

**FINANCIAL PERFORMANCE OF NEPALESE COMMERCIAL
BANKS ON THE BASIS OF CAMEL ANALYSIS**

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RECOMMENDATION

This is to certify that the Thesis

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FINANCIAL PERFORMANCE OF NEPALESE COMMERCIAL BANKS ON THE BASIS OF CAMEL ANALYSIS

*has been prepared as approved by this Department in the prescribed format of the
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VIVA-VOCE SHEET

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

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DECLARATION

I, hereby, declare that the work reported in this thesis entitled "**FINANCIAL PERFORMANCE OF NEPALESE COMMERCIAL BANKS ON THE BASIS OF CAMEL ANALYSIS**" submitted to office of the Dean, Faculty of Management, Tribhuvan University, is my original work done for the partial fulfillment of the requirement for the Masters of Business Studies (MBS) under the supervision of Asso. Prof. Dr. Achyut Gyawali, of Central Department of Management.

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ABBREVIATIONS

EMs	Emerging Markets
NRB	Nepal Rastra Bank
FIs	Financial Institutions
FY	Fiscal Year
P/L	Profit and Loss Account
Ngo	Non-Government Organization
MBs	Master of Business Studies
i.e.	That is
USA	United States of America
ADB	Asian Development Bank
RBI	Reserve Bank of India
PNB	Punjab National Bank
JKB	Jambu Kashmir Bank
NSBIBL	Nepal SBI Bank Limited
ROE	Return on Equity
ROA	Return on Assets
PM	Profit Margin
NPLs	Non-Performing Loans
NABIL	NABIL Bank Limited
NIBL	Nepal Investment Bank Limited
SCBNL	Standard Chartered Bank Nepal Limited
HBL	Himalayan Bank Limited

CHAPTER ONE

INTRODUCTION

1.1 Background

Capital adequacy has become one of the most important factors for assessing the soundness of the banking sector. Raise and utilization of fund are the primary function of the commercial banks. Commercial banks collect the large amount of deposit from general public. The depositors think that the depositing their money in a bank is safe. But what does happen if the bank does not have enough capital to provide a buffer against the future unexpected losses? So, capital must be sufficient to protect a bank's depositors and counterparties from the risk like, market and credit risks. Otherwise the bank will use all the money of depositors in their own interest and depositors will have to bear loss (NRB, 2017).

Capital adequacy measures the financial strength of a financial institution. It tells how much capital it has relative to (as a percentage of) the money it has lent out, i.e. its assets. There are specific minimum levels of capital set by international banking rules. They are designed to make it possible for banks to absorb a reasonable amount of losses before getting into deep trouble. With every investment decision, there is not only an anticipated return, but also a certain amount of risk associated with that return. The investment decision therefore, may be characterized as trade-off between risk and return. It is generally assumed that the larger amount of risk, the larger the anticipated return must be to compensate for this risk. Just as the risk associated with various securities and assets varies widely, the ability and willingness to accept risk also varies substantially from investor to investor. This proposed study aims to look at the role of capital adequacy of the commercial banks in economic development, sustainable future for commercial banks with the maintenance of adequate capital.

The efficient functioning of markets requires participants to have confidence in each other's stability and ability to transact business. Capital rules help foster this confidence because they require each member of the financial community to have adequate capital. This capital must be sufficient to protect depositors and counterparties from the risks of the institution's on- and off-balance sheet risks. Banks are

required to set aside capital to cover these two main risks. Capital standards should be designed to allow a firm to absorb its losses, and in the worst case, to allow a firm to wind down its business without loss to customers, counter-parties and without disrupting the orderly functioning of financial markets.

The commercial bank established under the commercial banks Act 2031 BS and Company Act 2053 BS. However, Nepal Rastra Bank as a regulatory body for banks and the financial institutions has right to specify the capital requirements and other requirements. Being the Central Bank of Nepal, Nepal Rastra Bank has the responsibility to give special attention to the interest of the depositors. It is to be noted that as per the banking and financial statistics of Nepal Rastra Bank , the commercial banks of Nepal have collected more than Rs 710 billion money from the depositors by the end of 2016/17. Such a big amount of money should have to be secured and Nepal Rastra Bank has the major responsibility to protect it (NRB, 2017).

Nepal Rastra Bank issues various directives to be complied by all commercial banks of the country in March 2001. The directives consist of nice volumes. The NRB directive no 1 includes the capital adequacy norms for the commercial banks representing the requirements of maintaining capital fund to the prescribed ratios. The directives are said to be based on the internationally accepted norms of Basel Committee. The Basle committee on banking supervision is a committee of banking supervisory authorities which was established by the central bank Governors of the Group of Ten countries in 1997. The Basle committee on banking supervision in 1988 has developed an internationally accepted standard for capital adequacy based on what is known as the “risk assets” approach. This show how important capital for supervisory purposes allocates weight to different board categories of assets (e.g. government securities, loans to banks, customer’s advances) and expresses capital as a percentage of total risk – weighted assets. The committee consists of senior representatives of bank supervisory authorities and central banks from Belgium, Canada, France, Germany, Italy, Japan, Luxembourg, Netherlands, Sweden Switzerland, the United Kingdom and the United States. Widely accepted though national authorities are free to impose higher standards on their banks and often do so. As originally designed this approach was only concerned with credit risk but at the

beginning of 1996 the Basle Committee published proposal to bring market risks into the calculation of capital requirements (NRB, 2001).

1.2 Focus of the study

Financial analysis covers analysis and other portfolios of commercial banks. Financial analysis is the process of determining the significant operating and financial characteristic of a firm from accounting data and financial statements. Financial ratio analysis is a widely used tool of financial analysis and its performance. The goal of such analysis is to determine the efficiency and the performance of the firm's management as reflected in the financial records and reports. Besides financial analysis emphasizing profitability the study is focus on financial position analysis, income and expenditure analysis, correlation analysis and trend analysis of commercial banks. Financial ratio identifies the financial strength and weaknesses of sample banks with the help of basis financial statement namely cash flow statement, balance sheet and P/L accounts. It measures the Bank's liquidity, leverage, activity and profitability in rational way.

1.3 Statement of the Problem

As we know Nepal is developing country and its economy is much depends on the agriculture. Most of the industries are based on the agriculture which provide employment opportunities and assist in improving national economy. Poverty has been a main problem in the country. Therefore, public enterprises are established but most of the public enterprises are not able to run in profit. Even though the government has given the subsidy to run public enterprises, they are not able to contribute to society at desirable rate.

CAMEL analysis is powerful tools for evaluating the financial analysis. It is also a process of determining and interpreting numerical relationship with the help of financial performance analysis on the basis of CAMEL analysis. Management use effective strategies through financial tools and analysis for achieving optimal goal. Financial analysis satisfies the interest of common stock holders, equity investors, creditor and management of the banks.

Although all sample banks are able to earn profit and dividend to shareholders, they are facing throat cut competition between them or with other commercial banks.

Therefore some question of problem arises in these sample banks, which are as follows:

- a) Whether sample banks are more effective and efficient mobilization of fund for better financial performance?
- b) What is the structure and trend of income and expenditure of Nepalese commercial banks?
- c) Is there any stability in various ratio policies of the sample banks?
- d) Do financial ratios indicate any strength and weakness of the banks?

1.4 Objectives of the Study

The main objective of the study is to evaluate the financial performance of Nepalese commercial banks with the help of CAMEL analysis and other portfolios. Besides, the specific objectives of this research are as follows:

1. To analyze the financial indicators of the banks such as liquidity ratio, leverage ratio, profitability ratio of Nepalese commercial Banks on the basis of CAMEL analysis.
2. To examine the structure and trend of income and expenditure of Nepalese commercial Banks.
3. To examine the stability in various ratio policies of Nepalese commercial bank
4. To measure the strength and weakness of the bank in terms of camel analysis.

1.5 Significance of the Study

Economic development and financial development go side by side and the need of financial institutions availing varieties of banking services to fulfill commerce, trade, industry and agriculture needs of their country is of crucial important in Nepal.

In banking world, Nepal is still in its infant stage although the numbers of financial institution have been increasing. Many commercial banks, finance and insurance companies have opened up within a few years. The competition in the financial sector in banking industry is ever increasing. However, there have been few commercial banks creating to banking need of the country. The success and failure of such financial institutions would be responsible for disparity of the economy.

Financial performance analysis play vital role in the management decision. Every organization has to analyze its financial performance. In this way this study is very useable and valuable to major parties interested in the reference to the policy making bodies. This study is important for the following groups and individuals.

-) Further researcher
-) University students who are new generation
-) Financial managers
-) Government
-) NGO's and INGO's
-) Shareholders and creditors
-) Stockbrokers

1.6 Limitations of the Study

This study is simply for partial fulfillment of the requirement of Master in Business Studies (MBS). However there are some limitations, which narrowed the generalization. This study is limited by following factors:

- a) The study deals with only commercial banks but it may not applicable to other.
- b) The whole study is based on secondary data as per requirement collected from the respective companies and websites on internet. As far as the output concerned, any research based on secondary data is not far from limitations due to inherent character.
- c) The study concerns only a periods of 5 years i.e. from 2012 A.D. to 2017 A.D. therefore the conclusion is concern with only above period.
- d) Time and budget limitation

1.7 Structure of the Study

The study has been divided into five chapters. They are as follows:

Chapter 1: Introduction

Introduction chapter covers background of the study, statement of the problem, objectives of the Study, limitations of the Study and structure of the study.

Chapter 2: Review of Literature

This chapter deals with different article, books and relevant thesis related to financial analysis.

Chapter 3: Research Methodology

This chapter is concern with research question, research design, sources of data, population and sampling, data collection procedures and data analysis procedures. In data analysis there are two parts. One is financial analysis where different CAMEL analysis concern with financial performance is study. Another is statistical analysis where different statistical tools like trend line analysis, correlation analysis and simple regression analysis are mention.

Chapter 4: Presentation and Analysis

In this chapter different part of CAMEL analysis are analyze like Capital adequacy analysis, Assets quality analysis, Management Capability Analysis, Earning Analysis and Liquidity Analysis. Statistical analysis and interpretations of data where study analyze the trend analysis, correlation analysis between different variable terms like total deposit, investment, net profit and loan advances.

Chapter 5: Summary, Conclusion and Recommendation

In this chapter summary of whole chapter and different results find in data analysis and recommendation to bank for nation development are included.

Bibliography and appendix have also been incorporated at the end of the study.

CHAPTER TWO

REVIEW OF LITERATURE

Review of the literature is supported to revise the eminent literatures relating to the study. Various books, articles, statement and thesis etc. are the basis for preparing it. Some philosophers, writers or researcher have given the contributions on it since many years. Review of literature means reviewing research studies or other relevant preposition in the related areas of the study so that all past studies, their conclusion and deficiencies may be known and further research can be conducted. This second chapter review of literatures, which is very important as it provides valuable inputs to this study. Only by knowing what others have said, one can be realistic to make the study more useful and relevant. The available literature is reviewed relating to the field of this study and conceptual thoughts are presented below:

2.1 Conceptual Review

2.1.1 CAMEL Rating

The acronym "CAMEL" is revised in January 1997, the uniform financial institution rating system, which is commonly referred at as that camel rating system. For purpose of this rating system, the term financial institution refers those insured depository institution whose primary federal supervisory agency is represented on the FFIEC. The agency comprising the FFIEC the board of governors of the federal-reserve system (FRB) the federal deposit insurance corporation, the NRB, as central bank, has the important task of regulating and supervising the banking system of Nepal. To play this vital role, it is important that the NRB be able to assess the overall strength of the banking system as a whole, as well as the safety and soundness of each individual bank (Chandra, 2006: 55).

To help in this endeavor a uniform rating system for all banks may be used. This rating system will provide meaningful and concise information about the condition of the Nepali banking system as well as identify those banks that require closer supervision by the NRB. By assigning, the NRB will be able to categorize banks into groups based on their overall strength, quality and operating soundness. The rating

system, known as the CAMEL, helped as a supervisory tool to identify those banks that are having problems and require increased supervision.

During on site bank supervisor gathering private information. Such as details on problem loans, with which to evaluate banks financial conditions and to monitor its compliance with laws and regulatory policies. A key product of such an exam is a supervisory rating of banks overall conditions commonly referred to as a CAMEL rating (Chandra, 2006: 56).

Under the CAMEL rating system, banks should be assigned two sets of ratings.

-) Performance rating, which comprise five (5) individual ratings that address each of the CAMEL components; and
-) An overall composite rating is a single rating that is based on a comprehensive assessment of the overall condition of the banks.

Both the ratings are expressed by using a numerical scale of “1” to “5” in ascending order of supervisory concern. That is “1” represents the best rating, while “5” indicates the worst rating.

The Five aspects of CAMEL performance encompass; capital Adequacy, Asset Quality, Management, Earning and Liquidity to market risk. Each of these component areas is to be evaluated on a numerical scale of “1” to “5”. A “1” indicates the highest rating, the strongest performance, best risk management practices and least supervisory concern. A “5” is the lowest rating indicating the weakest performance, inadequate risk management practices and the highest degree of supervisory concern.

Asides from the component rating, an overall composite rating, one number, ranging from 1 to 5, is calculated reflecting a weighted sum of the 6 components are given more operation, relatively basic management system and controls may be adequate, At more complex banks on the other hand detailed and formal management systems and controls are needed to address their broader range of financial activities and to provide senior managers and directors, in their respective roles, with the information they need to monitor and direct day-to-day activities. All banks are expected to properly manage their risks (NRB, 2007).

A. Capital Adequacy

A financial institution is expected to maintain capital commensurate with the nature and extents of risks to the institution and the ability of management to identify, measure, monitor and control these risks. The effect of credit, market and other risks on the institution's financial conditions should be considered when evaluating the adequacy of capital. The types and quantity of risk inherent in institution's activities will determine the extent to which it may be necessary to maintain capital at levels above required regulatory minimums to properly reflect the potentially adverse consequences that these risks may have on the institution's capital. The capital adequacy of an institution's related based upon, but not limited to an assessment of the following evaluation factors.

1. Size of the bank
2. Volume of inferior quality assets
3. Bank's growth experience, plan and prospects
4. Quality of capital retained earnings
5. Access to capital markets

B. Assets Quality

The assets quality rating reflects the quantity of existing and potential credit risk associated with the loan and investment portfolios, other assets as well as off-balance sheet transaction. Commercial banks collect funds in the form of capital, deposit etc. It mobilizes these funds to generate certain returns by giving loans to the users of money to invest in various alternatives. A significant part of the banks income is through its lending activities. There are basically two types of loans - advances and loss provisions:

1. Performing loans:
 -) All good loans and overdue for below 90 days.
2. Non- Performing loans:
 -) Sub- standard-loans overdue by more than 3 months up to 6 months.
 -) Doubtful-loans overdue by more than 6 months up to 1 year
 -) Bad-loans overdue by more than 1 year.

C. Management

The management rating should reflect the capability of the Board of Directors and management in their respective roles, to identify, measure, monitor and control the risks of an institution's and to ensure a bank's safe, sound, cites are less than satisfactory. The level and severity of classified assets, other weaknesses and risks require an increased level of supervisory concern. There is generally a need to improve credit administration and risk management practices.

Sound management practices are demonstrated by active oversight by the Board of Directors and management; competent personnel; adequate policies, processes and controls taking into consideration the size and sophistication of the bank maintenance of an appropriate information system (MIS). This rating should reflect the Board's and management's ability as it applies to all aspects of banking operations as well as other financial service activities in which the bank is involved.

An institution can take a desire momentum only when the management is capable of strong and long term vision. For the proper and efficient management, the banks have to possess the following qualities:

-) Structure of management team should be perfect.
-) Qualitative manpower and its productivity.
-) Good relationship between customers and organization.
-) Adequate management expenses.
-) Internal management system should be perfect.
-) Fair decision making capability.
-) Proper communication system.
-) Working environment should be perfect.

D. Earnings

The rating for earning reflects not only the quantity and trend of earnings, but also factors threatening can be affected by inadequately managed credit risk that may result in loan losses and require additions to provisions for the absorption of current and potential losses, or by high levels of market risk that may unduly expose a bank's earning to volatility. The quality of earning may also be diminished by undue reliance

on extraordinary gains, nonrecurring events, or unusually favorable tax effects. Future earnings rating expenses, poorly executed or ill-advised business strategies, or badly managed or uncontrolled exposure to other risks.

Earnings should be rated from A '1' to A '5' based upon, but not limited to, an assessment of the following factors.

-) The level of earnings, including trends and stability.
-) The bank's ability to adequate capital through retained earning
-) The adequacy of the budgeting systems forecasting processes, and management information systems in general.
-) The adequacy of general loan loss provisioning and provisioning for loans classified as substandard, doubtful and loss.
-) The earning exposure to market risk, such as interest rate, foreign exchange and price risks.

The following ratios help the management and other stakeholders to know about the earning policy of the respective banks:

1. Return on Equity (ROE)
2. Return on Assets (ROA)
3. Earning per Share (EPS)

E. Liquidity

In evaluating the adequacy of a bank's liquidity position, consideration should can be affected by inadequately managed credit risk that may result in loan losses and require additions to provisions for the absorption of current and potential losses, or by high levels of market risk that may unduly expose a bank's earning to volatility. The quality of earning may also be diminished by undue reliance on extraordinary gains, nonrecurring events, or unusually favorable tax effects. It could not be able to pay depositors on the time of requirement. Liquidity can be measured in following ways:

-) Cash Reserve Ratio
-) Cash & Bank Balance Ratio
-) Investment Government Securities

Future earning limited to an assessment of the capability of, management to properly identify, measure, monitor, and control the bank's liquidity position, including the effectiveness of funds management strategies, liquidity policies, management information systems, and contingency funding plans.

Composite Rating

In assigning a composite rating for a bank consideration must be given to the can be affected by inadequately managed credit risk that may result in loan losses and require additions to provisions for the absorption of current and potential losses, or by high levels of market risk that may unduly expose a banks earning to volatility. The quality of earning may also be diminished by undue reliance on extraordinary gains, nonrecurring events, or unusually favorable tax effects future earning factors that may strongly influence the inspector's judgment. Composite rating may be distinguished as follows;

Composite 1(strong) – Banks in this group are fundamentally sound in every respect. Any deficiencies are minor and can be handled in a routine in a routine manner by the bank. Such a bank is resistant to outside economic and financial disturbances and as a result, gives no cause for supervisory concern.

Composite 2 (satisfactory) – Banks in this group are fundamentally sound, but may demonstrate modest weaknesses that are easily correctable. To the extent that remedial and, as a result, gives no cause of the bank/nonbanks business, supervisory concern would be minor.

Composite 3(Fair) – Banks in this category exhibit a combination of financial, operational and compliance weaknesses ranging from moderately severe to unsatisfactory. Such banks may be vulnerable to the onset of adverse business condition and could easily deteriorate if concerted action is not taken to correct the areas of weakness. Banks which exhibit significant instance of non – compliance with legislation and regulations may also be accorded this rating. Consequently, these banks give cause for supervisory concern and require more than normal supervision to address deficiencies. The overall strength and financial capacity if these institution, however, are still such as to make failure only a remote possibility.

Composite 4(Unsatisfactory) – Banks in this group have a number of serious financial weaknesses. Unless effective action is taken to correct this condition, they could easily escalate into a situation that could impair future solvency. Banks in this category require close supervisory attention and a definitive plan for corrective action.

Composite 5(Critical)- This category is reserved for those banks in dire can be affected by inadequately managed credit risk that may result in loan losses and require additions to provisions for the absorption of current and potential losses, or by high levels of market risk that may unduly expose a bank's earning to volatility. The quality of earning may also be diminished by undue reliance on extraordinary gains, nonrecurring events, or unusually favorable tax effects, future earning financial support or takeover.

2.1.2 Provisions of Capital Adequacy

In 1975, an international committee was formed by the central banks and supervisory authorities of ten centralized countries to coordinate the surveillance exercised by national authorities over the international banks. This group of ten countries, known as threatening can be affected by inadequately managed credit risk that may result in loan losses and require additions to provisions for the absorption of current and potential losses, or by high levels of market risk that may unduly expose a bank's earning to volatility. The quality of earning may also be diminished by undue reliance on extraordinary gains, nonrecurring events, or unusually favorable tax effects. Future committee on Banking Supervision has met regularly at the Bank for International Settlement in Basle, Switzerland.

The Basle concordat 1975 provided a general statement on the responsibilities of national authorities for the supervision of international banks. This concordat was revised in 1983, paving the way for more standardized methods of bank supervision among central banks around the world.

