 2 CAPITAL:

- a. Cumulative and/or redeemable preference shares with maturity of five years and above.
- b. Subordinated term debt fully paid up with a maturity of more than 5 years; unsecured and subordinated to the claim of other creditors, free of restrictive

clauses and not redeemable before maturity. Since, subordinated term debt is not normally available to participate in the losses; the amount eligible for inclusion in the capital adequacy calculations is limited to 50% of core capital. Moreover, to reflect the diminishing value of these instruments as a continuing source of strength, a cumulative discount (amortization) factor of 20% per annum shall be applied for capital adequacy computations, during the last 5 years to maturity. The banks should obtain written approval of NRB for including any subordinated debt instruments (like Debenture/Bonds) in supplementary (Tier-2) capital.

- c. Hybrid capital instruments. Those instruments which combine certain characteristics of debt and certain characteristics of equity. Each such instrument has a particular feature, which can be considered to affect its quality as capital. Where these instruments have close similarities to equity, in particular when they are able to support losses on an ongoing basis without triggering liquidation, they may be included in Tier 2 capital.
- d. General loan loss provision limited to a maximum of 1.25% of total Risk Weighted Exposures. The loan loss provision in respect of the rescheduled/restructured loans and specific loan loss provision in respect of Non Performing Assets shall not be included under this category. However, Software expenditure or software development expenditure, research and development expenditure, patents, copyrights, trademarks and lease hold developments booked as deferred revenue expenditure are subject to 100% risk weight and shall not be deducted from Tier 1 capital. Investment in shares of Rural Development Banks and other institutions, where the waiver has been explicitly provided by NRB are subject to risk weight of 100% and shall not be deducted from Tier 1 capital. Provisions created in excess of the regulatory requirements or provisions which is not attributable to identifiable losses in any specific loans shall be allowed to be included in the General Loan Loss Provision and shall be eligible for Tier II capital subject to a maximum of 1.25% of total risk weighted exposures. Banks shall be required to disclose the cases where additional provisions have been made.

- e. Investment adjustment reserves created as a cushion for adverse price movements in bank's investments.
- f. Revaluation reserves often serve as a cushion against unexpected losses but may not be fully available to absorb unexpected losses due to the subsequent deterioration in market values and tax consequences of revaluation. Therefore, revaluation reserves will be eligible up to 50% for treatment as Tier 2 capital and limited to a maximum of 2% of total Tier 2 capital subject to the condition that the reasonableness of the revalued amount is duly certified by the internal auditor of the bank.
- g. Exchange equalization reserves created by banks as a cushion for unexpected losses arising out of adverse movements in foreign currencies.
- h. Other reserves
- i. Any other type of reserves notified by NRB from time to time for inclusion in Tier 2 capital

2.1.5.2 <u>DEDUCTIONS FROM CORE (TIER 1) CAPITAL:</u>

Banks shall be required to deduct the following from the Tier 1 capital for capital adequacy purposes. The claims that have been deducted from core capital shall be exempt from risk weights for the measurement of credit risk.

- a. Losses suffered in the current period as well as those brought forward from previous periods,
- b. Book value of goodwill.
- c. Fictitious assets to the extent not written off. (E.g. VRS expense, preliminary expense, share issue expense, deferred revenue expenditure, etc.)
- d. Investment in equity of financial institutions licensed by Nepal Rastra Bank.
- e. All Investments in equity of institutions with financial interest.
- f. Investments in equity of institutions in excess of the prescribed limits.
- g. Investments arising out of underwriting commitments that have not been disposed within a year from the date of commitment.

- h. Reciprocal crossholdings of bank capital artificially designed to inflate the capital position of the bank.
- i. Any other items as stipulated by Nepal Rastra Bank, from time to time.

2.1.5.3 CAPITAL FUNDS:

The capital fund is the summation of Tier 1 and Tier 2 capital. The sum total of the different components of the tier 2 capitals will be limited to the sum total of the various components of the Tier 1 capital net of deductions.. In case the Tier 1 capital is negative, Tier 2 capital shall be considered to be "Nil" for regulatory capital adequacy purposes and hence, in such a situation, the capital fund shall be equal to the Tier 1 capital.

2.1.5.4 MINIMUM CAPITAL REQUIREMENTS:

Unless a higher minimum ratio has been set by Nepal Rastra Bank for an individual bank through a review process, every bank shall maintain at all times, the capital requirement set out below:

- a. A Tier 1 (core) capital of not less than 6 per cent of total risk weighted exposure;
- b. A total capital fund of not less than 10 per cent of its total risk weighted exposure. The Capital Adequacy Ratio (CAR) is calculated by dividing eligible regulatory capital by total risk weighted exposure. The total risk weighted exposure shall comprise of risk weights calculated in respect of bank's credit, operational and market risks.

2.2 Review of NRB Capital Adequacy Norms for Commercial Banks

Prior to 1988, there was no uniform international regulatory standard for setting bank capital requirements. In 1988, the Basel Committee on Banking Supervision (BCBS) developed the Capital Accord, which is known as Basel I, to align the capital adequacy requirements applicable especially to banks in G-10 countries. Basel I introduced two key concepts. First, it defined what banks could hold as capital, as well as designating capital as Tier 1 or Tier 2 according to its loss-absorbing or creditor-protecting characteristics. The second key concept introduced in Basel I was that capital should be held by banks in relation to the risks that they face. The major risks faced by banks relate to the assets held on balance sheet. Thus, Basel I calculated banks' minimum

capital requirements as a percentage of assets, which are adjusted in accordance to their riskiness and assigning risk weights to assets. Higher weights are assigned to riskier assets such as corporate loans, and lower weights are assigned to less risky assets, such as exposures to government.

The BCBS released the "International Convergence of Capital Measurements and Capital Standards: Revised Framework", popularly known as Basel II, on June 26, 2004. This framework was updated in November 2005 and a comprehensive version of the framework was issued in June 2006. Basel II builds significantly on Basel I by increasing the sensitivity of capital to key bank risks. In addition, Basel II recognizes that banks can face a multitude of risks, ranging from the traditional risks associated with financial intermediation to the day-to-day risks of operating a business as well as the risks associated with the ups and downs of the local and international economies. As a result, the new framework more explicitly associates capital requirements with the particular categories of major risks that banks face.

The new capital framework also recognizes that large, usually internationally active banks have already put in place sophisticated approaches to risk measurement and management based on statistical inference rather than judgment alone. Thus, the framework allows banks, under certain conditions, to use their own 'internal' models and techniques to measure the key risks that they face, the probability of loss, and the capital required to meet that loss. In developing the new framework, the Basel Committee wanted to incorporate many elements that help promote a sound and efficient financial system over and above the setting of minimum capital requirements. With this in mind, the Basel II framework incorporates three complementary 'pillars' that draw on the range of approaches to help ensure that banks are adequately capitalized in commensurate with their risk profile.

The Basel Committees on Banking Supervision's (BCBS) recommendations on capital accord are important guiding framework for the regulatory capital requirement to the banking industry all over the world and Nepal is no exception. Realizing the significance of capital for ensuring the safety and soundness of the banks and the banking system, at large, Nepal Rastra Bank (NRB) has developed and enforced capital adequacy requirement based on international practices with appropriate level of customization based on domestic state of market developments. The existing regulatory

capital is largely based on the Basel committee's 1988 recommendations.

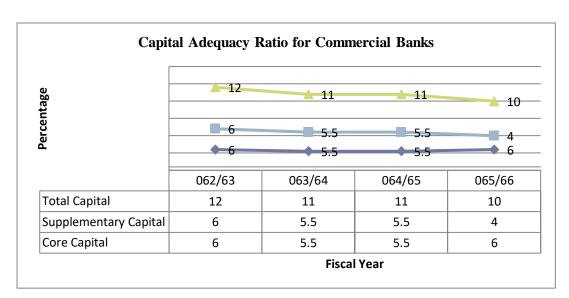
With a view of adopting the international best practices, NRB has already expressed its intention to adopt the Basel II framework, albeit in a simplified form. In line with the international development and thorough discussion with the stakeholders, evaluation and assessment of impact studies at various phases, this framework has been drafted. This framework provides the guidelines for the implementation of Basel II framework in Nepal. Reminiscent of the International convergence of capital measurements and capital standards, this framework also builds around three mutually reinforcing pillars, viz. minimum capital requirements, supervisory review process and disclosure requirements.

Mr. Bir Bikram Rayamajhi, opening address, Seminar on draft "Capital Adequacy Framework" on 10th July, 2006- "The current Basel I capital framework adopted over around two decade ago, has served us well.According to the introduction of the new Accord, issued in June 2004: "the objectives were to maintain the aggregate level of minimum capital requirements, providing incentives to adopt the more advanced risk sensitive approaches of the revised framework." The new capital framework attempts to achieve these objectives with three mutual reinforcing pillars. The first pillar aligns minimum capital requirements more closely with banks' actual underlying risks. At the outset the first pillar is similar to the existing capital framework that provides a measure of capital relative to risk. The purely new are the second and third pillar.

The second pillar- supervisory review- allows supervisors to evaluate a bank's assessment of its own risks and determine whether that assessment seems reasonable. It is not enough for a bank or its supervisors to rely on the calculation of minimum capital under the first pillar. Supervisors should provide an extra set of eyes to verify that the bank understands its risk profile and is sufficiently capitalized against its risks.

The third pillar- market discipline- ensures that the market provides yet another set of eyes. The third pillar is intended to strengthen incentives for prudent risk management. Greater transparency in banks' financial reporting should allow market participants to reward well-managed banks and penalize poorly managed ones.in a nutshell, I think that the new capital framework represents a significant step towards achieving a more

comprehensive and risk sensitive supervisory approach. Basel II is about much more than just setting better quantitative minimum capital requirements. It is bout establishing incentive-based approaches to risk and capital adequacy management, within a comprehensive framework of three mutually supporting pillars. In my view, the contribution of better risk management, a stronger capital structure and improved transparency standards in the banking system can significantly improve financial stability.



Details explain below year wise.

Nepal Rastra Bank, **Annual Bank Supervision Report, (2001-2002):** Strong capital base is the prerequisite for the safety and soundness of any bank, since; any losses arising out of the unexpected risks have to be borne by the bank out of its own capital. It is for this reason, Basel Capital Accord, 1988 stresses on the creation and maintenance of the strong capital base in proportion to the Risk Weighted Assets of the banks. At present, Banks in Nepal are required to maintain minimum risk weighted capital adequacy ratio of 9%, which is to be increased to 12% from the beginning of FY2004-05

In line with the Basel Capital Accord, capital is defined in two tiers, collectively known as capital fund. Capital fund of the banks consists of permanent or core element called 'core capital' and less permanent element called 'supplementary capital'. Banks at present are required to maintain core capital and total capital fund ratios of 4.5% and 9% respectively in proportion to their Risk Weighted Assets.

Core capital of the commercial banks as a whole at end of FY2001-02 was negative at Rs. 18435 million due to heavy accumulated losses. During the given financial year, public sector banks of the country have failed to meet the capital adequacy requirements due to huge amount of accumulated losses of these banks resulting in the negative core capital to the tune of Rs. 25392 million, which was Rs. 17128 million (negative) during the previous year.

Private sector banks of the country complied with the minimum risk adjusted capital requirements of 9% except for Nepal Credit and Commerce Bank Limited, which had negative core capital of Rs. 150 million. The over all risk adjusted capital ratio maintained by these banks stood at 13.25% up from 11.18% during the previous year.

