## **IMPACT OF NRB DIRECTIVES ON COMMERCIAL BANK**

## **A THESIS**

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### **Submitted To:**

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In Partial Fulfillment of the Requirement for the Degree **Master's of Business Studies (M.B.S.)** 

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## RECOMMENDATION

This is to certify that the thesis

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## **IMPACT OF NRB DIRECTIVES ON COMMERCIAL BANK**

Has been prepared and approved by this department in the prescribed format of Faculty of Management. This thesis is forwarded for examination.

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## **VIVA-VOCE SHEET**

We have conducted the Viva-Voce examination of the thesis presented

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And found the thesis to be original work of the student and written in accordance to the prescribed format. We recommend the thesis to be accepted as partial fulfillment of the requirements for **Master Degree of Business Studies (M.B.S)** 

## **<u>Viva-Voce Committee:</u>**

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## DECLARATION

I hereby declare that the work reported in this thesis entitled " Impact of NRB Directives on Commercial Bank" submitted to Shanker Dev Campus, Faculty of Management, Tribhuvan University, is my original work done in the form of partial fulfillment of requirement for the Master's Degree in Business Studies (M.B.S) under the supervision of Mrs. Rita Maskey of Shanker Dev Campus.

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## ABBREVIATIONS

&	:	And
A/C	:	Account
A.D	:	Anno Domini
AM	:	Arithmetic Mean
B.S	:	Bikram Sambat
CA	:	Capital Adequacy
CCA	:	Chartered Certified Account
CDR	:	Credit Deposit Ratio
CRR	:	Cash Reserve Ratio
C.V	:	Correlation of Variation
\$	:	Dollar
EBL	:	Everest Bank Limited
FSRP	:	Financial Sector Reform Program
FY	:	Fiscal Year
HBL	:	Himalayan Bank Limited
HURDEC	:	Human Resource Development Center
ICCMT	:	International Chamber of Commerce Management Team
IDA	:	International Development Agency
i.e.	:	That is
Ltd.	:	Limited
MBS	:	Master of Business Studies
NBL	:	Nepal Bank Limited
NBBL	:	Nepal Bangladesh Bank Limited
NCCB	:	Nepal Credit & Commerce Bank
NGO	:	Non Government Organization
NIBL	:	Nepal Investment Bank Limited
NO.	:	Number

NRB	:	Nepal Rastra Bank
NSBIBL	:	Nepal State Bank of India Bank Limited
Pvt.	:	Private
%	:	Percentage
P/ER	:	Price-Earning Ratio
RBB	:	Rastriya Banijya Bank
RWA	:	Risk Weighted Assets
S.D	:	Standard Deviation
T.U	:	Tribhuvan University
USA	:	United States of America
Vol.	:	Volume

# CHAPTER ONE INTRODUCTION

### **1.1. General Background:**

Nepal is one of the very few countries in the world in terms of rich and unique cultural heritage, manifested in its architecture, temples, sculptures, monuments etc. Aside from this, it is also richly gifted with natural resources like vast forests, many perennial rivers and minerals.

Due to geographical difficulties & lack of infrastructure development of Nepal, the growths of financial sector are badly affected. Domestic crisis create huge problem in development of financial sector in Nepal. The world converted into narrow boundary. The concept of borderless country took rapid motion in those days. Liberalization, globalization as well as privatization are most common and essential part of investment and other activities in financial sector of Nepal. The open market concept creates several opportunities & threats. Rapid development in information-technology sector is also milestone for increasing investment activities. Thus, competitive environment was formed in national market as well as international market. The liberalization policy attracts foreign investor as well as national investor to invest financial sector & commercial sector, which help to raise the life standard of people.

Despite of the above natural resources and attributes, Nepal is still a developing country characterized by high population growth rate, low per capita income and low rate of capital formation. Nepal remained in self-imposed isolation for more than a century. It is an underdeveloped country with per capita income of US\$240, almost half of the population lives below the poverty line. Many reasons are there for the slow pace of development such as landlocked position, misuse of resources, absence of economic infrastructure, political instability, poor economic policy and institutional weaknesses. Capital accumulation plays an important role in accelerating the economic growth of a nation, which in turn is determined among other, by saving and investment propensities. However, the capacity to save in developing countries is quite low with a relative higher marginal propensity of consumption. As a result, such countries are badly entrapped into the vicious circle of poverty. Therefore, the basic problem for the developing countries is in raising the level of saving and thus investments.

The banking sector is largely responsible for collecting household saving in terms of different types of deposit and regulating them in the society by lending different sectors of economy. The different sector has now reached to the most remote areas of the country and has experienced a good deal in the growth of the economy. By lending their resources in the small-scale industries under intensive banking program has enabled the banks to share in the economic growth of the economy.

Banking institutions are inevitable for the resources mobilization and all round development of the country. It is necessary for economic development; it maintains economic confident of various segment and extend credit to the people. Bank and banking activities have prominent role in the development of our country. The pace of development of the country grew as bank and its activities gradually developed. Nepal bank Limited and Rastriya Banijya Bank were the only commercial banks operating over the last three decades in Nepal before the opening of foreign joint venture banks. Today there are altogether 28 commercial banks operating in the Nepali financial market. Still many other commercial banks are in the process of opening in the market. There has been a tremendous growth in banking transaction in terms of their length and breadth due to these commercial joint venture banks.

#### **1.2. Origin of Bank:**

The origin of word "bank" is linked to Latin word "Bancus"; Italian word "Banca" and a French word "banque; all of which means a bench. The early bankers, the Jews in lambardy, transacted their business at benches in the market place. When they are unable to meet their liabilities, the depositors funds mainly to make loans and buys securities. Banks operate as financial intermediaries between the ultimate lender (depositor) and ultimate borrower. Regarding the origin of bank in the world, the first bank named as The Bank of Venice, was established in Venice of Italy in 1157 A.D. Following this, "The Bank of Barcelona, Spain, established in 1401 A.D. was the second bank of the world. In addition, the first central bank, which was established in 1844 A.D., was "The Bank of England".

"I believe in the fact that banks are not merely purveyors of money, but also in an important sense; manufactures of money"

"Banking means the accepting for the purpose of lending and investment of deposits of money from the public, repayable on demand or otherwise and withdraws by cheque, draft or otherwise." (*Sayers: 1991:125*)

#### Indian Banking Companies Act 1949

"The banker is a person or company carrying on the business of receiving money & collecting drafts for customers subject to the obligation of honoring the cheques drawn upon them from time by customer to the amount available to their current account."

To define any institution as a bank, it has to enjoy a high reputation and standing in the financial community for a reasonable period. Any undesirable rumors in the market can undermine the depositor's confidence. The institution to be called a bank, it has to provide a wide range of banking services such as:

- To provide deposit facilities to people
- Finance in the form of loan or overdraft facilities
- Foreign exchange services for domestic and foreign customers
- Finance through the medium of bills of exchange and promissory notes together with finance for foreign trade and documentation in connection with foreign trade

According to the history of banking, it is found that the term bank was first used in Medieval Italy. According to the French Writer Revilpout, banking system and bank notes had come into existence in Babylon at around 600 B.C. In Jerusalem, the exchange of money used to be done at temple premises. Likewise in Greece temples used to accept deposits and lend out loans to the public. Banking system in early Rome was also developing in the similar manner like that in Greece. It has been found that the banking system in England started by the goldsmith. The goldsmith who in turn gave them deposit slip, which acted like a bank note, accepted the gold and silvers brought by the citizen. The merchant were famous businesspersons who used to issue documents, which could be used as money at any place. On the other hand, moneylenders accepted goods and money to be deposited and lend money at certain interest rate.

#### **1.3. Origin of Bank in Nepal:**

The bank helps in uplifting the industry, agriculture and business in the country. It is said to be concerned with the economic development of the country. According to the history, it is found that people of our country have been involved in business and trade since long time back. Though the production of copper utensils had been started during the 7<sup>th</sup> century, business relationship could not be established with India since India was involved in the production of copper utensil. However, the craft concerned with copper, wood and metal in our country did attract the Chinese and the Tibetan a lot, thus resulting in the establishment of business relationship with China and Tibet.

History relates that Nepal had its own coin since long time back. Since there was no system of having the dates of issuance of the coin it still remains a mystery in our country. However, it has been found that coins have been used in the times of the King Mandev and King Gunakamadev. The history also states that King Gunakamadev had received loans from the public in the 8<sup>th</sup> century to renovate "Kathmandu City". By the end of the 8<sup>th</sup> century, it is said that the businessperson named Shankhadhar Shakha had paid back all the loans taken from the public and since then Nepal Sambat had stated in our country. This tells us that the system of lending money and paying back started long time back in our country.

After the issuance of coins, credit system started in our country. Merchant and big businessmen started lending out money based on collateral provided by the creditors and charge them with higher interest rates.

Sometimes around the 12<sup>th</sup> century Sadssivade brought out silver coins that were called 'Daam'. Later on in the 14<sup>th</sup> century, King Jayasthiti Malla divided the people into 64 castes according to their occupation, amongst which **'TANKADHARI**' one is that dealt with the lending of money to the public. Since the main objective of the **'TANKADHARI'** was to earn profit, they used to charge people at higher interest rate.

In order to protect people from higher interest rate, Prime Minister Ranadeep Singh established **'TEJARATH ADDA'** in the 19<sup>th</sup> century. The **'TEJARATH ADDA'** was responsible for providing loans to the people working in the government offices based on the security and the public based on the collateral they deposited in the **'TEJARATH ADDA'** was not to earn

profit, it charged its creditors with a low interest rate of 5% per annum. It had no other sources besides the government so it limited in serving a certain area. Again, it was only subjected to lend but did not accept deposits, hence it cloud not be counted as a bank. However, it can be said that **'TEJARATH ADDA'** was the main financial institution that led to the development of modern banking system into the country. As a basic need, cottage industries were started in the country thus establishing business relationship with India. When Chandra Shamsher became the Prime Minister of our country in 1980 B.S., a treaty was singed which stated that Nepal could establish business relationship with countries beyond India as well. This led to the need of modern banking system in the country. This led the establishment of Nepal Bank Limited was established as the first modern bank in our country in B.S. 1994 Kartik 30<sup>th</sup> according to the Nepal Bank Act 1993. Thus, the year B.S. 1994 is said to be the Golden year for modern banking system in Nepal.

#### 1.4. Meaning of Commercial Bank:

The ordinary meaning of bank is commercial bank. Commercial are those banks that pool together the saving of the community and arrange for their productive use. They supply the financial needs of modern business by various means. They accept deposits from the public on condition that they are repayable on demand or on short notice. In other words, a bank is a financial intermediary, a dealer in loans and in debts. It borrows from one set of people and lends to hiring money and hiring out again. Some banks draw their capital mainly from their shareholders, other's mainly from depositors. Some lend mainly to industry, others mainly to government, central and local. Some deal in short loans, borrowings and lending for short periods, others deal in long periods. However the business of individual bank may differ, their essential function is to gather saving together and lend out what they collect.

"A bank is a business organization that receives and holds deposits of funds others and makes loans or extends credits and transfer funds by written order of depositors." (Horne, 2005: 14-120)

"A commercial banker is a dealer in money and a substitute for money, such as cheque or bill of exchange .He also provides a variety of financial services." (Shakespeare, 2001: 51-541)

The primary economic function of the commercial bank is to hold demand deposits and to honor cheques drawn upon them. In short, to provide us, the economies, with the most important component of the money supply. Commercial bank plays an important role in directing affairs of the economy in various ways. The operations of commercial banks record the economic pulse of the economy. The size and composition of their transaction mirror the economic happenings in the country. For instance, the mass failure of commercial banks during 1980 has reflected the phenomenon of several global depressions in the world. Commercial banks have played a vital role in giving direction financing the requirements of trade and industry in the country. In a planned economy, bank make the entire planned productive process possible by providing funds for all types of production incorporated in the plan, regardless of whether the production is in the public sector, joint sector or in the private sector or whether the production is undertaken by one type of organization or another. They endeavor to promote enterprise development by investing in shares and debentures. Therefore, they support the country's overall economic development process by financing in various ways.

In the Nepalese context, the Nepal **Commercial Bank Act 2031 B.S.** defines a commercial bank as one, which exchanges money, accepts deposits, grants loans and performs commercial banking functions.

As an outcome of, the economic liberalization policy, GON has put its face in the international arena by which so many investment opportunities are evolved within the nation integrated and speedily development of the nation is possible, only when competitive banking services reach the nook sand corners of the nation. Commercial banks occupy an important place in the framework of every economy by providing required capital for the development of industry trade and business out of the saving collected as deposits, besides, commercial in view of facilitating the economic & social life. Banks are the essential part of the business activities, which are established to safeguard people's money and utilizing the money in making loans and investments. Concerning Nepal, there are several commercial banks operating in different places especially in the kingdom with foreign collaboration or joint investment.

#### 1.4.1. Functions of Commercial Bank:

The primary functions of Commercial bank in Nepal are concentrated on accepting deposit from general public and advancing loans to industrialist, businesspersons and others. Besides that, it also executes banking activities. All commercial banks are authorized to transact various businesses, which are considered as the main function of Commercial Bank. Commercial Bank has significant role in transferring idle money of General Public to industrialist or businessperson who generally use such amounts in productive sectors. This Major function of commercial bank plays a vital role in the overall development of economy and nation too. Despite that, Commercial bank provides wide range of agencies and other miscellaneous services by the means of branch expansion at different parts of the country, which can be listed as follows:

#### a) Accepting Deposits

Commercial bank accepts deposits in different types of account. The different types of deposits are:

#### Saving Deposit

It is one of the deposits, generally collected from the people having low level of income. The bank usually pays a small rate of interest to the depositors against the deposit. The main purpose of this account is to increase saving habit of public. Under this account, the depositor has to maintain amount, as prescribed by the bank to open this accounts. The depositor is allowed to withdraw money by cheques up to the amount prescribed by bank. Amount collecting under this account should be invested is purchasing marketable securities and short-term investment.

#### Current Deposit

Another account provided by commercial bank to deposit amount of traders and businesspersons is current deposit. The bank should payment on demand of the client therefore; it is called as demand deposit. There are no restrictions regarding the number of deposits and withdraws. The bank does not pay any interest on such amount.

#### Fixed Deposit

A fixed deposit is such type of account where the customer is required to keep the amount the bank for long period. Those who do not need for stipulated time open such account. The bank, on such amount, provides a high rate of interest. The customers are not allowed to withdraw money before the matured period. In case of urgent need of money the customers are permitted to borrow money from the bank on the security of fixed deposit.

#### b) Advancing loan

The major function of commercial bank is to invest and lend of its funds collected by means of different account into productive sectors. Enough consideration should be given in choosing the project that ensures the receiving of interest regularly and recoverable of loans after the matured period. Mainly loans are granted in four forms overdraft, cash credit, and direct loan and discounting of bills of exchange.