In 1988, after consulting with bank supervisors around the world, the Basle Committee proposed a risk based capital adequacy framework. Underlying this framework, c

supervisory authorities of the Group of Ten countries (Belgium, Canada, France, Germany, Italy, Japan, Netherlands, Sweden, Switzerland, United Kingdom, United States and Luxembourg (Basle Committee on Banking Supervision, 1988:1).

For the purpose of study, following major four sections are divided. The first two describe the framework: Section third constituents of capital and Section fourth the risk weighting system. Section III deals with the target standard ratio; and Section IV with implementing arrangements.

2.1.2.1 The Constituents of Capital under Capital Accord 1988

As per Capital Accord 1988, there are two types of capital. First one is core capital and the next is supplementary capital.

a) Core capital (basic equity)

The key element of capital on which the main emphasis is placed on equity capital and disclosed reserves is core capital. It includes fully paid ordinary shares/common stock and non-cumulative perpetual preferred stock (but excluding cumulative preferred stock) of equity capital and published reserves. The other element of capital (supplementary capital) is admitted to an amount equal to that of the core capital.

b) Supplementary capital

While calculating supplementary capital, following points are included.

- i. Undisclosed reserves: Unpublished or hidden reserves are constituted in various ways according to differing legal and accounting regimes in member countries. Under this heading are included only reserves which, though unpublished, have been passed through the profit and loss account and which are accepted by the bank's supervisory authorities
- ii. Revaluation reserves: Some countries, under their national regulatory or accounting arrangements, allow certain assets to be revalued to reflect their current value. Such reserve is included within supplementary capital provided that the assets are considered by the supervisory authority to be prudently valued, fully reflecting the possibility of price fluctuations. Such revaluations can arise in two ways:

- (a) from a formal revaluation, carried through to the balance sheets of bank's own premises; or
 - (b) from a notional addition to capital of hidden values which arise from the practice of holding securities in the balance sheet valued at historic costs.
- i. General provisions/general loan-loss reserves: General provisions or general commonly known as the Basle Capital Accord. It is the premise that a uniform approach to establishing minimum levels of capital will help to: a) Strengthen the soundness and stability of international banking system, b) Promote a fair and consistent basis for evaluating capital; and c) Diminish competitive inequalities among international banks. The weighted risk based risk based framework proposed by the Basle Committee focuses on credit risk and takes into account both off balance sheet and on balance sheet credit risk exposure. The approach also distinguishes the varying degrees of risk inherent to different assets by assigning weights according to asset class. The Basel I Capital Accord 1988 has been endorsed by the Group of Ten central-bank Governors. The Basle Committee on Banking Supervision comprises representatives of the central banks and points, or exceptionally and temporarily up to 2.0 percentage points, of risk assets.
- ii. Hybrid (debt/equity) capital instruments. This heading includes a range of instruments, which combine characteristics of equity capital and of debt. Their precise specifications differ from country to country, but they should meet the following requirements:
-) they are unsecured, subordinated and fully paid-up;
 -) they are not redeemable at the initiative of the holder or without the prior consent of the supervisory authority;
 -) they are available to participate in losses without the bank being obliged to cease trading.
 -) Cumulative preference shares, having these characteristics, are eligible for inclusion in this category.
- iii. Subordinated term debt: Subordinated term debt instruments have significant deficiencies as constituents of capital in view of their fixed maturity and inability to absorb losses except in liquidation. These deficiencies justify an additional restriction on the amount of such debt capital, which is eligible for inclusion within

the capital base. Subordinated term debt instruments with a minimum original term to maturity of over five years are included within the supplementary capital.

2.1.2.2 The Risk Weights under Capital Accord 1988

Weighted risk ratio in which capital is related to different categories of asset or off-balance-sheet exposure, weighted according to broad categories commonly known as the Basle Capital Accord, was the premise that a uniform approach to establishing minimum levels of capital will help to: a) Strengthen the soundness and stability of international banking system, b) Promote a fair and consistent basis for evaluating capital; and c) Diminish competitive inequalities among international banks. The weighted risk based risk based framework proposed by the Basle Committee focuses on credit risk and takes into account both off balance sheet and on balance sheet credit risk exposure. The approach also distinguishes the varying degrees of risk inherent to different assets by assigning weights according to asset class. The Basel I Capital Accord 1988 have been endorsed by the Group of Ten central-bank Governors. The Basle Committee on Banking Supervision comprises representatives of the central banks and network of weights has been kept simple and only five weights are used - 0, 10, 20, 50 and 100%.

a) There are six aspects of the structure to which attention is particularly drawn while calculating risk weights in capital accord 1988

- i. Categories of risk captured in the framework: There are many different kinds of risks against which banks' managements need to guard. For most banks the major risk is credit risk, that is to say the risk of counter-party. There are many other kinds of risk - for example, investment risk, interest rate risk, exchange rate risk and concentration risk. The central focus of this framework is credit risk and, as a further aspect of credit risk, country transfer risk.
- ii. Country transfer risk: Firstly, a simple differentiation between claims on domestic institutions (central government, official sector and banks) and claims on all foreign countries; and secondly, differentiation on the basis of an approach involving the selection of a defined grouping of countries considered to be of high credit standing.

- iii. Claims on non-central-government, public-sector entities (PEs): In order to preserve in the application of such discretion, the weights should be 0, 10, 20 or 50% for domestic PEs.
- iv. Collateral and guarantees: In view of the varying practices among banks in different countries for taking collateral and different experiences of the stability of physical or financial collateral values, it has not been found possible to develop a basis for recognizing collateral generally in the weighting system. These attract the weight given to the collateral (i.e. a zero or low weight). The contingent liability assumed by banks in respect of guarantees attracts a credit conversion factor of 100%.
- v. Loans secured on residential property: Loans fully secured by mortgage on occupied residential property have a very low record of loss in most countries. 50% weight to loans fully secured by mortgage on residential property, which is rented or is (or is intended to be) occupied by the borrower. Other collateral has not been regarded as justifying the reduction of the weightings.
- vi. Off-balance-sheet engagements: An importance that all off-balance-sheet activity should be caught within the capital adequacy framework. At the same time, it is recognized that there is only limited experience in assessing the risks in some of the activities. The credit conversion factors would be multiplied by the weights applicable to the category of the counter party for an on-balance-sheet transaction

b) Target Standard Ratio

The target standard ratio of capital to weighted risk assets should be set at 8% (of which the core capital element is at least 4%). This is expressed as a common minimum standard which international banks in member countries were expected to observe by the end of 1992.

Implementation

Each country should decide the way in which the supervisory authorities introduce and apply these recommendations in the light of their different legal structures and existing supervisory arrangements. Accordingly, Nepal Rastra Bank had developed its capital adequacy norms suitable to our country based on the framework prescribed in the 1988 capital accord.

This accord was revised in 1996 with the introduction of capital charge for market risk. This 1988 accord was adopted by more than 100 countries, including Nepal. The accord had contributed to strengthen bank capital at a time when a number of countries had experienced problems in their banking systems. It has become one of the benchmark measures of bank in financial health.

2.1.2.3 Provisions for Capital Adequacy in Commercial Banking Sector in Nepal

Present capital adequacy norms developed by central bank of Nepal had considered major international norms from The Basel I Capital Accord 1988. Nepal Rastra Bank had issued commonly known as the Basle Capital Accord, was the premise that a uniform approach to establishing minimum levels of capital will help to: a) Strengthen the soundness and stability of international banking system, b) Promote a fair and consistent basis for evaluating capital; and c) Diminish competitive inequalities among international banks. The weighted risk based risk based framework proposed by the Basel Committee focuses on credit risk and takes into account both off balance sheet and on balance sheet credit risk exposure. The approach also distinguishes the varying degrees of risk inherent to different assets by assigning weights according to asset class. The Basel I Capital Accord 1988 has been endorsed by the Group of Ten Central-bank Governors. The Basle Committee on Banking Supervision comprises representatives of the central banks and 1 fund by commercial banks had been issued on 14 September, 2001 by Nepal Rastra Bank (NRB, 2001). Major areas covered in capital adequacy directives issued by Nepal Rastra Bank are given below.

1. Maintenance of Minimum Capital Fund

On the basis of the risk-weighted assets, the banks shall maintain the prescribed proportion of minimum capital fund as per the following time-table.

Table No: 2.1
Regulatory Requirement of Capital Adequacy

Time Table	Required Capital fund on the basis of weighted risk assets (In percentage)	
For FY 2011/12	4%	8%
For FY 2012/13	4.5%	9.0%
For FY 2013/14	5.0%	10.0%
For FY 2014/15	5.5%	11%
For FY 2015/15	6%	12%
For FY 2016/17	6.5%	13%

* Revised by circulars of NRB

2. Definition of Capital

For the purpose of calculation of Capital fund, the capital of the banks is divided into the following two components and defined:

a) Core Capital

The amounts under the following heads shall be included in the Core Capital

Paid up capital

- (a) Share premium
- (b) Non-redeemable preference shares
- (c) General Reserve Fund
- (d) Accumulated Profit and loss account

However, where the amount of Goodwill exists, the amount of goodwill shall be deducted for the purpose of calculation of Core Capital.

b) Supplementary capital

For the purpose of the calculation of capital fund, the amount under the following heads, subject up to one hundred percent of the core capital, shall be included under the supplementary capital.

- (a) General Loan Loss Provision

Under this head, provision made only against the Pass Loan shall be included. This amount shall be limited up to 1.25 percent of the total Risk Weighted Assets.

However, loan loss provisioning on sub-standard and doubtful loans shall be available for inclusion under the supplementary capital during the period as follows:

Table No: 2.2
Loan Loss provisioning for Inclusion in Supplementary Capital

Time period	loan loss provisioning available for inclusion under supplementary capital
For FY 20012/13	Pass, sub-standard and doubtful
For FY 2014/15	Pass, sub standard
For FY 2015/16	Pass*
For FY 2016/17	Pass*

-) Up to 1.25 percent of Total risk weighted assets
- (b) Exchange Equalization Reserve
- (c) Assets Revaluation Reserve

The amount of Assets Revaluation Reserve can be included for the purpose of calculation supplementary capital subject up to 2 percent of the total supplementary capital, inclusive of the amount of the reserve.

- (d) Hybrid Capital Instruments

This includes the following instruments that have the characteristics of both debt and equity:

- (i) Unsecured, fully paid up instruments issued by the bank which are subordinated to priority of payment after) depositors and creditors, and available to absorb losses as well as convertible into ordinary capital.
- (ii) Instruments, which are non-redeemable at the option of the holder except with the approval of Nepal Rastra Bank.
- (iii) Perpetual or long-term preference stock (Shares) convertible into common stock if the profit and loss account becomes negative.

However, banks and financial institutions cannot hold (purchase) Hybrid Capital Instruments issued by any bank of financial institution.

- (e) Unsecured Subordinated Term Debt.

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

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

- (e) Other Free Reserves not allocated for a specific purpose

2. Total Capital Fund

Total Capital Fund is defined as the sum of core capital and supplementary capital.

3. Total Weighted Risk Assets

For the purpose of calculation of capital fund, the risk weighted assets has been classified into following two components:

- (a) On balance sheet risk weighted assets
- (b) Off-balance sheet risk weighted assets

4. Risk weighted on Balance Sheet Assets and off-balance sheet items

- (a) For the purpose of calculation capital fund, the on balance sheet assets are divided as follows with assignment of separate risk weight-age. Accordingly, for determining the Total Risk Weighted Assets the amount as exhibited in the balance sheet assets shall be multiplied by their respective risk weight-age and then added together. Risk weights for off balance sheet items are given in Appendix 2.
- (b) Risk weighted off Balance Sheet items
- (c) For the purpose of calculation Capital Fund, the Off-Balance Sheet Items are divided as follows with assignment of separate risk weight-age.

Accordingly, for determining the total Risk Weighted Off Balance sheet assets, the amount of such transaction shall be multiplied by their respective risk-weights and then added together. Risk weights for off balance sheet items are given in Appendix 3.

5. Capital Fund Ratios

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

$$\text{Capital fund ratio} = \frac{\text{Core capital} + \text{Supplementary capital}}{\text{Sum of risk-weighted assets}} \times 100$$

Sum of risk-weighted assets = Total on balance sheet risk-weighted assets+ Total off balance sheet risk-weighted items.

6. Reporting Requirement of Capital Fund

Banks shall, at the end of Ashwin, Poush, Chaitra and Ashad of each fiscal year, prepare the statements of capital fund and other relevant statements on the basis of the financial commonly known as the Basle Capital Accord, was the premise that a uniform approach to establishing minimum levels of capital will help to: a) Strengthen the soundness and stability of international banking system, b) Promote a fair and consistent basis for evaluating capital; and c) Diminish competitive inequalities among international banks. The weighted risk based risk based framework proposed by the Basle Committee focuses on credit risk and takes into account both off balance sheet and on balance sheet credit risk exposure. The approach also distinguishes the varying degrees of risk inherent to different assets by assigning weights according to asset class. The Basel I Capital Accord 1988 have been endorsed by the Group of Ten central-bank Governors. The Basle Committee on Banking Supervision comprises representatives of the central banks and of calculation of the capital fund.

7. Time period for fulfilling the shortfall in capital fund

In the event of non-fulfillment of capital fund ratio as mentioned under section 1 above in any quarter, the shortfall amount shall be fulfilled within next six months. Until the fulfillment of such capital fund, banks shall not declare or distribute dividend to its shareholders under section 18 of commercial bank act, 2031. The shortfall in the capital fund may be rectified:

- (a) by issuing new shares.
- (b) by reallocating assets.

8. Actions for not complying the directives relating to capital fund.

Where any bank does not fulfill the minimum capital fund within the period specified in clause (8) above, any of the following actions may be initiated:

- (a) Suspension of declaration or distribution of dividend (including bonus shares)
- (b) Suspension of opening new branch.
- (c) Suspension of access to refinancing facilities of Nepal Rastra Bank.
- (d) Restriction on lending activities of the bank
- (e) Restriction on acceptance of new deposits.
- (f) Initiation of any other actions by exercising the authority under Section 32 of Nepal Rastra Bank Act, 2012.

2.1.2.4 Factors Affecting in the Provisions for Capital Adequacy in Commercial Banking Sector

Capital adequacy shows the condition of having sufficient permanent resources to continue operations despite financial losses or non-availability of external funding. Capital adequacy cannot be determined wholly on the basis of a numeric formula or calculation of a ratio. The following factors come into play when considering the sufficiency of capital for the banks.

a. Competent and Effective Management

The competence and effectiveness of management including the board of directors, is a key determinant of capital adequacy. A competent and effective management team would chart the proper course of operations and establish efficient systems with effective commonly known as the Basle Capital Accord, was the premise that a uniform approach to establishing minimum levels of capital will help to: a) Strengthen the soundness and stability of international banking system, b) Promote a fair and consistent basis for evaluating capital; and c) Diminish competitive inequalities among international banks. The weighted risk based risk based framework proposed by the Basle Committee focuses on credit risk and takes into account both off balance

sheet and on balance sheet credit risk exposure. The approach also distinguishes the varying degrees of risk inherent to different assets by assigning weights according to asset class. The Basel I Capital Accord 1988 has been endorsed by the Group of Ten central-bank Governors. The Basle Committee on Banking Supervision comprises representatives of the central banks and management team.

b. Growth Trends and Operating Targets

Capital needs depend upon a great deal on the volume and size of the bank's operations. In order to maintain adequate capital, asset growth should be supported by capital growth. Fixed assets and the long-term infrastructural investments of the bank/nonbank should be supported by capital or long term loans (preferably subordinated debt) rather than deposits. Growth that outpaces the bank/non-bank's ability to maintain a sufficient level of capital means that the bank/nonbank is highly geared and depends too much on less permanent funds as deposits are sometimes quite volatile. Such dependence is unsafe and imprudent. Therefore, banks/non-banks should not only target asset growth but should also plan adequately for their additional capital needs.

c. Earnings Performance and Expectation

Profitability is a fundamental component of capital adequacy. Profits contribute to the accumulation of revenue reserves that constitute the main ingredient of capital growth.

A trend of sustained profitability may be a sign of well-managed operations and may be a reflection of competent and efficient management. However, the components of profits should be analyzed to determine the quality of earnings. That is profits should be separated into operating profits and extraordinary profits. Obviously, profits from a stable source of operational earnings provided a better defense against losses than the occasional sale of assets or opportune gains from investments.

d. Balance Sheet Composition

The asset/liability mix as reflected in the balance sheet is a good indicator of the bank/non-bank's long term financial stability. The components of the balance sheet and commonly known as the Basle Capital Accord, was the premise that a uniform approach to establishing minimum levels of capital will help to: a) Strengthen the soundness and stability of international banking system, b) Promote a fair and

consistent basis for evaluating capital; and c) Diminish competitive inequalities among international banks. The weighted risk based risk based framework proposed by the Basle Committee focuses on credit risk and takes into account both off balance sheet and on balance sheet credit risk exposure. The approach also distinguishes the varying degrees of risk inherent to different assets by assigning weights according to asset class. The Basel I Capital Accord 1988 has been endorsed by the Group of Ten central-bank Governors. The Basle Committee on Banking Supervision comprises representatives of the central banks and s in the asset/liability mix over time may indicate that the bank lacks clear, long term objectives and is pursuing poor operational strategies that may put the bank/non-bank at greater risk of loss.

e. Assets Quality and Risk Estimations

Although the overall risk-mix inherent to assets appearing on the balance sheet is important in evaluating capital adequacy, possible weakness attached to individual assets are essential to consider. An indicator of asset quality problems is the amount of credit that has been classified and the relative severity of these classifications in relation to capital. Delinquency and foreclosure trends, the level of non-accrued interest or nonperforming loans, and the decline in the market value of securities are also signals with respect to asset quality. Consideration must be given to signs of deterioration in asset quality and its potential impact on the ban/non-bank's capital.

f. Off Balance Sheet Exposures

Off-balance sheet activities should be examined along with on balance sheet activities to commonly known as the Basle Capital Accord, was the premise that a uniform approach to establishing minimum levels of capital will help to: a) Strengthen the soundness and stability of international banking system, b) Promote a fair and consistent basis for evaluating capital; and c) Diminish competitive inequalities among international banks. The weighted risk based risk based framework proposed by the Basle Committee focuses on credit risk and takes into account both off balance sheet and on balance sheet credit risk exposure. The approach also distinguishes the varying degrees of risk inherent to different assets by assigning weights according to asset class. The Basel I Capital Accord 1988 has been endorsed by the Group of Ten central-bank Governors. The Basle Committee on Banking Supervision comprises representatives of the central banks and in relation to credit risk. It is important,

therefore, for management to implement controls and procedures to identify, monitor, and manage all risks relating to the activities of the banks/non-banks.

2.1.2.5 Present Effort for the Development of Prudential Directives in Capital Adequacy

After the successful implementation of 1988 capital accord in more than 100 countries, the Basel Committee on Banking Supervision reached an agreement on a number of important issues for promoting prudential and uniform banking practices as well as setting standards and guidelines for supervisory functions. Realizing the fact, In January 2001, it has developed a new comprehensive framework for capital requirements based commonly known as the Basle Capital Accord, was the premise that a uniform approach to establishing minimum levels of capital will help to: a) Strengthen the soundness and stability of international banking system, b) Promote a fair and consistent basis for evaluating capital; and c) Diminish competitive inequalities among international banks. The weighted risk based risk based framework proposed by the Basle Committee focuses on credit risk and takes into account both off balance sheet and on balance sheet credit risk exposure. The approach also distinguishes the varying degrees of risk inherent to different assets by assigning weights according to asset class. The Basel I Capital Accord 1988 has been endorsed by the Group of Ten Central-bank Governors. The Basle Committee on Banking Supervision comprises representatives of the central banks and expected that the Basel-II will be a milestone in the global banking history.

Key Elements of the New Accord

The New Accord consists of three re-enforceable pillars:

- (1) Minimum capital requirements,
- (2) Supervisory review process and
- (3) Market discipline.

The proposals comprising of each of the three pillars are summarized below:-

1) Pillar 1: Minimum Capital Requirements

In new capital accord 2005 also, the definition of eligible regulatory capital, as outlined in the 1988 Accord¹¹ is eligible for inclusion in Tier 1 (Core Capital) and in Tier II (Supplementary Capital) except in exceptional cases.

The current accord is based on the concept of a capital ratio where the numerator represents the amount of capital a bank has available and the denominator is a measure of the risks faced by the bank and is referred to as risk-weighted assets. The resulting capital ratio may be not less than 8%.