Table 2.2 Capital Fund Table

NPR in million

	Public		Private		Total	
	2000-01	2001-02	2000-01	2001-02	2000-01	2001-02
Core capital	-17128	-25392	6111	6957	-11017	-18435
Supplementary capital	0	0	2105	2614	2105	2614
Total capital fund	-17128	-25392	8216	9571	-8912	-15821

The aggregate capital base (core capital as well as supplementary capital), of the commercial banks as a whole as on the end of FY.2001-02 was negative at Rs. 15821 million against Rs. 8912 million (negative) of previous year registering an increase of 77.52% in the total negative core capital.

Capital base of private sector banks amounted to Rs. 9571 million with the increase of 16.49% from the previous year. Core capital of these banks amounted to Rs. 6957 million with an increase of 13.84% from the previous year.

Supplementary capital of the banks on the same date was Rs. 2614 million registering growth of 24.18% from the previous year.

However core capital of two public sector banks (RBB & NBL) was negative, at Rs. 25392 million due to heavy accumulated losses of these banks, registering increase in negative capital by Rs. 8264 million (48.25%) from the previous year. Such huge negative balance in the core capital of these public sector banks have consumed the

core capital of commercial banks as a whole as a result of which core capital of commercial banks as a whole is also negative.

Nepal Rastra Bank, **Annual Bank Supervision Report**, (2002-2003): The aggregate as well as public sector and private sector banks capital adequacy deteriorated as accumulated loss of the public sector banks highly increased and more private sector commercial banks had total capital fund below the statutory minimum of 10 % of risk weighted assets. However, private sector banks average capital adequacy ratio of 11.95 % is marginally above the statutory requirement. Negative total capital fund of Rs. 31448 million relating to two public sector banks converted the total capital base of the commercial bank in to negative (-11.74%). Table given below clearly shows the fact.

Table 2.3 Capital Fund to Risk Weighted Assets Ratio

Year	2000-01	2001-02	2002-03
Public Sector	-2.51%	-24.55%	-37.83%
Private Sector	15.09%	13.82%	11.95%
Commercial banks	4.00%	-7.25%	-11.74%

Total capital fund was decreased by 80% compared to previous year's negative capital fund base of Rs. -11,380 million. Rate of decrease in capital fund during year 2001-02 was 280%. Significant part of this decline was because of huge loss incurred by two public sector banks during the relevant period. Decline in the capital adequacy ratio of the private sector banks was due to higher growth in exposures in high-risk category, which resulted in growth of risk weighted assets by 29.32%, without commensurate growth in the total capital fund.

Nepal Rastra Bank, **Annual Bank Supervision Report, (2003-2004):** Aggregate Capital fund as well as that of public sector banks remained negative even though there was some improvement in capital adequacy. Though, average capital adequacy ratio of 11.62 Percent private sector banks is marginally above the minimum statutory requirement, more number of banks failed to meet minimum requirement during the year. Negative total capital fund of Rs. 29816 million relating to two public sector banks converted the total capital base of the commercial bank into negative 8.92 Percent. Table given below clearly shows the fact.

Table 2.4: Capital Fund to Risk Weighted Assets ratio

Year	2001-02	2002-03	2003-04	Tota
Public Sector	-24.55%	-37.83%	-35.01%	1014
Private Sector	13.82%	11.95%	11.62%	capi
Commercial banks	-7.25%	-11.74%	-8.92%	tal

fund was increased by 15.90 Percent compared to previous year's capital fund base of negative Rs.20510 million due to improvement in performance of the public sector banks during the year. Rate of decrease in capital fund during year 2002-03 was 80.22 Percent. Decline in the capital adequacy ratio of the private sector banks was due to higher growth in exposures in high-risk category, which resulted in growth of risk weighted assets by 18.21 Percent, without commensurate growth in the total capital fund.

In addition to capital adequacy requirement NRB has directed all commercial banks to increase paid up capital up to minimum of 1 billion by mid July 2009 as a part of strengthening the capital base.

Nepal Rastra Bank, **Annual Bank Supervision Report, (2005):** the consolidated capital of the Nepalese banking industry has shown positive trend during the review period. The capital has improved by Rs.6.34 billion in 2004/05. However, due to the large volume of negative reserves of the public banks, the capital base is still is a long way from being satisfactory.

Table 2.5: Capital of the Banking Industry (Rs.in billions)

Banks	2004/05	change %	2003/04	change %	2002/03
Private	13.88	32.70	10.46	16.61	8.97
Public	-27.80	-9.51	-30.72	-5.68	-32.57
Industry	-13.92	-31.29	-20.26	-14.15	-23.60

The capital adequacy position of the private banks is satisfactory. However, because of continuous large increase in the risk assets of these banks, their capital adequacy ratio is declining.

It is the public banks that are responsible for the ruining the capital base of the entire

banking industry. The public banks due to their inherent problems had suffered massive losses in the past, which are reflected in their negative reserves. Although, these banks have started to improve their financial condition, it is a far cry from an acceptable standard. The public banks, due to their size, have a relatively significant degree of sensitivity to the entire industry's performance and their improvement has been echoed in the improvement of the entire industry's capital.

Figure 2.2: Movements in the Capital Adequacy Ratio

The review of the individual banks capital adequacy, as on Mid July 2005, reflects that most of the banks have complied with the statutory capital adequacy ratio of 11 percent. The banks with non-compliance are Rastriya Banijya Bank (-34.12%), Nepal Bank Ltd. (-19.54%), Nepal Bangladesh Bank Ltd. (2.38%), Nepal Credit & Commerce Bank Ltd. (4.20%), Lumbini Bank Ltd.(6.35%) and Nepal SBI Bank Ltd. (9.47%)

The capital of the Nepalese banking industry has depicted a favorable trend during 2004/05. There are various reasons for this improvement. The banks, during the period, on an average have performed well and some of them have raised capital from the market, which improved the overall capital position of the industry. All banks, except for three private banks were able to post handsome profits. Some banks were able to distribute cash dividends and bonus shares to its shareholders. At the same time, some banks raised finance from the market through issue of right shares while Lumbini Bank raised equity capital through initial public offering during the year.

Nepal Rastra Bank, **Annual Bank Supervision Report, (2006):** the consolidated capital of the Nepalese banking industry has shown positive trend during the review period. The capital has improved by Rs.2.36 billion in 2005/06. However, due to the large volume of negative reserves of the public banks and three private banks, the capital base is still is a long way from being satisfactory.

Table 2.6: Total Capital Fund of the Commercial Banks (Rs .in billion)

Banks/Year	2003/04	Change %	2004/05	Change %	2005/06
Private	10.46	70%	13.88	-2.36%	13.55
Public	-30.72	9.51%	-27.8	9.65%	-25.12
Industry	-20.26	31.29%	-13.92	16.92%	-11.56

The capital adequacy position of the private banks is not satisfactory due to some problematic banks. However, because of continuous large increase in the risk assets of these banks, their capital adequacy ratio is declining. It is the public banks and three private banks that are responsible for the ruining the capital base of the entire banking industry. The public banks due to their inherent problems has suffered massive losses in the past and three private banks due to increase their non-performing loans has suffered massive losses from last year, which are reflected in their negative reserves. Although, the public banks have started to improve their financial condition, it is a far cry from an acceptable standard. The public banks, due to their size, have a relatively significant degree of sensitivity to the entire industry's performance and their improvement has been echoed in the improvement of the entire industry's capital.

The review of the individual banks capital adequacy, as on Mid July 2006, reflects that most of the banks have complied with the statutory capital adequacy ratio of 11 percent. The banks with non-compliance are Rastriya Banijya Bank (-56.40%), Nepal Bank Ltd. (-40.44%), Nepal Bangladesh Bank Ltd. (-13.23%), Nepal Credit & Commerce Bank Ltd. (-3.46%), Lumbini Bank Ltd. (-13.93%) and Agriculture Development Bank (-2.07%).

The capital of the Nepalese banking industry has depicted a favorable trend during 2005/06. There are various reasons for this improvement. The banks, during the period, on an average have performed well and some of them have raised capital from the market, which improved the overall capital position of the industry. All banks, except for three private banks were able to post handsome profits. Some banks were able to distribute cash dividends and bonus shares to its shareholders. At the same time, some banks raised finance from the market through issue of right shares during the year except some problematic banks.

Nepal Rastra Bank, **Annual Bank Supervision Report**, (2007): The consolidated capital of the Nepalese banking industry has shown positive trend during the review period. The capital has improved by Rs.8.10 billion in 2006/07. However, due to the large volume of negative reserves of the public banks and three private banks, the capital base is still is negative and not satisfactory.

Table 2.7: Total capital Fund of the Commercial Banks (NPR in billion)

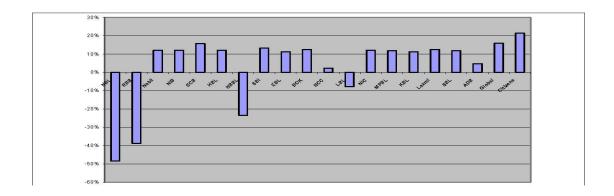
Banks	2003/04	Change%	2004/05	Change%	2005/06	Change%	2006/07
Private	10.46	32.70%	13.88	-2.36%	13.55	25.23%	16.97
Public	-30.72	9.51%	-27.8	9.65%	-25.12	-18.67%	-20.43
Industries	-20.26	31.29%	-13.92	16.92%	-11.56	-70.06%	-3.46

The capital adequacy position of the private banks, public banks and the entire industries is not satisfactory mainly due to some problematic banks.

It is the negative capital base of public banks and three private banks that has resulted on the negative capital base of the entire banking industry. The public banks due to their inherent problems have suffered massive losses in the past and three private banks due to increase their non-performing loans has suffered massive losses from last year, which has resulted in their negative reserves. Although, the public banks have started to improve their financial condition, it is far from an acceptable standard. The public banks, due to their size, have a relatively significant degree of sensitivity to the entire industry's performance and their improvement has been echoed in the improvement of the entire industry's capital.

The review of the individual banks capital adequacy as on Mid July 2007 reflects that most of the banks have complied with the statutory capital adequacy ratio of 11 percent. The banks with non-compliance are Rastriya Banijya Bank (-48.45%), Nepal Bank Ltd. (-32.46%), Nepal Bangladesh Bank Ltd. (-23.55%), Nepal Credit & Commerce Bank Ltd. (2.35%), Lumbini Bank Ltd. (-7.80%) and Agriculture Development Bank (4.84%).

Figure 2.3: Capital Adequacies of Commercial Banks (Mid July 2007)



The capital of the Nepalese banking industry has depicted a favorable trend during 2006/07. There are various reasons for this improvement. The banks, during the period, on an average have performed well and some of them have raised capital from the market, which improved the overall capital position of the industry. All banks, except for four private banks were able to post handsome profits during the year in review.

2.3 Review of International Policies:

Basel Committee on Banking Supervision, Report for the G7 Summit on the activities of the Basel Committee, June 2006: This report, prepared for the Group of Seven (G7) Finance Ministers and Central Bank Governors, discusses the Committee's main efforts over the past year. It summarizes the Committee's contribution to the promotion of stability in the global banking system through its efforts to provide guidance on key banking supervisory issues and foster cooperation among banking supervisors.

The publication in June 2004 of the Basel II Framework represented the outcome of a multi-year effort by the Committee to bring capital adequacy regulations, which are a key underpinning of the safety and soundness of the global banking system, up to date with current business realities and risk management practices. Currently, the Committee is actively promoting cooperation among supervisors with the goal of fostering greater convergence in supervisory practices in implementing the new rules.