#### c) Credit creation

Credit creation is one of the most important functions of commercial bank. Commercial bank's main objective is to earn profit. Bank creates credit by advancing loan in different sector. They do not provide hard cash but open an account on the loaner's name.

Bank creates credit by flowing or advancing loan in different productive sector. Commercial bank charges certain amount of money as interest. Sometimes commercial bank may advance loan beyond their capacity and they may feel difficulty. In such case central bank controls credit by changing the cash reserve ratio (CRR), interest rate in loan or deposited and lending policy of commercial bank.

According to directive of central bank, i.e. Nepal Rastra and Commercial bank of Nepal should keep 20% of their profit as reserve, until it reaches double of its paid up capital. Similarly the spread rate should be between 4 – 4.5 % in all commercial bank, this spread rate is not being practiced in bank of Nepal.

#### d) Financing foreign trade

Foreign trade refers to trading activity with parties outside the country. This trade is due in foreign currencies, which are financed by banks. Some of the major products of foreign trade are Letter of Credit Guarantee, Advance payment, Draft and Collection.

In case of Nepal, when we say Letter of credit we normally refers it with import because there is not much exporting in Nepal. In letter of credit also there is limited allocated according all to the financial position of the firm or individual. Letter of credit is provided against collateral.

Similarly, bank also finances foreign trade against '**Trust receipt'**. Trust receipt is like on indemnity. Loan against 'Trust receipt' is normally provided for import of goods. When the importer cannot pay the exporter within short period, the importer provides the bank with 'Trust Receipt' against which bank provide loan to the importer not exceeding the 90% of the receipt. In addition, the importer is supposed to repay the bank within 120 –180 days with interest.

#### e) Agency functions

A bank performs a number of services on behalf of its customer as an agent. Mainly commercial bank undertakes the payment of subscriptions, insurance premium, rent collection of cheques, bills, salaries, pensions, dividends, remittance of money from one place to another etc on the behalf of customers. For these different services provides by commercial bank it charges a small amount of commission.

#### f) Miscellaneous Services

Commercial banks provide other services to other customers provide lockers where important documents, gold and silver are kept for security and underwriting services shares issues, statistical information money market and business trend.

### 1.5. Brief Introduction of Selected Commercial Banks

#### 1.5.1. Nabil Bank:

Authorized Nabil Bank Limited, the first joint venture bank of Nepal, started operations in shrawan, 2051. 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 correspondent 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. (www.nabilbank.com.np)

Highly qualified and experienced management team manages operations of the bank, including day-to-day operations and risk management. Bank is fully equipped with modern technology, which includes ATM's, credit cards, state-of-art world-renowned software from Infosys Technologies System, Bangalore, India, and Internet banking system and Tele-banking system.

#### Share Capital of Nabil Bank as on 2065/66 B.S

Authorized Capital	NPR 1,600,000,000
Issued Capital	NPR 965,747,000
Paid-Up Capital	NPR 965,747,000

#### 1.5.2. Himalayan Bank Limited:

Himalayan Bank Limited (HBL) is the largest private sector commercial bank of Nepal in terms of deposit base, loan portfolio and capital base. In July 2003 and again in July 2005 the Bankers Almanac ranked HBL as country's no. 1 bank. For the year 2005, it was ranked at 2368 in the worldwide ratings, which are fifty positions ahead of its nearest competitor in the country (<u>www.himalayanbank.com</u>).

Himalayan Bank Limited was incorporated in 1992 by a few distinguished business personalities of Nepal in partnership with Employees Provident Fund and Habib Bank Limited, one of the largest commercial bank of Pakistan. Banking operation commenced from January 1993. It is the first commercial bank of Nepal whose maximum shares are held by the Nepalese private sector. Besides commercial banking services, the Bank also offers industrial and merchant banking services.

Himalayan Bank has always been committed to providing a quality service to its valued customers, with a personal touch. All customers are treated with utmost courtesy as valued clients. The Bank, wherever possible, offers tailor made facilities to its clients, based on the unique needs and requirements of different clients. To further extend the reliable and efficient services to its valued customers, Himalayan Bank has adopted the latest banking technology. This has not only helped the bank to improve its service level but has also prepared the Bank for future adaptation to new technology. The Bank already offers unique services such as SMS Banking and Internet Banking to customers and will be introducing more services like these in the near future.

Himalayan Bank has access to the worldwide correspondent network of Habib Bank for fund transfer, letter of credit or any banking services.

#### Share Capital of Himalayan Bank Limited as on 2065/66

Authorized Capital	NPR 2,000,000,000
Issued Capital	NPR 1,216,215,000
Paid-Up Capital	NPR 1,216,215,000

#### **1.5.3. Nepal Bank Limited:**

The modern banking system started in Nepal after the establishment of Nepal Bank Limited (NBL), which commenced its operations on 30th Kartik, 1994 B.S. (1938) during the period of Prime Minister Randip Singh under the Nepal Bank Act 1994 B.S. (1938). As NBL is the first bank in Nepalese banking history, it was established as joint venture between the government and private sector and replaced by Tejarath Adda by taking over its operation and overcoming its limitation. Accordingly, NBL had a Herculean responsibility of attracting people towards banking sector from pre-dominant Sahu Mahajan's transaction and of introducing other banking services as well. www.nbl.com.np

In opening ceremony, late King Tribhuvan inaugurated the NBL. It is the bank with the largest number of branches reaching every part of urban and rural areas of the country.

The NBL established its banking operations from the initial authorized capital of Rs.10 million, issued capital 25 lakhs, and paid up capital of 8 lakhs 42 thousand out of 51% of the shares were from GON and remaining 49% from equity partition of the public. At the time of establishment, the deposits and loan of Nepal Bank Limited were Rs.17 lakhs and 20 lakhs respectively.

After suffering huge loss & facing many problems by NBL, that time GON decided to give the bank in the foreign management team. At the same time, World Bank decided to give loan of U.S\$24 million on 1st phase & U.S. \$75 million on 2nd phase under highly popular Financial Sector Reform Program (FSRP). The agreement was done between that time GON & the World Bank on Oct. 28th 1999. From July 22nd, 2002(2059 Ashad 17), NBL was taken on contract for two years with an agreement to improve financial position .As per contract the agreement was extend for plus one year in August, 2004. As per agreement, International Development Agency (IDA) provide loan amounting to U.S. \$ 550000 toward the restructuring & privatizing. The contract period of the management team, which expired on 21 July 2004 was renewed initially for one more year. Later, the contract period has been extended up to 21 July 2007. The management contractor of NBL:

- The International Chamber of Commerce (I.C.C.)-Management Team- Bank of Scotland-Ireland
- International Business & Technical Consultant Inc.-U.S.A
- R.Bajracharya & Co. (Chartered Accounts)-Nepal

- P.P. Pradhan & Co. (Chartered Certified Accounts)-Nepal
- Human Resource Development Center HURDEC (Pvt.) Ltd.-Nepal

After unilateral termination of contract by ICCMT with the NRB and GON on 2007/07/27, NRB again took over the management of NBL. On the same date, the central bank, NRB sent three officers to look after the top-level management of NBL. On the leadership of Dr. Binod Attarya with Mr. Laxmipant Niraula and Mr. Numnath Poudyal took over the management of NBL & started to do day-to-day activities as the top-level management.

Under the Financial Sector Reform Program (FSRP), ICCMT was given the management of the NBL for the restructuring. From 2007/07/22, after the ICCMT left the bank, there was no top-level management in NBL. NRB had agreed to extend the contract for further 6 months but the CEO from the ICCMT, Mr. J. Craig McAllister put the opinion that they did not get the sufficient cooperation from NRB in the restructure program of NBL.

At the same World Bank had also threatened the GON that if it does not call back the foreign management in NBL it will block the grant & loan amount of U.S.\$15 crore under the FSRP for Nepal. In the process of computerization of NBL, it has installed LIVE NEWTON system in its 44 branches until July 2006.

Of the total Rs.7 Arab loan & grant from World Bank to Nepal, the cost of Rs.6 Arab has been already spent on FSRP.

#### Share Capital of Nepal Bank as on 2065/66 B.S

Authorized CapitalNPR 1,000,000,000Issued CapitalNPR 500,000,000Paid-up CapitalNPR 380, 382,600

#### 1.5.4 Nepal SBI Bank

Nepal SBI Bank was established in 2050BS.It started its operation on 23<sup>rd</sup> Ashad 2050. It is an associate of state bank of India and Nepalese entrepreneurs. Regarding the composition of equity capital, state Bank of India and general public employee's provident fund: 55%, 30%, and 15% respectively. Under the technical service agreement signed between two Banks, state Bank of India has been providing top management service to the bank service to bank. The

bank operates with objective of providing loan to industry, commerce and trade. It also wishes to have public benefited from the various services. <u>www.nsbibl.com.np</u>

The bank has 42 branches in various parts of the kingdom and 1 proposed branch in Gaushala. Its corporate office is located in Hattisar, Kathmandu and main branch office in Durbarmarg, Kathmandu. 28 branches outside the valley are in Birgunj, Biratnager,Bairahawa, Rampur, Britamod, Sisuwa, Pokhara, Dharan etc.

The bank has utilized advanced computerized technique in its operation. The software in the user is 'FINACLE infosys' (version 7.6.1) developed by Infosys Technology, India.

Performance review of the bank depicts that the total deposits of the bank grew from 3744.50 million rupees in the fiscal year 2003/04 to 4380 million rupees in 2007/08, recording a moderate growth of 16.97%. During the same period, total loans and advance reached the level of 2963 million rupees from 2363 million rupees recording a growth of 2\*5.36% over the previous year. Accordingly total negative growth of 70.28% the level of investment in government securities. Net profit, during the period declined to 16.70 million rupees from 58.90 million rupees showing the negative growth of 71.58%.

#### Share Capital of Nepal SBI Bank

Authorized Capital	NPR 2,000,000,000
Issued Capital	NPR 1,661,600,000
Paid-up CapitalNPR 1,653,600,000	

#### 1.5.5. Rastriya Banijya Bank:

Rastriya Banijya Bank was another important bank to be established in Nepal. The existence of only one bank, or the NBL was functioning in the field of business only. Hence, its establishment had a great significance. This bank was established in government sector in 2022/10/10(1966/01/23A.D.) under the Banijya Bank Act 2021(1965) according to the recommendation of the Nepal Rastra Bank. <a href="http://www.rbb.com.np">www.rbb.com.np</a>

RBB has Nepal's most extensive banking network with over 114 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 inter-bank funds transfer via SWIFT. In a bid to promote remittance business, RBB works with Western Union and International Money Express, two lending 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 government 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.

A foreign consultant appointed as the CEO for restructuring of RBB has been working since January 16, 2003. The team for restructuring was formed from domestic & foreign consultants under the leadership of the CEO, whose team of contract has been extended for further two years effective from January 16, 2006.

The team has formulated & implemented the management plan, budget plan, accounting & auditing manuals, & credit policy. The bank is running under the leadership of Dr. Bhola Nath Chalise. The CEO of the RBB appointed by the foreign management team is Bruce F.Henderson. (www.rbb.com.np)

#### Share Capital of RBB as on 2065/66 B.S

Authorized CapitalNPR 156,000,000Issued CapitalNPR 117,000,000Paid-up CapitalNPR 117,000,000

### 1.6. Focus of the Study

The focus of study is on the NRB directives to the commercial banks operating within Nepal. The study entitled "Impact of NRB Directives in Commercial Banks of Nepal" with respect to capital adequacy ratio, CD Ratio, CRR, etc in mainly focused on directives issued by NRB to the commercial banks. This study tried to find out the impact & implementation of the directives by CBs of Nepal.

The study also focus from the NRB perspective as the central banking functioning as the banker's bank giving necessary directives to the CBs for the benefit of the country economy as well as for the CBs themselves.

### 1.7. Statement of the Problem

Nepal is a least-developing country of the world. The economy of the country is at the primitive situation. The economic growth rate of the country is very poor. At present, commercial banks and financial institutions are as the backbone of Nepalese economy. The establishment of joint venture banks in the kingdom has added more bricks in the up liftmen of Nepalese economy. The existence of the joint venture banks in Nepal was possible only when the 'Financial Sector Reforms' was introduced in 1980A.D.

As outcome of the reforms in the year 1987-88, the government allotted liberalization in interest rate structure directing only for interest spread. This led increment in commercial banks and financial institutions.

- The responsibilities of the central bank, NRB have been increased tremendously in the past decade.
- As bankers' bank, NRB has to look after the commercial banks operating within the country. For the smooth operation of these CBs, NRB used to flow the necessity rules, regulations & especially directives time-to-time.
- The functioning of the activities does not goes well. Therefore, according to the requirement of the changing economic situation, market trend, etc, the central bank has to circular new directives according to the necessity & suitability of the business & economic environment.

### 1.8. Objectives of the study

The main objectives of the study are as follows:

- a) To find out the effectiveness of directive of NRB.
- b) To examine the implementation of NRB directives by commercial banks of Nepal.
- c) To find out the impact of NRB directives on commercial banks.
- d) To make necessary recommendations as far as possible.

## 1.9. Limitations of the study

The report is for the partial fulfillment of Master of Business Studies. The efforts have been made to present & analyze the fact clearly, truly & within the boundary. However, reliability of tools, lack of research experience, and lack of data are the primary limitation of this report. Other limitations are:

- This study is focused on only the few directives (of the total 20 directives issued 2066B.S) issued by the NRB to the commercial banks of Nepal time-to-time.
- This study is based on secondary data only received from NRB & the concerned commercial banks.
- Data from the FY 2061/62 to FY 2065/66 are only taken into consideration for analysis.
- Out of the total 28 commercial banks operating in the country, only five CBs are taken as a sample for research purpose.

## 1.10. Organization of the study

- Chapter one : Introduction
- Chapter two : Review of Literature
- Chapter three: Research Methodology
- Chapter four :Data Presentation and Analysis
- Chapter five : Summary, Conclusion and Recommendations

First chapter will describe about the research itself by defining various aspects of NRB directives concerning to commercial banks of Nepal. This will help to develop the conceptual framework about the research problem and subject matter.

Review of literature will advance the knowledge about the subject matter as well as general method of doing research in directives on some requirements, which are also defined by the finance, & banking expertise.

Research methodology is policy and framework not within, which we will find the best alternative for making the research effective to analyze on the topic.

Data presentation and analysis will evaluate & examine the impact & situation of directives on different section of commercial banks in Nepal.

Moreover, the last chapter will be the summary and conclusion of this research and remedial measures to be applied for further advancement and effectives of the directives of the central bank, NRB to the commercial banks of Nepal.