"Likewise, risk-weighted assets are determined by multiplying the capital requirements for market risk and operational risk by 12.5 (i.e. the reciprocal of the minimum capital ratio of 8%) and adding the resulting figures to the sum of risk-weighted assets for credit risk"(International Convergence of Capital Measurement and Capital Standards, 2005).

A major innovation of the proposed Basel-II is the introduction of three distinct options for the calculation of three types of risk. It is not feasible or desirable to insist upon a commonly known as the Basle Capital Accord, was the premise that a uniform approach to establishing minimum levels of capital will help to: a) Strengthen the soundness and stability of international banking system, b) Promote a fair and consistent basis for evaluating capital; and c) Diminish competitive inequalities among international banks. The weighted risk based risk based framework proposed by the Basle Committee focuses on credit risk and takes into account both off balance sheet and on balance sheet credit risk exposure. The approach also distinguishes the varying degrees of risk inherent to different assets by assigning weights according to asset class. The Basel I Capital Accord 1988 has been endorsed by the Group of Ten central-bank Governors. The Basle Committee on Banking Supervision comprises representatives of the central banks and allows banks and supervisors to select the approach or approaches that they believe are most appropriate to the stage of development of bank's operation and of the financial market infrastructure. The following table identifies the three primary approaches available by risk type.

Credit risk

A bank always faces the risk that some of its borrowers may renege on timely repayments of loan, interest on loan or meet the other terms of contract. This risk is called credit risk, which varies from borrower to borrower depending on their credit quality. Basel-II requires banks to accurately measure credit risk to hold sufficient capital to cover it.

The bank can also suffer losses in excess of expected losses, say, during economic downturns. These are called unexpected losses. Ideally, a bank should recover expected loss on a loan from its customer through loan pricing. The capital base is required to absorb the unexpected losses, as and when they arise.

Market risk

Investment is risky because of the change in their prices due to market forces. This volatility in the value of a bank's investment portfolio is known as the market risk, as it is driven by the market forces. The change in the value of the portfolio can be due to changes in interest rate, fluctuation in exchange rate or the changes in the values of equity or commodities.

Operational Risk

Several events that are neither due to default by third party nor because of the volatility of the market mechanism are called operational risks and can be attributed to internal systems, processes, people and external factors.

2) Pillar 2: Supervisory Review Process

Pillar II ensures that not only do the banks have adequate capital to cover their risks, but also that they employ better risk management practices so as to minimize the risks. Capital cannot be regarded as a substitute for inadequate risk management practices.

This pillar requires that if the banks use asset securitization and credit derivatives and wish to minimize their capital charge they need to comply with various standard and control. As a part of the supervisory process, the supervisors need to ensure that the regulations are adhered to and the internal measurement systems are standardized and validated.

The supervisory review process is based on four principles:

Principle 1:

Banks should have a process for assessing their overall capital adequacy vis-à-vis their risk profile and a strategy for maintaining their capital levels.

Principle 2:

Supervisors should review and evaluate bank's internal capital adequacy assessments and strategies, as well as their ability to monitor and ensure compliance with

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

Principle 3:

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

Principle 4:

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

Given the kind of responsibilities, the supervisor's role assumes high importance in the Basel-II . Pillar II does not seek to harmonize supervisory processes across countries as they have different supervisory objectives, legal processes and authority of supervisors. It allows for sufficient national discretion but still it wants supervisors to maintain some degree of consistency in their approaches.

3) Pillar 3: Market Discipline

Banking operation is becoming complex and difficult for supervisors to monitor and agencies, depositors and investors.

With frequent and material disclosures, outsiders can learn about the bank's risk. Armed with this information, the outsiders can always protect themselves by ending their relationships with the bank.

Market discipline has two important components:

- a. Market signaling is the form of change in bank's share prices or change in bank's borrowing rates

Responsiveness of the bank or the supervisor to market signals Seeing the importance of the impact that the market can have on banks, Pillar III provides a comprehensive menu of public and regulatory disclosures like disclosures related to capital structure (core and supplementary capital), capital adequacy, risk assessment and risk management processes to enhance the transparency in banking operations.

2.1.3 Capital and Capital Adequacy

Capital is a part of wealth or money or property, which may be used for the production of more wealth and additional wealth. It consists of those kinds of wealth other than free gifts of nature, which yield income. Capital is a stock resource that may be employed in the production of goods and services and the price paid for the use of credit or money, respectively.

Patheja has defined banks capital as common stock plus surplus plus undivided profits

The Basel Committee sets a standard for all the banking norms, which will be accepted by central bank of all big industrialist countries. The first Basel Capital Accord was issued in 1988 and was implemented by 1992. The committee has now issued New Basel Capital Accord which will be implemented by 2006 to overcome the drawbacks of the current capital accord. Central banks of developing underdeveloped countries follow these standards Nepal Rastra Bank also follows these standards and accordingly sets standard for commercial banks in Nepal.

According to the directive issued by Nepal Rastra Bank, the bank capital has been categorized in to two parts: core capital and supplementary capital. This categorized is also known as core capital for Tier-1 capital and supplementary capital for Tier-2 capital.

The Tier-1 capital includes Share Capital, Share Premium, Non- Redeemable Preference Shares, General reserve Fund, and Accumulated Profit and Loss Goodwill amount to be deducted, if any.

The Tier -2 capital includes General Loan Loss Provision, Exchange Equalization Reserve, Assets Revaluation Reserve and Hybrid Capital Instruments.

Total risk-Weighted assets (TRWA) = Assets held by a financial institution to which degree of risk have been assigned, so that adequate provision can be set aside.

2.1.3.1 Definition of Capital Fund for Commercial Banks

For the purpose of calculation of Capital Fund, the capital of the banks is divided into two components, Core Capital and Supplementary Capital.

Core Capital:

Core Capital of commercial banks includes: Paid up capital, Share premium, Non-redeemable preference share, General Reserve Fund and Accumulated Profit and Loss Account.

The amount of goodwill shall be deducted from; the; amount of core capital, if amount of goodwill exists at all.

Supplementary Capital:

Supplementary Capital of Commercial banks includes:

) General Loan loss provision:

Previously, total amount of loan loss provision made for all the six categories of loan used to be included in the supplementary capital but not with the new directives, the amount of general loan loss provision shall be included in the supplementary capital as per the following time table:

Time Period	Provision available for inclusion in the Supplementary capital
For FY 2013/14	Doubtful loans
For FY 2014/15	Sub-Standard and Doubtful loan
From FY 2015/16	Pass loan

The amount of general loan loss provision shall not exceed 1.25 percent of the total risk weighted asset

) Exchange Equalization Reserve

) Assets Revaluation Reserve

The asset revaluation reserve can be included in the supplementary capital but is limited only up to 2 percent of the total supplementary capital including this reserve amount

) Hybrid Capital Instruments

There are two types of instruments includes under this, they are:

-) Unsecured, fully paid up instruments issued by the bank which are subordinated to (priority of payment after) depositors and creditors, not available to absorb losses as well as convertible into ordinary capital.
-) Instruments which are non-redeemable at the option of the holder except with the approval of NRB
-) Perpetual or long term preference stock (share) convertible into common shares if the profit and loss account becomes negative.
-) Unsecured Subordinated Term debt

In order to show the diminishing value of these instruments, banks are required to amortize the value of the instruments at the rate of 20 percent every year.

-) Other free resources not allocated for a specific purpose. (NRB Directives No.1, 2017)

2.1.3.2 Review of NRB Capital Adequacy Norms for Commercial Banks

With the objectives to build up a strong, capable and secured banking system for promoting economic growth of the country as well as to protect the interests of depositors, as provide under section 23 (1) of Nepal Rastra Bank Act 2012 relating to development and regulation of banking system. This directives is respects to maintenances of minimum capital fund by commercial banks has been issued in exercise of authority under section 14 (a) commercial banking Act, 2031.

Commercial banks need to maintain the prescribed proportion of minimum capital fund in the basis of the risk weighted assets. As per the directives issue by the Central Bank, the banks need to follow the following time table:

Table No: 2.3

Proportion of Minimum Capital Fund

Time Table	Core Capital	Total Capital Fund
For FY 2012/13	4.5%	9.0%
For FY 2013/14	5.0%	10.0%
For FY 2014/15	5.5%	11.0%
For FY 2015/16	6%	12.0%
For FY 2016/17	6.5%	13.0%

Since, the capital of the bank is divided into two categories core and supplementary capital. Core capital is known as Tier-1 capital and Supplementary capital is known as Tier-2 capital. The core capital is the summation of share capital, share premium, non-redeemable preference shares, general reserve fund and accumulated profit/loss. Similarly supplementary capital has been defined to include general loan loss provision, exchange equalization reserve, assets revaluation reserve, hybrid capital instruments, unsecured subordinated term debt, interest rate fluctuation fund and other fee reserves.

The sum of Core and Supplementary capital is measured to be total capital fund. For the purpose of calculation of capital fund, the risk-weighted assets have been classified in two parts on –Balance Sheet Risk-Weighted Assets and Off-Balance Sheet Risk Weighted Items. As stated by the norms, the capital fund ratio would measure the total capital fund on the basis of total risk-weighted assets. The capital fund ratio shall be determined as follows:

$$\text{Capital Fund Ratio} = \frac{\text{Core Capital} \Gamma \text{Supplementary Capital}}{\text{Sum of risk - weighted assets}} * 100\%$$

The sum of risk weighted assets is the sum of total no-balance sheet risk-weighted assets and total off-balance sheet risk-weighted items. The bank shall, at the end of Ashoj (mid-October), push (mid-January), Chaitra (mid-April) and Ashad (mid-July) of each fiscal year, prepare the statements of Capital Fund and other relevant statements on the basis of Suspension of declaration/ distribution of dividend (including bonus share).

1. Suspension of opening new branch.
2. Suspension of access to refinancing facilities of Nepal Rastra Bank.
3. Restriction on lending activities of the bank.
4. Restriction on accepting new deposits.
5. Initiation of any other actions by exercising the authority under Section 32 of Nepal Rastra Bank Act, 2012. (NRB Directives No. 1, 2004)

2.1.3.3 Loan Classification and Provision

All financial Institutions are required to classify their loan and advances as per the maturity date. Total loan and advances will be classified in to the following four categories.

Pass loan -	Loan matured up to 3 months (including restructured and Rescheduled loan)
Sub-standard loan-	Loan matured up to 6 month
Doubtful loan-	Loan matured up to 1 year
Loss loan-	Loan matured more than a year

Loan against Gold and Silver, Fixed deposit, NSB and credit card loan shall be categorized as pass loan irrespective of maturity.

Credit card loan matured for more than 90 days should be classified as loss loan.

Pass loan is categorize as performing loan and all other three categories are categorize as Nonperforming loan.

Additional condition for loss loans

-) Any loan and advances not matured but if any of the following condition is prevailed, it will be classified as loss loan.
-) Insufficient collateral.
-) Borrowers become bankrupt.
-) Whereabouts of the borrower is not known.
-) If the loan is miss-utilized
-) Six months after the auction process initiated.
-) Loan provided to blacklisted parties.
-) If the funded projects are not in existence.
-) B/P and non-funded loan if converted to funded and not settled within 90 days.

Loan on installment basis

If the loan is provided on installment basis, whole principle should be classified as per the maturity of installment.

Any loan provided for more than one year period must be in installment basis.

Loan loss provision Loan loss provision will be set aside for all categories of loan and advances as per the following percentages.

Pass	1%
Substandard	25%
Doubtful	50%
Loss	100%

Loan against personal guarantee

Loan and advances provided against personal guarantee needs details net worth of the guarantor and additional 20% provision. Personal guarantee taken on top of other collateral for additional security also have same treatment.

Current A/C overdrawn

Realization of interest and principle by overdrawing the current account and OD accounts not allowed, incase of such practiced is followed by the bank it should be classified one level down if it is not settled within one month.

Restructuring and rescheduling

All restructured and rescheduled loans needs 12.5% loan loss provision.

There must be written proposal and sufficient collateral and projected cash flow for restructuring and rescheduling of loan.

At least 25% interest must be recovered for such restructuring. In case of loan classified as sick industry by the committee formed by Nepal government 12% interest recovery will be sufficient for restructuring but 25% provision is required. If such loan is regular for 2years, it can classify as good.

2.2 Review of Previous Studies

Bhusal, (2014) carried out a research study on *"Financial Performance Analysis of Commercial Banks in Nepal the Frame Work of CAMEL (A Comparative Study of Kumari Bank and Machhapuchchhre Bank"*, with the fundamental objective to analyze and compare the financial performance of KBL and MBL in the frame work of CAMEL. with the help of both secondary as well as primary data, she conducted

her study by applying Some financial and statistical tools and techniques. Her study shows both banks are maintaining CAR as per rule of NRB and the trend of CAR is decreasing. Both banks are in much satisfactory level in the case of assets management. Increasing profit of both banks shows the good sign but it is not enough to compete with other established banks. According to her study, Profits are also not enough to meet benchmark set by the World Bank. In the case of liquidity both banks are not properly maintaining the rule of NRB. In her overall analysis there is tough competition between KBL and MBL and both are in the phase of improvement.

Ahmad (2014) in attempt to evaluate “*Credit Appraisal Techniques*” conduct that Pakistan’s leading business magazine suggests that forward-looking approach should be taken while making credit appraisals. The author has honors degree in Economics/Accounting and a MBA, both from British Universities. Subsequently he has gained over 20 years lending experience with Citibank and American Express Bank, in Pakistan and the Middle East. He has served on the Board of Directors of NDFC and Orix Investment Bank besides other Companies and is presently working as a Credit Advisor with Pakistan Kuwait Investment Company (Pvt.) Ltd. He suggests not to be overwhelmed by marketing or profit center reasons to book a loan but to take a balanced view when booking a loan, taking into account the risk reward aspects. Generally we remain optimistic during the upswing of the business cycle, but tend to forget to see how the borrower will during the downturn, which is a shortsighted approach. Furthermore we tend to place greater emphasis on financials, which are usually outdated; this is further exacerbated by the fact that a descriptive approach is usually taken, rather than an analytical approach, to the credit. Thus a forward looking approach should also be adopted, since the loan will be repaid primarily from future cash flows, not historic performance; however both can be used as good repayment indicators. He suggests analyzing followings carefully while making short term lending decision:

- Company Profile / Ownership
- Proposed Transaction
- Source of repayment
- Security
- Financial Analysis

- Management Evaluation
- Organization Culture, Corporate strategy
- Risk Areas
- Reference Checking

He focuses that lending officer should have reliance on identifiable cash flows for the first way out to repay the loan rather than the security itself.

Shrestha (2014) in attempt to evaluate “*Lending Operation of Commercial Banks of Nepal and its Impact on GDP*” conduct that has made an analysis of contribution of commercial banks, lending to the Gross Domestic Product (GDP) of Nepal. She has set hypothesis that there has been positive impact of lending of commercial banks to the GDP, in research methodology; she has considered GDP as the dependent variable and various sector of lending like agriculture, industrial, commercial service and general social sectors as independent variables. A multiple regression techniques have been applied to analyze the contribution.

The analysis shows that the entire variable except service sector lending has positive impact on GDP. Thus, in the conclusion she had accepted the hypothesis i.e. there has been positive impact on GDP and also she has accepted the hypothesis i.e. there has been positive impact by the lending of Commercial Banks in various investment.

Pandit (2015) has conducted a research entitled “Directives of NRB in maintaining capital adequacy Ratio & its impact, a case study of NIC Bank” his major objectives were to find out the effect of the Supplementary Capital in The Capital Fund, to access the level of capital Adequacy Ratio prescribed by NRB and to analyze the trend of total capital to Deposit ratio.

Capital Fund has grown consistently during 2059/60 to 2064/65 due to the substantial increment in the supplementary capital, and issuance of Unsecured subordinated Term Debt. Bank is quite successful in maintaining capital adequacy as prescribed by NRB. Capital to deposit ratio is adequate and satisfactory. The credit deposit ratio of the Bank is very low and needs to be improved. Although the capital adequacy requirement has been met, the Bank is unable to fulfill other capital and deposit ratios, which are important to safeguard the depositors.

Baral (2015) entitled “*A study of Non- performing Loans of Nepalese commercial Banks*” with the aim to find out the non-performing loans and its effects in ROA and ROE of the Nepalese commercial banks. To examine whether the Nepalese commercial banks are following the NRB directives regarding loan loss provision for non-performing loan or not.

The study found that the return on assets (ROA) and Return on equity (ROE) of the bank somehow depend upon Non Performing Loan. The bank should reduce its NPLs to increase ROA and ROE of the bank. Management inefficiency is one of major cause behind high level of NPA of commercial banks. No banks have been following NRB directives regarding loan loss provision.

From the study the recommendations were made to those banks having high level of NPL should take immediate action. The bank should dispose of the collateral taken from the borrower and recover principal and interest amounts. Corporate structure of the bank play key role in the effective loan management. There should be separate department for credit appraisal, documentation, disbursement, relationship maintenance and inspections.

A latest publication of NRB supporting the recessionary economic trends highlights the performance of the economy in the first month of the current fiscal year (mid July 2014- mid March 2015). Revenue collection grew by mere 4.3% while the non-budgetary and industry and export related borrowers. The CRR reduction has released additional liquidity between NRP 1,000 million to NRP 1,500 million to the banks. As expected several banks have started to drop interest rates. The decision of NRB to cut CRR comes at a time when the Nepalese industry has been reeling under the recession. The cut in CRR and the resultant drop in the interest rates should contribute towards the recovery of the recession hit industry (NRB Press Communication, 2016).

Basel-II norms are expected to have far-reaching consequences on the health of financial sectors worldwide because of the increased emphasis on banks' risk-management systems, supervisory review process and market discipline. The new norms bring to front not only the issues of bank-wide risk measurement but also of active risk management.

The new capital adequacy framework (new capital accord) and its accompanying documentation constitute a very detailed set of proposals with something to say about every aspect of how banks originate measure and manage risk. This is quite fitting. Since the original Accord of 1988, every aspect of risk management in banking has changed and it is inevitable that regulators, as custodians of the financial system, should seek to leverage this transformation in banks' own methods. But instigating such wide-ranging, once and for all, change to the regulatory framework brings its own risks. In particular, a milestone in improving banks internal mechanism and supervisory process. It will be beneficial to the commercial banks, as it requires review and measurement of risk, which ultimately have effect of risk management approach to comply with the accord standards (NRB, 2016).

To reform of supervisory authorities' practices and measures to ensure that the national supervisory practices in different countries do not vary unnecessarily. Supervisory authorities related to the current capital adequacy regime require a considerable input of work and expense from banks. The proposed changes would increase the amount of information needed by the authorities concerning risks related to commercial banking activities, in particular. In order to avoid unnecessary effort and costs, the changes should be implemented in a way that would allow the systems and data currently used for banks' business management and supervision to be utilized as far as possible (NRB, 2016).

This new accord has examined possible approaches in relation to these risks. that banks are expected to be disparate to meet the regret of capital adequacy norms since the consequences the banks have to face in case of non-compliance are very strict for this purpose they will have to issue additional shares, which is not possible for them in the short-run or they do not prefer to go for additional share issue simply because they will also have to pay the same dividend as the past to the holders of shares so issued. This becomes the more difficult as the business is not going to expand commensurately. The difficult is understandable now when every banker is complaining of the lack of new investment projects (Lamsal, 2016).

Shrestha (2016) entitled "*A study of Non- performing Loan and loan loss provision of commercial Banks, A case study of NIBL, HBL and EBL*". The objectives of his studies were to find out the proportion of nonperforming loan in the selected

commercial banks, to study and analyze the guidelines and provisions pertaining to loan classification and loan loss provisioning, to find out the relationship between loan and loan loss provision in the selected commercial bank and to study and the impact of loan loss provision on the profitability of the commercial banks.

From the study it was found that the EBL has the highest portion of the loan in total asset followed by NIBL and HBL. He concludes that the EBL shows the risk adverse attitude. Likewise, the nonperforming loan to the total loan is found in HBL, NIBL and EBL. The loan loss provision is also highest in HBL whereas the EBL has the least Loan Loss Provision. The HBL has the highest portion of loss loan followed by NIBL and EBL.