The Basel Committee reviewed and confirmed the calibration of the Basel II Framework in May 2006. The QIS results for the Basel Committee member countries show that minimum required capital under the Basel II Framework would decrease relative to the current Accord. For large, internationally active banks, minimum

required capital would decrease by 6.8%, based on the results for the approach that participating banks will likely adopt after implementation. Taking into account the benign economic conditions prevailing in the final quarter of 2005 and the remaining uncertainties in the data, the Committee agreed that no adjustment of the scaling factor to credit risk-weighted assets would be necessary at this stage. The Committee intends to publish a detailed report on the outcome of QIS 5 in G10 and non-G10 countries in June 2006.

Basel Committee on Banking Supervision, International Convergence of Capital Measurement and Capital Standards, A Revised Framework Comprehensive Version, June 2006, the First pillar- minimum capital requirements needs credit, market and operational risk. The capital ratio is calculated using the definition of regulatory capital and risk-weighted assets. The total capital ratio must be no lower than 8%. Tier 2 capital is limited to 100% of Tier 1 capital. The Second Pillar -Supervisory Review Process discusses the key principles of supervisory review, risk management guidance and supervisory transparency and accountability produced by the Committee with respect to banking risks, including guidance relating to, among other things, the treatment of interest rate risk in the banking book, credit risk (stress testing, definition of default, residual risk, and credit concentration risk), operational risk, enhanced cross-border communication and cooperation, and securitization. The third pillar-**Disclosure requirements** The Committee believes that the rationale for Pillar 3 is sufficiently strong to warrant the introduction of disclosure requirements for banks using the Framework. Supervisors have an array of measures that they can use to require banks to make such disclosures. Some of these disclosures will be qualifying criteria for the use of particular methodologies or the recognition of particular instruments and transactions.

2.4 Review of Related Studies

Jurg Blum, **Do capital adequacy requirements reduce risks in banking?** Journal of Banking & Finance 23 (1999), 755-771, in a dynamic framework it is shown that capital adequacy rules may increase a bank's riskiness. In addition to the standard negative effect of rents on risk attitudes of banks a further intertemporal effect has to be considered. The intuition behind the result is that under binding capital requirements an additional unit of equity tomorrow is more valuable to a bank. If raising equity is

excessively costly, the only possibility to increase equity tomorrow is to increase risk today.

Usha Subedi, NRB Unified Directives on Capital Adequacy Norms and its impact A case study of NIC Bank Ltd. (2065), states that 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.

KANTI SHRESTHA UDAS, Capital Adequacy and its Significance to Commercial Banks (2007), found that New directive of NRB are made with a view to protect the deposit of depositors, which also enhances the financial strength of the banks. Even then it has adverse effect in profitability of the banks but this decreasing profit will affect the banks only for short term. This study also reveals that there is a significant impact of NRB directives of capital adequacy on the various aspects of the commercial banks and it also helps in maintaining the stability of commercial banks in the financial market and to uplift the banking sector in Nepal to international standard.

The amendment of the new capital adequacy ratio, not only shows the negative sides but also there are positive sides of new directives. Recently the problems of banks are increasing operating cost and decreasing loan amount resulting decrease in profits of the bank. But is a show it is only for short term because the directives are more effective to protect the banks from bad loans, which protect the bank from bankruptcy as well as protection of deposits of depositors. Increase in capital adequacy ratio strengthens the banks financial position. This will improve the reputation of the banks and increase the goodwill. Above all it can be concluded newly issued directives are more effective than previous one although it has brought some problem toward banks. To increase the decreasing profit of the banks, they should search the alternative such like more investments in other business, bank should adopt new technology according to demand of time and must not depend on only interest income for profits.

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

CHAPTER III

RESEARCH METHODOLOGY

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

3.1 Research Design

This study attempts to analyze the Capital Funds of commercial banks taking the data and information of Research banks. 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 26 commercial banks presently operating in Nepal. Collecting the data of these entire commercial banks is not possible. Hence, Nepal Bank Limited, Rastriya Banijya Bank Limited, and Nabil Bank Limited have been selected for the case study. Thus, the population of the study comprises of all these commercial banks and the sample of Research banks. Also, through the research questionnaire, various responds of the respondents have been considered as sample for the study.

3.3 Data Collection Procedure

The data and information are collected from both the primary and secondary sources. For the primary information, research interview and questionnaire are used. For the collection of secondary data and information, Unified Directives of Nepal Rastra Bank, Annual reports of Research banks, various publications of Nepal Rastra Bank, magazines, and publication of BASEL, various publications and the internet (website www.nrb.org.np) have been used. Also, for other related information, various books and periodicals have been referred from library and some that the researcher self has.

3.4 Data Analysis Tools

Before analyzing the data, the data and information have been presented systematically

in the formats of Tables, Graphs and Charts which will explain a lot about the data and

information collected. For the analysis of the research study, the following financials

tools and statistical tools are used.

3.4.1 Financial Tools

3.4.1.1 Ratio Analysis

Ratio Analysis is one of the best tools for financial analysis. Ratios can be taken as

expression of relationships between two items or group of items and therefore may be

calculated in any number and ways so far meaningful co-relationship is obtainable. In

general, the Ratio Analysis is used as a benchmark for evaluating the financial position

and performance of a firm.

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

(a) Capital Adequacy Ratio

Capital Adequacy Ratio is the foremost tool to analyze the Capital Fund of a bank.

Actually, the fundamental objective of this study is to examine Capital Adequacy of

Research banks. The Capital Adequacy Ratio is based on Total Risk-Weighted Assets

(TRWA) of the bank. Capital Adequacy Ratios are a measure of the amount of a bank's

capital expressed as a percentage of its risk weighted credit exposures. This ratio is

used to examine adequacy of Total Capital Fund and Core Capital, which is yielded by

the following formulas:

To measure the adequacy of Total Capital Fund:

Total Capital Fund × 100%

TRWE

To measure the adequacy of Core Capital:

Core Capital \times 100%

TRWE

53

(b) TRWE to Book Value Ratio:

The TRWE to Book Value Ratio is an important tool in measuring mean risk of total credit in banking for credit risk. This is derived by the following formula:

3.4.2 Statistical Tools

The following statistical tool is used to analyze the data:

(a) Karl Pearson Correlation Analysis:

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

$$r_{12} = \frac{N\Sigma X_1 X_2 - (\Sigma X_1) (\Sigma X_2)}{\sqrt{[N\Sigma X_1^2 - (\Sigma X_1)^2]} \sqrt{[N\Sigma X_2^2 - (\Sigma X_2)^2]}}$$

Where,

 $N = Number of pairs in observation X_1 = Product of the first variable$

 X_2 = 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:
$$r_{12} = \frac{\sum x_1 x_2}{\sqrt{\sum x_1^2} \sqrt{\sum x_2^2}}$$

Where,
$$x_1 = (X_1 - \overline{X}_1)$$
, $x_2 = (X_2 - \overline{X}_2)$

(b) Multiple Correlation Co-efficient

Many independent variables do affect the dependent variable and the study on degree of relationship between a single dependent variable and a number of independent variables in combination are called multiple correlation analysis. For example, capital adequacy ratio depends upon the total capital fund and total risk weighted exposures. If we measure the association between capital adequacy ratio on one side and all the factors affecting the CAR taken together on the other side, then we are using multiple

 $R_{1.23}$ = correlation coefficient between dependent variable CAR X_1 , and joint effect of the independent variables Total Capital Fund X_2 and Total Risk Weighted Exposures X_3 on Capital Adequacy Ratio X_1 .

$$R_{1.23} = \sqrt{\frac{r_{12}^2 + r_{13}^2 - 2r_{12}r_{23}r_{13}}{1 - r_{23}^2}}$$

Where,
$$r_{12} = \frac{\sum x_1 x_2}{\sqrt{\sum x_1^2} \sqrt{\sum x_2^2}}$$
 $r_{23} = \frac{\sum x_2 x_3}{\sqrt{\sum x_2^2} \sqrt{\sum x_3^2}}$ $r_{13} = \frac{\sum x_1 x_3}{\sqrt{\sum x_1^2} \sqrt{\sum x_3^2}}$

CHAPTER IV

DATA PRESENTATION AND ANALYSIS

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

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

This chapter is partitioned into the sections of:

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

4.1 Presentation of Data

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

4.1.1 Capital Fund

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

4.1.1.1 Capital Fund of Research banks

The capital funds of Research banks have been tabulated in Table 4.1 which shows the capital fund of the bank over the following research period.

Table 4.1Amount in NPR

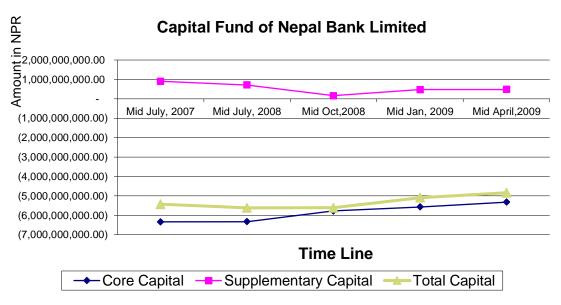
(Capital Fund of Research Banks over the Research period						
			Fiscal Years	_			
Banks/Capital	Mid July,	Mid July, 2008	Mid Oct,2008	Mid Jan, 2009	Mid		
	2007		First Quarter	Second	April,2009		
				Quarter	Third Quarter		
Nepal Bank I	Limited						
a. Core Capital	-6,334,738,883	-6,325,869,045	-5,772,608,000	-5,565,306,000	-5,321,905,000		
b.	905,453,784	710,526,707	165,024,000	477,515,000	486,933,000		
Supplementary							
Capital							
Total Capital	-5,429,285,099	-5,615,342,338	-5,607,584,000	-5,087,791,000	-4,834,972,000		
(a+b)							
Rastriya Ban	ijya Bank						
a. Core Capital	-18814477140	-17,418,563,070	-15,194,569,480	-14,452,615,599	-14,059,604,845		
b.	237350000	338,308,090	0	0	0		
Supplementary							
Capital							
Total Capital	-18577127140	-17,080,254,980	-15194569480	-14452615599	-14059604845		
(a+b)							
Nabil Bank L	imited						
a. Core Capital	1,992,849,715	2,363,598,989	2,585,574,360	2,792,924,473	3,022,105,465		
b.	314,782,680	635,131,175	708,502,504	716,388,300	724,682,918		
Supplementary							
Capital							
Total Capital	2,307,632,395	2,998,730,164	3,294,076,864	3,509,312,773	3,746,788,383		
(a+b)							

(Source: Annual and Quarterly Reports of NBL, RBB, and Nabil Bank Limited)

In mid April 2009, the Total Capital Fund of NBL is Rs. -4,834,972,000 which is negative figure and shown that there is need of huge capital to safe the depositor's deposit. If the bank goes to dissolve, the deposit of depositor are collapsed because of there is no sufficient capital in bank to repay the deposit. And also the RBB is same condition with negative figure Rs. 14059604845 but in Nabil bank there is sufficient capital in his account required by NRB directives.

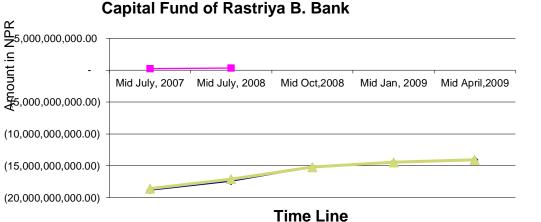
The following figure has shown real situation and trend about the combination of core capital, supplementary capital and total capital during the research periods and we can analyze the figure.