# CHAPTER TWO REVIEW OF LITERATURE

#### 2.1. Conceptual framework

The concept of central banking is of recent origin. Prior to the commencement of 20<sup>th</sup> century, there had been clearly defined concept of central banking. However, as the time changed, there is no country in the world, which does not have a central bank. The bank works as the leader of the money market. The bank works as the leader of the money market. It is the chief of all banks operating in a country. It supervises, regulates & controls the functions of commercial banks & other financial institutions. The central bank also works as the banker to the government & advises the government on several matters. It is the only organization, who monitors the whole economy of the country.

Therefore, central bank is an important financial institution in every sovereign independent country in modern times. It is an apex of economy is banking system. Central bank is the central arch of the monetary & fiscal framework in every country of the world & its functions are indispensable for proper functioning of the economy & fiscal operations of the government. The objective of the central bank is also to control monetary circulation, manage debt, etc.

The history of central banks is very old. In 12<sup>th</sup> century, most of the banks in England, France, Sweden, etc. were assuming more power but not considered them central banks. They were enjoying the right of note issue & were acting as the banker for the government & sometimes work as an agent for the government & sometimes work as an agent for the government & sometimes work as an agent for the government as well in the financial matters. However, they were not known as central banks but referred as the banks of not issue or national banks. The oldest central banks in the world are Riks Bank of Sweden, which was established in 1656. The Bank of England came in 1694. Being originated from Europe, International Conference held in Brussels during 1920 agreed with common agenda of establishing central bank in most of the European countries. Likewise, European central bank has been developed. In the political business cycle, the independent central bank is proving very important but questionable & doubtful. (*Shrestha & et al., 2007:85*)

The Bank of England is the first bank to work as the position of central bank and to develop all the fundamental of central banking which are under operation. The fundamentals, principles &

tools & instruments developed by the Bank of England were universally accepted by all the banks all over the country. The successful functioning of Bank of England forced other countries to think about the concepts & principles of the central banks. The Bank of England is the United Kingdom's central bank, & has broad responsibilities for the organization & operation of government monetary & financial policies. The bank was formed with the purpose of raising funds for the British Government, but it only came into public ownership in 1946. Nevertheless, since the middle of the 19<sup>th</sup> century the bank has been undertaking the majority of functions, which are normally associated with a central bank. According to the provision of the Bank of England Act 1946, the bank has a legal duty to carry the wishes of the Treasury (Finance Ministry) in respect of the implementation of the government's policies on financial, monetary & related matters. (*Acharya, 2055: 132*)

As the British ruled India as a colony, the ruling company, East India Company established three banks: The Bank of Bengal in 1809, The Bank of Bombay in 1840 & The Bank of Madras in 1843. These banks were known as Presidency Banks. After the independency of the India, several banks established & collapsed. However, the Reserve Bank of India as a central bank of India was originally constituted as a shareholders' bank in 1935 under the Reserve Bank of India Act, 1934, to regulate the issue of bank notes & the keeping of reserves with a view to securing monetary stability in India & generally to operate the currency & credit system of the country to its advantage. The Banking Companies Act, 1949 of India, the bank is vested with large powers of supervision, control, direction & inspection of scheduled & non-scheduled banks of India. (*Acharya, 2055: 137*)

### 2.2 Meaning of Central Bank

Central bank is an important financial institution in every sovereign independent state in modern times. It is the apex body of banking system. There are many types of banks. Of the various banks most or the supreme bank is the central bank. The central bank plays an important role in the economic development of a country. This bank is established to develop banking through strategy on its own to issue the notes, to control the credit, to act as the bank of the banks, advisor of the government in each country.

Within banking system, central banking is also a vital component. There are different logics enhanced on the definition of the central banking. Either V Smith has said that the primary definition of the central banking system in which a single bank has complete or residuary monopoly in the note issue. But, R.D. Hawtrey regarded that the central banking is basically related with the lender of the last resort function. On the other hand, A.W. Shaw was more concerned with credit control function while defining the concept of central banking. The Bank of International Settlement (BIS) has urged that the central bank is the bank to which has been entrusted the duty of regulating the volume of currency & credit in the country.

The meaning of central bank has been defined in different ways according to situation & need. Different authors have given different definition for central bank. Therefore, it is very difficult to give a precise definition of central bank. The momentum took place when it started to work as the banker's bank much later not as the privately owned bank as discussed above. That is why, the meaning of central bank varied according to time & situation. In this context, De Kock observes, "central banks have developed their own code of rules & practices, which can be described as the art of central banking but which, in a changing world, is still in the process of evolution & subject of periodical readjustment." In the past, there was no much difference in the meaning & definition between ordinary banks with the central bank except in some areas.

"A central bank is a bank, which constitutes the apex of the monitory & banking structure. It is the lender of the last resort & has monopoly in note issue". (*Kock., 2007: 267*)

"Central bank as an institution which is charged with the responsibility of managing the expansion and contraction of the volume of money in the interest of the general public welfare." (Radhaswamy & *et al., 2007: 296*)

#### 2.3 Introduction to Nepal Rastra Bank:

Nepal Rastra Bank is the supreme bank of a country. It is a banker of banks & government's bank. It has monopoly to issue currency. Nepal Rastra Bank as a central bank of Nepal was established in 2013 B.S. Baishak 14(April 26, 1956) NRB Act 2012. Prior to this bank there was no such formal organization who controls and regulates the monetary system in the country. It is an autonomous body & fully owned by the Government of Nepal, who works for the development of banking system in the country. It has also the responsibility to observe, evaluate & regulate the economy of the country. It has also the responsibility & authority to make the monetary policy of the country.

More power & authorities to control & responsibility for supervision over the financial institutions of the country came over after the enactment of the Nepal Rasrta Bank Act, 2058 &

Nepal Rasrta Bank Act, 2058(First Amendment, 2063/7/23/5) to the central bank. Currently also the central bank is doing its functions & other related activities standing on this act.

The organizational structure of the bank is just like in other countries. The top body of the bank is its Board of Directors who sets goals & objectives & defines policies. The Board of Directors is comprised of four representatives from the government, two deputy governors and the governor is the chairperson of the board. In order to achieve its goals & objectives, it can develop its own policies.

The central bank, NRB is also in the process of the restructuring for its effective role in the economy of the country with the help of the World Bank under the Financial Sector Reform Program (FSRP).

### 2.4 Organizational Structure of Nepal Rastra Bank

To achieve the objectives mentioned in the Preamble of NRB Act, 2058 & to run the bank smoothly & effectively, the following provisions have been made in the Act:

- The entire responsibility including the management of the bank & the performance of all acts to be executed by the bank under this Act & other Nepal laws shall be present in the Board of Directors.
- 2. The Board shall make rules for the conduct of business mentioned in sub-section (2) as above. The Governor shall exercise all the powers vested in the Board, under the supervision & direction of the Board of Directors, in accordance with such rules. The Governor may, in order to carry out the business of the bank smoothly, delegate his powers to Deputy Governors & other employees of the Bank, on his own responsibility.

Thus, the Board of Directors is the supreme policy maker body of NRB. In line with the policies & programs of the GON, the Board mainly formulates & executes the monetary policies that ensure adequate availability of money & credit in the economy. (*Singh, 2007: 115*)

The BOD of the bank constitutes seven members comprising the Governor, four Directors nominated by the GON & the two Deputy Governors of the bank. The Governor & the two Deputy Governors too are appointed by the GON. The person holding the post of Director in any CB is not eligible to become the Bank's Director. However, this regulation does not apply in the case of the Governor & the Deputy Governors. Similarly, no two persons who are partners of the same firm or directors of the same corporate body are qualified for directorship in the Board. Traditionally, 2 out of 4 directors are senior, the GON officials at Secretary level usually from the Ministry of Finance & Ministry of Industry. Beside, high-level officials from other Ministries or institutions are invited to take part in the meetings of the Board as & when necessary.

The Governor convenes the meeting of the BOD. The Board meeting should be held compulsorily at least 6 times a year & once every 3 months. Similarly, if at least two Directors, having voting rights, make written request together with the agenda to be discussed, the Governor convenes the meeting in accordance with such request. The Governor presides over the meetings. However, if the Governor, for any reason, is unable to attend the meeting of the Board, he can authorize one of the Deputy Governors to preside over the meeting. In such a circumstance, the Deputy Governors so authorized is entitled to exercise his voting power. To form a quorum, the presence of at least two among the four directors nominated by the GON, apart from the Chairman, is necessary. The decision of the meeting with such a quorum is deemed the decision of the Board. In the event of equality of votes for & against a resolution, the Governors as members of the BOD take part in the discussion in the meeting of the BOD. However, these officials are not entitled to vote on any subject put to vote in the meeting.

In NRB, various departments, divisions, branch & sub-branch offices have been set-up for conducting the bank's day-to-day operations smoothly & effectively. The bank has to accomplish a number of objectives consistent with other national economic objectives. Therefore, while designing the organizational structure, special attention has been paid to ensure that the bank's dimensions & dynamic role are clearly reflected in it. Over the years, the bank's responsibilities have expanded in sound reputation with the increase in numbers of banks & financial institutions. Additional regulatory framework has been designed & the number of employees has been increased to provide the needs of monitoring & follow-up of the changed financial system

### 2.5 Regulatory Measures followed by NRB for CBs:

With a view to maintaining financial stability, a number of regulatory measures were adopted in F/Y 2005/2006. An integrated directive for CBs, development banks, finance companies & micro-credit development banks was issued on 13 July 2005. The umbrella act "Bank and Financial Institution Ordinance 2005" has been made effective by scraping all then acts governing these banks & financial institutions. This ordinance has been converted into "Bank & Financial Institution Act 2006" in 2006 with necessary amendment. Likewise, a draft of "Assets Management Company" & "Anti-money Laundering Act" has been submitted to the GON.

The umbrella directives incorporates 16 directives relating to capital adequacy, classification of loan & advances & loan loss provisioning, sectoral credit limit, accounting policy & structure of financial statement, risk minimization, investment, statistical returns to be submitted, sale of promoters shares, consortium lending, credit information & black listing arrangement, cash reserve ratio, branch office opening, interest rates & financial; resources collection.

#### 2.5.1 Legal Framework of Establishing Commercial Bank

Only on the recommendation of Nepal Rastra Bank, a commercial bank is established as a company with limited liability under the company Act. For obtaining, such recommendation of the NRB and only in case NRB so recommends such bank should be registered according to the company act to functioning under the Act.

The Nepal Rastra Bank may specify necessary condition, while recommending the establishment of a bank pursuant to sub recommending the establishment of a bank pursuant to subsection (1) and it shall be the duty of the concerned bank to fulfill the condition so specified.

Therefore, various legal provisions with regard to bank establishment are already being spelled out in Act, and those are being guided by the act itself. Provisions regarding the basic legal requirements in this regard are as following:

- Share capital
- Bank establishment policy
- Functioning definition of bank formation of board of director
- Formation of board of directors

- Disqualification for the directors
- Operational criteria of establishment
- Function, which the bank may perform
- Capital and provision of general reserve
- Branch Expansion Policy

#### 2.5.2 Bank Capital Structure Requirements

One of the most critical of all banking problems in recent years centers on raising and maintaining sufficient capital. A CB has access to their source of funds: capital, deposits & borrowing. Therefore, the term capital has special meaning in the balance sheet of a bank. Capital refers to those funds contributed by the bank's owners, consisting mainly of stock, reserves & earnings that are retained in the bank rather than paid out to the stockholders. Capital performs several important functions of a bank such as supplying resources to get operate a new bank, further to expand & defend against risk. It also assists in maintaining public confidence in the bank's management & shareholders.

Bank capital cannot be treated as a single & homogenous item. Choice of the form of capital, of the amounts needed in each form, and of the way of raising it have important implications for bank profitability, it is therefore, the study of capital management has become significant in the banking management.

In general sense, "Money is needed to establish & operate a bank is called bank capital." It is not possible to establish & operate a bank without capital. In this way, "the amount received by the bank from different sources to establish the bank, to operate the banking system is called bank capital."

Hence, The NRB has ultimate power or right to decide how much capital is needed for a bank & non-bank financial institutions. According to the new provision implemented by NRB under BAFIA 2063, the financial institution should be as:

#### Table No.1.1

#### **Capital Structure Requirements**

Description	Prior to	At present		
	27 March, 2007			
Paid-up Capital				
CBs	Rs.1000 million	Rs.2000 million		
Regional CB Concept		Eliminated		
Development Bank(National Level)	Rs.320 million	Rs.640 million		
Development Bank(1-3 districts)	Rs.50 million	Rs.100 million		
Development Bank(4-10 districts)	Rs.100 million	Rs.200 million		
Development Bank	Rs.150 million	Rs.300 million		
(Leasing transactions)				
Finance Companies(National Level)	Rs.100 million (Rs.150	Rs.200 million (Rs. 300		
	million for leasing	million for leasing		
	companies)	company)		
Finance Company(1 district)	Rs.50 million	Eliminated		
Finance Company(1-3 districts)	Rs. 50 million (Rs.150	Rs.100 million (Rs. 300		
	million for leasing	million for leasing		
	companies)	company)		
Micro finance National Level	Rs.100 million	Continued		
Micro finance Regional	Rs.60 million	Continued		
Micro finance 1-3 districts	Rs.10 million	Continued		

Source: NRB Directives 2065/66

#### 2.5.2.1 Capital Requirement Criteria for Establishing New Bank

As discussed in table No. 1.1 need & importance of the bank capital, the central bank of the country, NRB has made the capital requirement criteria for establishing new bank also.

With a view to encourage people to open commercial banks outside the valley and also limiting the monopoly of a single person, a group and/or company in banking business, NRB announced the following measures under new BAFIA 2063:

A minimum paid-up capital of Rs 500 million required to establish a commercial bank with the headquarter to be stationed in Kathmandu valley and operation expanding throughout the country.

A minimum paid up capital of Rs. 50 million required for establishing a bank with its headquarter to be stationed in the district level and limiting its area of operation only up to 5 districts other than Kathmandu valley.

A minimum paid up capital of Rs.120 million required for establishing a bank with its headquarter in any municipality expanding business in all parts of the country except the Kathmandu valley.

In addition to above requirement NRB also made some provision in connection with the ownership pattern. Accordingly, the bank, which is to be opened, is required to sell at least 30% of its share to the general public. However, no single person, firm, company and/or a person could purchase more than 10% of issued capital of bank. Similarly, such person, firm, company and group of person (except GON, Nepal Rastra Bank, commercial banks and government financial institution) could not purchase more than 15% of issued capital of all other banks.

However, the above capital structure is still prevailing in the country but as the GON & NRB has decided to let the foreign banks to operate within Nepal since 2010 as promised while being the member of WTO. So, viewing this scenario, the central bank may decide in the capital structure required for the CBs to be established in the coming days.