Tesfatsion Sahlu Desta (2016) Financial Performance of "*The Best of African Banks.*" In summary, the above reviewed literature depicts that the CAMEL model can be applied to measure and evaluate the financial performance of commercial banks. However, the results were not consistent when the CAMEL components are applied to ROA, ROE and NIM. The literature also shows that the ratios that were used to compute the CAMEL components are not consistent, that is, different re- searchers employed different ratios. For instance, the researchers applied the total loans to total customer deposit, total loan/total deposit or total loans to total assets for computing the liquidity position of the commercial banks. Therefore, it can be concluded that commercial banks are rated differently when the CAMEL compo- nents are applied to ROA, ROE and NIM. On the other hand, empirical studies revealed that Ferrouhi (2015), Ginevicius and Podvieszko (2012), Rozzani and Rahman (2014) and Sangmi and Nazir (2011) have employed the composite CAMEL ratings for comparative analysis of the financial performance of commercial banks in Morocco, Lithuania, Bang- ladesh, Malaysia and India. Although the CAMEL composite rating has been used for internal control and for supervisory as well as regulatory purpose, the aforementioned empirical evidences confirmed that researchers have been employing the composite rating for identifying strong as well as the weak financial performance of commercial banks.

Bhandari (2016) conducted a study on "*Financial performance Analysis of Himalayan Bank Limited in the Framework of CAMEL*". The basic objective of the study was to analyze the financial performance of Himalayan Bank Limited through CAMEL framework. He had used secondary data for the period of six years. The study

revealed the adequate capital of the bank. The non-performing loan was in decreasing trend, which shows the improvement of the bank. The bank is still with better return which is proved by its better ROE; however it is in decreasing trend. The decreasing trend of net interest margin shows management slack monitoring over the banks earning assets. The liquid fund to total deposit ratio is above the industrial average ratio. NRB balance and cash in vault to total deposit ratios are below the industrial average ratio during the study period.

Sharma (2016) performed a study on "*Financial Performance Analysis of Nepal SBI Bank Ltd., In the Frame work of CAMEL.*" The main objective of the study is to analyze the financial performance of Nepal SBI bank Ltd. Through CAMEL framework, the study was based on secondary data covering the six years from 2009 to 2015. The researcher conducts the financial tools to analyze the six years data. He concluded That Nepal SBI bank Ltd. was well capitalized and complying with directives of NRB. The bank has maintained satisfactory level of past due loan on total loan except 2014. Earning per employees of the bank was found quite high. Net interest margin of the bank was found satisfactory. Further the liquidity position of the bank was found sound.

Gurung (2017), conducted the research study entitled "*Financial Performance Analysis of Annapurna Finance Company Ltd. in the framework of CAMELS*". The objective of the study were to evaluate the capital adequacy of selected banks, to analyze the ratio of loan loss provision to non-performing loan or safety margin and to evaluate the management efficiency in regard to bank total revenues, expenses and other established controlling and monitoring mechanism. The study found out that the capital adequacy ratios of the company were found to be generally above the NRB standards in all the study years. The non performing loan ratio of the company was found fluctuating through the ratios were below the international standards. The loan loss ratios was found fluctuating but in increasing trend during the period. The management quality proxy ratios-the total expenses to total income ratios were in fluctuating trend were as earning per employee ratio were in increasing trend. The earning quality ratio were in fluctuating trend but were above the World Bank standard.

Koirala (2007), conducted a research study entitled “*Diagnosis of Financial Health of Nepal Investment Bank Ltd. in the framework of CAMELS.*” The objectives of the study were to assess the financial performance of the bank in CAMELS framework and to evaluate the level, trend and stability of earnings. The study found out that the capital adequacy ratios of the bank were generally above the NRB standard in all the year except in the year 2015. The assets mainly composed of loans and advance investment. The non performing loans to loans ratios were quite below the industrial average and international standard. The loans loss provision ratio of the bank was fluctuated continuously in each year. The total expenses to revenue ratio were in decreasing trend and the earning per employee was in increasing trend. The earning quality ratios were generally above the benchmark prescribed by World Bank and were in increasing trend. The bank was not able to follow the NRB directive strictly. The banks short-term net financial assets are highly sensitive to interest rate risk.

2.3 Research Gap

Based on the above literature, it can be said that there are some studies about banks in various countries, however a detailed study has not yet been conducted in Nepalese context, especially Banking sectors. Hence the present study is made on Comparative Study of Financial Performance of Banking Sector in Nepal: An application of CAMELS analysis system with 12 Commercial Bank of Nepal which are in operation before 10 years from now.

Now a days, CAMELS framework is suggested for performance evaluation of financial sectors especially in banking sector. Nepal Rastra Bank also adopted CAMEL frame work for supervision of Banks in Nepal. So many researches or case studies are conducted on performance evaluation of Nepalese bank but most of them adopted ratio analysis technique. The internationally accepted tool CAMELS technique is used to see performance of Nepalese commercial bank in this study to fulfill the gap of above reviewed studies as well as it also try to see the current status of Nepalese commercial bank by using latest evaluating tool CAMELS. There is no more Studies are conducted by using this technique so to show actual mirror of commercial banking sector of Nepal is necessary and needed. Which helps for :

) Further researcher

-) University students who are new generation
-) Financial managers
-) Government
-) NGO's and INGO's
-) Shareholders and creditors
-) Stockbrokers

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Research Design

The research design of this proposed study was descriptive (to find out the causes and consequences of performance trend), historical and comparative (Ten years from now). For the convenience, in this thesis, a comparative analysis of financial performance of twelve commercial banks based on descriptive and analytical research design.

3.2 Sources of Data

This study mainly based on secondary data. Secondary data are collected from their respective annual report especially from profit and loss account, balance sheet and other publications made by the banks. Also some data has been gathered from Website. Similarly, articles, journals related to the financial performance study, previous research report etc., have also taken into account while collecting information.

3.3 Population and Sampling

All Nepalese commercial banks are population size of this research work. Out of which the bank which are establish before 2001 except governmental share and control like Nepal Bank limited, Rastriya Banijya Bank and Agriculture Development Bank. That is fully private sector commercial banks which are in operation before 10 years from 2010 are taken as a sample using convenience sampling method, which include 12 banks which are as follows:

S.N.	Name	Operation Date (A.D.)	Head Office
1	NABIL Bank Limited (NABIL)	1984/07/16	Kathmandu
2	Nepal Investment Bank Limited (NIBL)	1986/02/27	Kathmandu
3	Standard Chartered Bank Nepal Ltd. (SCBN)	1987/01/30	Kathmandu
4	Himalayan Bank Limited (HBL)	1993/01/18	Kathmandu
5	Nepal SBI Bank Limited (NSBI)	1993/07/07	Kathmandu
6	Nepal Bangladesh Bank Limited (NBBL)	1993/06/05	Kathmandu
7	Everest Bank Limited (EBL)	1994/10/18	Kathmandu
8	Bank of Kathmandu Limited (BOK)	1995/03/12	Kathmandu
9	Nepal Credit and Commerce Bank Ltd. (NCCBL)	1996/10/14	Siddharthanagar
10	Lumbini Bank Limited (LBL)	1998/07/17	Narayangadh
11	Nepal Industrial & Commercial Bank Ltd. (NIC)	1998/07/21	Biratnagar
12	Machhapuchchhre Bank Limited (MBL)	2000/10/03	Pokhara

3.4 Data Analysis Procedure

To achieve the objectives of the study, various accounting, statistical and financial tools have been used in this study. The analysis of data is done according to pattern of data available. With the available tools and resources statistical tools such as Karl Pearson's coefficient of correlation, simple and multiple regressions analysis as well as corresponding hypothesis etc. is use in the study. Similarly some strong accounting and financial tools such as ratio analysis and trend line analysis are also apply in this study. Mainly CAMELS & its corresponding analysis is used in this study

The various calculated results obtained through financial and statistic tools are tabulated under different headings. Then they are compared with each other to interpret the results.

3.4.1 Financial Tools/ CAMELS Tools.

There are various financial tools and technique each of which is used according to their purpose carried out. Among them ratio analysis is used by most companies. Therefore in this study we discuss about CAMELS analysis.

A. Capital Adequacy analysis

- i) Core Capital Ratio (Core Capital to Risk Weighted Assets)
- ii) Leverage Ratio (Core Capital to Total Assets)
- iii) Total Capital Ratio (Total Capital to Risk Weighted Assets)
- iv) Supplementary Capital Ratio (Supplementary Capital to Risk Weighted Assets)

B. Assets quality analysis

- v) Nonperforming Assets Ratio (NPAR) (Nonperforming Assets to Total Loan And Advances)
- vi) Loan Loss Reserve Ratio (LLRR) (Loan Loss Reserve to Total Loan and Advances)

C. Management capability analysis

- vii) Operating Expenses Ratio (OER) (Total Operating Expenses to Total Operating Revenue)

- viii) Earning per Employee (EPE) (Net Operating Income to Total No. of Employees)

D. Earning analysis

- ix) Return on Equity (ROE) (Net Income to Shareholders Equity)
- x) Return on Assets (ROA) (Net Income to Total Assets)
- xi) Profit Margin (PM) (Net Income to Total Operating Revenue)

E. Liquidity analysis

- xii) Total Loan to Total Deposit Ratio (LDR)
- xiii) Cash and Equivalent to Total Asset Ratio (CETAR)
- xiv) Cash and Equivalent to Total Deposit (CETDR)
- xv) Cash Balance with NRB to Total Deposit Ratio (CBNRBR)

3.4.2 Statistical Tools

Various statistical tools related to this study will draw out to make the conclusion more reliable according to the available financial data. For this study following statistical tools are used.

a. Arithmetic Mean or Average

The average value is a single value within the range of the data that is used to represent all of the values in the series. Since an average is somewhere within the range of that data, it is also called a measure of central value. Since average represents the entire data, its value lies somewhere in between the two average. Among them is use the arithmetic mean which is more popular to denote particular type of average. It is obtain dividing sum of obtain observations by the number of items which is presented as follows.

$$\bar{X} = \frac{\sum x}{N}$$

Where,

\bar{X} = Arithmetic Mean

$\sum x$ = Summation for Total Values of the Variable / Observation

N = Number of Items

b. Standard Deviation

The standard deviation is the most important and widely used measure of studying dispersion. It is also known as root mean square deviation for the reason that the square root of the mean of the standard deviation from the arithmetic mean. It is also denoted by the small Greek letter σ (Sigma). The standard deviation measures the absolute dispersion or variability of a distribution. 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. Hence, standard deviation is extremely useful in judging the representative of the mean.

Symbolically,

$$\sigma = \sqrt{\frac{\sum d^2}{n}}$$

Where,

σ = Standard Deviation

$\sum d^2$ = Sum of Squares of the Deviation Measured from the Arithmetic Average

n = Numbers of Item

CHAPTERFOUR

DATA ANALYSIS AND PRESENTATION

This chapter deals with the analysis and interpretation of data according to the research methodology to attain the objectives of this study. During analysis data gathered from various sources have been inserted in tabular form. Using financial and statistical tools the data have been analyzed. But in this study the data is presented using CAMEL analysis tools and average and standard deviation of statistical tools also used to interpret the results.

4.1 Capital Adequacy Analysis

In camel analysis capital adequacy analysis is one of important tool to see the performance of financial institutions for this purpose

Following ratios are calculated to analyze capital adequacy of the firm.This is presented bellow in tabular form

- a) Core Capital Ratio (Core Capital to Risk Weighted Assets)
- b) Leverage Ratio (Core Capital to Total Assets)
- c) Total Capital Ratio (Total Capital to Risk Weighted Assets)
- d) Supplementary Capital Ratio (Supplementary Capital to Risk Weighted Assets)

4.1.1 Core Capital Ratio (Core Capital to Risk Weighted Assets)

According to the 1993 Basel Accord Core Capital must equal to or exceed 4% of the risk weighted assets of the commercial Bank. This table shows that all sampled banks have adequate capital except NB Bank Limited in year 2012/13, 2013/14and 2014/15 similarly NCC Bank and Lumbini Bank in year 2012/13 &2013/14.This result is presented in Table 4.1 and Figure 4.1.

Table 4.1 Core Capital Ratio (In Percentage)

Bank/year	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	Average	SD
NABIL	11.45	12.12	11.35	10.78	10.40	8.75	8.74	8.77	10.30	1.28
NIBL	7.88	7.22	8.52	7.97	7.90	7.71	8.56	8.50	8.03	0.44
SCBN	12.31	14.14	14.25	12.99	13.77	12.15	13.05	12.61	13.16	0.76
HBL	7.14	7.66	8.42	8.65	9.61	9.64	8.81	8.68	8.58	0.81
NSBI	10.16	9.47	8.68	10.53	10.53	9.97	10.03	10.89	10.03	0.65
NBBL	6.22	4.65	1.51	-13.48	-23.55	-18.17	4.42	11.74	-3.33	12.24
EBL	11.60	9.58	8.87	8.21	7.80	9.04	8.52	8.39	9.00	1.11
BOK	10.44	10.14	10.23	10.71	9.43	9.57	9.81	9.41	9.97	0.45
NCCBL	1.90	2.85	3.48	-5.05	-9.14	9.61	9.81	12.69	3.27	7.04
LBL	8.68	7.54	5.68	-15.11	-7.80	4.73	16.87	22.35	5.37	11.34
NIC	17.44	12.92	12.36	9.94	9.21	10.50	10.48	11.25	11.76	2.43
MBL	23.98	17.01	10.52	11.95	10.68	10.97	10.96	9.94	13.25	4.56

(Sources: www.nrb.org.np)

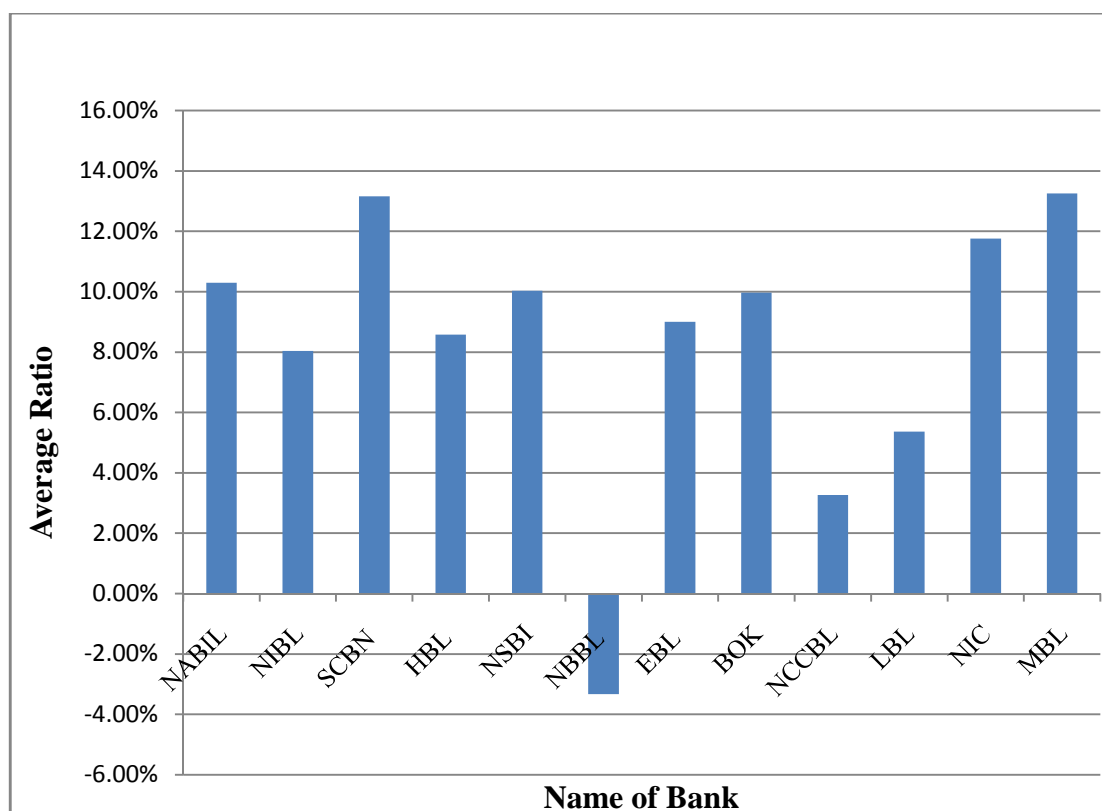


Figure 4.1 : Average Ratio of Core Capital to Risk Weighted Assets

4.1.2 Leverage Ratio (Core Capital to Total Assets)

Leverage ratio can be used to measure the capital adequacy of a bank. This is the ratio of bank's book value of core capital to the book value of its assets the higher ratio shows the higher level of capital adequacy. The USA Federal Deposit Insurance Corporation Improvement Act (FDICIA) of 1991 has fixed the five target zones. The leverage ratio falling in the first zone implies that bank is well capitalized. Similarly, the leverage falling in the second zone shows that bank is adequately capitalized. The leverage falling in the last three zones indicates that bank is inadequately capitalized and regulators should take prompt corrective action to bring the capital to the desirable level (Saunders and Cornett 2004). Above Table shows that all sampled banks are well capitalized except NB Bank Limited in Year 2011/12, 2013/14&2014/15 similarly NCC Bank Limited and Lumbini Bank Limited in Year 2011/12&2013/14. This tabulated in Table 4.2 presented in Bar Chart Figure 4.2.

Table 4.2Leverage Ratio (In Percentage)

Bank/year	2009/10	2010/11	2011/12	2011/12	2013/14	2014/15	2015/16	2016/17	Average	SD
NABIL	9.99	12.05	11.75	10.35	9.42	7.74	7.96	8.20	9.68	1.56
NIBL	7.74	5.83	7.74	7.21	6.97	7.15	8.29	9.05	7.50	0.90
SCBN	8.30	8.07	9.22	8.74	8.60	9.00	8.69	10.29	8.86	0.64
HBL	4.58	5.32	5.88	6.80	6.79	7.67	8.35	8.49	6.74	1.32
NSBI	7.98	7.42	6.70	7.81	9.02	8.30	5.62	6.66	7.44	1.01
NBBL	5.73	4.60	1.78	-13.33	-36.15	-23.32	9.31	17.03	-4.30	17.01
EBL	7.61	7.08	6.73	6.75	5.92	7.60	6.59	7.33	6.95	0.53
BOK	8.09	7.34	8.14	7.64	7.74	7.76	8.87	9.62	8.15	0.70
NCCBL	1.63	2.81	3.42	-4.81	-8.45	8.31	10.38	11.93	3.15	6.68
LBL	8.08	6.79	5.45	-16.95	-7.53	4.77	12.63	19.64	4.11	10.71
NIC	13.80	10.54	9.83	7.49	7.96	8.64	8.91	10.39	9.69	1.86
MBL	20.91	16.07	9.88	10.33	9.32	9.38	9.72	8.58	11.77	4.09

(Sources: www.nrb.org.np)

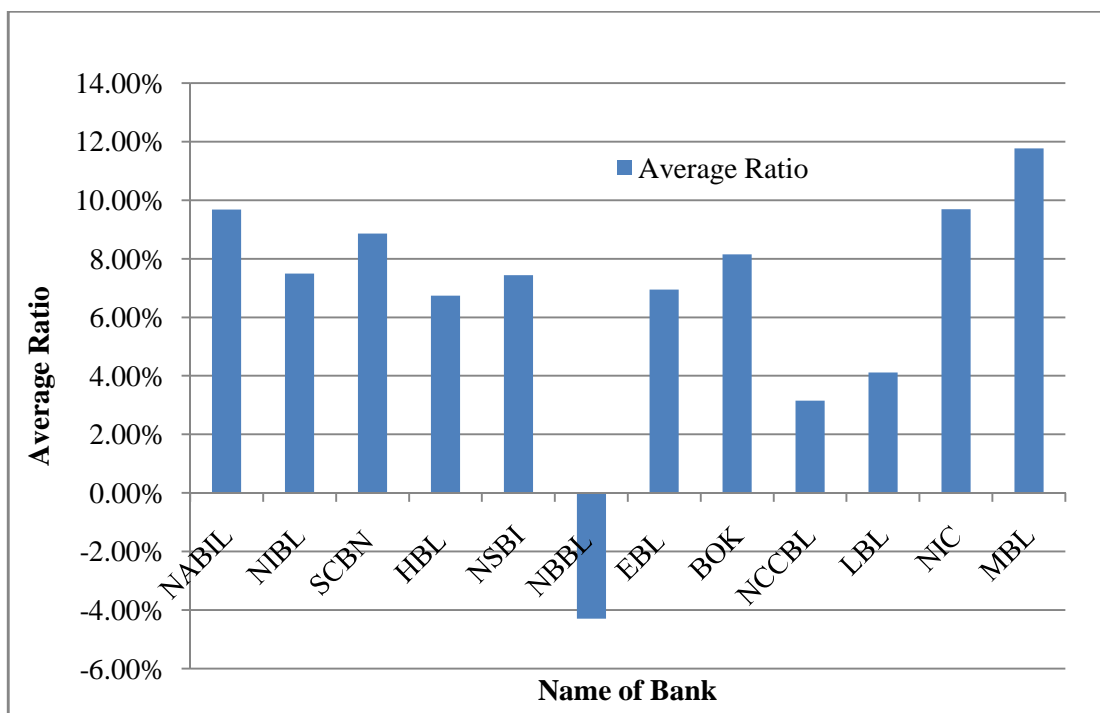


Figure 4.2 Average Ratio of Core Capital to Total Assets Ratio

4.1.3 Total Capital Ratio (Total Capital to Risk Weighted Assets)

Total capital must equal or exceed 8 percent of risk weighted assets (Saunders and Cornett 2004). NRB initially fixed the core capital at the level of 4.5 percent of the risk weighted assets and total capital at the level of 9 percent of risk weighted assets of the commercial banks (NRB 2058). In this table we see that all sampled banks are success to mention the level except three banks NB Bank Limited in FY 2010/11 to 2015/16, NCC Bank Limited in FY2009/10 to 2013/14 and Lumbini Bank Limited in FY 2011/12 to 2014/15. This data also presented Table 4.3 and in Bar Chart in Figure 4.3.