Figure 4.1



In the research period, core capital of NBL is decreasing in negative i.e. it is improving its core capital but supplementary capital is fluctuating but since mid Oct 2008, its figure has shown that it is increasing smoothly. During the Mid July, 2007 to Mid April, 2009 Nepal Bank Limited decreased its negative figure by 10.94% i.e. from Rs.-5,429,285,099 to Rs. -4,834,972,000. If the bank can manage this ratio, the bank can take long period to remove the negative figure of total capital.

Figure 4.2



Total Capital

Core Capital
 Supplementary Capital

From above figure, the supplementary capital of end mid July, 2007 and 2008 are Rs. 237350000 and Rs. 338308090 respectively, since mid Oct, 2008 it is zero. But core capital is slowly decreasing in negative figure i.e. it is improving to reach in zero. Here Core capital is negative figure with huge amount its' indicate that the negative figure of core capital can not safe the depositor deposit and the also creditors.

Capital Fund of Nabil Bank Limited

Figure 4.3

Capital Fund of Nabil Bank Limited



The figure 4.3 shows the growing trend of capital fund of the bank during the research period. The trend shows that core capital and supplementary capital both are in increasing trend. As a result the total capital is increased in their average ratio.

The increment in the capital fund shows that Nabil 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 Total Risk Weighted Exposures

4,000,000,000

3.500.000.000

3,000,000,000

2,500,000,000

2,000,000,000

1,500,000,000

1,000,000,000

Amount in NPR

Total risk weighted exposures is the summation of credit risk, operational risk, and market risk. And the credit risk is the sum of on-balance sheet items and off-balance

sheet items. Credit risk, operational risk and market risk are calculated by multiplying risk percentage under their risk nature followed by prescribed weight. Credit risk calls the Risk Weighted Assets and previous year's capital adequacy ratio depends on only Credit Risk i.e. RWA.

The Risk-Weighted Assets and Exposures of Research banks have been illustrated in Table 4.2. The table shows Risk-Weighted Assets and Exposures both of the banks over the research period i.e. since Mid July, 2007 to till quarter

Table 4.2

Risk-Weight	ed Exposures o	of Research Ba		research perio	d			
		Fiscal Years						
	Mid July, 2007	Mid July, 2008	Mid Oct,2008	Mid Jan, 2009	Mid April,2009			
Nepal Bank Limited								
a. Balance Sheet Assets	19,031,280,703	22,274,475,330	27,535,824,000	28,826,307,000	27,962,820,000			
b. Off Balance Sheet Assets	479,992,476	682,956,747	1,065,349,000	873,643,000	1,186,534,000			
A. RWE for Credit Risk (a+b)			28,601,173,000	29,699,950,000	29,149,354,000			
B. RWE for Operational Risk			2,776,408,000	2,908,338,000	2,908,338,000			
C .RWE for Market Risk			1,175,879,000	1,227,719,000	1,292,134,000			
Total Risk Weighted Exposures								
(A+B+C)	19,511,273,179	22,957,432,077	32,553,460,000	33,836,007,000	33,349,826,000			
Rastriya Banijya Bank								
a. Balance Sheet Assets	37,957,689,950.90	39,970,659,845.25	54,022,707,652	56,948,112,501	40,421,645,225			
b. Off Balance Sheet Assets	1,042,871,807.08	1,137,994,253.82	1,057,137,580	775,594,025	1,392,650,071			
A. RWE for Credit Risk (a+b)	39,000,561,757.98	41,108,654,099.07	55,079,845,232	57,723,706,526	41,814,295,296			
B. RWE for Operational Risk			3,517,301,228	3,517,301,228	3,517,301,228			
C .RWE for Market Risk			1,699,638,892	1,602,695,125	1,673,169,631			
Total Risk Weighted Exposures								
(A+B+C)	39,000,561,757.98	41,108,654,099.07	60,296,785,352	62,843,702,879	47,004,766,155			
Nabil Bank Limited	1	1		1				
a. Balance Sheet Assets	16,946,257,093	23,724,198,289	24,462,964,890	25,707,177,261	26,943,844,409			
b. Off Balance Sheet Assets	2,220,508,940	3,286,366,026	3,851,021,191	3,407,265,657	3,382,760,420			
A. RWE for Credit Risk (a+b)	19,166,766,033	27,010,564,315	28,313,986,081	29,114,442,918	30,326,604,829			
B. RWE for Operational Risk			2,264,233,871	2,264,233,871	2,264,233,871			
C .RWE for Market Risk			119,713,856	96,456,561	285,002,216			
Total Risk Weighted Exposures								
(A+B+C)	19,166,766,033	27,010,564,315	30,697,933,808	31,475,133,350	32,875,840,916			

(Source: Annual and Quarterly Reports of NBL, RBB, and Nabil Bank Limited)

The TRWA as well as TRWE of NBL and Nabil has been increasing gradually in the research period but RBB's TRWE of Mid April, 2009 has been declined than Mid Jan, 2009. The increasing of TRWA/TRWE indicates that there is more need of Total Capital Fund to maintain the required capital adequacy ratio. Also it indicates that either book value of risks (credit, operation, and market) increased or the multiplying factor risk weight is decreased i.e. more risked assets changed to less risked assets.

The following figure has shown the actual figure of Risk Weighted Assets/Exposures of research banks separately during the research period. It can easy to analyze and predict the real situation.

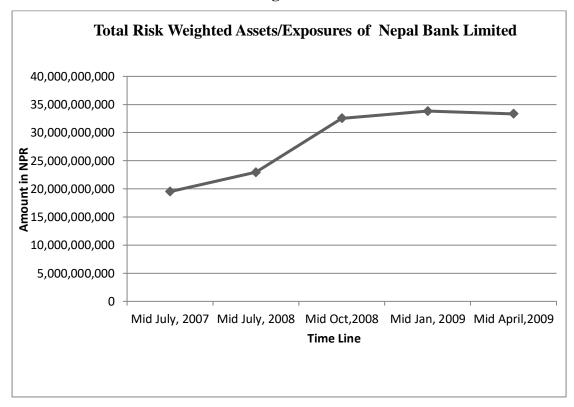


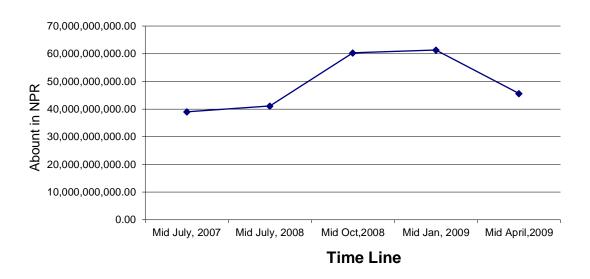
Figure 4.4

The figure 4.4 shows the increasing trend of TRWA/TRWE in during period from Mid July, 2007 to Mid April, 2009. The total risk weighted assets of NBL has reached from Rs. 19,511,273,179 to Rs. 29,149,354,000 since Mid July, 2007 to Mid April, 2009.

Increasing of TRWE needs more Total Capital Fund to maintain Capital Adequacy Ratio prescribed by Capital Adequacy Framework of NRB. This can minimize the risk of depositors and creditors fund.

Figure 4.5

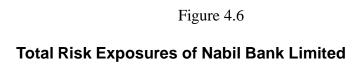
Total Risk Weighted Exposures of Rastriya B. Bank

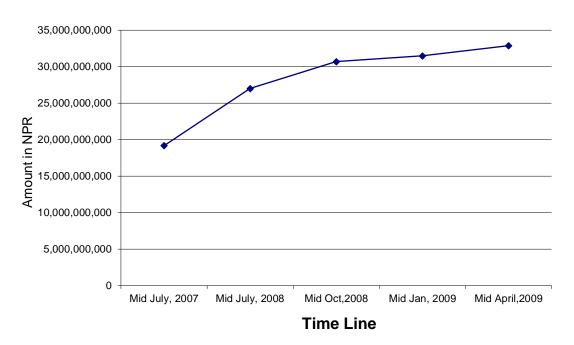


The figure 4.5 shows the fluctuating trend of TRWA/TRWE in during period from Mid July, 2007 to Mid April, 2009 but for the data no available for Mid Oct, 2008. The total risk weighted assets of RBB has reached from Rs. 39,000,561,757.98 to Rs. 41,814,295,296 since Mid July, 2007 to Mid April, 2009. But TRWA of Mid July, 2007 to TRWE of Mid April, 2009 has drastically up because of increasing Operational Risk and Market Risk in Mid April, 2009 from Rs. 39,000,561,757.98 to Rs. 47,004,766,155.

Increasing of TRWE needs more Total Capital Fund to maintain Capital Adequacy Ratio described by Capital Adequacy Framework of NRB and vice versa. This can minimize the risk of depositors and creditors fund.

From Mid, Jan 2009 to Mid April, 2009 the TRWE has again declined by huge amount because of changing credit risk. It can show that there is increased in on-balance sheet items and off-balance sheet items.





The figure 4.6 shows the increasing trend of TRWA/TRWE in during period from Mid July, 2007 to Mid April, 2009. The total risk weighted assets of Nabil Bank has reached from Rs. 19,166,766,033 to Rs. 32,875,840,916 from Mid July, 2007 to Mid April, 2009. In this period, the figure and table show that the gradually development of credit risk, operational risk and market risk.

Increasing of TRWE needs more Total Capital Fund to maintain Capital Adequacy Ratio described by Capital Adequacy Framework of NRB. This can minimize the risk of depositors and creditors fund.

4.2 Ratio Analysis

The following ratios are used to evaluate the financial of research banks in regard of the capital adequacy and capital fund.

4.2.1 Capital Adequacy Ratio of Research Bank

Capital Adequacy Ratio shows the strength of a bank. The calculation of Capital Adequacy Ratios has been presented in Appendix E. The calculated Capital Adequacy Ratio is shown in the Table 4.3 from the FY 2063/64 to current third quarter.

Table 4.3

Capital Adequacy Ratio of Research Banks over the research period								
					Mid			
	Mid July, 2007	Mid July, 2008	Mid Oct,2008	Mid Jan, 2009	April,2009			
Nepal Bank Limited	Nepal Bank Limited							
Tier 1 Capital to Total Risk								
Weighted Exposures	-32.46	-27.55	-17.73%	-16.45%	-15.96%			
Tier 1 and Tier 2 Capital to Total								
Risk Weighted Exposures	-37.97	-27.55	-17.73%	-16.45%	-15.96%			
Rastriya Banijya Bank								
Tier 1 Capital to Total Risk								
Weighted Exposures	-48.24	-42.37	-25.80	-23.00%	-29.91%			
Tier 1 and Tier 2 Capital to Total								
Risk Weighted Exposures	-48.24	-42.37%	-25.80	-23.00%	-29.91%			
Nabil Bank Limited	Nabil Bank Limited							
Tier 1 Capital to Total Risk								
Weighted Exposures	10.40%	8.75%	8.42%	8.87%	9.19%			
Tier 1 and Tier 2 Capital to Total								
Risk Weighted Exposures	12.04%	11.10%	10.73%	11.15%	11.40%			

(Source: Appendix I)

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

For FY 2063/64: Core Capital 5.50% and Total Capital 11% of TRWA

For FY 2064/65: Core Capital 5.50% and Total Capital 11% of TRWA

For FY 065/66: Core Capital 6% and Total Capital 10% of TRWE

Nepal Rastra Bank revised the rate of capital adequacy time to time. For FY 2063/64 and FY 064/65, it was 11% of Total Risk Weighted Assets. But from 2065 Ashwin, it

has applied Basel II principle, and need 10% Capital Adequacy Ratio on Total Risk Weighted Exposures. Total Capital Ratio declined by 1% but core capital ratio increased by .5%. It shows, core capital is more important than supplementary capital. The latest policy needs core capital rather than supplementary because to keep sound financial transactions by making promoter responsible.