S. No.	Timeframe for compliance	Type of action
1.	F/Y 2064/65	Restriction on dividend
2.	F/Y 2065/66	Restriction on dividend/deposit collection
3.	F/Y 2066/67	Restriction on dividend/deposit collection/loan
		disbursement
4.	F/Y 2067/68	Restriction on all transaction, except loan
		recovery & paying back matured deposits
5.	F/Y 2067/68 onwards	Initiation of the process of revoking license

#### Table No.1.2

#### Actions on Non-compliance of Minimum Capital Requirement

Source: Mirmire Vol.36 No.264

In context of capital adequacy requirements in a banking institution, the core principle # 6 of the Basel Committee on Banking Supervision (revised in October 2006) states: "Supervisors must set prudent and appropriate minimum capital adequacy requirements for banks that reflect the risks that the banks undertakes, and must define the components of capital, bearing in mind its ability to absorb losses. At least for internationally active banks, these requirements must not be less than those established in Basel capital requirements." (*Shrestha: Mirmire, 2007: vol. 36: 264*)

#### 2.5.3 CRR for CB:

The CRR too can be taken as criteria of measuring bank liquidity. The CBs should maintain the CRR as fixed by the central bank by opening an account in central bank and should maintain the statutory liquidity ratio, in its own treasury. It changes from time to time. CRR was used even before 1990s. NRB, first time introduced CRR in December 1966. At that time, CBs were required to maintain CRR of 8% of total deposit liabilities. Since then, NRB changed CRR a dozen times until to date, and sometimes, variable rates for different deposits, and sometimes, single rate. In 1990, NRB directed the CBs even to maintain cash in vault of 4% of deposit liabilities. Such a provision was taken away in August 2003.At present; the level of CRR is 5% of total domestic deposit liabilities of the CBs in Nepal. Demand, savings, and fixed deposits denominated in rupee are subject to the provision of CRR. The following table shows the CRR used by the NRB in past.

Ta	ble No	0.1.3	
		_	

Date	Rate(% of domestic deposit liabilities)
2023	8%
2030	5% including statutory liquidity ratio(SLR) 32%
2034	7%
2037	9% (Cash in Vault 4% & Bal. with NRB 5%)
2045	9%
2045	12%
2046	12% (Cash in Vault 4% & Bal. with NRB 5%)
2055	Cash in Vault 3% & 8% for current & saving deposits, 6% for fixed
	deposits
2058	Cash in Vault 3% & 7% for current & saving deposits, 4.5% for fixed

**CRR at Different Time Period** 

	deposits
2059	Cash in Vault 2% & 7% for current & saving deposits, 4.5% for fixed
	deposits
2060/61	6%
2061/62	5%
2062/63	5%
2063/64	5%
2064/65	5.5%
2065/66	5.5%

Source: NRB Directives 2065/66

#### 2.5.4. Credit Classification & Loan Loss Provision for CB

The commercial banks of Nepal have to classify its credit/loan as prescribed by the central bank of the country, NRB. The loans are classified as per their recovery performance. Generally, the principle of loan classification & provision for loan loss should be arranged in accordance with the directives of central bank. In Nepal, at present loans/credits are classified into two types, which further have been sub-divided. They are:

#### 1) Performing Loans

- a) Pass (Good) Loan
- b) Restructured Loan

#### 2) Non-performing Loans

- c) Sub-standard Loan
- d) Doubtful Loan
- e) Bad Loan (Loss)

The loan loss provision must be arranged according to the classification of loan. So, the provision should also be maintained according to each type of loans. Every commercial banks of Nepal should mention the report of credit under *Schedule 13 Classification of Loans, Advances and Bills Purchased & Provisioning* in every F/Y Report as per the directive of the central bank, NRB.

According to the directive, the loan loss provision should be maintained as follow by CBs:

#### Table No.1.4

Classification of Credit	Loan Loss Provision
Pass (Good) Loan	1%
Sub-standard Loan	25%
Doubtful Loan	50%
Bad Loan (Loss)	100%

#### **Credit Classification & Loan Loss Provision for CB**

Source: NRB Directives 2065/66

The provision for the performing loans has been maintained as "General Loan Loss Provision" & for the non-performing loans as "Specific Loan Loss Provision".

#### 2.5.5 Black Listing Provision

CBs & the finance companies have been issued directives on black listing & credit information for transparency & relevancy in their loan options & to regulate the process of black listing of loan defaulters. The directive will also enable accessing information from one single source. More power & authority, similarly responsibilities have been added to the Debt Recovery Tribunal by this directives which is established by GON.

#### 2.5.6 Protective Provision for CB

Provision of up to Rs.10.0 million has been made to protect small & medium industries through the Deposit Insurance & Credit Guarantee Corporation.

#### 2.5.7 Imposition of Restriction

Restriction on inter-bank transaction in Indian currency has been removed recognizing to fact that such a restriction has caused inter-bank market to remain partially inactive. Commission charged to CBs for the purchase of Indian currency from NRB has also been waived which, in turn, is expected to help banks to reduce commission charged to customers. Furthermore, individuals are also licensed to purchase Indian currency.

#### 2.5.8 Promoters' Qualification:

1. The NRB would not proceed with further actions of the application if any of the promoters was legally charged in the past for not being able to repay the debt to the bank or finance company & his collateral was proposed for auction, if he was recorded

in the blacklist of CIC. The application would be immediately cancelled if such evidence were provided irrespective of the stage of its processing.

- 2. One third of the total promoters should have taken either economics as a major or taken accounts, finance, law, banking or statistics the graduate level or a degree in chartered accountancy from TU or any university recognized by TU & at least 25% of the promoters should posses working experience in a bank or financial institution or similar professional experience.
- 3. The promoters of a bank or finance company shall not be promoters of another bank or finance company that has been granted license by the NRB.
- 4. Stockbrokers, market-makers, & persons or institutions involved in auditing the accounts of the bank cannot be the directors of the bank or finance company.

## 2.6 Bank Supervision in Nepal:

Banks & financial institution is one of the prime responsibilities of the supervisory authority. Effective supervision of these institutions is an essential component of a strong economic environment. The task of supervision is to ensure that banks operate in a safe & sound manner & that they hold capital & reserves sufficient to support the risks that arise in their business. Strong& effective banking supervision contributes in enhancing effective banking supervision contributes in enhancing effective banking supervision contributes policy along with financial stability in any country. While the cost of banking supervision is high, the cost of poor supervision has proved to be even higher. (Pradhan: 2006: 136)

Banks are supervised in order to achieve both long-term financial stability & sector efficiency. This is done through the promotion of safe & efficient banking practices & institutions- to support sound private business development & meet individual bank customer needs. A weak regulatory framework & poor supervision provide grounds for inefficient & unsafe banking practices, which increase the risk of bank failure.

Preventing systematic risk, protecting small depositors & containing financial crimes are concrete steps in attaining these objectives. They require that the supervisors enforce fundamental discipline in the banking system with the support of well-crafted laws & regulations & the presence of strong in-house supervisory expertise. Like most banking supervisory authorities the world over, at the backdrop of the inspirations of the abovementioned supervisory motives, NRB has adopted a two-prong approaches to monitor & supervise the financial health of the financial institutions under its preview through off-site surveillance & on-site inspections. However, NRB's main approach to supervising banking institutions is to concentrate on corporate governance, market discipline & management oversight.

NRB Act 2001 ensures whether CBs are operating prudentially & complying with regulatory requirements. The ultimate objective of the supervision lies in the protection of the depositors' interest. NRB is heading towards successful implementation of Basel II in our country. For this, we have already formed an accord implementation group for proper analysis & formulation of necessary directives. This will again enhance our strength in the course of supervision.

#### 2.7. Introduction to Financial Analysis

The types of analysis vary according to the specific interests of the party involved. Trade creditors are interested primarily in the liquidity of an institution. Their claims are short term, & the ability of a financial institution to pay these claims is best judged by means of a thorough analysis of its liquidity. The claims of bondholders, on the other hand, are long term. Accordingly, they are more interested in the cash-flow ability of the firm to service debt over the long run. The bondholder may evaluate this ability by analyzing the capital structure of the financial institution, the major sources & uses of funds, its profitability over time, and projections of future profitability.

Investors in a company's common stock are concerned principally with present & expected future earnings & the stability of these earnings about a trend, as well as their covariance with the earnings of other financial institutions. As a result, investors might concentrate their analysis on a company's profitability. They would be concerned with its financial condition insofar as it affects the ability of the company to pay dividends & to avoid bankruptcy. In order to bargain more effectively for outside funds, the management of a firm should be interested in all aspects of financial analysis that outside suppliers of capital use in evaluating the firm. Management also employs financial analysis for purposes of internal control. In particular, it is concerned with profitability on investment in the various assets of the company & in the efficiency of assets management.

Financial ratios are the main tool for the financial analysis. They can be derived from the balance sheet & the income statement. They are categorized into five types: liquidity, debt,

coverage, profitability, & market value. Each type has a special use for the financial analyst. The usefulness of the ratios depends on the ingenuity & experience of the financial analyst who employs them. By themselves, financial ratios are fairly meaningless; they must be analyzed on a comparative basis. (*Horne, 2005: 332*)

## 2.8 Related Research, Journal and Articles

In addition to financial performance, various articles were published on financial aspect, which deals in the context of Nepalese commercials banks and financial sectors of Nepal. The major findings of the approaches used in those important articles are reviewed briefly:

Bhisma Raj Dhungana, in his article, "Financial Sector Reform (FSR) program in Nepal" published in Souvenir of RBB, 2061, has concluded that Nepalese Financial sectors are being strengthened under the financial reform program. The expediting of the liberalization and privatization process within the financial reforms programs has succeeded to place the private sector rather than the government in charge of determining who gets credit and the credit and at what price. The FSR has also been able to establish the system of prudential regulation and supervision design to restrain the private sectors so that we can be reasonably sure that their decisions will also be broadly in the general social interest. Many Act s are being promulgated to obtain and maintain a strong legal environment requires for the system. It is also equally important that the enforcement aspect in all respect play a vital role, which is continuously improving.

Within this reform program the two largest commercial banks NBL and RBB are being restructured, institutional building program are being lunched, greater autonomy and responsibility have been provided to the central bank, entry and exit norms are being prepared, laws are being prepared for the banking sector. There all are positive aspects to boosts up the system.

It has been widely recognized that less government involvement in the financial sector, a strong central blank, a strong banking environment, adequate banking services to the poor, adequate legal framework and enforcement of law are six basic pillars for the development of the healthy financial architecture. The government has lunched this program to eliminate financial problems. Except some aspects, the progress made within FSRP seems are satisfactory.

Bhesh Raj Panthi highlights on his article entitled, "The importance of human resources management" published in Souvenir of RBB 2061, that the human resources management always plays key role in a commercial bank like RBB where the banking services are only made by human skills. If the size of the employee is suitable and skillful, the optimum objectives of the bank will be nearer to the achievement. The objectives of the profitability and the liquidity of the bank may be fulfilled if and only if its human resources are perfect in and suitable in quality. So, the selecting process of human resources should go through the straightway of identifying workforce requirement Recruiting - Selecting – Placing – Promoting – Appraising – Training and Retirement.

An article was publishes in New Business Age September 2004 entitles "All Bank in Profit". It focused that in general all banks for the fiscal year 2003-04 are bullish in their performance. During the year all the banks were in profit but in the previous year two commercial banks, Nepal Bank Ltd. and Rastriya Banijya Bank were in a loss of 252 million and 3246 million respectively. NBL, RBB, Siddhartha Bank, Laxmi Bank, Kumari Bank and Machhapuchhre Bank have increased their operation profit in substantial amount. In addition, the old banks with huge losses in the previous year (NBL and RBB) have succeeded to improve their performance.

In the article, "challenges of a non performing loan management in Nepal" Uma Karli has mentioned the course of increasing trend of non-performing loan. she identifies the major courses such as poor loan analysis guarantee oriented loan system, desire platoon of valued assets, misuse of loan, lack of regular supervision of loan. (Karki 2059, NRB Samachar Patra vol. 47:87)

In an article Ashwini Kumar Thakur, causes the issue of risk management in the banking sector. Acc to him, risk should be taken as one of the challenges of the banking industry but it is not sufficient to minimize the potential disasters. Banking risk should be managed as a separate part of the management. (Thakur 2059, NRB Samachar Patra vol. 47:49)

In an article, Mahesh Bhattarai is trying to indicate the problem of bank's bad debt and NPA, Acc. to him; if a bank cannot receiver, its loan-lending bank's cash flow will be

badly affected. Similarly, it can affect the lease relationship between depositors. (Bhattarai 2059, NRB Samachar Patra vol. 47:62)

A decrease in CD ratio (the percentage of the deposit mobilization over the credit) signifies the presence of high liquidity and comparatively lower fund mobilization and vase versa. High liquidity and idle funds will result in lower profits. HBL has the highest growth of 18.47% in CD ratio over the last year. Similarly, NABIL, Everest Bank Ltd (EBL) and Nepal SBI Ltd (SBI) have recorded growth ratio of 6.28%, 11.83%, and 7.45% respectively in their CD ratio. However, this ratio of other commercial banks has declined, largely due to factors external to the banks. As per the NRB directives, all commercial banks have to maintain Loan Loss provision according to the size of overdue loans.

Nepal Credit and Commerce Bank (NCCB) were able to decrease to its loan provision by 27.63% as compared to the previous year indicating a good recovery of interest as well as principal. In cash of Nepal Investment Bank (NIBL), growth in loan loss provision (which in fact decreased by 6.73%) was much less than the growth of the total credit (which in increased by 53%). Similarly, NBL and HBL were able to maintain a healthy composition of loan loss provision (decreased by 9.49% and 0%) and credit (increased by 3.70% and 26.78%), again signifying good results form their loan recovery efforts. In cash of remaining banks, the situation is not satisfactory as the growth of loan loss provision is higher than the growth of credit. (Subedi 2004, New Business Age: 47-48)

## 2.9 Review of Unpublished Thesis

In this thesis an attempt has been made to review some thesis following are few of them

Shrestha (2006) has study on "*Impact and Implementation of NRB Guidelines of Commercial Banks*" which has the following objectives

a) NRB Directive has made both positive and the negative impacts on the commercial banks.

- b) The new directives of NRB have more good output than the negative on various aspects of the banks.
- c) To make necessary recommendations as far as possible

The major findings of his study were:

- a) The changed directive of Single Obligor limit, the loan exposure has been cut down to customers which resulted decrease in the interest income resulting decrease in the profit of commercial banks and less dividends could be given to the shareholders and bonus to the employees of the banks.
- b) The need for the increment in the core capital increased the expenses of the commercial banks and the banks are facing the problem of increasing operating cost with the decreasing loan amount, restricting the increase in the profit of the banks.
- c) The restriction of borrowing limit to a single party is done with a view of reducing the bad loans to a minimum level, protecting the banks from bankruptcy as well as protection of deposits of the depositors.