Table 4.3 Total Capital Ratio (In Percentage)

Bank/year	2009/10	2010/11	2011/12	2011/12	2013/14	2014/15	2015/16	2016/17	Average	SD
NABIL	13.05	13.56	12.00	12.31	12.04	11.10	10.70	10.50	11.91	1.02
NIBL	8.85	11.18	11.58	11.97	12.17	11.28	11.24	10.55	11.10	0.97
SCBN	14.21	15.99	16.36	14.93	15.71	0.14	14.70	14.60	13.33	5.03
HBL	11.03	10.62	11.10	11.26	11.13	13.00	11.02	10.72	11.24	0.70
NSBI	12.34	10.95	9.47	13.57	13.29	12.32	11.92	12.25	12.01	1.22
NBBL	8.11	5.61	3.02	-13.48	-23.55	-18.17	5.55	12.81	-2.51	12.83
EBL	13.10	11.07	13.54	12.32	11.20	11.44	10.55	10.77	11.75	1.04
BOK	12.05	11.18	11.22	14.52	12.62	11.94	11.68	10.85	12.01	1.09
NCCBL	6.51	3.42	5.51	-3.46	-9.14	11.09	11.07	13.94	4.87	7.33
LBL	11.37	8.71	6.35	-15.11	-7.80	0.06	17.78	24.62	5.75	12.21
NIC	18.87	13.75	13.29	13.54	12.20	13.11	12.42	12.92	13.76	1.99
MBL	24.75	17.82	11.36	12.79	11.97	12.29	11.84	11.24	14.26	4.44

(Sources: www.nrb.org.np)

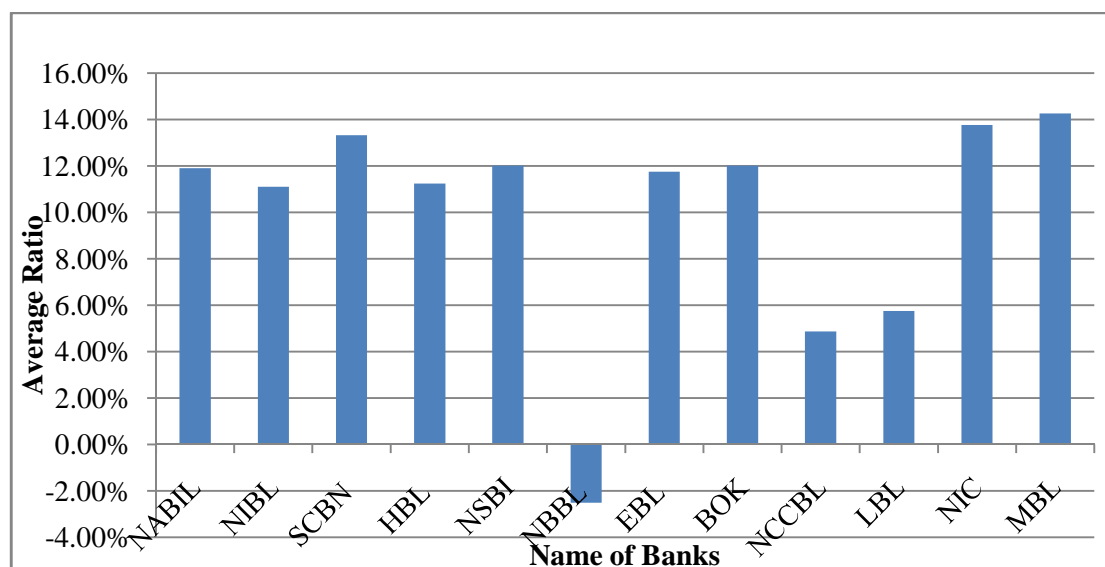


Figure 4.3 Average Ratio of Total Capital to Risk Weighted Assets

4.1.4 Supplementary Capital Ratio (Supplementary Capital to Risk Weighted Assets)

The amount of the supplementary capital should not exceed the amount of the core capital. In this table all sampled banks have mention the satisfactory level of supplementary capital but NB Bank has not any Supplementary capital level in FY

2011/12,2013/14 and 2014/15 and Lumbini Bank limited has Negative ratio in FY2014/15 and zero level in FY 2011/12& FY 2013/14. Similarly NCC Bank has also Zero Level of this Ratio in FY 2013/14. This data also presented Table 4.4 and in Bar Chart in Figure 4.4.

Table 4.4: Supplementary Capital Ratio (In Percentage)

Bank/year	2009/10	2010/11	2011/12	2011/12	2013/14	2014/15	2015/16	2016/17	Average	SD
NABIL	1.60	1.44	1.09	1.53	1.64	2.35	1.96	1.73	1.67	0.37
NIBL	0.97	3.96	3.06	4.00	4.27	3.57	2.68	2.05	3.07	1.13
SCBN	1.90	1.85	2.07	1.94	1.94	1.63	1.65	1.99	1.87	0.16
HBL	3.89	2.96	2.68	2.61	1.52	3.36	2.21	2.04	2.66	0.75
NSBI	2.18	1.48	0.79	3.04	2.76	2.35	1.89	1.36	1.98	0.75
NBBL	1.89	0.96	1.51	0.00	0.00	0.00	1.13	1.07	0.82	0.74
EBL	1.50	1.49	4.67	4.11	3.40	2.40	2.03	2.38	2.75	1.19
BOK	1.61	1.04	0.99	3.81	3.19	2.37	1.87	1.44	2.04	1.02
NCCBL	4.61	0.57	2.03	1.59	0.00	1.48	1.26	1.25	1.60	1.37
LBL	2.69	1.17	0.67	0.00	0.00	-4.67	0.91	2.27	0.38	2.26
NIC	1.43	0.83	0.93	3.60	2.99	2.61	1.94	1.67	2.00	0.99
MBL	0.77	0.81	0.84	0.84	1.29	1.32	0.88	1.30	1.01	0.25

(Sources: www.nrb.org.np)

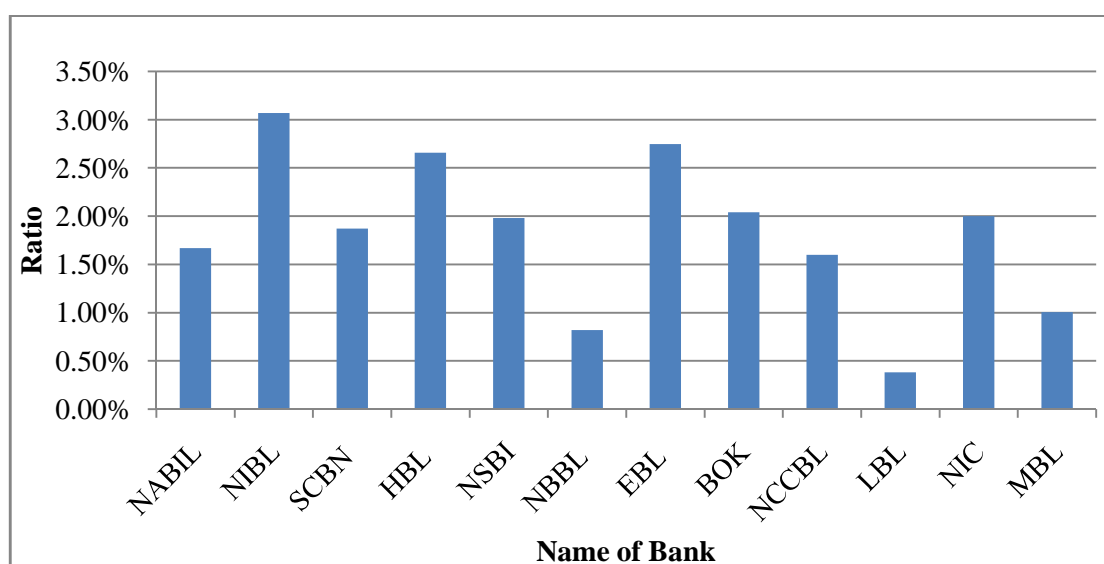


Figure 4.4 Average Ratio of Supplementary Capital to Risk Weighted Assets

4.2 Assets Quality Analysis

Credit risk is one of the factors that affect the health of an individual financial institution. The extent of the credit risk depends on the quality of assets held by an individual financial institution. The quality of assets held by financial institution depends on exposure to specific risks, trends in non-performing loans, and the health and profitability of bank borrowers—especially the corporate sector. We can use a number of measures to indicate the quality of assets held by financial institution. ADB suggests these measures— loan concentration by industry, region, borrower and portfolio quality; related party policies and exposure on outstanding loan, approval process of loan, check and balance of loans; loan loss provision ratio; portfolio in arrear; loan loss ratio; and reserve ratio—of checking the quality of assets of an financial institution (ADB, 2002).

NRB uses composition of assets, nonperforming loan to total loan ratio, net nonperforming loan to total loan ratio as the indicators of the quality of assets of commercial banks (NRB 2005). NRB has directed the commercial banks in regards to the concentration of the loan. Any licensed financial institution can grant the fund base loan to a single borrower or borrowers related to the same business group up to the 25 percent of its primary capital. In the same vein, it can provide the non-fund base loan up to 50 percent of its core capital (NRB 2005). Similarly, it has directed FIs to classify the loans into performing loan and nonperforming loans. The loans that are not due and 3 months past due fall in the class of performing loans/performing assets and others do in the non-performing loans. Further, non-performing loans are classified into three groups: substandard, doubtful, and bad Debt/loss (for detail classification see NRB directive 2/061/62).

Commercial banks have to make 1 percent provision for pass loan/performing loan, 25 percent for substandard loan, 50 percent for doubtful loan and 100 percent for bad loan (NRB 2005). Non-performing assets in the total assets of commercial banks was 22.77 percent in the FY 2010/11. But the percentage of non-performing assets of an individual commercial bank varies from 0.76 percent to 57.64 in the same fiscal year. But the normal international standard of the percentage of non-performing assets is 5-8 percent of the total assets. Following two ratios are taken in to consideration to measure assets quality which data are presented below in table.

- a. Nonperforming Assets Ratio (NPAR) (Nonperforming Assets to Total Loan And Advances)
- b. Loan Loss Reserve Ratio (LLRR) (Loan Loss Reserve to Total Loan and Advances)

4.2.1 Nonperforming Assets Ratio(Nonperforming Assets to Total Loan and Advances)

Table4.5: Nonperforming Assets Ratio (In Percentage)

Bank/year	2009/10	2010/11	2011/12	2011/12	2013/14	2014/15	2015/16	2016/17	Average	SD
NABIL	27.14	21.99	13.83	11.56	14.14	18.14	17.75	9.58	16.77	5.39
NIBL	25.93	27.39	20.48	22.55	19.88	18.53	25.85	20.71	22.67	3.10
SCBN	57.75	50.33	21.23	22.56	26.47	25.64	33.74	17.17	31.86	13.68
HBL	30.27	26.35	26.42	19.97	17.58	14.46	18.74	21.38	21.90	4.98
NSBI	42.30	27.01	22.54	18.82	15.13	13.88	16.51	24.38	22.57	8.62
NBBL	33.33	33.65	39.52	39.58	39.94	46.58	45.28	33.40	38.91	4.88
EBL	30.35	17.02	19.35	19.29	20.38	18.57	29.66	32.00	23.33	5.79
BOK	23.24	19.48	17.21	14.47	20.54	15.91	19.26	15.18	18.16	2.80
NCCBL	43.72	41.22	29.84	25.23	27.42	40.03	28.62	34.01	33.76	6.60
LBL	23.17	26.70	25.00	18.49	18.34	17.30	26.47	21.08	22.07	3.55
NIC	17.97	13.44	24.06	13.43	10.91	13.34	14.95	19.88	16.00	4.05
MBL	21.67	21.30	18.01	18.00	23.96	27.11	29.79	25.41	23.16	3.94

(Sources: www.nrb.org.np)

NRB uses composition of assets, nonperforming loan to total loan ratio, net nonperforming loan to total loan ratio as the indicators of the quality of assets of commercial banks (NRB 2005). NRB has directed the commercial banks in regards to the concentration of the loan. Any licensed financial institutions can grant the fund base loan to a single borrower or borrowers related to the same business group up to the 25 percent of its primary capital in the same vein, it can provide the non-fund base loan up to 50 percent of its core capital (NRB 2005). Similarly, it has directed FIs to classify the loans into performing loan and nonperforming loans. The loans that are not due and 3 months past due fall in the class of performing loans/performing assets and others do in the non-performing loans. Further, non-performing loans are

classified into three groups: substandard, doubtful, and bad Debt/loss (for detail classification see NRB directive 2/061/62).

Commercial banks have to make 1 percent provision for pass loan/performing loan, 25 percent for substandard loan, 50 percent for doubtful loan and 100 percent for bad loan (NRB 2005). Non-performing assets in the total assets of commercial banks was 22.77 percent in the FY 2010/11. But the percentage of non-performing assets of an individual commercial bank varies from 0.76 percent to 57.64 in the same fiscal year. But the normal international standard of the percentage of non-performing assets is 5-8 percent of the total assets. In above table we can see that average nonperforming assets ratio is 16 % to 38 % which is in satisfactory level.

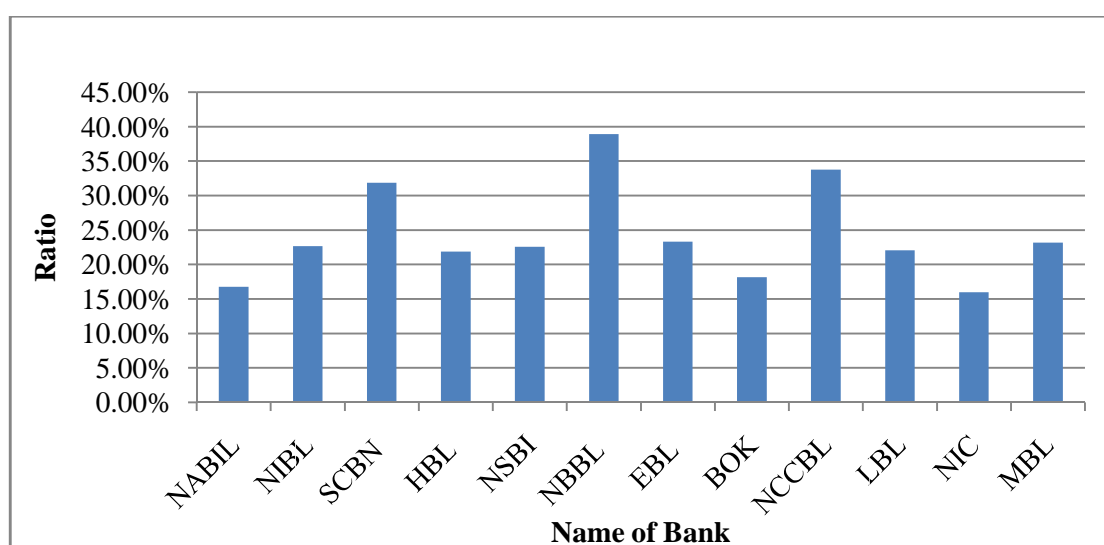


Figure 4.5 AverageRatio of Nonperforming Assets

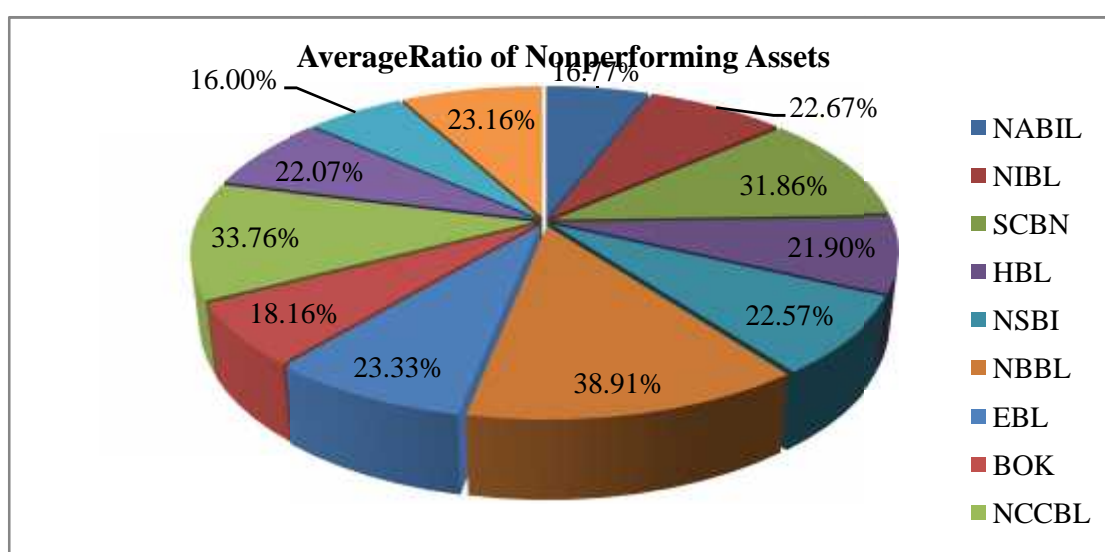


Figure 4.6: AverageRatio of Nonperforming Assets

4.2.2 Loan Loss Reserve Ratio (Loan Loss Reserve to Total Loan and Advances)

Table4.6: Loan Loss Reserve Ratio (In Percentage)

Bank/year	2009/10	2010/11	2011/12	2011/12	2013/14	2014/15	2015/16	2016/17	Average	SD
NABIL	0.00	0.01	2.30	0.03	0.09	0.30	0.17	1.10	0.50	0.76
NIBL	0.53	1.28	1.39	0.81	0.75	0.50	0.46%	0.23	0.74	0.38
SCBN	0.04	0.35	0.36	0.53	0.35	0.51	0.41	0.48	0.38	0.15
HBL	2.03	1.65	0.45	0.99	0.53	0.30	0.28	2.48	1.09	0.80
NSBI	1.88	2.31	3.11	1.92	0.63	0.47	0.27	0.36	1.37	1.00
NBBL	3.61	4.63	11.62	29.14	34.08	6.95	4.23	1.90	12.02	11.69
EBL	0.93	1.43	1.17	0.72	0.66	0.54	0.39	0.28	0.76	0.37
BOK	1.82	1.79	2.26	1.08	0.87	0.31	0.23	0.72	1.14	0.70
NCCBL	1.25	2.92	3.06	16.86	5.58	3.71	1.09	1.51	4.50	4.88
LBL	0.00	2.46	9.58	28.67	5.67	3.67	1.33	1.30	6.58	8.82
NIC	2.21	1.20	0.42	0.92	0.42	0.23	0.29	0.14	0.73	0.66
MBL	0.44	0.64	0.45	0.57	2.21	3.06	2.07	2.34	1.47	0.99

(Sources: www.nrb.org.np)

Table 4.6 shows the loan loss reserve ratio beside other sampled bank Nepal Bangladesh Bank, NCC Bank and Lumbini Bank has grater ratio which indicate poor performance because it shows the higher loan loss. Because Commercial banks have to make 1 percent provision for pass loan/performing loan, 25 percent for substandard loan, 50 percent for doubtful loan and 100 percent for bad loan (NRB 2005). Non-performing assets in the total assets of commercial banks was 22.77 percent in the FY 2010/11. But the percentage of non-performing assets of an individual commercial bank varies from 0.76 percent to 57.64 in the same fiscal year. But the normal international standard of the percentage of non-performing assets is 5-8 percent of the total assets. So higher ratio shows poor performance or poor quality of assets.