0 Mid July, 2007 Mid Oct.2008 Mid July, 2008 Mid Jan, 2009 Mid April.2009 -5 -10 -15 **Abount in NPR** -20 -25 -30 -35 -40 **Time Line**

-Tier 1 Capital to Total Risk Weighted Exposures

Tier 1 and Tier 2 Capital to Total Risk Weighted Exposures

Figure 4.7

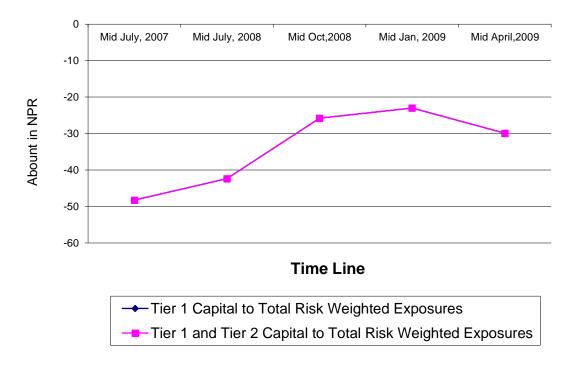
Capital Adequacy Ratio of Nepal Bank Limited

The figure 4.7 displays the decreasing trend of the Capital Adequacy Ratios of NBL in negative figure which shows that Nepal Bank Limited has been improving its negative figure of capital adequacy ratio. Due to the negative figure of core capital, the capital adequacy ratio is in negative figure. While the Tier 1 capital of a bank is negative, the Tier 2 capital for regulatory purposes shall be considered as zero and hence the capital fund, in such cases shall be equal to the core capital.

Therefore, in this figure the Tier 1 capital to TRWE is equal to Tier 1 and 2 capitals to TRWE. After the study of this data and minimum capital requirement, the bank has to increase its core capital to maintain minimum capital requirement.

Figure 4.8

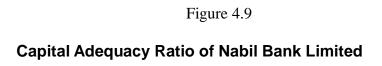
Capital Adequacy Ratio of Rastriya Banijya Bank

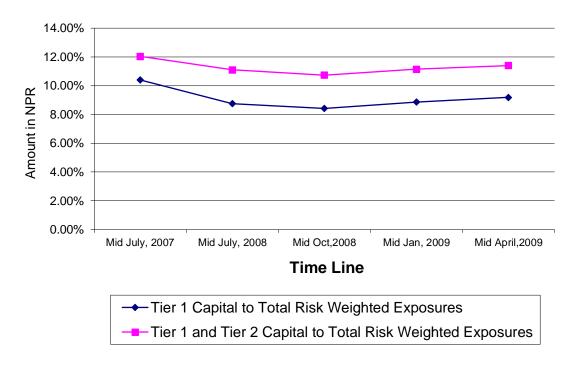


The figure 4.8 displays the decreasing trend of the Capital Adequacy Ratios of RBB in negative figure which shows that RBB has been improving its negative figure of capital adequacy ratio from Mid July 2007 to Mid July 2008. But Mid April, 2009 shows that the trend increased from Mid Jan, 2009. It shows there is some problems in banking to maintain capital adequacy ratio.

Due to the negative figure of core capital, the capital adequacy ratio is in negative figure. While the Tier 1 capital of a bank is negative, the Tier 2 capital for regulatory purposes shall be considered as zero and hence the capital fund, in such cases shall be equal to the core capital.

Therefore, in this figure the Tier 1 capital to TRWE is equal to Tier 1 and 2 capitals to TRWE. After the study of this data and minimum capital requirement, the bank has to increase its core capital to maintain minimum capital requirement.





The figure 4.9 displays the trend of the Capital Adequacy Ratios of Nabil Bank Limited which has been maintaining the minimum capital requirement.

This shows the competency of bank is to maintain the capital adequacy ratio directed by authorized body. The bank is very successful to maintain the capital adequacy ratio because there is nominal gap between bank's actual capital adequacy ratio and required capital adequacy ratio. It explains the good combination of total capital fund and total risk weighted exposures. The banks' depositors and creditors safe either capital fund is high or risk exposure is low. Therefore, the portfolio of capital fund and risk weighted exposures is considerable to maintain the capital adequacy ratio.

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

Correlation may be defined as the degree of linear relationship existing between two or more variables. Two various are said to be correlated when the change in the value of one variable is accompanied by the change of another variable. For example, changes in the ratio of Capital Adequacy are associated with the change in Total Capital Fund and Total Risk Weighted Exposure. The correlation like regression shows the degree and direction of relationship between the variables but, unlike regression, it dose not show the cause and effect relationship.

Table 4.4

Correlation Co-efficient

Correlation between	Values				
	NBL	RBB	Nabil		
CAR and Total Capital (r ₁₂₎	0.937952578	0.949424186	-0.620942719		
CAR and TRWE (r ₁₃₎	0.997327122	0.917665552	-0.738253567		
Total Capital and TRWE (r ₂₃₎	0.933661705	0.74753629	0.9868942		
R _{1.23}	0.997507105	0.99970426	0.9949515		
$R^{2}_{1.23}$	0.995020425	0.996253234	0.989928488		

Source: Appendix G.

The calculated correlation co-efficient of Nepal Bank Limited between CAR and Total Capital Fund is .94, CAR and TRWE is approximately 1, and Total Capital and TRWE is .934. These relation shows that the relationship between the given variables. This relationship between calculated variable is perfect i.e. CAR increased due to the increasing total capital, and also TRWE and so on.

For Rastriya Banijya Bank Limited, correlation coefficient shows that relationship between variable is significant but high for total capital and total risk weighted exposures. It explains the relationship between two variables which is calculated above and appendix.

The correlation coefficient between CAR and Total Capital is -.621, and CAR and TRWE is -.738 for Nabil Bank. But correlation coefficient between Total Capital and TRWE is approximately 1 i.e. it is perfect. It can say that capital adequacy ratio changed that due to the change of both total capital fund and total risk weighted

exposures. The relationship of Capital Adequacy Ratio between total capital and total risk weighted exposures high negative.

Here, the interpretation of correlation coefficient of given variables will be wrong because there are one dependent variable- capital adequacy ratio and two independent variables- total capital fund and total risk weighted exposures. Therefore, there is need of multiple correlation coefficients and its determination to predict their relationship.

Nepal Bank Limited:

Here, the determination of multiple correlation coefficients is approximately 1. This tells us that 100% of total variation in Capital Adequacy X_1 is due to the variable X_2 and X_3 .

Rastriya Banijya Bank:

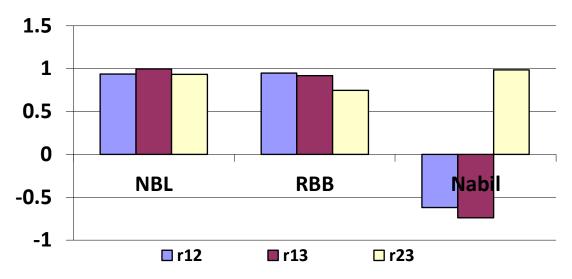
Here, the determination of multiple correlation coefficients is approximately 1. This tells us that 100% of total variation in Capital Adequacy X_1 is due to the variable X_2 and X_3 .

Nabil Bank Limited:

Here, the determination of multiple correlation coefficients is .99. This tells us that 99% of total variation in Capital Adequacy X_1 is due to the variable X_2 and X_3 and 1% is due to the other factor.

Figure 4.10





4.4 Risk Percentage and Correlation Coefficient of Credit Risk

The exactly meaning of capital adequacy is bank must have adequate capital to invest depositor's deposit as a loan. The standard of NRB is 10% of total risk weighted exposures and Basel Standard is 8% of total risk weighted exposures. That is if the bank wants to invest one hundred rupees in riskier investment there must be at least ten rupees of his own money, remaining can be the depositors deposit or creditors loan or both.

The following table shows the risk of deposits in researched banks.

Table 4.5

Ratio of TRWE of Credit Risk and its Book Value and their Correlation
Coefficient

	Nepal Bank Limited	RBB	Nabil
Mid July 2007	0.455282987	0.69	0.575304085
Mid July 2008	0.503132008	0.69	0.595663469
Mid Oct, 2008	0.574860084	0.60	N/A
Mid Jan,2009	0.575598241	0.59	N/A
Mid April,2009	0.560677266	0.41	N/A
r ₁₂ (Book Value and TRWE	0.984677649	0.73449334	1
for Credit Risk)			

Source: Appendix I

The ratio of TRWE of Credit Risk and its Book Value represents the average risk of credit which indicates that how many risk in banking. Nepal Bank Limited has around fifty percent, Rastriya Banijya Bank has fluctuated in decreasing trend from 69 percent to 41 percent but Nabil Bank Limited has 57% for fiscal year 063/064 and 59% for 064/65. The commerce philosophy "More risks, more gains and no risks no gains" apply for lending deposit of bank's investment. But more risks need more capital under the capital adequacy framework. NRB says that, if bank wants to invest in riskier assets bank should have to maintain 6% core capital.

And also the correlation coefficient of Book Value of Credit Risk and its TRWE said that the relationship between these two variable. For Nepal Bank Limited, it has approximately 1 i.e. perfect correlation, for Nabil it has also 1. Perfect correlation but Rastriya Banijya Bank Limited, it has only 73% i.e. high, it has changed the investment portfolio. It is not significant that is it can say the ratio of book value and TRWE declined due to the change of its investment portfolio.

4.5 Study of Primary Research

4.5.1 Study of response about capital adequacy of Officials of Research banks

Regarding the impact of capital adequacy norms, a simple questionnaire was developed as shown in Appendix J. A total number of twenty one officials participated in the queries. The questionnaire revealed the opinions that bank officials held towards the capital fund and capital adequacy. The following analysis predicts the answering of bank officials.

	No. of Responses	Percentage			
Question No. 1: Do capital adequacy requirements reduce risks in banking?					
a) Yes	19	90%			
b) No.	1	5%			
c) Don't Know	1	5%			
Total	21	100%			

Ninety percent officials agreed that the capital adequacy requirements reduce risks in banking, five percent have no idea and five percent did not agree.

		No. of Responses	Percentage
Question No. 2 NRB's prescribed Capital Adequacy ratio is different from original Basel. Why			
a)	Imperfect Banking System	6	29%
b)	Poor Practices in Baking Sector	5	24%
c)	Problems of Professionalism		0%
d)	Others (please specify)	10	47%
	Total	21	100%

Different between Basel standard and NRB standard in Capital Adequacy Ratio is different issues. 29% respondents has agreed with imperfect banking system, 24% has agreed with agreed with poor practices in banking sector and remaining 47% has agreed with imperfect banking system, poor practices in banking sector, problems of professionalism and also other factors. Out of 47%, some interview has added most important factors also e.g., lack of proper knowledge personnel in banking sector, local requirements of country, it's depend on case to case basis, the Basel Standard may not support the Nepal's standard, Basel II requirement is applicable mainly for international banks, market variances are too different than the international banking market & Nepal is just in first stage in this matter, immature or unbalanced financial system, situation of financial condition of the country. They have suggested very crucial points for implementing the capital adequacy in Nepal. These suggesting points are very important factor to achieve the goals of capital adequacy framework set by NRB.

		No. of Responses	Percentage	
Question No. 3 Do you agree with the revision in capital adequacy ratio is necessary from				
time to tir	me?			
a) Y	es, it is necessary	17	81%	
b) N	ot at all	4	19%	
Te	otal	21	100%	

The revision of capital adequacy ratio is right to time to time be applicable for 81% respondents but 19% percent says it is not necessary.