**Barahi(2007)** In the thesis on *"A Comparative Study on NRB Directives and its Implementation In Nepalese Commercial Banks"*, The main objective of the research is to examine the implementation of NRB Directives by the selected Commercial Bank related to Capital Adequacy, Loan Classification and Provisioning in their activities. Specific objectives are as follows:

- a) To conclude the impact of NRB Directives on safety of general public's deposit and on enhancement of the situation of commercial bank's situation.
- b) To make a comparative study between Everest Bank Ltd., Nepal SBI Bank Ltd. and Nepal Bangladesh Bank Ltd. with respective to Capital Adequacy, Loan Classification and Provisioning as given in the directives of NRB.

The major findings of his study were:

a) In terms of capital adequacy EBL is in a much better position than of NBBL and NSBIBL. The bank is heading forward with a healthy growth. However, NSBIBL

is in recovering stage but the position of NBBL in terms of capital adequacy is deteriorating.

- b) Comparatively, despite of highest deposits, loan and advances and income spread, EBL stood second to NBBL in case of Net Profit. NSBIBL is the one with lowest deposits, loan and advances and income spread and so with the net profit.
- c) EBL has been doing exceptionally well than by NSBIBL and NBBL in increasing its' loans and advances. NSBIBL has been improving and increasing its market rapidly. NBBL though, is ahead of NSBIBL in figure of Loan Extended, is lying behind NSBIBL in the growth rate of loan extended.

# **Shrestha (2008)** In the thesis on "*Raising and utilization of funds are the primary functions of commercial banks*".

The major objectives of his study were:

- a) Analysis the source of the fund of the bank.
- b) Analyses the interest of depositors Commercial banks collect a large amount of deposits from general public.
- c) To make necessary recommendations as far as possible

The major findings of his study were:

- a) NRB should consult to the various bank officials before setting or resetting standards on capital adequacy norms.
- b) The complaints and criticisms of bank officials should be considered accordingly. Consequently, an optimal standard will ensure which will satisfy almost everyone.
- c) depositors are not aware of the fact of the necessity of adequate capital fund to safeguard their deposits. They deposit their money to any banks regardless of adequate capital fund which may endanger safety of their money.

**Pandey (2009)**, In the thesis "*Impact and Implementation of NRB Directive*" The main objectives of his study were:

- a) To examine the implementation of NRB directives by commercial banks of Nepal.
- b) To find out the impact of NRB directives on commercial banks.
- c) To make necessary recommendations as far as possible.

The major findings of his study were:

- a) The researcher has observed about the protection of the deposits of public because of the reduction in the loan exposure to the single unit, the reporter states that due to the new directives
- b) The reporter laid down about the changes in the directives will bring prosperity to the shareholders, depositors, employees and the economy of the country as a whole.
- c) NRB that the NRB should issued directives only after doing the proper homework. NRB must strengthen the functioning of Credit Information Bureau.
- d) NRB to try to avoid ambiguity in the directives that are found there in the present directives and to come up with straightforward directives leaving no loopholes that can be manipulated.

**Shrestha (2010)** In the thesis stated that "**Raising and utilization of funds are the primary functions of commercial banks**". The main objectives of his study were:

- a. To analyze the Commercial banks collect amount of deposits from general public.
- b. To analyze the deposits capital of commercial bank.
- c. To make necessary recommendations as far as possible.

The major findings of his study were:

a. Must be sufficient otherwise the banks will use all the money of depositors in their own interest and depositors will have to suffer loss.

- b. Capital adequacy norm is required to safeguard the money of the depositors as the banks are playing with the money they collected from the depositors. The reporter also added that depositors are not aware of the fact of the necessity of adequate capital fund to safeguard their deposits.
- c. Deposit their money to any banks 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 think before depositing money in any commercial banks.
- d. The reporter further stated that NRB should consult to the various bank officials before setting or resetting standards on capital adequacy norms. The complaints and criticisms of bank officials should be considered accordingly. Consequently, an optimal standard will ensure which will satisfy almost everyone.

#### **Research Gap**

All the above mentioned reports have derived more or less universally acceptable conclusions and have been proved to be significant to different sectors in their own places. But the studies are related only with either the impact of NRB directives on commercial banking or the compliance of the capital adequacy maintained by commercial banks with the guidance of NRB Directives. But it is not sufficient to discover whether directives do have positive or negative impact on commercial banking. It is equally important to check whether the issued directives are being followed properly or not. If despite of following the directives, commercial banks are not able to enhance their situation or their situation worsens instead of enhancing, we can conclude that the directives are not user friendly. Hence along with the impact of NRB Directives, it is also necessary to study the implementation part of NRB Directives. In another hand, directives are not just related to capital adequacy. At present the number of guidelines issued by Nepal Rastra Bank to commercial bank reaches twenty one. Hence it is necessary to include other sectors of the directives in order to know whether the directives do have positive impact on banks or whether the directives are actually being followed by the banks. Finally none of the researches have studied the strictness in monitoring and supervision of commercial banks by NRB which is the main important aspect in impact and implementation of directives. Current research will include both impact and implementation of NRB Directives in its study. The study has included different time periods during which the amendments have

been brought in directives of NRB. Also, three different sectors of Directives: Capital Adequacy, Loan Loss Provision and Supervision and Monitoring have been included. Hence the researcher claims the study to be more broad and significant in comparison to the former ones

## CHAPTER THREE RESEARCH METHODOLOGY

This chapter presents the short outline of the methods applied in the process of analyzing the capital structure is a systematic method of finding out solution to a problem whereas research methodology refers to the various sequential steps to adopt by a researcher in studying a problem with certain objective in view.

## 3.1 Research Design

For the analysis of the capital structure of selected joint venture banks, analytical as well as descriptive designs are applied to achieve the objective of the research.

## 3.2 Population and Sample

## 3.2.1 Population

Mainly the commercial banks or "A" class financial institutions as categorized by NRB are the population samples considered for the study. The list of CBs is at Annex-I.

## 3.2.2 Sample

The sample used in this research is purposive in nature. Thus, five commercial banks cover

17.86 % $\cong$ 18% of the population as sample ( $\frac{5}{28} \times 100\%$ ). They are:

- 1. Nabil Bank Ltd.
- 2. Himalayan Bank Ltd.
- 3. Nepal SBI Bank Ltd.
- 4. Nepal Bank Ltd.
- 5. Rastrya Banijya Bank

Of the above five CBs, NBL & RBB covers about 50% banking transactions of Nepal.

#### 3.3 Sources of Data

This research is based on secondary data. Required data is collected from Economic Survey (NRB) financial statement of listed companies, Quarterly Economic Bulletin (NRB), Banking and Financial Statistics (NRB), Bulletin & Reports of Periodically Published by various

organizations, previous thesis and dissertation and Published by various organizations. The basic sources of data used are as follows:

- a. Annual Reports
- b. Published materials from concerned CBs
- c. Financial statements of concerned CBs
- d. Related books and journals

#### 3.4 Methods of Data Analysis

Mainly financial methods are applied for the purpose of this study. Appropriate statistical tools are also used. Among them correlation analysis regarded as major one is used for this research.

#### 3.5 Tools Used

#### 3.5.1. Credit Deposit Ratio (C.D Ratio)

If 75% of amount deposited by the customers are invested in various sectors, it is considered satisfactory. It is good sign. This ratio shows the efficiency of the CB to use the liquidity during a particular time. The ratio helps to find out the liquidity position as well as the prediction for the need of additional capital for the CBs. If the given ratio is not maintained by the CBs, there is a scarcity of cash & there is a lack of capital.

#### 3.5.2. Capital Deposit Ratio

A bank carries out its transaction through the medium of ownership & borrowed capital. Naturally, the function of a bank requires a lot of capital it is known based on deposit in the bank, whether a bank has an adequate ownership capital or not. If there is 8-10% ownership capital of the total deposit of the bank, it is considered good. However, the ratio is to change according to the movement of the economy.

#### 3.5.3. Cash Reserve Ratio (CRR)

It is the proportion of the deposit liabilities that commercial banks are required to keep as a cash deposit with the NRB. The level of CRR influences the commercial banks' credit creation capacity. If there is a higher rate of CRR, then the CBs need to keep the higher portion of deposits for CRR purpose with the central bank. As such, they have less deposit for lending purpose. Hence, the higher CRR squeezes the money expansion in the economy. Conversely, the low CRR rate means CBs need to keep less of the deposits so that they can lend more, resulting in the expansion of money supply in the economy. Moreover, CRR also serves as a

measure for smoothing payment system as a prudential measure by avoiding sudden liquidity crunch in the banking system.

#### 3.5.4. Arithmetic Mean (A.M)

The mean is the figure we get when the total of all the values in a distribution is divided by the number of values in the distribution. The arithmetic mean is also known as the average. It should, however, be remembered that the mean can only be calculated for numerical data. The mean is an appropriate term than saying average. The mean of data is biased toward extreme values. The mean is suitable when the scores are distributed symmetrically about the center of the distribution. This is calculated by using following formulae:

Mean (A.M.) = 
$$\mu = \frac{\sum X}{n}$$

#### 3.5.5. Standard deviation (S.D)

The measurement of the scatter ness of the mass of figure in a series about an average is known as the dispersion. The standard deviation measures the absolute dispersion. The greater amount of dispersion, greater the standard deviation. A small standard deviation means a high degree of uniformity of the observation as well as homogeneity of a series: a large standard deviation means just the opposite. This is calculated as follows:

Standard deviation (S.D.) = 
$$\sqrt{\frac{\sum (X - \overline{X})}{n}}$$

#### 3.5.6. Coefficient of Variation (CV)

The coefficient of variance is the relative measure of dispersion, comparable across distribution, which is defined as the ratio of the standard deviation to the mean expressed in percent. It is calculates as follows:

Coefficient of Variation 
$$(CV) = \frac{S.D.}{Mean} \times 100$$

#### 3.5.7 Test of Hypothesis

Under this topic, an effort has been made to test the significance regarding the parameter of the population based on drawn from the population. Generally, the following steps are followed for the test of hypothesis.

- a. Formulation of Hypothesis
  - i. Null Hypothesis
  - ii. Alternative Hypothesis

Test of Hypothesis on CD Ratios of Nabil, NBL, LUBL, RBB & HBL:

**Null Hypothesis (H**<sub>o</sub>):  $\mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5$  i.e. there is no significant difference among mean CD Ratio of Nabil, NBL, LUBL, RBB & HBL i.e. CD ratio of CBs are homogenous.

**Alternative Hypothesis (H<sub>1</sub>):**  $\mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4 \neq \mu_5$  i.e. there is a significant difference among mean CD Ratio of Nabil, NBL, LUBL and RBB & HBL.

#### Test of Hypothesis on CRR of Nabil, NBL, LUBL, RBB & HBL:

Null Hypothesis (H<sub>o</sub>):  $\mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5$  i.e. there is no significant difference among mean CRR of Nabil, NBL, LUBL, RBB & HBL

Alternative Hypothesis (H<sub>1</sub>):  $\mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4 \neq \mu_5$  i.e. there is a significant difference among mean ratio of CRR of Nabil, NBL, LUB and RBB & HBL.

#### 3.5.8. Line Graphs

Similarly, graphical presentation support has been also taken to elaborate the collected data. For this purpose, line graph has been used in the report to present the calculated values.

## CHAPTER FOUR DATA PRESENTATION AND ANALYSIS

## 4.1 Introduction

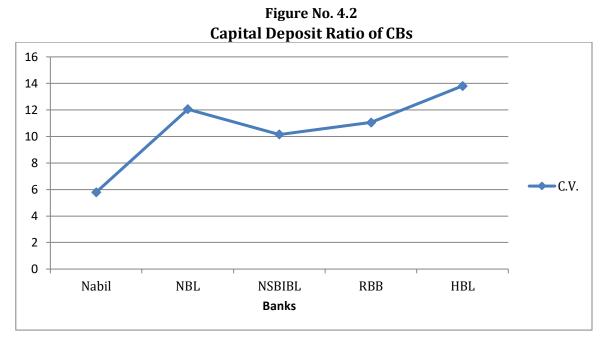
The data, after collection by different methods has to be processed and analyzed in accordance for the purpose of the research plan. The main purpose of analyzing data is to change it from an unprocessed from to an understandable presentation which consists of organizing, tabulating and performing the statistical data. The presentation of data is the basic organization and classification of the data for analysis. This is the section where, the filtered data are presented and analyzed. This is one of the major chapters of this study because it includes detail analysis and interpretation of data from which concrete result can be obtained. This chapter consists of various calculation made for the analysis of credit risks of the sample bank. To make our study effective, precise and easily understandable, this chapter is categorized in three parts; presentation, analysis and interpretation. The analysis is fully based on secondary data. In presentation section, data are presented in terms of table and charts. The presented data are then analyzed using different statistical tools mentioned in chapter three. At last the results of analysis are interpreted. Though there is no distinct line of demarcation for each section (like presentation section, analysis section & interpretation section).

Capital Deposit Ratio of CBs									
F/Y	NabilNBLNSBIBLRBBHBL								
2061/62	8.53	4.17	4.99	3.96	3.53				
2062/63	12.8	2.93	5.82	59.14	6.31				
2063/64	10.16	29.78	5.70	49.29	5.35				
2064/65	8.57	28.4	6.38	44.38	5.83				
2065/66	8.49	4.26	3.13	39.25	6.19				
A.M.	A.M. 9.71 13.908 5.204 39.204 5.442								
S.D.	4.27	4.77	9.056	6.91	7.97				
C.V.	5.79	12.05	10.15	11.05	13.81				

Table No 4 1

## 4.2 Capital Deposit Ratio of the CBs:

Source: NRB Ashar end FY 2065/66



Source: Table No. 4.1

Capital Deposit ratio is one of the major indicators of the performance of the CBs. It helps to know the capital deposit position of the CBs. From the above table we see that the average Capital Deposit ratio of the RBB 39.20% which is highest among other sample CBs and standard deviation and CV are 7.97% and 13.81% respectively. However the mean Capital Deposit ratio of the HBL is 5.42% which is the lowest among the other sample banks & the S.D. is 7.97% and CV is 13.81%.