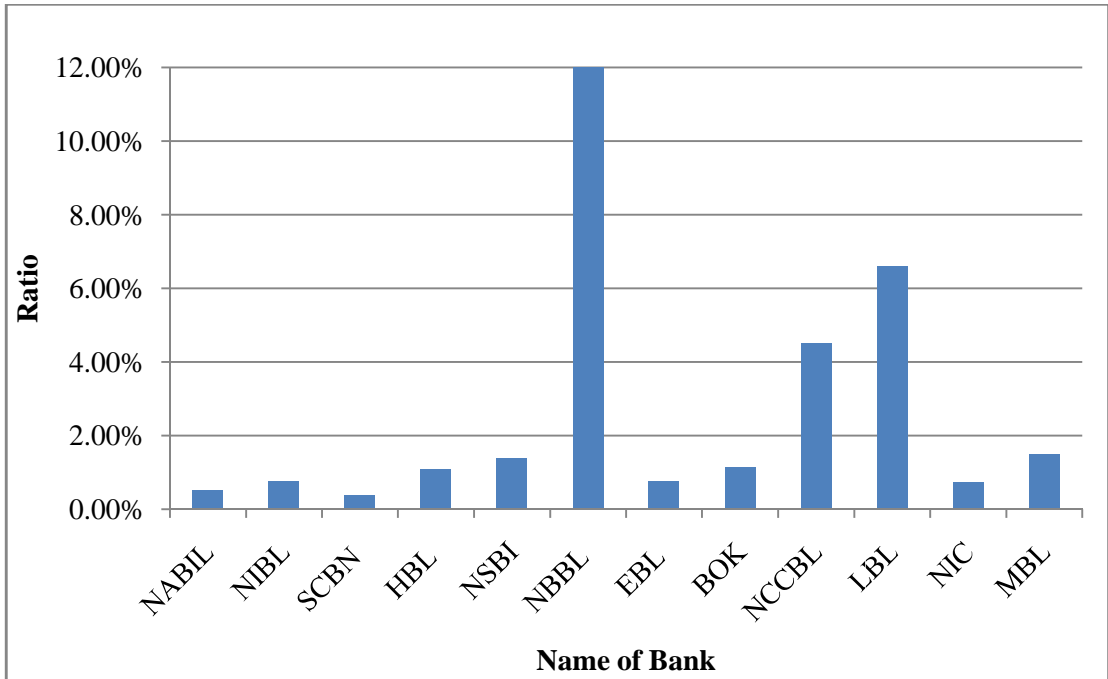


Figure 4.7: Average Loan Loss Reserve Ratio

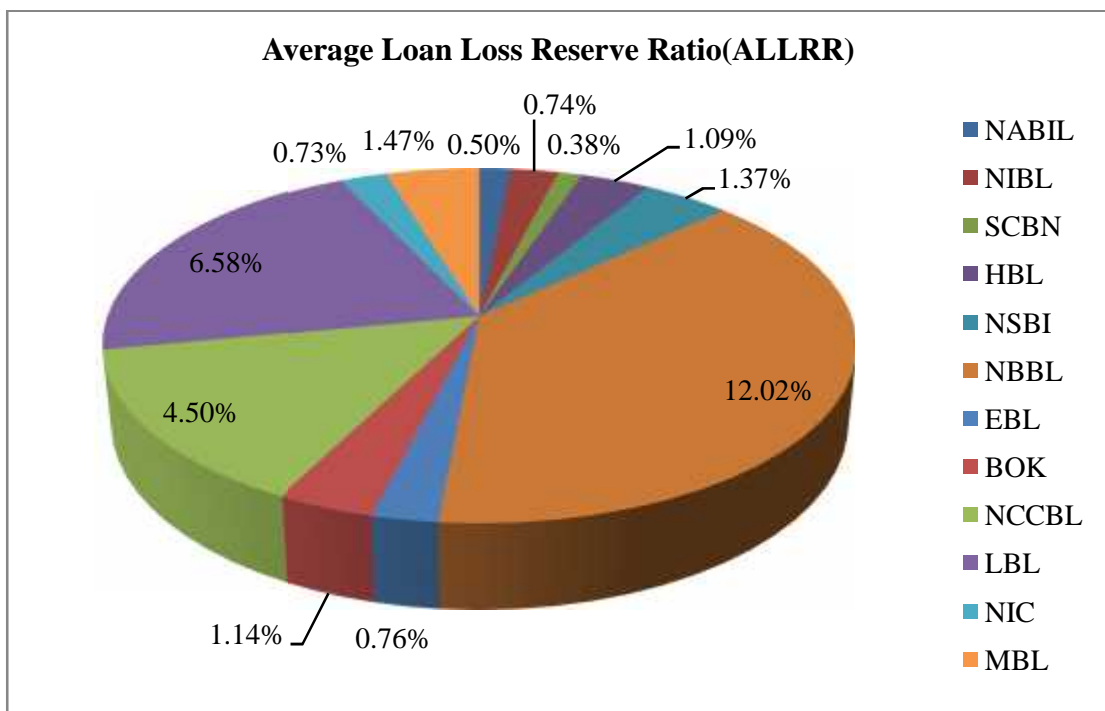


Figure 4.8: Average Loan Loss Reserve Ratio

4.3 Management Efficiency

It is Sound management key to bank performance but is difficult to measure. It is primarily a qualitative factor applicable to individual institutions. Several indicators,

however, can jointly serve as an indicator of management soundness. Expenses ratio, earning per employee, cost per loan, average loan size and cost per unit of money lent can be used as a proxy of the management quality. ADB recommends cost per unit of money lent as a proxy of management quality. But this cannot be used as an indicator of management quality in Nepal. Since the data on amount of the total loan mobilized during a particular FY is not available in published financial statements and annual reports. As stated earlier, NRB has skipped up this component of CAMELS in the performance evaluation of commercial banks (see NRB 2005). In this study following two ratios are taken in to consideration to measure the management efficiency which data are presented below in the table and figure.

4.3.1 Operating Expenses Ratio (OER) (Total Operating Expenses to Total Operating Revenue)

Table4.7: Operating Expenses Ratio (In Percentage)

Bank/year	2009/10	2010/11	2011/12	2011/12	2013/14	2014/15	2015/16	2016/17	Average	SD
NABIL	37.05	31.56	32.62	29.60	28.94	28.95	27.24	25.39	30.17	3.35
NIBL	45.43	42.28	35.66	32.44	31.20	30.33	30.22	26.09	34.21	6.15
SCBN	36.07	32.76	31.52	27.45	27.49	25.69	25.30	26.47	29.09	3.64
HBL	33.42	35.48	38.13	40.49	44.05	39.85	38.19	41.06	38.83	3.11
NSBI	47.91	37.34	31.57	32.21	32.49	35.62	41.75	42.84	37.72	5.55
NBBL	26.52	27.41	48.06	59.61	28.58	32.18	20.85	29.39	34.07	12.14
EBL	40.11	32.15	34.09	32.39	31.34	32.38	31.00	30.03	32.94	2.93
BOK	40.41	31.46	29.75	30.64	30.75	30.25	34.10	34.48	32.73	3.33
NCCBL	36.40	43.62	40.74	37.09	54.93	40.34	33.94	36.53	40.45	6.18
LBL	47.27	41.41	37.75	65.99	45.72	37.25	33.19	32.63	42.65	10.13
NIC	45.67	35.47	30.98	32.67	29.09	28.06	26.99	26.67	31.95	5.89
MBL	68.70	47.84	37.18	36.23	38.55	39.16	44.42	53.88	45.75	10.36

(Sources: www.nrb.org.np)

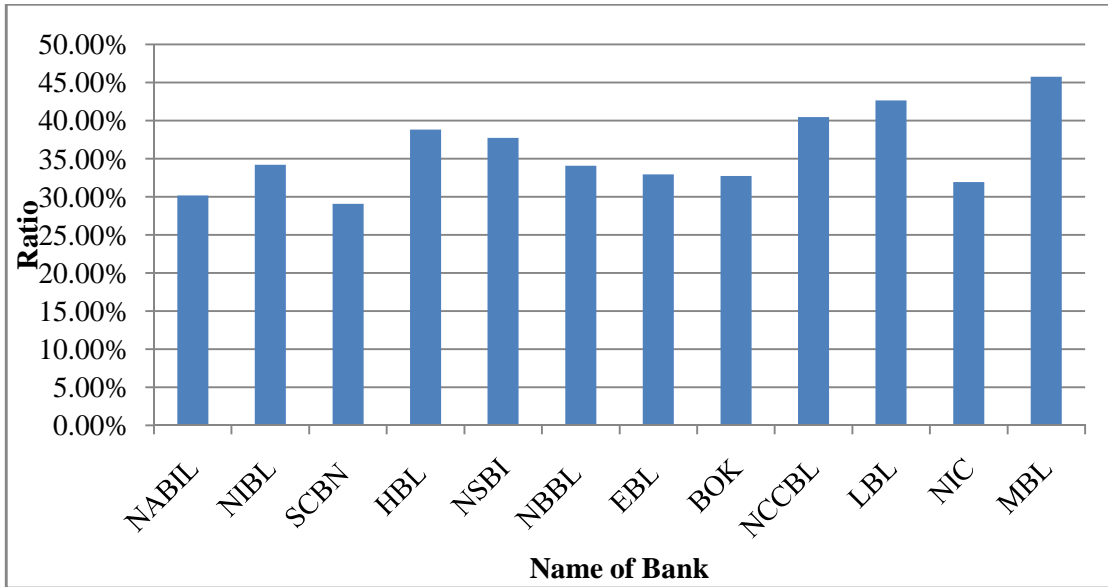


Figure 4.9: Average Operating Expenses Ratio

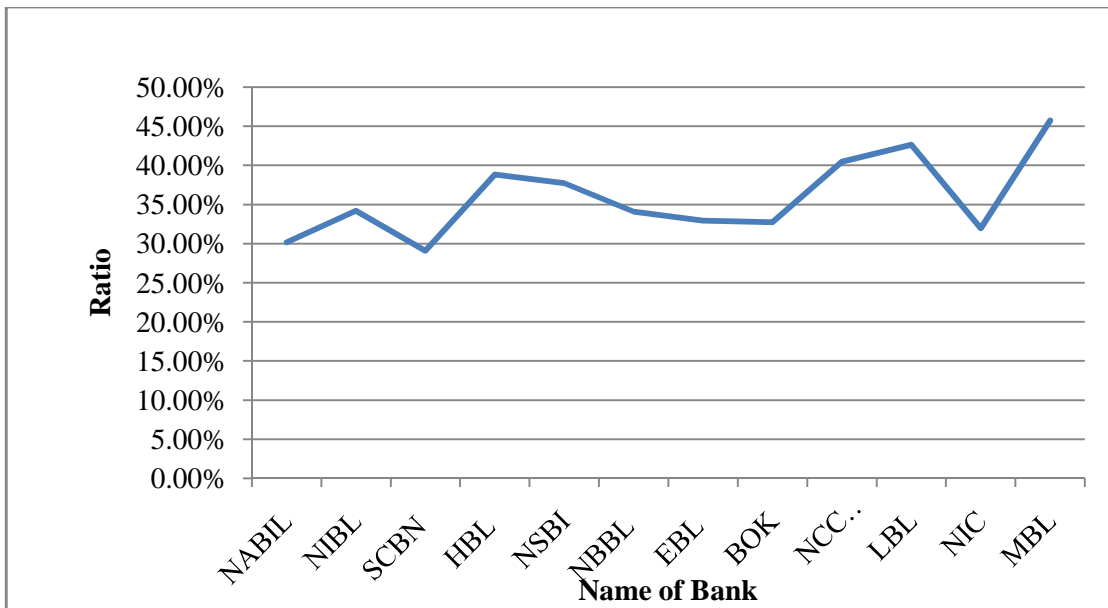


Figure 4.10: Average Operating Expenses Ratio

Now a days the business age is in cut-throat so for better performance of management is seen if management success to reduce operating and other costs for better target profit. The table shows that management of each sampled banks are succeed to maintain average 29.09% to 45.75% operating expenses ratio. Lower the ratio shows better the management quality. In this data Standard Chartered Bank has lower ratio i.e., better management quality and Machhapuchhre bank has some poor Management quality comparatively.

4.3.2 Earning per Employee (EPE) (Net Operating Income to Total No. of Employees)

Table 4.8 Earning per Employee (Rs. In ‘000’)

Bank/ year	2009/10	2010/11	2011/12	2011/12	2013/14	2014/15	2015/16	2016/17	Average	SD
NABIL	1720.84	1930.26	1318.61	2161.60	2429.99	2698.83	3109.32	3063.61	2304.13	598.78
NIBL	681.20	724.46	1032.75	1395.67	1415.39	1629.15	1711.30	2198.89	1348.60	484.08
SCBN	2823.15	3144.49	2815.30	2844.06	3113.87	3311.49	3842.11	3758.66	3206.64	381.39
HBL	1011.09	1019.80	1365.76	1219.42	1179.60	1527.12	1962.68	1003.87	1286.17	309.07
NSBI	247.42	488.52	516.39	968.33	1591.48	1418.98	1369.56	1226.43	978.39	470.69
NBBL	582.94	283.26	-1718.22	-4673.17	-2363.28	432.89	1935.43	1433.45	-510.84	2082.56
EBL	626.55	930.83	1081.04	1232.68	1241.66	1600.97	1822.00	2239.60	1346.92	483.99
BOK	686.83	1135.93	1330.19	1816.79	2162.11	1444.72	1433.36	1600.68	1451.33	412.32
NCCBL	406.63	25.61	47.89	-2511.15	-333.11	320.83	990.60	836.00	-27.09	1022.40
LBL	566.94	331.42	-1145.17	-5593.46	-468.95	403.49	1933.21	1998.42	-246.76	2254.33
NIC	368.14	767.92	1158.74	910.07	1341.75	1584.70	1800.30	2102.94	1254.32	534.39
MBL	226.79	610.35	937.20	984.22	400.91	126.99	190.51	-27.60	431.17	353.14

(Sources: www.nrb.org.np)

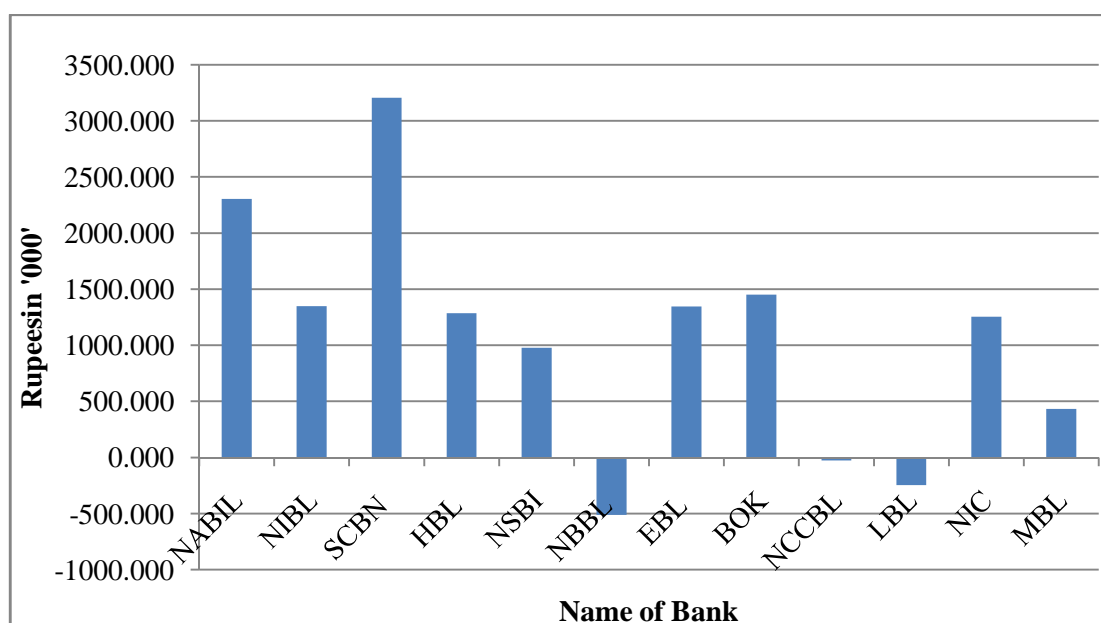


Figure 4.11: Average Earning per Employee

Performance of management also shows the how employee gives the performance. So Earning per Employee is also the indicator of management quality. In this table Standard Chartered Bank's Employees are Succeed to earn average 3206.641 thousand rupees per employee which is better management quality of SCBN but NB Bank in FY 3004/05 to 2013/14 has negative earning that is very poor management

quality and NCC Bank and Lumbini Bank has also negative earnings (loss) in FY 2011/12, 2013/14 and FY 2011/12, 2011/12, 2013/14 respectively.

4.4 Earning Performance

Earning capacity or profitability keeps up the sound health of financial institution. Chronically unprofitable financial institution risks insolvency on one hand and on the others, unusually high profitability can reflect excessive risk taking of financial institution. There are different indicators of profitability. Return on assets, return on equity, interest-spread ratio, earning-spread ratio, gross margin, operating profit margin and net profit margin are commonly used profitability indicators. NRB uses return on total assets as an indicator of profitability of a commercial bank. In addition, it uses the absolute measures such as interest income, net interest income, noninterest income, net non-interest income, non-operating income, net non-operating income and net profit, to evaluate the profitability of a commercial bank (NRB 2005). For this study purpose following three ratios is taken as a indicator of earning performance which data is presented in respective table and figure below.

- a. Return on Equity (ROE) (Net Income to Shareholders Equity)
- b. Return on Assets (ROA) (Net Income to Total Assets)
- c. Profit Margin (PM) (Net Income to Total Operating Revenue)

4.4.1 Return on Equity (ROE) (Net Income to Shareholders Equity)

Table 4.9 Return on Equity (In Percentage)

Bank/year	2009/10	2010/11	2011/12	2011/12	2013/14	2014/15	2015/16	2016/17	Average	SD
NABIL	25.16	22.56	25.69	27.50	26.26	25.97	29.53	26.67	26.17	1.99
NIBL	16.75	19.74	18.43	22.81	26.09	25.06	20.50	24.40	21.72	3.37
SCBN	29.09	28.19	26.38	29.22	28.14	27.31	29.05	26.24	27.95	1.20
HBL	19.85	19.95	19.84	22.82	21.60	22.91	22.94	14.02	20.49	2.96
NSBI	8.07	9.71	8.28	11.50	20.32	17.36	18.21	15.46	13.61	4.82
NBBL	10.45	0.40	-317.5	115.11	40.47	-27.24	193.79	47.87	7.92	149.23
EBL	15.37	21.10	21.54	22.02	23.35	21.88	26.24	27.40	22.36	3.64
BOK	13.64	18.29	17.39	21.57	23.24	26.29	25.38	22.63	21.05	4.31
NCCBL	103.78	1.82	-2.02	184.36	22.72	72.80	37.81	27.83	56.14	62.76
LBL	32.08	6.29	-80.31	111.63	-44.78	111.56	34.86	20.89	24.03	67.04
NIC	4.66	10.92	15.41	12.42	17.04	18.47	18.99	21.32	14.91	5.38
MBL	3.05	8.42%	13.31	14.30	7.62	7.25	7.25	4.13	8.17	3.94

(Sources: www.nrb.org.np)

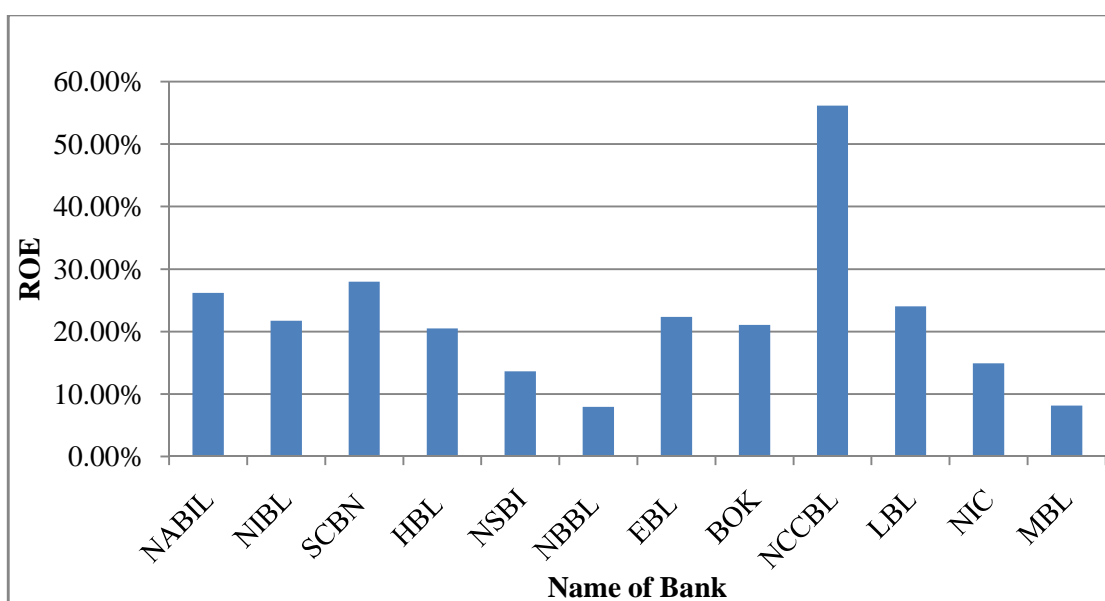


Figure 4.12 Average Returnson Equity

From above table ROE of these sampled banks are average 7.92% to 27.95% except NCC Bank limited. Among them NB Bank, NCC Bank and LUMBINI Bank have negative ROE in some year which is presented in above table beside these all banks have better ROE. Standard deviation of the ROE also lies between 1.2% to 5.38% beside these three bank lower the standard deviation shows the consistence in data so standard chartered bank have lowest standard deviation it indicate that it has consistency in its ROE. And NIC Bank have 5.38% of standard deviation which is greatest deviation among sampled bank we can also see each year ROE of that bank of study period that is 4.66% in 2009/10 and 21.32 % in FY 2016/17 but it also indicate that the bank is success to improve its performance.