		No. of Responses	Percentage						
Questio	Question No. 4: The calculation of CAR had to use credit risk. From this year, it added								
operati	operational risk and market risk. Is ti rational to add the operational risk and market risk?								
a)	Yes	21	100%						
b)	No		0%						
c)	Don't know		0%						
d)	Others (please specify)		0%						
	Total	21	100%						

100% says that the adding operational and market risk for calculation the capital adequacy ratio in market risk. But one person agrees with above explanation and added capital to address other risks may also be introduced gradually.

		No. of Responses	Percentage						
Questi	Question No. 5: which of the following steps is appropriate for your bank to follow to cope								
for the	compliance of capital adequacy ratio								
a)	By increasing Core Capital	13	62%						
b)	By increasing Supplementary Capital		0%						
c)	By decreasing TRWE	2	10%						
d)	Others (please specify)	6	28%						
	Total	21	100%						

Research shows different perspectives in maintain the capital adequacy ratio. 62% says by increasing core capital, 10% by decreasing TRWE and 28% says above all and others factors. 5% has said that high risk exposure needs high capital fund. Which is main aim of capital adequacy requirements.

		No. of Responses	Percentage				
Question No. 6: Which stakeholders' interest will be safeguard most by adequate capital							
fund?							
a)	Depositor's interest	17	81%				
b)	Shareholder's interest		0%				
c)	Creditor's interest		0%				
d)	Others (please specify)	4	19%				
	Total	21	100%				

Obviously adequate capital safes the depositor's deposit and 81% agreed, 19% agreed with depositors' deposit, shareholder's fund and creditors' interest. 5% agree with depositors' interest and add banks should maintain adequate buffer capital based on its risk exposure to be safe and sound to protect depositors and other stakeholders interest as the minimum capital adequacy ratio set by NRB is the basis only.

		No. of Responses	Percentage						
Questio	Question No. 7: Is it applicable the review process of Basel standard for Nepalese Banking								
Sector	?								
a)	Yes	15	71%						
b)	No.	4	19%						
c)	Don't Know	2	10%						
	Total	21	100%						
Questio	on No. 8: Is it appropriates the reporting of d	isclosure requirement	for Nepalese						
Contex	t?								
a)	Yes	13	62%						
b)	No.	5	24%						
c)	Don't Know	3	14%						
	Total	21	100%						

The supervisory review process and disclosure requirements is applicable and appropriate for Nepalese context, 71% agree with supervisory review process, 19% disagree and 10% don't know but only 62% agree with disclosure requirements, 24% disagree and 14 % have no ideas.

There is an ongoing debate about the effects of capital adequacy rules on banks' risk taking behavior. This thesis introduces very little surface level questions to identify the perception of bank officials who are reporting and implementing the capital adequacy requirement. Capital adequacy requirement does not reduce risk but it makes responsible for taking risks. In Nepal, we have imperfect banking system, poor practices, professionalism problems and other problems. Capital adequacy system safeguards not only the depositors' deposit but it safeguards all stakeholders' interest.

And the supervisory review process and disclosure requirements need qualified manpower in bank and also knowledge of banks' stakeholder currently which is not accessible for our banking system.

CHAPTER V

SUMMARY, FINDINGS, CONCLUSION & RECOMMENDATION

5.1 Summary

This research is aimed to studying capital adequacy for commercial banks set by NRB with case study of Nepal Bank Limited, Rastriya Banijya Bank Limited and Nabil Bank Limited.

Generally, Bank is known as the depositor's bank because the first primary function of the bank is to collect deposit. Therefore, bank collects hug amount of deposits and it lends to earn profit. Public hardly get surplus from their income and deposit to bank for safety. Banks earn profit by lending deposits in riskier assets. If the lending of bank suffers in loss then ultimately the deposit of depositor will suffer in risk. The promoter of bank always have ambitious to earn profit in short period by lending money in riskier assets because riskier assets will give high return with high risk. To be responsible in lending the money in riskier assets, the capital adequacy requirement need. Because capital adequacy requirement explains about ratio about the capital and total risk weighted exposures which can secure the depositors deposit by making shareholders responsible by increasing their capital if they want to lend investment in riskier assets.

Being the central bank of Nepal, NRB has the responsibility to give special attention to the interest of depositors. Because it has already explained the bank is the bank of depositors' and the depositors can get only nominal interest in their deposited money. 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 Nepal Bank Limited, Rastriya Banijya Bank Limited and Nabil Bank Limited. The study showed that the capital adequacy requirement and its affect in banking system. Total capital fund of Nepal Bank Limited and Rastriya Banijya Bank is negative and it can not secure depositor deposit but Nabil Bank has sufficient fund prescribed by NRB. Risk Weighted Exposures has been increasing over the research almost all research banks.

But its percentage on book value is different and it explains how many percentages have risk in book value of credit risk, it has shown in table 4.4. The capital adequacy ratio of Nepal Bank Limited is below by -15.96% in Mid April 2009 which was -32.46% in Mid July, 2007. It improved slightly. Rastriya Banijya Bank has dangerous capital adequacy ratio -48.24% in Mid July, 2007 and today mid April, 2009 has -29.91%. But private operated bank Nabil has smoothly maintained the capital adequately ratio prescribed by NRB 11.10% in Mid July 2008 followed 11.00% requirements and 11.40% in Mid April, 2009 followed 10% requirements.

The correlation coefficient of Capital Adequacy Ratio, Total Capital Fund, and Total Risk Weighted Exposures are significant for Nepal Bank Limited and Rastriya Banijya Bank Limited. But correlation coefficient between CAR and Total Capital Fund, and CAR and TRWE is high negative of Nabil but correlation coefficient between total capital and TRWE is approximately perfect and also multiple correlation coefficient and determination.

5.2 Findings

Capital Adequacy Framework has three pillars: the first pillar- minimum capital requirements, the second pillar-supervisory review process, and the third pillar-market discipline.

The first pillar-minimum capital requirements of Nepal Bank Limited and Rastriya Banijya Bank are below almost over by minus 25%. They have not maintained the required percentage. This indicates that they can not secure the depositors' deposit. It should be go to liquidation but the government guaranteed the depositors deposit therefore they are running. In Nabil Bank limited, it is satisfied.

The second pillar-supervisory review process which have four principles:

Principle 1: Banks should have a process for assessing their overall capital adequacy in relation to their risk profile and a strategy for maintaining their capital levels.

Principle 2: Supervisors should review and evaluate banks' internal capital adequacy assessments and strategies, as well as their ability to monitor and ensure their

compliance with regulatory capital ratios. Supervisors should take appropriate supervisory action if they are not satisfied with the result of this process.

Principle 3: Supervisors should expect banks to operate above the minimum regulatory capital ratios and should have the ability to require banks to hold capital in excess of the minimum.

Principle 4: Supervisors should seek to intervene at an early stage to prevent capital from falling below the minimum levels required to support the risk characteristics of a particular bank and should require rapid remedial action if capital is not maintained or restored.

Here, Nepal Rastra Bank is the supervisor of research bank and it follows the above explained principle to cope the capital need by total risk weighted exposures. The supervisory review process more needed for those banks who can not maintain the required capital fund and supervisor should corrective action to these banks. Principle 2 explains, supervisors should take appropriate supervisory action if they are not satisfied with the result of this process but in research the core capital of government's own bank has negative i.e. without investing capital government has been operating banks, and its body, supervisors of banks-NRB needs core capital 6% of total risk weighted exposures. And Nabil Bank Limited have sufficient capital fund. Government does not want to do better but taught do better. The question arises how can worse teach better? The RBB capital adequacy ratio is fluctuated which indicated it is not operated smoothly. The multiple correlation coefficient and its determination is satisfactory, it is perfectly 1.

The third pillar, the market discipline, the purpose of Pillar 3 — market discipline is to complement the minimum capital requirements (Pillar 1) and the supervisory review process (Pillar 2). The Committee aims to encourage market discipline by developing a set of disclosure requirements which will allow market participants to assess key pieces of information on the scope of application, capital, risk exposures, risk assessment processes, and hence the capital adequacy of the institution. The Committee believes that such disclosures have particular relevance under the Framework, where reliance on internal methodologies gives banks more discretion in assessing capital requirements. In principle, banks' disclosures should be consistent with how senior management and

the board of directors assess and manage the risks of the bank. Under Pillar 1, banks use specified approaches/methodologies for measuring the various risks they face and the resulting capital requirements. The Committee believes that providing disclosures that are based on this common framework is an effective means of informing the market about a bank's exposure to those risks and provides a consistent and understandable disclosure framework that enhances comparability.

Market discipline related with the qualified manpower of bank. For examples the disclosure requirements need the competency of bank officials. And the publishing of disclosure in website will be valuable if the stakeholders read and analyze the banks. Public have no idea about what is capital adequacy. Capital adequacy determines the market price of share but public did not know about this. Therefore, research has not satisfied because Nepalese banking sector have not sufficient knowledge about the market discipline. Because capital adequacy framework need the disclosures publishing in website but

Basically, capital adequacy requirements have two effects on risk taking incentives. First, they influence the marginal costs of taking risk. The tighter the requirements, the lower the profits in case of success and the less a bank has to lose if it defaults. Since the marginal costs of taking risk are these profits times the decrease in the probability of success, a higher requirement tends to increase risk.

Second, capital rules affect the marginal return of taking risk. Here the actual effect depends crucially on the regime we are in. If the regulation is only binding in the first period, marginal returns of taking risk are reduced. Increasing risk raises the rate of return in case of success. The gain from such an increase is proportional to the amount invested at this rate of return. Under a binding requirement the amount that can be invested is a multiple of the given value of equity. The tighter the regulation, the lower this multiple. Therefore, a stricter regulation today tends to reduce risk.

5.4 Recommendations

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

- The capital fund of the bank under study is highly depending upon share capital. It is recommended to the commercial banks to follow optimal capital structure which maximizes the market value of the firm. The both banks Nepal Bank Limited and Rastriya Banijya Bank should have increased core capital because their core capital is negative. Nabil Bank Limited can maintain its capital adequacy ratio by keeping perfect correlation coefficient between Total Capital Fund and TRWE.
- ➤ The capital adequacy frameworks have many problems in Nepalese banking sector. Poor banking system, lack of professionalism, imperfect banking system are important. Nepal Rastra Bank should have to reduce these problems in banking sector.
- It has been found that the depositors are not aware of the fact of the necessity of adequate capital fund to safeguard their deposits. They deposit their money to any bank regardless of adequate capital fund which may endanger safety of their money. Therefore, NRB should initiate awareness programs to make the depositors aware of such fact and carefully think before depositing money in any commercial banks.
- 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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ANNEXURES

A: CAPITAL ADEQUACY TABLE

1.1	Risk Weighted Exposures	Current Period	Previous Period
a	Risk Weighted Exposure for Credit Risk		
b	Risk Weighted Exposure for Operational Risk		
С	Risk Weighted Exposure for Market Risk		
Tot	al Risk Weighted Exposures (a+b+c)		