Higher the Capital deposit ration better will be the performance of CBs. If capital deposit ratio is high the CBs can maintain good Capital Adequacy Ratio. As per NRB directive commercial bank should maintain at least 10% capital Adequacy. Considering this RBB has maintained good capital deposit ratio. If the capital ratio riches below 10% no CBs can flow the loan and cant expand the branch, hence in line to this high capital deposit ratio is favorable. (For detail calculation see Annex -II)

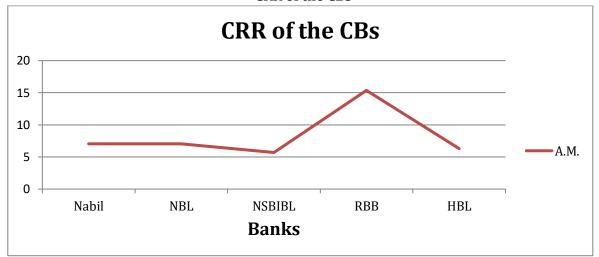
#### 4.3 Cash Reserve Ratio of the CBs

CRR of the CBs					
F/Y	Nabil	NBL	NSBIBL	RBB	HBL
2061/62	8.83	16.4	5.26	15.05	7.86
2062/63	3.26	17.14	5.83	21.94	5.92
2063/64	6	19	5.60	11.01	5.92
2064/65	8.37	18.24	5.72	13.04	5.13
2065/66	8.74	15.82	6.67	15.78	6.76
A.M.	7.04	17.32	5.696	15.364	6.318
S.D.	2.16	1.41	2.69	3.68	9.822
C.V.	30.68	8.14	33.54	23.96	64.32

## Table No.4.2

Source: NRB Ashar end FY 2065/66

Figure No.4.2 CRR of the CBs



Source: Table No. 4.2

The mean CRR of NBL is seen the highest among the sample CBs. It is 17.32%. It is more than the requirement as directed by the central bank, NRB. Theoretical, higher the level of CRR, higher the liquidity of the CBs, which directly affects in the profitability level of the CBs. Therefore, the trade-off between the liquidity & profitability should be reached as far as possible.

NBL has been maintaining the CRR in the uniformity level than the other sample CBs. The C.V. of the NBL is the lowest among the CBs. It is just 8.14%. Similarly, RBB has also has good mean

CRR with 15.36% & CV of 23.96%. Though these two CBs were suffering with huge problems, it has been maintaining the good & effective CRR level consistency.

The mean CRR level of the NABIL Bank is seen the least with just the average of 7.04%. This is due to the failure in maintaining the CRR level as at the end of FY 2062/63. Being the renowned bank of the country, non-compliance to NRB Directive by NABIL Bank is a serious concern both for NABIL as well as NRB. NBL and RBB is seen maintaining a high level of CRR which indicates the higher liquidity, which is good from the point of view of depositors. However, on the other hand it is keeping its fund idle which could have been otherwise invested in Inter-Bank Lending and some income could have been generated. NSBIBL & HBL have been uniformly maintaining the CRR level with buffer of 0.5% to 1.5%. This shows the effective utilization of funds by both the Banks. (For detail, calculations see Annex-IV)

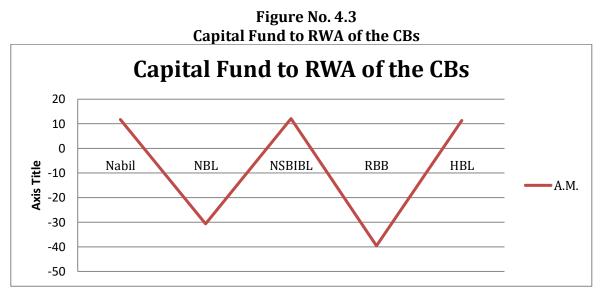
#### 4.4 Capital Fund to Risk Weighted Assets of the CBs:

Until the F/Y 2061/62 the ratio for the RWA ratio should be maintained 11 %( includes 5.5% Core Capital) which was changed in the F/Y 2062/63. From F/Y 2062/63, the CBs have to maintain 12% of risk weighted assets & 6% of core capital in the composition of the total capital. This provision is applied for the "A", "B","C", & "D" class financial institutions respectively. For the "D" class financial institution the composition was 6% capital fund of which 3% core capital & changed to 8% capital fund of which 4% as core capital. As per the NRB directives, until & unless the financial institutions do not fulfill the requirement of the capital, they could not distribute the dividend & bonus shares to the shareholders. Revised framework of BASEL-II Accords, 2008 has reduced the capital adequacy ratio to 10% (which includes minimum 6% core capital) for Commercial Banks.

	Capital Fund to RWA of the CBS					
F/Y	Nabil	NBL	NSBIBL	RBB	HBL	
2061/62	12.44	-29.53	9.47	-44.2	11.01	
2062/63	12.31	-43.09	13.57	-39.93	11.26	
2063/64	12.04	-38.83	13.29	-37.6	11.13	
2064/65	11.1	-27.55	12.32	-39.64	12.42	
2065/66	10.7	-13.94	11.92	-36.56	11.02	
A.M.	11.718	-30.588	12.114	-39.586	11.368	
S.D.	0.689	10.11	10.64	2.62	5.31	
C.V.	5.87	33.05	877.88	6.63	4.67	

Table No. 4.3 Capital Fund to RWA of the CBs

Source: Banking & Financial Statistics, NRB Ashar end FY 2065/066



#### Source: Table No. 4.3

The capital fund to RWA ratio of the fully government-owned RBB & semi-government CB, NBL is seen worst. The ratio is seen negative. The A.M. of NBL ratio is -30.588% & RBB is -39.568%. This has made the NRB to take over the management of these to CBs. They were not working efficiently with the expectation of the shareholders. These two CBs were operating in full risk recording huge losses with the near future to be liquidated. Between these two CBs also, the maintaining of ratio was inconsistent by NBL as its C.V. was greater negatively than of RBB.

Among the positive capital fund to RWA ratio among the sample CBs, NSBIBL is suffering from the huge problem in the uniformity in maintaining the ratio. It has the highest C.V. among the CBs having positive capital fund to risk weighted assets ratio. As per the NRB directive, the CBs should maintain at least 12% of this ratio. Only Nabil Bank & HBL has been following the NRB directive & has maintained the required ratio.

Nabil Bank has maintained the average ratio of 11.72 % with 5.87% of C.V. showing more uniformity. Similarly, HBL has also maintained the required level of average ratio of 11.37% with 4.67% of C.V. (For detail calculation see Annex-V)

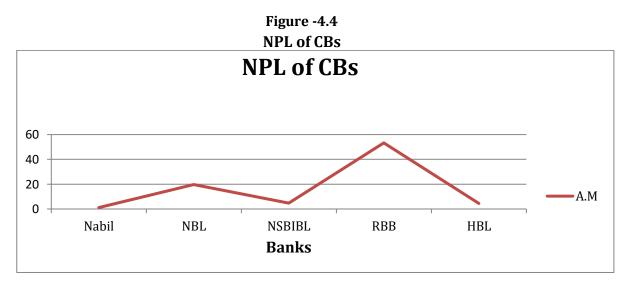
## 4.5 Classification of Credits of CBs in percentage

The major attention in the Nepalese banking sector, more attention should be done in the credit policy by the central bank, NRB. Regarding loan policy, it should make clear to its policy & view. In fact the CBs should follow the credit policy, which would match the economic policy of the NRB or country to gain more & more profit. For this purpose, & as per the performance level of the credit of the CBs, the central bank, NRB, they are classified as PL & NPL. As discussed earlier, the PL is also divided as Pass (Good) Loan & Restructured Loan. And similarly, the NPL is also divided as Sub-standard Loan, Doubtful Loan & Bad Loan (Loss). Due to the data & time limitation, the percentage of the PL & NPL of the sample CBs are presented in next page:

F.Y	Nabil	Nabil NBL N	NSBIBL	RBB	HBL
	NPL	NPL	NPL	NPL	NPL
2061/62	1.32	49.64	6.54	60.15	7.44
2062/63	1.38	18.18	6.13	57.64	6.6
2063/64	1.42	13.49	4.56	52.99	3.61
2064/65	0.74	12.38	3.83	45.34	2.63
2065/66	0.84	4.94	2.02	50.54	2.16
A.M	1.14	19.726	4.616	53.312	4.488
S.D.	1.14	15.54	7.37	5.24	2.13
C.V	2.89	78.77	40.69	9.83	47.54

Table No.4.4

Source: Banking & Financial Statistics, NRB, Ashar end FY 2065/66



Source: Table No. 4.4

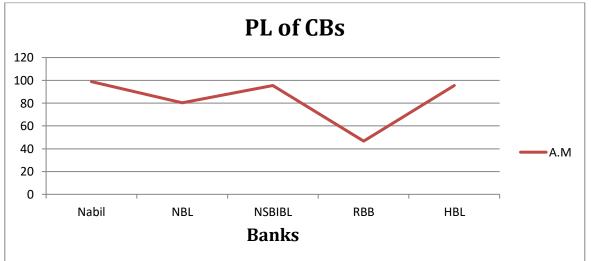
Huge improvement is seen in the loan performance of the semi-government owned oldest CB, NBL. As with the direct intervention of the central bank, NRB & management took over by the foreign management team & their strict follow-up in the recovery of the non-performing loans, NBL recorded this positive indicator in past 3-4 F/Y. The performance of RBB is highest amount those banks.

PL of CBs					
F.Y	Nabil	NBL	NSBIBL	RBB	HBL
	PL	PL	PL	PL	PL
2061/62	98.68	50.36	93.46	39.85	92.56
2062/63	98.62	81.82	93.87	42.36	93.4
2063/64	98.58	86.51	95.44	47.01	96.39
2064/65	99.26	87.62	96.17	54.66	97.37
2065/66	99.2	95.06	97.98	49.56	97.84
A.M	98.868	80.274	95.38	46.688	95.512
S.D	2.969	15.54	7.36	5.24	2.13
C.V	3.002	19.35	8.99	11.22	2.30

Table No.4.5 PL of CBs

Source: Banking & Financial Statistics, NRB Ashar end FY 2065/66

Figure No. 4.5 PL of CBs



Source: Table No. 4.5

The mean PL of the two joint venture CBs, Nabil Bank & HBL is seen excellent. The mean percentage of PL of Nabil Bank is 98.87% & of the HBL 95.512%.

As the RBB is the government-owned CB, its PL mean percentage is seen the lowest among the sample CBs. Its man ratio is seen only 46.688%. C.V is higher value of NBL 19.35 and loweros2.30 of HBL.

As the C.V. of the HBL PL is the lowest, there is the consistency in the flow of the credit in the past F/Y. HBL is has the high average percentage of the PL among the sample CBs. Similarly, HBL recorded the lowest C.V. in the NPL among the sample CBs. This shows the consistency in maintaining the low amount of the NPL, which is beneficiary to the CBs. (Annex-VI)

## 4.6 Test of Hypothesis

Under this topic, an effort has been made to test the significance regarding the parameter of the population based on drawn from the population. Generally, the following steps are followed for the test of hypothesis.

- b. Formulation of Hypothesis
  - i. Null Hypothesis
  - ii. Alternative Hypothesis
- c. Computation of test statistic
- d. Fixing the level of significance
- e. Finding the criteria region
- f. Deciding the two tailed or one tailed test
- g. Making decision

#### 4.6.1. Test of Hypothesis on CRR of Nabil, NBL, NSBIBL, RBB & HBL:

Null Hypothesis (H<sub>o</sub>):  $\mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5$  i.e. there is no significant difference among mean CRR of Nabil, NBL, NSBIBL, RBB & HBL

Alternative Hypothesis (H<sub>1</sub>):  $\mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4 \neq \mu_5$  i.e. there is a significant difference among mean ratio of CRR of Nabil, NBL, NSBIBL, RBB & HBL . **Note:** (Annex-VIII)

	Une-way Av	Ovn rubic		
Source of	Sum of Square	D.F.	Mean Square	F ratio=
Variation				MSC
				MSF
Between	SSC=655647.3153	k-1=	MSC <u>655647.3153</u>	$F = \frac{MSC}{MSF} =$
samples		5-1=4	4	MSF
			=163911.82	163911.82
Within samples	SSE=655304.4	n-k=	$MS = \frac{655304.4005}{20}$	163826.10
(Error)	005	25-5=20	20	=1.00052
			=163826.10	
Total	TSS=342.9148	n-1=24		F=-1.000

Table No.4.5One-way AVOVA Table for CRR

Source: Banking & Financial Statistics, NRB FY 2065/66

Critical Value: The tabulated value of F at 5% level of significance for 4& 20 d.f. is 2.87.

**Decision:** Since calculated F is greater than the tabulated value, the null hypothesis,  $H_0$  is rejected & hence the alternative hypothesis,  $H_1$  is accepted. Therefore, we conclude that there is significant difference among mean CRR of Nabil, NBL, NSBIBL, RBB & HBL i.e. CD ratio of CBs are homogenous.

## 4.7 Major findings of the study

In the interest of financial stability, inactive loan amount should be below 5% of total loan. In Nepal, inactive loan amount is high in the banking sector particularly because of some clients being delinquent. Victims of high inactive loan amount are the government-owned banks. Among the measures taken so far to reduce the level of inactive loan, blacklisting has proved more effective.

The capital fund to risk weighted assets (Total Capital Fund) of the CBs should be positive principally. Among the calculations of the sample CBs, the ratio of the two huge & old CBs, NBL & RBB was negative which shows the risk in the operation of these banks. Other three banks have been maintaining the prescribed capital adequacy ratio.

The CD ratio of the sample CBs was in good position. The CD ratio of RBB was seen high with the average of 39.20%. Other CBs were maintaining somewhat good level of CD ratio. This ratio is one of the important indicators to find out the exact liquidity position of the CBs.

The NPL of the NBL & RBB has not been improved yet. The mean ratio of NPL has remained 19.72% & 53.31% respectively of NBL & RBB. NSBIBL and HBL has shown some improvement by reducing their respective Non performing loan to 2.02 and 2.16 in FY 2065/66. Although the NPL of Nabil Bank has slightly increased in FY 2065/66 than in FY 2064/65, it still has very low level of NPL in the Banking Industry, i.e. 0.84 in FY 2065/66.

## CHAPTER FIVE SUMMARY, CONCLUSION AND RECOMENDATION

## 5.1 Summary

The main reason of the business fluctuation of modern times is the expansion and contraction of money and credit. In modern economics, there is the circulation of credit money many times more than the volume of bank note and coins. The central bank, the highest monetary authority of the country should, therefore, control the volume of money and credit for business stability. Since the bank notes are issued by the central bank, it can directly control the volume of money. However, the central bank controls credit through indirect measures. Hence, in an ordinary sense, the policy of the central bank related to the control of money and credit is known as monetary policy. Based on this policy, the central bank of every country makes & gives directives to the different types of financial institutions for their effective & smooth operation for the economic benefits of the country.