4.4.2 Return on Assets (ROA) (Net Income to Total Assets)

Table 4.10 shows the ROA of sampled bank taken in this study. All above data shows the NB Bank, NCC Bank and Lumbini Bank have faced poor performance in some FY. Beside this all bank have positive ROA higher the ROA shows better the performance in this table average ROA of NABIL Bank is 3.06% which is better among these sampled bank and NB Bank in FY2011/12 to FY 2006/7 is in loss similarly NCC Bank also loss in FY 2011/12 to FY 2006/7 and Lumbini Bank is also

in loss in FY 2011/12 and FY 2011/12. So in average Nepalese commercial bank's performance in earning is satisfactory.

Table4.10: Return on Assets (In Percentage)

Bank/year	2009/10	2010/11	2011/12	2011/12	2013/14	2014/15	2015/16	2016/17	Average	SD
NABIL	2.51	2.72	3.02	6.23%	2.72	2.32	2.55%	2.37	3.06	1.22
NIBL	1.30	1.15	1.53	1.61	1.79	1.77%	1.68	2.19	1.63	0.30
SCBN	2.41	2.27	2.43	2.56	2.42	2.46	2.53	2.70	2.47	0.12
HBL	0.91	1.06	1.17	1.55	1.47	1.76%	1.91	1.19	1.38	0.33
NSBI	0.64	0.72	0.55	0.90	1.83	1.44	1.02	1.03	1.02	0.40
NBBL	0.60	0.02	-5.65	-15.35	-14.63	6.35	18.04	8.15	-0.31	10.69
EBL	1.17	1.49	1.41	1.49	1.40	0.02	1.73	2.09	1.60	0.30
BOK	1.10	1.34	1.42	1.65	1.80	2.04	2.25	2.18	1.72	0.39
NCCBL	1.69	0.05	-0.07	-7.72	-1.56	5.48	3.76	3.21	0.61	3.82
LBL	2.59	0.43	-4.38	-18.92	3.37	5.36	4.40	4.10	-0.38	7.58
NIC	0.64	1.15	1.52	1.08	1.36	1.81	1.88	2.30	1.47	0.49
MBL	0.64	1.35	1.31	1.48	0.69	0.68	0.70	0.35	0.90	0.39

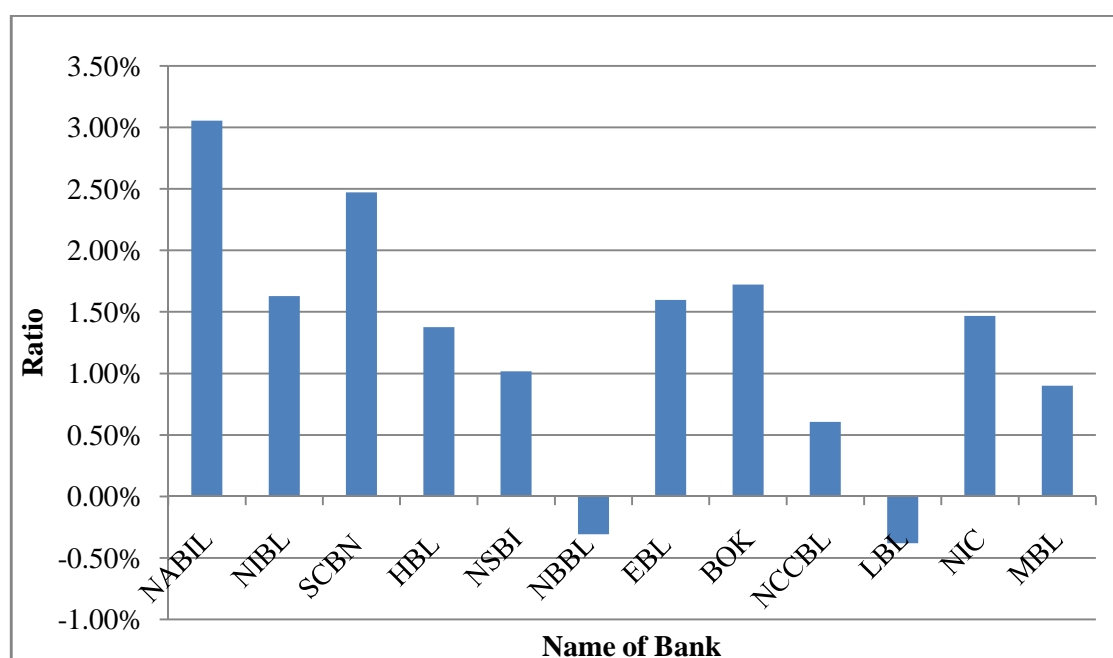


Figure 4.13: Average Returns on Assets

4.4.3 Profit Margin (PM) (Net Income to Total Operating Revenue)

Table 4.11: Profit Margin (In Percentage)

Bank/year	2009/10	2010/11	2011/12	2011/12	2013/14	2014/15	2015/16	2016/17	Average	SD
NABIL	40.93	43.33	43.40	46.73	45.53	44.69	46.42	41.19	44.03	2.07
NIBL	31.34	26.98	29.58	36.54	40.24	42.24	42.55	46.29	36.97	6.54
SCBN	41.62	42.52	41.94	46.45	44.39	46.16	49.00	47.26	44.92	2.54
HBL	23.85	25.67	27.19	32.83	35.30	39.80	37.87	23.58	30.76	6.07
NSBI	21.02	19.81	14.13	25.17	47.78	38.83	38.18	35.39	30.04	10.90
NBBL	11.07	0.38	-140.04	-411.12	-133.73	73.06	171.91	109.01	-39.93	173.44
EBL	28.85	30.75	30.70	35.84	35.23	37.29	41.34	43.14	35.39	4.82
BOK	23.50	30.03	27.13	35.11	38.75	41.89	41.42	37.93	34.47	6.40
NCCBL	39.36	1.47	-1.72	-179.09	-43.69	116.98	74.42	71.52	9.91	85.94
LBL	59.64	9.14	-84.93	-447.08	68.40	93.32	70.77	67.82	-20.36	169.71
NIC	14.01	29.29	38.89	30.68	38.57	44.49	44.09	46.76	35.85	10.16
MBL	20.41	35.89	35.24	37.54	18.77	17.00	19.99	10.52	24.42	9.60

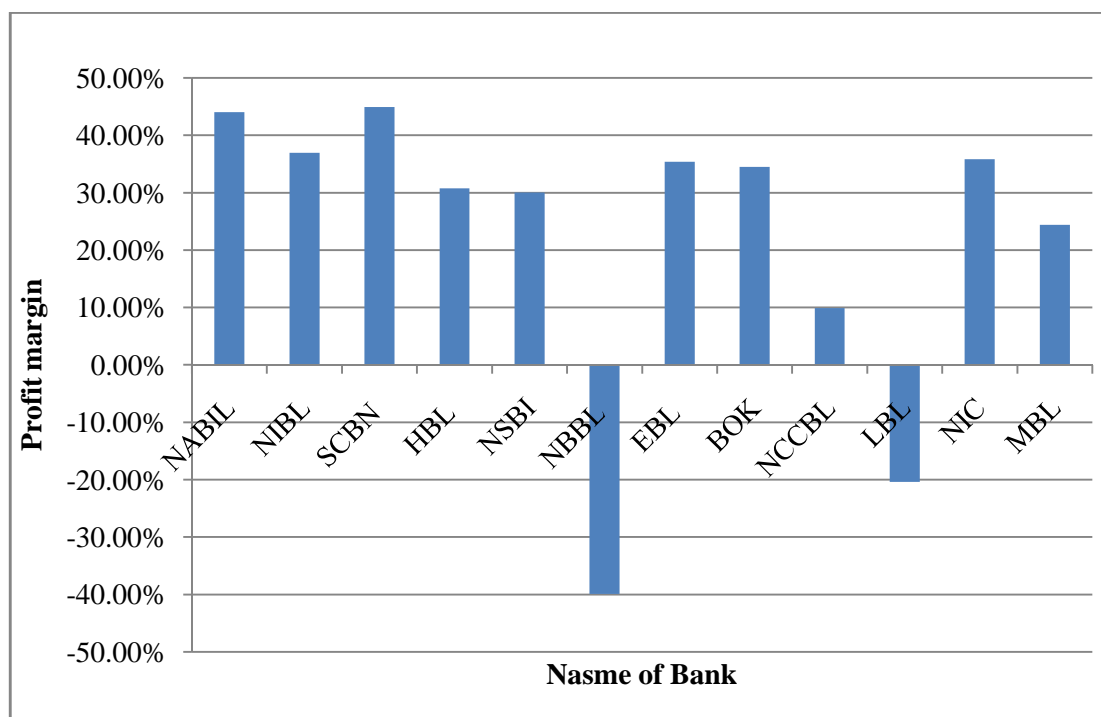


Figure 4.14: Average Profit Margin

Table 4.11 is related with profit margin and figure 4.11 is graphical presentation of these data which is indicator of earning performance. In this table average PM lies between 24.42% to 44.92% except NB Bank, NCC Bank and Lumbini Bank because these three banks are in loss in some FY. Higher the PM shows better the earning performance. Among these sampled banks Standard Chartered Bank has higher average PM i.e, 44.92% and NABIL Bank has also similar performance among these data Machhapuchhre Bank has 24.42% PM

4.5 Liquidity Position

Liquidity risk threatens the solvency of financial institutions. In the case of commercial banks, first type of liquidity risk arises when depositors of commercial banks seek to withdraw their money and the second type does when commitment holders want to exercise the commitments recorded off the balance sheet. Commercial banks have to borrow the additional funds or sell the assets at fire sale price to pay off the deposit liabilities. They become insolvent if sale price of the assets are not enough to meet the liability withdrawals. The second type of liquidity risk arises when demand for unexpected loans cannot be met due to the lack of the funds. Commercial banks can raise the funds by running down their cash assets, borrowing additional funds in the money markets and selling off other assets at distressed price. Both liability side liquidity risk (first type risk) and asset side liquidity risk (second type risk) affect the health of commercial banks adversely. But maintaining the high liquidity position to minimize such risks also adversely affects the profitability of financial institutions. Return on highly liquid assets is almost zero. Therefore, financial institutions should strike the tradeoff between liquidity position and profitability so that they could maintain their health sound. Commercial bank's liquidity exposure can be measured by analyzing the sources and uses of liquidity. In this approach, total net liquidity is worked out by deducting the total of uses of liquidity from the total of sources of liquidity. Similarly, BIS maturity laddering model can be used to measure the liquidity of a commercial banks. In addition, different liquidity exposure ratios such as borrowed funds to total assets, core deposit to total assets, loans to deposits, and commitments to lend to total assets are used to measure the liquidity position of a commercial bank (Saunders and Cornett 2004). NRB uses total loan to total deposit ratio, cash and equivalents to total assets ratio, cash and equivalents to total deposit ratio, NRB balance to total deposit ratio to measure the liquidity position of

commercial banks in the course of the performance evaluation of commercial banks (NRB 2005).

- a. Total Loan to Total Deposit Ratio (LDR)
- b. Cash and Equivalent to Total Asset Ratio (CETAR)
- c. Cash and Equivalent to Total Deposit (CETDR)
- d. Cash Balance with NRB to Total Deposit Ratio (CBNRBR)

4.5.1 Loan to Deposit Ratio (LDR) (Total Loan and advances to Total Deposit)

Table 4.12: Loan to Deposit Ratio (In Percentage)

Bank/year	2009/10	2010/11	2011/12	2011/12	2013/14	2014/15	2015/16	2016/17	Average	SD
NABIL	57.68	58.01	72.57	66.79	66.60	66.94	73.87	69.63	66.51	5.61
NIBL	72.86	61.87	71.04	67.50	70.59	78.36	77.61	80.48	72.54	5.79
SCBN	30.37	31.63	43.55	38.75	42.61	46.12	38.14	45.35	39.57	5.61
HBL	47.61	54.30	50.14	55.27	56.57	61.23	71.49	74.39	58.88	9.00
NSBI	68.51	71.46	71.80	69.32	82.66	88.32	54.12	50.09	69.54	11.99
NBBL	68.50	67.53	64.23	49.64	46.60	50.15	67.06	77.69	61.42	10.47
EBL	73.32	72.97	75.45	71.01	75.13	76.49	71.68	74.61	73.83	1.79
BOK	73.62	72.94	66.12	69.23	75.87	78.71	81.00	82.03	74.94	5.22
NCCBL	69.80	71.34	81.73	70.14	57.04	60.35	75.14	73.86	69.92	7.43
LBL	82.49	78.90	78.58	62.34	63.75	78.71	77.32	88.55	76.33	8.36
NIC	76.95	69.20	75.49	75.93	88.81	86.09	87.80	79.73	80.00	6.51
MBL	82.31	90.51	90.60	76.88	75.25	77.84	80.25	77.09	81.34	5.69

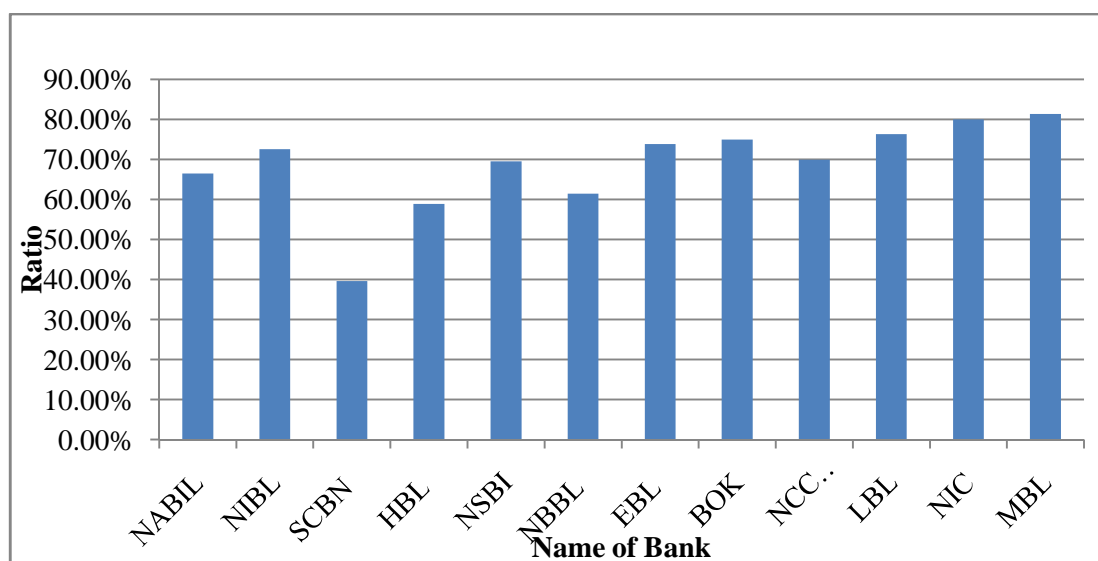


Figure 4.15: Average Loan To Deposit Ratio

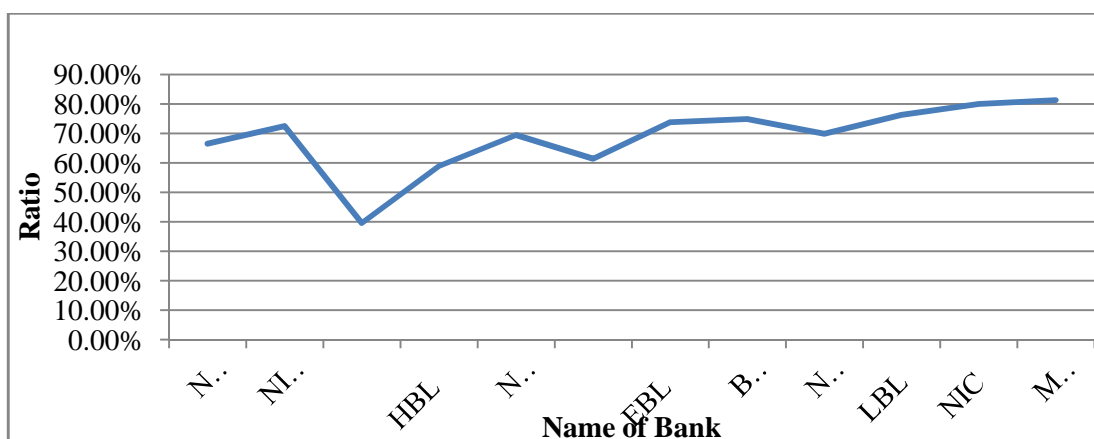


Figure 4.16: Average Loan To Deposit Ratio

Table 4.12 is related with Loan to Deposit Ratio which shows the liquidity position of the firms. We can see that average LDR lies in between 39.57% to 81.34%. Among above sampled bank of this study the highest LDR is 81.34% of Machapuchhre Bank and the lowest LDR is 39.57% of Standard chartered Bank. In this study the standard deviation of average LDR of Everest Bank Limited is 1.79% which is minimum standard deviation of these study sample and 11.99% of standard deviation of LDR of Nepal SBI Bank is highest among these sampled Bank. Average LDR of these banks is also presented in Figure 4.12.