1.2	CAPITAL	Current Period	Previous Period
Cor	e Capital (Tier 1)		
a	Paid up Equity Share Capital		
b	Proposed Bonus Equity Shares		
С	Irredeemable Non-cumulative preference shares		
d	Share Premium		
e	Statutory General Reserves		
f	Retained Earnings		
g	Un-audited current year cumulative profit		
h	Capital Redemption Reserve		
i	Capital Adjustment Reserve		
j	Dividend Equalization Reserves		
k	Other Free Reserve		
1	Less: Goodwill		
m	Less: Fictitious Assets		
n	Less: Shortfall in provisions		
0	Less: Loan to parties prohibited by Acts and directives		
p	Less: Investment in equity in licensed Financial		
	Institutions		
q	Less: Investment in equity of institutions with vested		
	interests		
r	Less: Investment in equity of institutions in excess of		
	limits		
S	Less: Investments arising out of underwriting		
	commitments		
t	Less: Reciprocal crossholdings		
u	Less: Other Deductions		
Sup	plementary Capital (Tier 2)		
a	Cumulative and/or Redeemable Preference Share		
b	Subordinated Term Debt		
С	Hybrid Capital Instruments		
d	General loan loss provision		
e	Investment Adjustment Reserve		
f	Assets Revaluation Reserve		
g	Exchange Equalization Reserve		
h	Other Reserves		
	Total Capital Fund (Tier I and Tier II)		

1.3 CAPITAL ADEQUACY RATIOS	Current Period	Previous
-----------------------------	----------------	----------

	Period
Tier 1 Capital to Total Risk Weighted Exposures	
Tier 1 and Tier 2 Capital to Total Risk Weighted Exposures	

B: RISK WEIGHTED EXPOSURE FOR CREDIT RISK

D. KISK WEIGHTED	1					1
A. Balance Sheet Exposures	Book Value	Specific Provision	Eligible CRM	Net Value	Risk Weight.	Risk Weighted Exposures
	a	b	с	d=a-b-c	e	f=d*e
Cash Balance	0	0	C	()	0%	0
Balance With Nepal Rastra Bank	0	0		0	0%	0
Gold	0	0		0	0%	0
Investment in Nepalese Government	0	0		0	0%	0
Securities				O O	070	· ·
All Claims on Government of Nepal	0	0		0	0%	0
Investment in Nepal Rastra Bank securities	0	0		0	0%	0
All claims on Nepal Rastra Bank	0	0		0	0%	0
Claims on Foreign Government and Central Bank (ECA 0-1)	0	0		0	0%	0
Claims on Foreign Government and Central Bank (ECA -2)	0	0	0	0	20%	0
Claims on Foreign Government and Central Bank (ECA -3)	0	0	0	0	50%	0
Claims on Foreign Government and Central Bank (ECA-4-6)	0	0	0	0	100%	0
Claims on Foreign Government and Central Bank (ECA -7)	0	0	0	0	150%	0
Claims On BIS, IMF, ECB, EC and on Multilateral Development Banks (MDB's) recognized by the framework	0	0		0	0%	0
Claims on Other Multilateral Development Banks	0	0	0	0	100%	0
Claims on Public Sector Entity (ECA 0-1)	0	0	0	0	20%	0
Claims on Public Sector Entity (ECA 2)	0	0	0	0	50%	0
Claims on Public Sector Entity (ECA 3-6)	0	0	0	0	100%	0
Claims on Public Sector Entity (ECA 7)	0	0	0	0	150%	0
Claims on domestic banks that meet capital adequacy requirements	0	0	0	0	20%	0
Claims on domestic banks that do not meet capital adequacy requirements	0	0	0	0	100%	0
Claims on foreign bank (ECA Rating 0-1)	0	0	0	0	20%	0
Claims on foreign bank (ECA Rating 2)	0	0	0	0	50%	0
Claims on foreign bank (ECA Rating 3-6)	0	0	0	0	100%	0
Claims on foreign bank (ECA Rating 7)	0	0	0	0	150%	0
Claims on foreign bank incorporated in SAARC region operating with a buffer of 1% above their respective regulatory capital requirement	0	0	0	0	20%	0
Claims on Domestic Corporate	0	0	0		100%	
Claims on Foreign Corporate (ECA 0-1)	0	0	0	0	20%	0
Claims on Foreign Corporate (ECA 2)	0	0	0	0	50%	0
Claims on Foreign Corporate (ECA 3-6)	0	0	0	0	100%	0
Claims on Foreign Corporate (ECA 7)	0	0	0	0	150%	0
Regulatory Retail Portfolio (Not Overdue)	0	0	0	0	75%	0
Claims fulfilling all criterion of regulatory retail except granularity	0	0	0	0	100%	0
Claims secured by residential properties	0	0	0	0	60%	0
Claims not fully secured by residential properties	0	0	0	0	150%	0
Claims secured by residential properties (Overdue)	0	0	0	0	100%	0

Claims secured by Commercial real estate	0	0	0	0	100%	0
Past due claims (except for claim secured by	0	0	0	0	150%	0
residential properties)	U	U	U	U	15070	U
High Risk claims	0	0	0	0	150%	0
Investments in equity and other capital	0	0	0	0	100%	0
instruments of institutions listed in the stock		Ü	Ü	Ü	10070	O
exchange						
Investments in equity and other capital	0	0	0	0	150%	0
instruments of institutions not listed in the		o o	Ü	Ü	15070	Ü
stock exchange						
Other Assets (as per attachment)	0	0	0	0	100%	0
TOTAL	0	0	0	0		0
B. Off Balance Sheet Exposures	Gross	Specific	Eligible	Net	Risk	Risk
St on Bullion short Emposures	Book	Provision	CRM	Value	Weight	Weighted
	Value					Exposures
	a	b	c	d=a-b-c	e	f=d*e
Revocable Commitments	0	0		0	0%	0
Bills Under Collection	0	0		0	0%	0
Forward Exchange Contract Liabilities	0	0	0	0	10%	0
LC Commitments With Original Maturity Up						
to 6 months domestic counterparty	0	0	0	0	20%	0
foreign counterparty (ECA Rating 0-1)	0	0	0	0	20%	0
foreign counterparty (ECA Rating 2)	0	0	0	0	50%	0
foreign counterparty (ECA Rating 3-6)	0	0	0	0	100%	0
foreign counterparty (ECA Rating 7)	0	0	0	0	150%	0
LC Commitments With Original Maturity						
Over 6 months domestic counterparty	0	0	0	0	50%	0
foreign counterparty (ECA Rating 0-1)	0	0	0	0	20%	0
foreign counterparty (ECA Rating 2)	0	0	0	0	50%	0
foreign counterparty (ECA Rating 3-6)	0	0	0	0	100%	0
foreign counterparty (ECA Rating 7)	0	0	0	0	150%	0
Bid Bond, Performance Bond and Counter	0	0	0	0	50%	0
guarantee domestic counterparty	U	U	U	U	30%	U
foreign counterparty (ECA Rating 0-1)	0	0	0	0	20%	0
foreign counterparty (ECA Rating 2)	0	0	0	0	50%	0
foreign counterparty (ECA Rating 3-6)	0	0	0	0	100%	0
foreign counterparty (ECA Rating 7)	0	0	0	0	150%	0
Underwriting commitments	0	0	0	0	50%	0
Lending of Bank's Securities or Posting of	0	0	0	0	100%	0
Securities as collateral						
Repurchase Agreements, Assets sale with	0	0	0	0	100%	0
recourse						
Advance Payment Guarantee	0	0	0	0	100%	0
Financial Guarantee	0	0	0	0	100%	0
Acceptances and Endorsements	0	0	0	0	100%	0
Unpaid portion of Partly paid shares and	0	0	0	0	100%	0
Securities						
Irrevocable Credit commitments (short term)	0	0	0	0	20%	0
Irrevocable Credit commitments (long term)	0	0	0	0	50%	0
Other Contingent Liabilities	0	0	0	0	100%	0
TOTAL	0	0	0	0		0
Total RWE for credit Risk (A) +(B)	0	0	0	0		0

C: ELIGIBLE CREDIT RISK MITIGANTS

Credit exposures	Deposits with Bank	Deposits with other banks/FI	Gold	Govt.& NRB Securities	G'tee of Govt. of Nepal	Sec/G'tee of Other Sovereigns	G'tee of domestic banks	G'tee of MDBs	Sec/G'tee of Foreign Banks	Total
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	
Balance Sheet										
Exposures										
Claims on Foreign government and Central Bank (ECA -2)										
Claims on Foreign government and Central Bank (ECA -3)										
Claims on Foreign government and Central Bank (ECA-4-6)										
Claims on Foreign government and Central Bank (ECA -7)										
Claims on Other Multilateral Development Banks										
Claims on Public Sector Entity (ECA 0-1)										
Claims on Public Sector Entity (ECA 2)										
Claims on Public Sector Entity (ECA 3-6)										
Claims on Public Sector Entity (ECA 7)										
Claims on domestic banks that meet capital adequacy requirements										
Claims on domestic banks that do not meet capital										
adequacy requirements Claims on foreign bank (ECA Rating 0-1)										
Claims on foreign bank (ECA Rating 2)										
Claims on foreign bank (ECA Rating 3-6)										
Claims on foreign bank (ECA Rating 7)										
Claims on foreign bank incorporated in SAARC										
region operating with a buffer of 1% above their respective regulatory										
capital requirement Claims on Foreign										
Corporate (ECA 0-1) Claims on Foreign										
Corporate (ECA 2)										

		 		1	1	
Claims on Foreign						
Corporate (ECA 3-6)						
Claims on Foreign						
Corporate (ECA 7)						
Regulatory Retail Portfolio						
(Not Overdue)						
Claims fulfilling all						
criterion of regulatory retail						
except granularity						
Claims secured by						
residential properties						
Claims not fully secured by						
residential properties						
Claims secured by						
residential properties						
(Overdue)						
Claims secured by						
Commercial real estate						
Past due claims (except for						
claim secured by						
residential properties) High Risk claims						
_						
Investments in equity and			 		 	
other capital instruments of						
institutions listed in the						
stock exchange						
Investments in equity and						
other capital instruments of						
institutions not listed in the						
stock exchange						
Other Assets (as per						
attachment)						
Off Balance Sheet						
Exposures						
Forward Exchange						
Contract Liabilities						
LC Commitments With						
Original Maturity Upto 6						
months domestic						
counterparty foreign counterparty (ECA						
Rating 0-1)						
foreign counterparty (ECA						
Rating 2)						
foreign counterparty (ECA						
Rating 3-6)						
foreign counterparty (ECA						
Rating 7)						
LC Commitments With						
Original Maturity Over 6						
months domestic						
counterparty						
foreign counterparty (ECA						
Rating 0-1)						
foreign counterparty (ECA						
Rating 2)						
foreign counterparty (ECA						
Rating 3-6)						
foreign counterparty (ECA						
Rating 7)						
Bid Bond, Performance						
Bond and Counter						

guarantee domestic					
counterparty					
foreign counterparty (ECA					
Rating 0-1)					
foreign counterparty (ECA					
Rating 2)					
foreign counterparty (ECA					
Rating 3-6)					
foreign counterparty (ECA					
Rating 7)					
Underwriting commitments					
Lending of Bank's					
Securities or Posting of					
Securities as collateral					
Repurchase Agreements,					
Assets sale with recourse					
Advance Payment					
Guarantee					
Financial Guarantee					
Acceptances and					
Endorsements					
Unpaid portion of Partly					
paid shares and Securities					
Irrevocable Credit					
commitments 0				 	
Other Contingent			<u>-</u>		
Liabilities					

D: EXHIBIT OF CLAIMS WITH CREDIT RISK MITIGANTS

S.N.	Counterparty	Category	Facility	Outstanding		Eligi	ble CRM	
					Nature	Gross	Haircut	Net Amount
						Amount		