NRB has also updated the financial institution establishment policy with changes where necessary to ensure financial sector stability. Directives have been served to these institutions to increase their paid-up capital base with a view to ensure bank's capacity to bear possible risks of their banking transactions & to encourage merges when necessary. Accordingly, the new licensing policy in place requires having paid-up capital of Rs.2 billion for new commercial banks ("A" class financial institutions) to open. The concept of regional banks has been eliminated. Paid-up capital base for development banks & finance companies has also been raised. Such capital requirement for micro-finance companies to open, however, has not been changed with a view to encourage micro-finance companies to expand. According to the new licensing policy, providing proof of mandatory paid-up capital base by 2069/70 ashad is a precondition for those which have submitted proposals to open new finance institutions. This provision has been made considering the entry of Nepal in WTO. In case of operating financial institutions, they are required to comply with this provision by 2072/73 ashad. Provisions such as individuals intending to invest in these institutions require to proof of tax clearance, & they are not blacklisted by the CIC been made effective.

As a regulator of country's financial & banking institutions, NRB always directly & indirectly advised banks & financial institutions to increase their financial base. The plan for capital

enhancement is one of the best solutions to increase capital strength of banks & complying Basle Accord. The global mantra of facing competition lies in growing big. This is not survival of the fittest alone, survival of "biggest & fittest" is the new theory formed under globalization of world finance.

Banks & financial institutions are the backbone of the economic development of a country. They have promoted industrialization & economic development by channeling the public deposit into these sectors. The establishment of the new bank & financial institutions leads more competition in the banking market. To win the competition, banks provide more facilities to the customers with modern technology. At the same time, the probability of loss becomes significant to banks, which are running behind in the competition. In case of insolvency, the public depositors as well as the shareholders of the bank may suffer significantly. It will adversely affect the overall banking sector. Therefore, the supervisory & monitoring of banks & financial institutions is essential to find out the solvency position & take corrective action in time when needed. For this purpose, the central bank of the country, NRB monitors & gives directives to CBs & financial institutions after supervision & inspection.

## 5.2 Conclusion

Banks & financial institutions in Nepal will have to benchmark themselves against some of the best in the world, for a strong & resilient banking & financial system. Therefore, banks need to go beyond peripheral issues & tackle significant issues like improvements in profitability, efficiency & technology, while achieving economies of scale through available cost effective solutions. These are some of the major issues that need to be addressed by banks in recent scenario, for their success & not just survival, in the changing milieu.

Adequate capital reserve is necessary for financial institutions to minimize risks. Financial crisis faced by the Southeast Asian countries in 1997-98 due to inadequate capital reserve is a living memory. BASEL II guides the capital-structuring requirement, which has been implemented from FY 2065/66. Accordingly, the banks & finance institutions are required to maintain capital adequacy at 10.0% and Core Capital at 6% starting from F/Y 2065/66.

Another directive of NRB to licensed banks & financial institutions deals with the financial statement. Starting from F/Y 2065/66, they are required to open capital adjustment fund to meet mandatory minimum paid-up capital by allocating a minimum of 10% of paid-up capital

from their profit. For financial institutions not earning profit, they are required to comply with this provision by managing resources from whatsoever sources at their disposal.

In the interest of financial stability, inactive loan amount should be below 5% of total loan. In Nepal, inactive loan amount is high in the banking sector particularly because of some clients being delinquent. Victims of high inactive loan amount are the government-owned banks. Among the measures taken so far to reduce the level of inactive loan, blacklisting has proved more effective.

The capital fund to risk weighted assets (Total Capital Fund) of the CBs should be positive principally. Among the calculations of the sample CBs, the ratio of the two huge & old CBs, NBL & RBB was negative which shows the risk in the operation of these banks. Similarly, the ratio of one of the private sector CB, NSBIBL was also in the risk as, its ratio was also been recording negative since F/Y 2064/65.

The CD ratio of the sample CBs was in good position. The CD ratio of NSBIBL was seen extremely high with the average of 96.88%. Other CBs were maintaining somewhat good level of CD ratio. This ratio is one of the important indicators to find out the exact liquidity position of the CBs.

The NPL of the NBL & RBB has not been improved yet. The mean ratio of NPL has remained 19.72% & 53.31% respectively of NBL & RBB. NSBIBL & HBL has shown some improvement with its NPL being 2.02 and 2.16 respectively in FY 2065/66. The mean ratio of PL of Nabil Bank was seen excellent at 99.16 in FY 2065/66.

CRR is one of the important indicators to know the exact liquidity position of the CBs. It is also a compulsory to maintain the CRR as per the directive of the central bank, NRB by all the CBs. Among the sample CBs, NBL & RBB have maintained the high mean CRR level with 17.32% and 15.32% respectively. CRR for Nabil Bank for FY 2063/64 is seen lower than that prescribed by NRB, which is a serious concern for both NRB as well as Nabil Bank.

## 5.3 Recommendation

1. NRB has to encourage the simultaneous growth of a sound & competitive financial system in the country. Such objective supports the promotion of momentum policy with stabilization driving economic development of the country.

- 2. The central bank of the country, NRB has to review its directives time-to-time according to the requirement of the economic situation of the country.
- 3. Strict action should be taken by the NRB to the CBs who have not followed the directives as prescribed by it.
- 4. The loan defaulters should be taken into strict legal action in the joint effort of the NRB, Debt Recovery Tribunal, GON & the concerned CBs.
- 5. As, Nepal has entered into WTO, & government has decided to let the foreign banks to enter into the Nepalese market, the capital requirement for the establishment of new CBs should be strictly follow-up by the local CBs also.
- 6. Information-technology aid should also be taken by the central bank to make the effective & efficient flow of information to the financial institutions.
- 7. Proper provision for collection of capital fund required should be made by the central bank. The mode of collection should also be properly mentioned in the act by the central bank.
- 8. Loan loss provision & the classification of the loans by the CBs should be continued in the coming days to protect from the crisis.
- 9. Consistency in the indicators should be made among the CBs as far as possible by the central bank, NRB using its authorities & flowing effective directives.
- 10. Proper implementation of bills & acts namely: Bankruptcy Act, 2063, Credit Rating Institution Bill, Assets Management Corporation Bill, Trustee Bill, Anti-Money Laundering Bill should be passed as soon as possible by GON & also be implemented with the co-ordination of NRB.
- 11. NRB should not only issue directives for the sake of issuing them but a proper homework needs to be done to combat the problems associated with the directives. It should not happen as the directives related to L/C, where prior study was not done & within a few days of the issuance of the directives, they had to be amended.

12. NRB should be more practicable while issuing the directives to the CBs. Directives should be straight forward, reasonable & with no loopholes with context to the country & not just to fulfill the duty of the central bank only but also as the care-taker of the economy of the country.

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S. No.	Name of the Banks	Est. Date
1.	Nepal Bank Ltd.	1994/07/30
2.	Rastriya Banijya Bank	2022/10/01
3.	NABIL Bank	2041/03/29
4.	Nepal Investment Bank Ltd.	2042/11/16
5.	Standard Chartered Bank Nepal Ltd.	2043/10/16
6.	Himalayan Bank Limited	2049/10/05
7.	Nepal Bangladesh Bank Ltd.	2050/03/03
8.	Nepal SBI Bank	2050/03/23
9.	Everest Bank Ltd.	2051/11/28
10.	Bank of Kathmandu	2051/11/28
11.	Nepal Credit & Commerce Bank Ltd.	2053/06/28
12.	Lumbini Bank Ltd.	2055/04/01
13.	Nepal Industrial & Commercial Bank Ltd.	2055/04/05
14.	Machhapuchhre Bank Ltd.	2057/06/17
15.	Kumari Bank Limited	2057/12/22
16.	Laxmi Bank Ltd.	2058/12/19
17.	Siddhartha Bank Ltd.	2059/09/10
18.	Agriculture Development Bank Ltd.*	2062/03/30
19.	Global Bank Ltd.	2063/10/01
20.	Citizen International Bank Ltd.	2064/04/05
21.	Prime Commercial Bank Ltd.	2064/06/07
22.	Bank of Asia	2064/06/25
23.	Sunrise Bank Ltd.	2064/06/25
24.	Kist Bank Ltd.	2059/11/09
25.	NMB Bank Ltd.	2053/08/11
26.	Development and Credit Bank Ltd.	2057/10/23
27.	Janata Bank Ltd.	2067/01/16
28.	Mega Bank	2067/04/07

ANNEX-I

Source: Nepal Rastra Bank, Bank Management Dept., Thapthali, Kathmandu.

### **ANNEX-II**

# **Calculation of the Capital-Deposit Ratios of CBs**

**Formula:** Capital – Deposit Ratio =  $\frac{Total Deposis}{Total Capitals} \times 100\%$ 

### For Nabil:

### Rs. in million

Particulars	2061/62	2062/63	2063/64	2064/65	2065/66	
Capital- Deposit Ratio	8.53%	12.80%	10.16%	8.57%	8.49%	∑X=48.55
		$\therefore \overline{X} = \frac{\sum X}{n}$	9.71%			
$(x - \overline{x})^2$	1.3924	9.5481	0.2025	1.2996	1.4884	$\sum_{\substack{\left(X - \overline{X}\right)^2 \\ = 13.931}}$

$$\therefore \sigma = \sqrt{\frac{1}{n} \sum \left(X - \overline{X}\right)^2} = 1.67$$
$$\therefore C.V. = \frac{\sigma}{\overline{X}} \times 100\% = \frac{1.67}{9.71} \times 100\% = 17.20\%$$

For NBL:

Rs. in million

Particulars	s <b>2061/62</b>	2062/63	2063/64	2064/65	2065/66	
Capital- Deposit Ratio	4.17%	2.93%	29.78%	28.40%	4.26%	∑X=-69.52
					$\therefore \overline{X} = \frac{\sum X}{n}$	13.908%
$(x-\overline{x})^2$	94.83	120.52	251.86	210.02	93.08	$\sum (x - \overline{x})^2$
						=770.31

$$\therefore \sigma = \sqrt{\frac{1}{n} \sum (X - \overline{X})^2} = 12.41$$
$$\therefore C.V. = \frac{\sigma}{\overline{X}} \times 100\% = \frac{12.41}{13.908} \times 100\% = 89.25\%$$

For NSBIBL:

Rs. in million

Particulars	2061/62	2062/63	2063/64	2064/65	2065/66	
Capital- Deposit Ratio	4.99%	5.82%	5.70%	6.38%	3.13%	∑X=26.02
		$\therefore \overline{X} = \frac{\sum X}{n}$	5.204%			
$(x - \overline{x})^2$	0.044	0.375	0.243	1.375	4.301	$\sum (x - \overline{x})^2$
						=93.565

$$\therefore \sigma = \sqrt{\frac{1}{n} \sum \left( X - \overline{X} \right)^2} = 4.33$$

$$\therefore C.V. = \frac{\sigma}{\overline{X}} \times 100\% = \frac{4.33}{93.565} \times 100\% = 4.63\%$$

For RBB:

Rs. in million

Particulars	s 2061/62	2062/63	2063/64	2064/65	2065/66	
Capital- Deposit Ratio	3.96%	59.14%	49.29%	44.38%	39.25%	ΣX=
					$\nabla_{\mathbf{v}}$	20.2040/
					$\therefore \overline{X} = \frac{\sum X}{n}$	39.204%
$(x-\overline{x})^2$	1242.14	397.44	103.55	26.79	0.002	$\sum (x - \overline{x})^2$
						=1769.922

$$\therefore \sigma = \sqrt{\frac{1}{n} \sum \left( X - \overline{X} \right)^2} = 18.81$$

$$\therefore C.V. = \frac{\sigma}{\overline{X}} \times 100\% = \frac{18.81}{39.204} \times 100\% = 47.98\%$$

For HBL:

Rs. in million

Particulars	2061/62	2062/63	2063/64	2064/65	2065/66	
Capital- Deposit Ratio	3.53%	6.31%	5.35%	5.83%	6.19%	∑X=27.21
					$\therefore \overline{X} = \frac{\sum X}{n}$	5.442%
$\left(X - \overline{X}\right)^2$	3.66	0.75	0.008	0.15	0.56	$\sum (x - \overline{x})^2$
						=5.129

$$\therefore \sigma = \sqrt{\frac{1}{n} \sum \left(X - \overline{X}\right)^2} = 1.01$$
$$\therefore C.V. = \frac{\sigma}{\overline{X}} \times 100\% = \frac{1.01}{5.129} \times 100\% = 19.69\%$$

# **ANNEX-III**

### Calculation of the CRR of CBs

**Formula:** 
$$CRR = \frac{Balance in NRB}{Total Deposis} \times 100\%$$

For Nabil:

Rs. in million

Particulars	ars 2061/62		63 2063/64	2064/65	2065/66	
CRR	8.83%	8.83% 3.26%		8.37%	8.74%	∑X=35.20
	7.04%					
				$\therefore \overline{X} = \frac{\sum X}{n}$		
$(X - \overline{X})^2$	3.20	14.29	1.08	1.77	2.89	$\sum (x - \overline{x})^2$
						=23.23

$$\therefore \sigma = \sqrt{\frac{1}{n} \sum (X - \overline{X})^2} = 2.16$$
$$\therefore C.V. = \frac{\sigma}{\overline{X}} \times 100\% = \frac{2.16}{7.04} \times 100\% = 30.68\%$$

For NBL:

Rs. in million

Particulars	<b>2061/62</b>	2062/63	2063/64	2064/65	2065/66	
CRR	16.40	17.14	19.00	18.24	15.82	∑X=86.6
$\therefore \overline{X} = \frac{\sum X}{n}$						
$(x - \overline{x})^2$	0.84	0.324	2.8224	0.846	2.25	Σ
						$(x - \overline{x})^2$ =7.0764

$$\therefore \sigma = \sqrt{\frac{1}{n} \sum (X - \overline{X})^2} = 1.41$$
$$\therefore C.V. = \frac{\sigma}{\overline{X}} \times 100\% = \frac{1.41}{17.32} \times 100\% = 8.14\%$$

### For NSBIBL:

# Rs. in million

Particulars	2061/62	2062/63	2063/64	2064/65	2065/66	
CRR	5.26 5.83 5.60 5.72		5.72	6.67	∑X=28.48	
	5.696					
$(x - \overline{x})^2$	0.190	0.017	10.27	0.0005	0.948	$\sum (x - \overline{x})^2$
						=36.347

$$\therefore \sigma = \sqrt{\frac{1}{n} \sum (X - \overline{X})^2} = 2.696$$
$$\therefore C.V. = \frac{\sigma}{\overline{X}} \times 100\% = \frac{2.696}{5.696} \times 100\% = 3.355\%$$

For RBB:

Rs. in million

Particulars	2061/62	2062/63	2063/64	2064/65	2065/66				
CRR	15.05	21.94	11.01	13.04	15.78	∑X=76.82			
$\therefore \overline{X} = \frac{\sum X}{n}$									
$(x-\overline{x})^2$	0.0961	43.29	18.92	5.382	0.176	$\sum_{(x - \overline{x})^2 = 67.71}$			
$\therefore \sigma = \sqrt{\frac{1}{n} \sum \left( X - \overline{X} \right)^2} = 3.679$									

$$\therefore C.V. = \frac{\sigma}{\overline{X}} \times 100\% = \frac{4.09}{16.70} \times 100\% = 23.95\%$$

For HBL:

Rs. in million

Particulars	<b>5 2061/62</b>	2062/63	2063/64	2064/65	2065/66	
CRR	7.86	5.92	5.92	5.13	6.76	∑X=31.59
	$\therefore \overline{X} = \frac{\sum X}{n}$					6.318%
$(X - \overline{X})^2$	2.377	0.158	0.158	1.411	0.195	Σ
						$(x - \overline{x})^2$ =4.824

$$\therefore \sigma = \sqrt{\frac{1}{n} \sum (X - \overline{X})^2} = 9.822$$
$$\therefore C.V. = \frac{\sigma}{\overline{X}} \times 100\% = \frac{6.318}{9.822} \times 100\% = 64.32\%$$

F/Y		Nabil	ľ	NBL	Ň	SBIBL		RBB		HBL
	Х	$\left(X - \overline{X}\right)^2$	Х	$\left(X - \overline{X}\right)^2$	Х	$\left(X-\overline{X}\right)^2$	Х	$\left(X-\overline{X}\right)^2$	Х	$\left(X-\overline{X}\right)^2$
2061/62	12.44	0.52	-29.53	1.11	9.47	-32.69	-44.2	11.01	11.03	0.13
2062/63	12.31	0.35	-43.09	156.30	13.57	193.15	-39.93	11.26	10.62	0.01
2063/64	12.04	0.10	-38.83	67.93	13.29	43.40	-37.6	11.13	11.10	0.05
2064/65	11.1	0.38	-27.55	9.22	12.32	22.92	-39.64	12.42	13.10	1.10
2065/66	10.7	1.03	-13.94	277.15	11.92	274.49	-36.56	11.02	11.59	0.12
N=5 Yrs.	∑X= 58.59	$\sum (x - \overline{x})^2$ = 2.38	∑X= -152.94	$\sum_{\left(X - \overline{X}\right)^2 = 511.71}$	∑X= 60.57	$\sum \left( x - \overline{x} \right)^2 = 566.65$	∑X= -197.93	$\sum \left( x - \overline{x} \right)^2 =$ 193.3153	∑X= 57.44	$\sum \left( x - \overline{x} \right)^2 =$ 1.41
$\therefore \overline{X} = \frac{\sum X}{n}$		11.718	-3	0.588	1	2.114	-	39.586		11.368
$\therefore \sigma = \sqrt{\frac{1}{n} \sum \left( X - \frac{1}{n} \sum \left( X - \frac{1}{n} \right) \right)^2}$	$\overline{x}^{2}$	$\frac{1}{2}$ 0.689 10.11			10.64	2.62		5.31		
$C.V. = \frac{\sigma}{\overline{X}} \times$	100%	5.87%	33.05%         87.83%         6.63%		6.63%	4.67%				

#### ANNEX-IV Calculation of Capital Fund to Risk Weighted Assets of the CBs

# ANNEX-V

# Calculation on Classification of Credits of CBs in percentage

# For Nabil

F/Y	<b>PL</b> (X)	NPL (Y)	$\mathbf{PL}(x-\overline{x})^2$	$\mathbf{NPL}\left(Y-\overline{Y}\right)^2$	
2061/62	98.68%	1.32%	0.035	0.0324	
2062/63	98.62%	1.38%	0.061	0.0576	
2063/64	98.58%	1.42%	0.082	0.0784	
2064/65	99.26%	0.74%	0.153	0.16	
2065/66	99.2%	0.84%	0.110	0.09	
N=5 years	∑X=494.34	∑Y=5.7	$\sum (x - \overline{x})^2 = 0.441$	$\sum \left(Y-\overline{Y}\right)^2 = 0.4184$	
$\therefore \overline{X} = \frac{\sum X}{n}$	98.868%	1.14%			
$\therefore \sigma = \sqrt{\frac{1}{n} \sum \left( X - \overline{X} \right)^2}$	2.969	2.8927			
$C.V. = \frac{\sigma}{\overline{X}} \times 100\%$	3.002%	39.40%			

# For NBL

F/Y	<b>PL</b> (X)	NPL (Y)	$\mathbf{PL}(x-\overline{x})^2$	<b>NPL</b> $(Y - \overline{Y})^2$	
2061/62	50.36%	49.64%	894.84	894.84	
2062/63	81.82%	18.18%	2.39	2.39	
2063/64	86.51%	13.49%	38.88	38.88	
2064/65	87.62%	12.38%	53.96	53.96	
2065/66	95.06%	4.94%	218.62	218.62	
N=5 years	∑X=401.37	∑Y=98.63	$\sum (x - \overline{x})^2 = 1208.69$	$\sum \left(Y - \overline{Y}\right)^2 = 1208.69$	
$\therefore \overline{X} = \frac{\sum X}{n}$	80.274%	19.72%			
$\therefore \sigma = \sqrt{\frac{1}{n} \sum \left( X - \overline{X} \right)^2}$	15.54	15.54			
$C.V. = \frac{\sigma}{\overline{X}} \times 100\%$	19.35%	78.77%			

### **For NSBIBL**

F/Y	<b>PL</b> (X)	NPL (Y)	$\mathbf{PL}(x-\overline{x})^2$	<b>NPL</b> $(Y - \overline{Y})^2$
2061/62	93.46	6.54	8.35	8.29
2062/63	93.87	6.13	165.63	165.89
2063/64	95.44	4.56	5.06	5.10
2064/65	96.17	3.83	10.04	10.17
2065/66	97.98	2.02	82.08	81.90
N=5 years	∑X=476.9	∑Y=23.08	$\sum (x - \overline{x})^2 = 271.16$	$\sum \left( Y - \overline{Y} \right)^2 = 271.35$
$\therefore \overline{X} = \frac{\sum X}{n}$	95.38%	4.616%		
$\therefore \sigma = \sqrt{\frac{1}{n} \sum \left( X - \overline{X} \right)^2}$	7.36	7.37		
$C.V. = \frac{\sigma}{\overline{X}} \times 100\%$	8.99%	40.69%		

# For RBB

F/Y	<b>PL</b> (X)	NPL (Y)	$\mathbf{PL}(x-\overline{x})^2$	$\mathbf{NPL}\left(Y-\overline{Y}\right)^2$
2061/62	39.85	60.15	46.78	46.78
2062/63	42.36	57.64	18.74	18.74
2063/64	47.01	52.99	0.10	0.10
2064/65	54.66	45.34	63.52	63.52
2065/66	49.66	50.44	8.23	8.23
N=5 years	∑X233.44	∑Y=266.56	$\sum \left(x - \overline{x}\right)^2 = 137.37$	$\sum \left(Y - \overline{Y}\right)^2 = 137.37$
$\therefore \overline{X} = \frac{\sum X}{n}$	46.69	53.31		
$\therefore \sigma = \sqrt{\frac{1}{n} \sum \left( X - \overline{X} \right)^2}$	5.24	5.24		
$C.V. = \frac{\sigma}{\overline{X}} \times 100\%$	1.22	9.83		

### For HBL

F/Y	<b>PL</b> (X)	NPL (Y)	$\mathbf{PL}(x-\overline{x})^2$	<b>NPL</b> $(Y - \overline{Y})^2$
2061/62	92.56	7.44	8.70	8.76
2062/63	93.4	6.6	4.45	4.49
2063/64	96.39	3.61	0.77	0.75
2064/65	97.37	2.63	3.45	3.42
2065/66	97.84	2.16	5.42	5.38
N=5 years	∑X=482.56	∑Y=22.44	$\sum (x-\overline{x})^2 = 22.79$	$\sum \left( Y - \overline{Y} \right)^2 = 22.82$
$\therefore \overline{X} = \frac{\sum X}{n}$	95.51	4.48		
$\therefore \sigma = \sqrt{\frac{1}{n} \sum \left( X - \overline{X} \right)^2}$	2.13	2.13		
$C.V. = \frac{\sigma}{\overline{X}} \times 100\%$	2.30	47.54		

### **ANNEX-VI**

Test of Hypothesis on Cl	D Ratios of Nabil	, NBL, NSBIBL,	RBB & HBL:
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<i>X</i> <sub>1</sub>	<i>X</i> <sub>2</sub>	<i>X</i> <sub>3</sub>	<i>X</i> <sub>4</sub>	<i>X</i> <sub>5</sub>	$X_{1_1}^2$	x <sub>2</sub> <sup>2</sup>	<i>x</i> <sub>3</sub> <sup>2</sup>	<i>x</i> <sup>2</sup> <sub>4</sub>	$x_{5}^{2}$
8.53	4.17	12.86	3.96	3.53	72.76	17.38	149.22	11.21	12.23
12.8	2.93	9.49	59.14	6.31	163.84	8.58	85.25	3421.22	39.36
10.16	29.78	13.06	49.29	5.35	103.22	886.84	174.25	2412.30	27.63
8.57	28.4	2.22	44.38	5.83	73.44	788.54	6.02	19265.33	28.23
8.49	4.26	12.44	39.25	6.19	72.08	18.33	148.26	1596	38.25
$\sum_{\substack{=48.5\\5}} X_1$	$\sum_{x} x_2$ = 69.54	$\sum_{x_3} x_3$ = 50.07	$\sum_{x_4} X_4$ = 196.0 6	$\sum_{=} X_5$ = 27.21	$\sum_{i=1}^{1} X_{1_{i}}^{2}$	$\sum_{n=1}^{\infty} X_2^2 = 10715.45$ 17	$\sum X_3^2 =$ 39773.36 78	$\sum_{4} X_{4}^{2} =$ 19790.08 94	$\sum_{5} x_{5}^{2} =$ 15874.67 68

 $T = \sum X_1 + \sum X_2 + \sum X_3 + \sum X_4 + \sum X_5 = 351.58 + 227.13 + 275.84 + 312.66 + 281.3$ 

=1428.51

C.F.=
$$\frac{T^2}{N} = \frac{(1428.51)^2}{25} = 81625.6328$$
  
T.S.S.= $\sum X_{1_1}^2 + \sum X_2^2 + \sum X_3^2 + \sum X_4^2 + \sum X_5^2 - C.F.$   
=22156.4+10715.4517+39773.3678+19790.0894+15874.6768-81625.6328  
=26684.3529

S.S.C.= 
$$\frac{(\sum_{n_1}^{X} x_1)^2}{n_1} + \frac{(\sum_{n_2}^{X} x_2)^2}{n_2} + \frac{(\sum_{n_3}^{X} x_3)^2}{n_3} + \frac{(\sum_{n_4}^{X} x_4)^2}{n_4} + \frac{(\sum_{n_5}^{X} x_5)^2}{n_5} - C.F.$$
$$= \frac{(331.58)^2}{4.6} + \frac{(227.13)^2}{4.6} + \frac{(278.84)^2}{4.6} + \frac{(312.66)^2}{4.6} + \frac{(281.3)^2}{4.6} - 81625.6328$$
$$= 23901.15139 + 11214.79063 + 16540.80557 + 21251.36426 + 17202.10652 - 81625.6328$$
$$= 8484.58557$$

S.S.W.=T.S.S.-S.S.C.= 26684.3529-8484.58557=18199.7673

### **ANNEX-VII**

Test of Hypothesis on C	CRR of Nabil, NBL,	NSBIBL, RBB & HBL
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<i>X</i> <sub>1</sub>	<i>x</i> <sub>2</sub>	<i>X</i> <sub>3</sub>	<i>X</i> <sub>4</sub>	<i>X</i> <sub>5</sub>	$X_{1_1}^2$	x <sub>2</sub> <sup>2</sup>	<i>x</i> <sub>3</sub> <sup>2</sup>	x <sub>4</sub> <sup>2</sup>	<i>x</i> <sup>2</sup> <sub>5</sub>
8.83	16.4	6.67	15.05	7.86	77.96	257.28	44.48	226.50	61.77
3.26	17.14	8.4	21.94	5.92	10.62	293.77	70.56	481.36	35.04
6	19	4.83	11.01	5.92	36	361	23.32	121.22	35.04
8.37	18.24	7.38	13.04	5.13	70.05	70.05	54.46	170.04	26.31
8.74	15.82	12.9	15.78	6.76	76.38	76.38	166.41	249.00	45.69
$\sum_{x=1}^{x} x_1$	$\sum_{=} X_2$	$\sum_{x_3} x_3$	$\sum_{x \in X} x_4$	$\sum_{=} X_5$	$\sum x_{1_1}^2$	$\sum x_{2}^{2} =$	$\sum x_3^2$	$\sum x_{4}^{2} =$	$\sum x_5^2$
35.2	86.6	40.18	76.82	25.67	= 271.01	1058.48	= 359.23	1248.12	= 203.85

 $T = \sum X_1 + \sum X_2 + \sum X_3 + \sum X_4 + \sum X_5 = 35.2 + 86.6 + 40.18 + 76.82 + 25.67$ 

$$C.F. = \frac{T^2}{N} = \frac{(264.47)^2}{25} = 2797.7752$$
  

$$T.S.S. = \sum X_{1_1}^2 + \sum X_2^2 + \sum X_3^2 + \sum X_4^2 + \sum X_5^2 - C.F.$$
  

$$= 271.01 + 1058.48 + 359.23 + 1248.12 + 203.85 - 2797.7752$$
  

$$= 3140.69 - 2797.7752$$
  

$$= 342.9148$$
  

$$S.S.C. = \frac{\left(\sum X_1\right)^2}{n_1} + \frac{\left(\sum X_2\right)^2}{n_2} + \frac{\left(\sum X_3\right)^2}{n_3} + \frac{\left(\sum X_4\right)^2}{n_4} + \frac{\left(\sum X_5\right)^2}{n_5} - C.F.$$
  

$$= \frac{(271.01)^2}{5} + \frac{(1058.48)^2}{5} + \frac{(359.23)^2}{5} + \frac{(1248.12)^2}{5} + \frac{(203.85)^2}{5} - 2797.7752$$
  

$$= \frac{73441 + 1120379.91 + 129046.19 + 1557803.53 + 411554.8225}{5} - 2797.7752$$
  

$$= 598.4142369 - 2797.7752$$
  

$$= 655647.3153$$
  
S.S.W.=T.S.S.-S.S.C.= 342.9148 - 655647.3153 = 655304.4005