E: RISK WEIGHTED EXPOSURES FOR OPERATIONAL RISK

Particulars	Year 1	Year 2	Year 3
Net Interest Income			
Commission and Discount Income			
Other Operating Income			
Exchange Fluctuation Income			
Addition/Deduction in Interest Suspense during the period			
Gross income (a)	0	0	0
Alfa (b)	15%	15%	15%
Fixed Percentage of Gross Income [c=(a×b)]			
Capital Requirement for operational risk (d) (average of			
c)			
Risk Weight (reciprocal of capital requirement of	10		
10%) in times (e)			
Equivalent Risk Weight Exposure [f=(d×e)]			

F: RISK WEIGHTED EXPOSURE FOR MARKET RISK

S.No.	Currency	Open Position (FCY)	Open Position (NPR)	Relevant Open Position			
1	INR						
2	USD						
3	GBP						
4	EURO						
5	GBP						
6	CHF						
7							
8							
9							
Total Open	Position (a)						
Fixed Percei		5%					
Capital Cha							
Risk Weight	Risk Weight (reciprocal of capital requirement of 10%) in times (d)						
Equivalent I	Equivalent Risk Weight Exposure [e=(c×d)]						

G: CALCULATION OF CORRELATION COEFFICEINT & DETEMINATION

a) Nepal Bank Limited

a) Tropal Balk L			
	$CAR(X_1)$	Total Capital (X ₂)	TRWE (X_3)
Mid July 2007	-0.324670708	-6,334,738,883	19,511,273,179
Mid July 2008	-0.275547763	-6,325,869,045	22,957,432,077
Mid Oct, 2008	-0.177327018	-5,772,608,000	32,553,460,000
Mid Jan,2009	-0.164478805	-5,565,306,000	33,836,007,000
Mid April,2009	-0.159578194	-5,321,905,000	33,349,826,000
r_{12}	0.937952578		
r ₁₃	0.997327122		
r ₂₃	0.933661705		
R _{1.23}	0.997507105		
$R^2_{1.23}$	0.995020425		

b) Rastriya Banijya Bank

<i>b)</i> Rastifya Dan	njya Dank		
	$CAR(X_1)$	Total Capital (X ₂)	TRWE (X_3)
Mid July 2007	-0.482415542	(18,814,477,140.00)	39,000,561,758
Mid July 2008	-0.423720101	(17,418,563,070.00)	41,108,654,099
Mid Oct, 2008	-		-
Mid Jan,2009	-0.229977149	(14,452,615,599.00)	62,843,702,879
Mid April,2009	-0.299110197	(14,059,604,845.00)	47,004,766,155
r_{12}	0.949424186		
r ₁₃	0.917665552		
r ₂₃	0.74753629		
R _{1.23}	0.99970426		
$R^2_{1.23}$	0.996253234		

c) Nabil Bank Limited

	$CAR(X_1)$	Total Capital (X ₂)	TRWE (X_3)
Mid July 2007	0.120397588	2,307,632,395	19,166,766,033
Mid July 2008	0.111020641	2,998,730,164	27,010,564,315
Mid Oct, 2008	0.107306143	3,294,076,864	30,697,933,808
Mid Jan,2009	0.111494771	3,509,312,773	31,475,133,350
Mid April,2009	0.113967834	3,746,788,383	32,875,840,916
r_{12}	-0.620942719		
r_{13}	-0.738253567		
r ₂₃	0.9868942		
R _{1.23}	0.9949515		
$R^2_{1,23}$	0.989928488		

Where,

$$r_{12} = \underbrace{\sum_{x_1 x_2}}_{\sqrt{\sum_{x_1}^2}.\sqrt{\sum_{x_2}^2}}$$

$$r_{13} = \underbrace{\sum_{x_1 x_3}}_{\sqrt{\sum_{x_1}^2}.\sqrt{\sum_{x_3}^2}}$$

$$r_{23} = \underbrace{\sum_{x_2 x_3}}_{\sqrt{\sum_x_2^2}.\sqrt{\sum_x_3^2}}$$

Where,
$$x_1 = (X_1 - \overline{X}_1)$$
, $x_2 = (X_2 - \overline{X}_2)$, $x_3 = (X_3 - \overline{X}_3)$,

$$R_{1.23} = \sqrt{\frac{r_{12}^2 + r_{13}^2 - 2r_{12}r_{23}r_{13}}{1 - r_{23}^2}}$$

Where,
$$r_{12} = \frac{\sum x_1 x_2}{\sqrt{\sum x_1^2} \sqrt{\sum x_2^2}}$$
 $r_{23} = \frac{\sum x_2 x_3}{\sqrt{\sum x_2^2} \sqrt{\sum x_3^2}}$ $r_{13} = \frac{\sum x_1 x_3}{\sqrt{\sum x_1^2} \sqrt{\sum x_3^2}}$

H: CALCULATION OF CORRELATION BETWEEN BOOK VALUE OF CREDIT RISK AND TRWE

	Book Value(X ₁)	TRWE(X ₂)	TRWE/BV
A. Nepal Bank Lin	nited		
Mid July 2007	42,855,265,225	19,511,273,179	0.455282987
Mid July 2008	45,629,043,135	22,957,432,077	0.503132008
Mid Oct, 2008	49753277000	28601173000	0.574860084
Mid Jan,2009	51598403000	29699950000	0.575598241
Mid April,2009	52471102000	29419354000	0.560677266
\mathbf{r}_{12}	0.984677649		
B. Rastriya Banijya	a Bank		
Mid July 2007	8,678,102,254.49	33449507631	0.69
Mid July 2008	56,463,114,329.87	39000561758	0.69
Mid Oct, 2008	91,654,032,138.00	55079845232	0.60
Mid Jan,2009	97,891,984,395.00	57723706526	0.59
Mid April,2009	103,057,296,936.00	41814295293	0.41
r_{12}	0.73449334		
C. Nabil Bank Lim	itad	·	
C. Nauli Balik Lilli	inted		
Mid July 2007	33,315,887,226	19,166,766,033	0.575304085
Mid July 2008	45,345,343,020	27,010,564,315	0.595663469
Mid Oct, 2008			
Mid Jan,2009			
Mid April,2009			
r_{12}	1		

Where,

$$r_{12} = \underbrace{\sum x_1 \ x_2}{\sqrt{\sum x_1^2} \cdot \sqrt{\sum x_2^2}}$$

Where, $x_1 = (X_1 - \overline{X}_1)$, $x_2 = (X_2 - \overline{X}_2)$,

I: CALCULATION OF CAPITAL ADEQUACY RATIO

	Core Capital	Supplementary	Total Capital	TRWE
	(Tier I)	Capital (Tier II)	(Tier I+ Tier II)	
Nepal Bank Lir	nited			
Mid July 2007	(6,334,738,883.00)	0	(6,334,738,883.00)	19,511,273,179
Mid July 2008	(6,325,869,045.00)	0	(6,325,869,045.00)	22,957,432,077
Mid Oct, 2008	(5,772,608,000.00)	0	(5,772,608,000.00)	32,553,460,000
Mid Jan,2009	(5,565,306,000.00)	0	(5,565,306,000.00)	33,836,007,000
Mid April,2009	(5,321,905,000.00)	0	(5,321,905,000.00)	33,349,826,000
Rastriya Banijy	ya Bank Limited			
Mid July 2007	(18,814,477,140.00)	0	(18,814,477,140.00)	39,000,561,758
Mid July 2008	(17,418,563,070.00)	0	(17,418,563,070.00)	41,108,654,099
Mid Oct, 2008	(15,554,096,242.00)	0	(15,554,096,242.00)	60,296,785,352
Mid Jan,2009	(14,452,615,599.00)	0	(14,452,615,599.00)	62,843,702,879
Mid April,2009	(14,059,604,845.00)	0	(14,059,604,845.00)	47,004,766,155
Nabil Bank Lin	nited		,	
Mid July 2007	1,992,849,715	314,782,680	2,307,632,395	19,166,766,033
Mid July 2008	2,363,598,989	635,131,175	2,998,730,164	27,010,564,315
Mid Oct, 2008	2,585,574,360	708,502,504	3,294,076,864	30,697,933,808
Mid Jan,2009	2,792,924,473	716,388,300	3,509,312,773	31,475,133,350
Mid April,2009	3,022,105,465	724,682,918	3,746,788,383	32,875,840,916

i. Tier 1 Capital to Total Risk Weighted Exposures

= <u>Tier I Capital</u> *100% Total Risk Weighted Exposures

ii. Tier 1 and Tier 2 Capital to Total Risk Weighted Exposures

= <u>Tier 1 and Tier 2 Capital</u> * 100% Total Risk Weighted Exposures

J: RESEARCH QUESTIONNAIRE FOR BANK OFFICIALS 'STUDY OF CAPITAL ADEQUACY IN COMMERCIAL BANKS DIRECTED BY NEPAL RASTRA BANK'

1)	1) Do Capital Adequacy requirements redu	Do Capital Adequacy requirements reduce risks in banking?					
	Yes No.	Don't Know					
2)	2) NRB's prescribed Capital Adequacy rat	io is different from original Basel					
	Standard. Why?						
	Because:						
	Imperfect banking system						
	Poor Practices in banking sector Problems of Professionalism						
	Other (please specify)						
a \	.						
3)	3) Do you think the revision in capital adeq to time?	uacy ratio is necessary from time					
	Yes, it is necessary	Not at all					
	res, it is necessary						
4)	4) The calculation of Capital Adequacy Ra	tio had to use credit risk. From this					
	year, it added operational risk and mark	tet risk. Is it rational to add the					
	operational risk and market risk?						
	Yes No	Don't Know					
	Other (please specify)						
5)	5) Which of the following steps is appropri	ate for your bank to follow to cope					
	for the compliance of capital adequacy r	atio?					
	By increasing core capital						
	By increasing supplementary capita	1					
	By decreasing TRWE						
	Others (Please Specify)						
6	6 Which stakeholders' interest will be saf	eouarded most by adequate canital					
Ū	fund?	eguarueu most by auequate capital					
	☐ Depositor's Interest ☐ ☐ Sharehold	er's Intere Creditor's					
	Interest						
	Others (please specify)						
	8						
7		el Standard for Nepalese banking					
	sector?						
	Yes No	Don't Know					
8.	8. Is it appropriate the reporting of disclos	ure requirement for Nepalese					
-	Context?	*					
	☐ Yes ☐ No	Don't Know					

Name:	
Designation:	Bank:

K: ANALYSIS OF INTRERVIEW QUESTIONNAIRE FILLED UP BY BANK OFFICIERS

	DI DANK OFF	No. of Responses	Percentage
Questi	on No. 1	110. Of Mesponses	1 ci ceinage
d)	Yes	19	90%
e)	No.	1	5%
f)	Don't Know	1	5%
Questi	on No. 2		
e)	Imperfect Banking System	6	29%
f)	Poor Practices in Baking Sector	5	24%
g)	Problems of Professionalism		0%
h)	Others (please specify)	10	47%
Questi	on No. 3		
c)	Yes, it is necessary	17	81%
d)	Not at all	4	19%
Questi	on No. 4	I	
e)	Yes	21	100%
f)	No		0%
g)	Don't know		0%
h)	Others (please specify)		0%
Questi	on No. 5		
e)	By increasing Core Capital	13	62%
f)	By increasing Supplementary Capital		0%
g)	By decreasing TRWE	2	10%
h)	Others (please specify)	6	28%
Questi	on No. 6		
e)	Depositor's interest	17	81%
f)	Shareholder's interest		0%
g)	Creditor's interest		0%
h)	Others (please specify)	4	19%
Questi	on No. 7		
d)	Yes	15	71%
e)	No.	4	19%
f)	Don't Know	2	10%
Questi	on No. 8	1	1
d)	Yes	13	62%
e)	No	5	24%
f)	Don't Know	3	14%
L		I.	l