4.5.2 Cash and Equivalent to Total Asset Ratio (CETAR)

Table 4.13: Cash and Equivalent to Total Asset Ratio (In Percentage)

Bank/year	2009/10	2010/11	2011/12	2011/12	2013/14	2014/15	2015/16	2016/17	Average	SD
NABIL	10.96	11.28	8.31	10.59	7.20	12.45	8.95	8.68	9.80	1.66
NIBL	10.72	11.59	9.10	11.28	10.16	9.66	14.94	11.89	11.17	1.68
SCBN	15.10	17.94	15.20	12.62	13.23	12.74	12.79	8.95	13.57	2.44
HBL	9.12	9.57	8.81	9.24	10.34	5.44	10.73	9.77	9.13	1.52
NSBI	17.62	10.24	8.19	11.36	10.59	9.58	6.16	9.04	10.35	3.13
NBBL	8.38	10.07	10.56	14.73	16.74	20.49	21.50	16.43	14.86	4.54
EBL	14.15	8.53	13.74	10.15	11.16	11.10	16.70	18.89	13.05	3.27
BOK	9.71	11.11	10.85	10.77	10.80	8.54	11.83	11.67	10.66	1.00
NCCBL	16.21	15.39	9.49	12.52	13.81	19.81	12.97	17.99	14.77	3.07
LBL	11.15	12.86	9.32	10.62	13.96	11.55	19.03	13.20	12.71	2.77
NIC	8.62	7.57	14.59	10.62	6.53	8.87	7.79	10.76	9.42	2.38
MBL	17.57	16.26	11.56	16.90	18.30	13.27	15.82	15.09	15.60	2.10

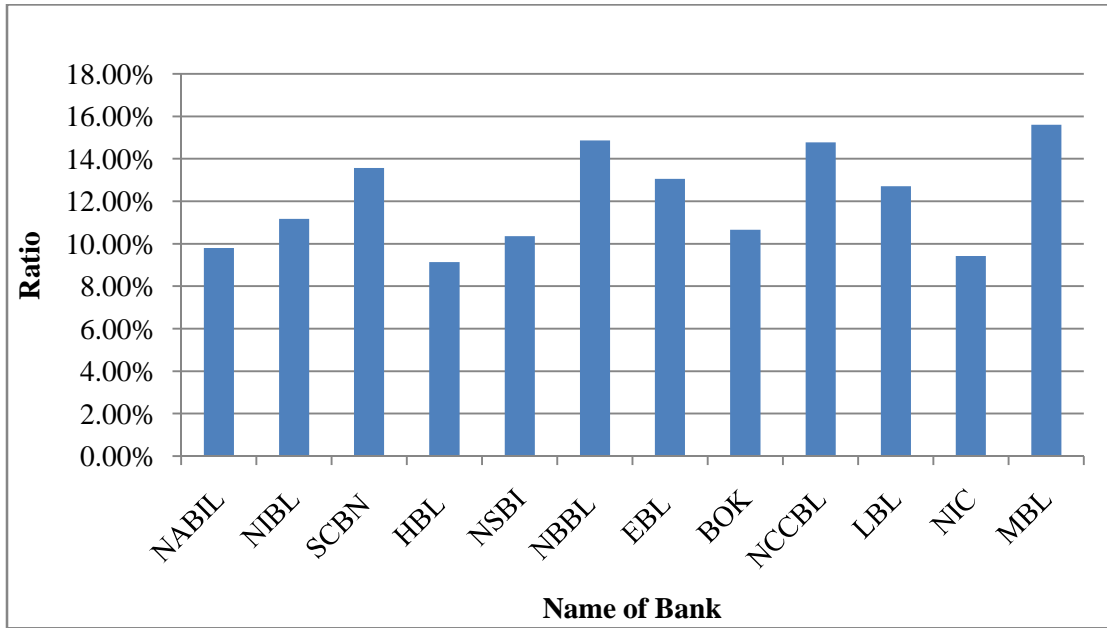


Figure 4.17: Average Cash and Equivalent to Total Assets Ratio

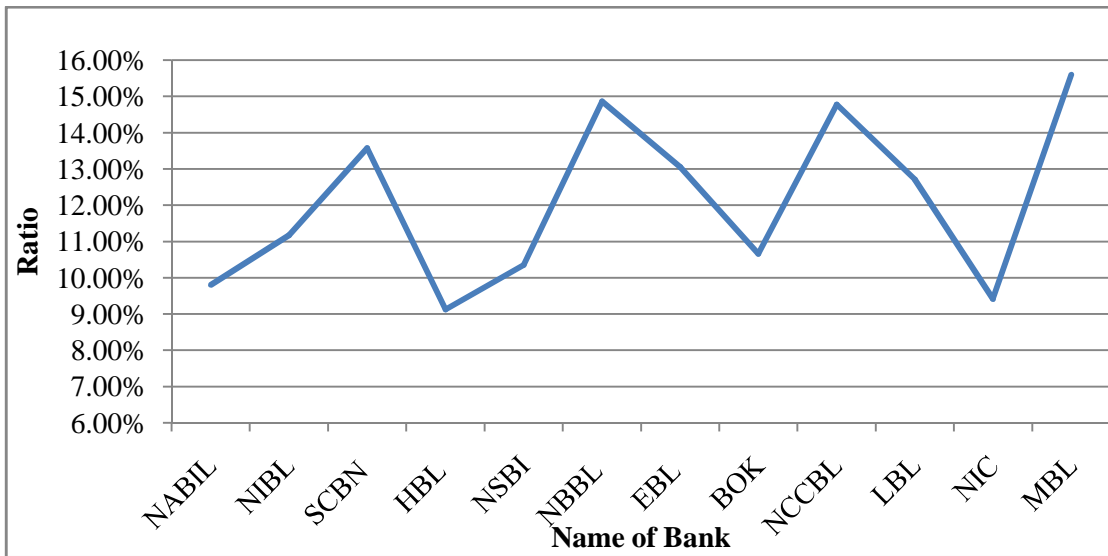


Figure 4.18: Average Cash and Equivalent to Total Assets Ratio

Table 4.13 is concerned with Cash and Equivalent to Total Asset Ratio (CETAR). It is an indication of liquidity position of the firm. In this table average CETAR is lies in between 9.13% to 15.60%, the Himalayan Bank Limited has 9.13% of average CETAR which is lowest value of the sampled study and Machapuchhre Bank limited has average 15.60% of CETAR which is biggest value among studied bank. In this calculate average CETAR the heist deviation is 4.54% which is concerned with

NBBank Limited and BOK has 1% of standard deviation which is lowest value among these banks.

4.5.3 Cash and Equivalent to Total Deposit (CETDR)

Table4.14: Cash and Equivalent to Total Deposit (In Percentage)

Bank/year	2009/10	2010/11	2011/12	2011/12	2013/14	2014/15	2015/16	2016/17	Average	SD
NABIL	13.50	13.38	9.79	12.22	8.41	14.49	10.51	9.75	11.51	2.05
NIBL	12.20	13.34	10.39	12.71	11.45	10.90	16.96	13.61	12.69	1.93
SCBN	16.90	20.04	17.43	14.11	15.35	14.28	14.48	10.23	15.35	2.70
HBL	10.14	10.77	9.90	10.28	11.54	6.18	12.17	11.10	10.26	1.70
NSBI	20.44	12.01	9.78	13.46	12.87	12.01	6.81	9.86	12.16	3.72
NBBL	9.45	11.22	11.56	13.25	12.83	17.68	25.73	20.48	15.27	5.20
EBL	17.02	10.16	16.04	11.74	13.15	12.57	18.50	21.17	15.04	3.52
BOK	11.72	13.63	11.96	12.62	12.71	9.56	13.41	13.44	12.38	1.25
NCCBL	18.24	17.12	10.72	12.16	12.83	22.30	15.05	21.21	16.20	3.97
LBL	12.96	14.85	10.39	9.45	13.22	12.45	22.29	16.96	14.07	3.81
NIC	11.07	8.72	17.55	12.58	7.58	10.34	9.38	13.69	11.36	2.99
MBL	23.71	20.36	13.36	19.41	20.88	14.94	17.74	16.84	18.40	3.15

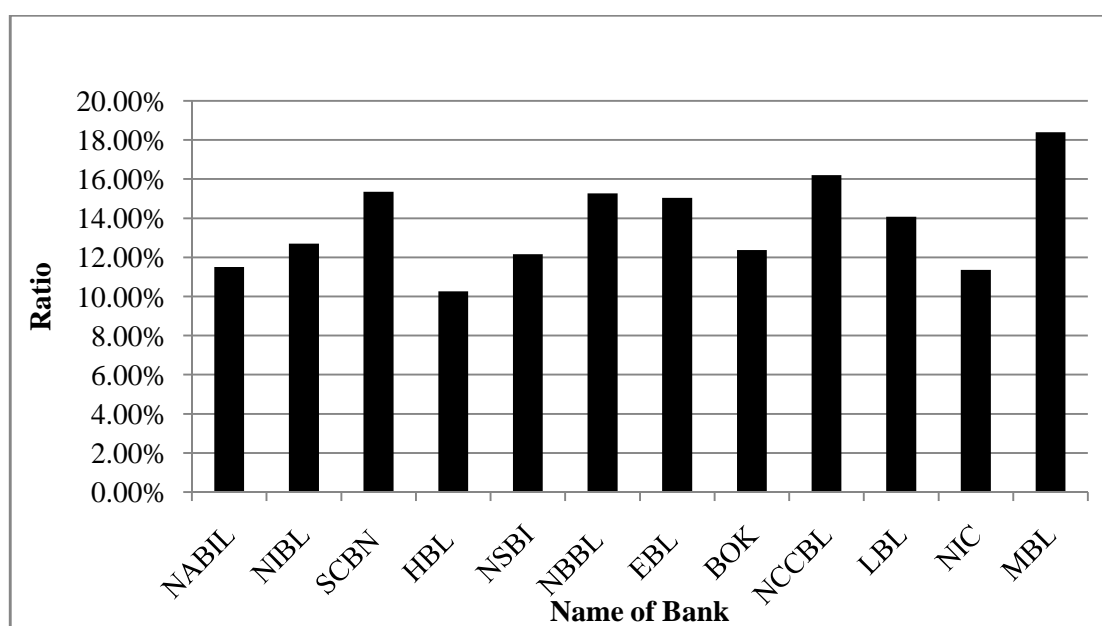


Figure 4.19: Average Cash & equivalent to Total Deposit

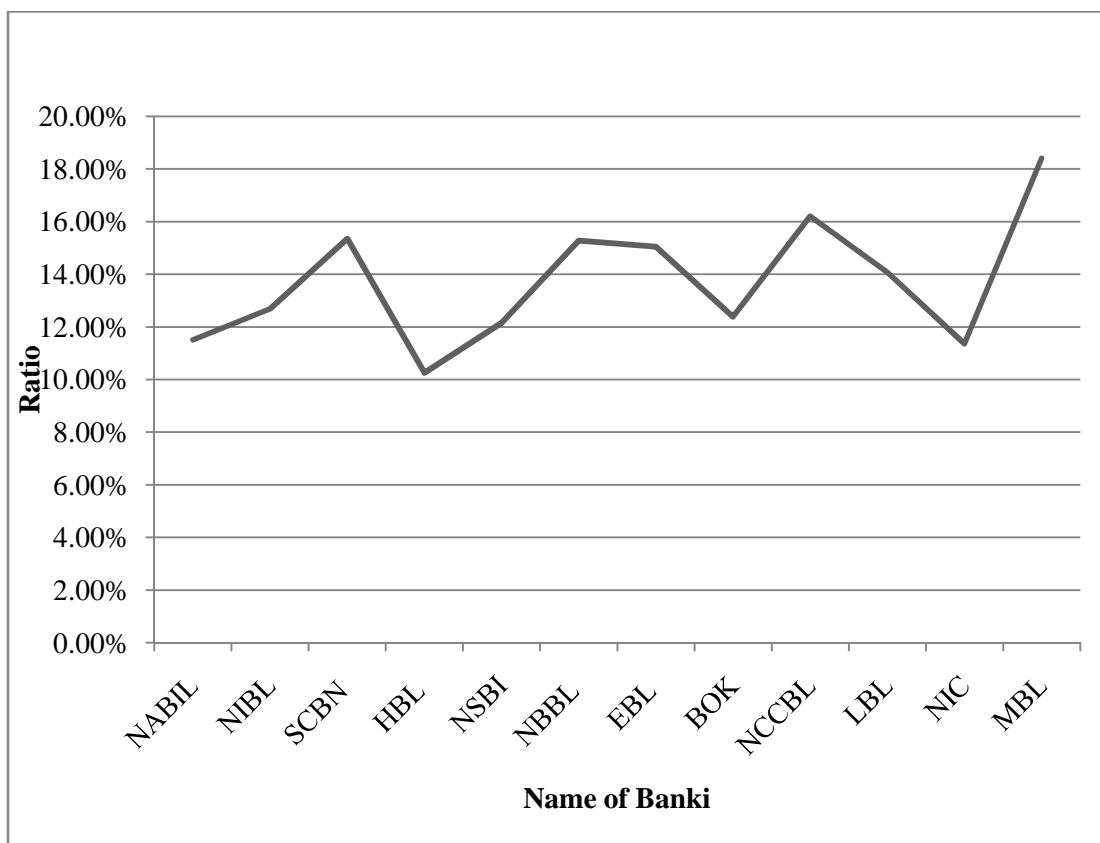


Figure 4.20: Average Cash & equivalent to Total Deposit

Cash and equivalent to total deposit ratio (CETDR) is presented in table 4.14. In this table in this table average CETDR is lies between 10.26% to 18.40%. Himalayan Bank Limited has average 10.26% CETDR which is lowest value among these sampled banks and Machapuchhre bank has average 18.40% of CETDR which is heist value among these sampled banks. Standard deviation of these average values is also presented in table 4.14 from this we find that average CETDR of BOK has 1.25% of standard deviation which is lowest value and average CETDR of NCC Bank Limited has 3.97% of standard deviation which is heist value among these sampled Banks.

4.5.4 Cash Balance with NRB to Total Deposit Ratio (CBNRBR)

Table 4.15: Cash Balance with NRB to Total Deposit Ratio (In Percentage)

Bank/year	2009/10	2010/11	2011/12	2011/12	2013/14	2014/15	2015/16	2016/17	Average	SD
NABIL	6.64	4.30	2.67	1.65	4.77	5.73	7.09	1.19	4.25	2.09
NIBL	5.69	4.73	5.47	8.06	5.64	5.28	9.45	6.46	6.35	1.50
SCBN	6.08	7.25	3.58	3.25	6.55	4.26	5.16	2.33	4.81	1.62
HBL	5.49	7.39	6.46	4.14	4.23	2.94	6.71	6.93	5.54	1.50
NSBI	13.71	8.06	4.51	5.69	4.86	2.94	1.59	5.28	5.83	3.47
NBBL	0.77	1.99	2.53	1.40	1.67	2.80	2.42	2.12	1.96	0.62
EBL	10.91	5.48	7.72	8.26	6.48	4.51	14.37	15.23	9.12	3.75
BOK	5.87	5.81	4.67	3.33	7.13	3.83	7.32	3.38	5.17	1.50
NCCBL	8.46	9.19	6.65	7.22	3.93	10.42	8.56%	13.70	8.52	2.67
LBL	6.27	8.60	6.64	3.73	4.66	7.21	11.64	9.73	7.31	2.44
NIC	5.57	3.99	13.42	5.20	2.61	4.85	6.23	3.69	5.69	3.11
MBL	5.00	4.96	8.29	6.20	8.29	8.05	11.26	5.91	7.24	2.00

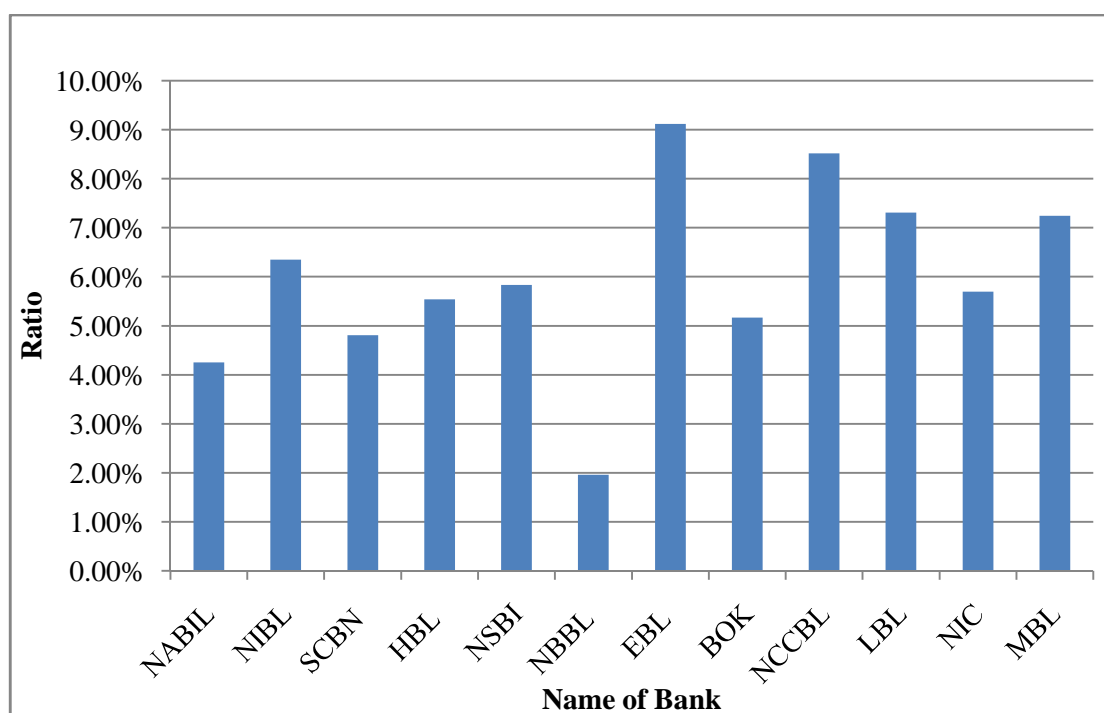


Figure 4.21: Average Cash Balance With NRB to Total Deposit Ratio

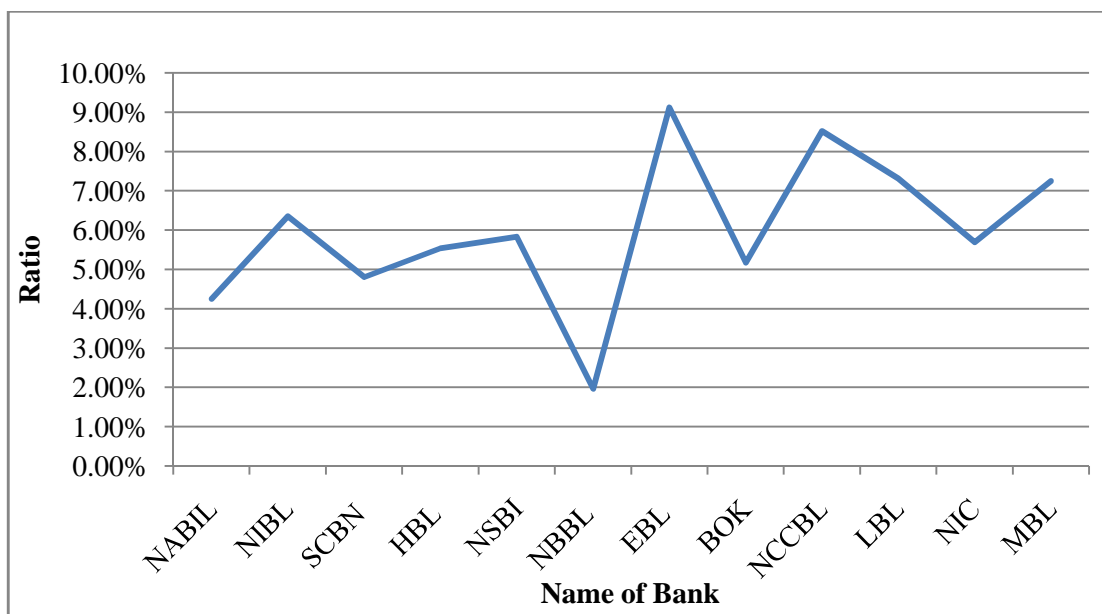


Figure4.22: Average Cash Balance With NRB to Total Deposit Ratio

Cash Balance with NRB to Total Deposit Ratio (CBNRBR) is presented in table 4.15 which is the indicator of liquidity position. Average CBNRBR is lies between 1.96% to 9.12%. Everest Bank Limited has average 9.12 % of CBNRBR which is heist value among these sampled banks. And Nepal Bangladesh Bank Limited has average 1.96% of CBNRBR which is lowest value among these sampled banks. Standard deviation of these average is also calculated in table 4.15 the lowest standard deviation of these average is 0.62% which is related with Nepal Bangladesh Bank limited and heist standard deviation is 3.75% which is concerned with average CBNRBR of Everest Bank Limited.

4.6 Major Findings of the Study

Based on the analysis of data, following major findings have been drawn:

1. According to the 1993 Basel Accord Core Capital must equal to or exceed 4% of the risk weighted assets of the commercial Bank. The table 4.1 shows that all sampled banks have adequacy capital except NB Bank Limited in year 2011/12, 2013/14 & 2014/15 similarly NCC Bank and Lumbini Bank in year 2011/12 & 2013/14.
2. Leverage ratio can be used to measure the capital adequacy of a bank. This is the ratio of bank's book value of core capital to the book value of its assets the higher ratio shows the higher level of capital adequacy. The USA Federal

Deposit Insurance Corporation Improvement Act (FDICIA) of 1991 has fixed the five target zones:

3. The leverage ratio falling in the first zone implies that bank is well capitalized. Similarly, the leverage falling in the second zone shows that bank is adequately capitalized. The leverage falling in the last three zones indicates that bank is inadequately capitalized and regulators should take prompt corrective action to bring the capital to the desirable level (Saunders and Cornett 2004). Above Table shows that all sampled banks are well capitalized except NB Bank Limited in Year 2011/12, 2013/14 & 2014/15 similarly NCC Bank Limited and Lumbini Bank Limited in Year 2011/12 & 2013/14. This tabulated data also Presented in Bar Chart which is in Table 4.2.
4. Total capital must equal or exceed 8 percent of risk weighted assets (Saunders and Cornett 2004). NRB initially fixed the core capital at the level of 4.5 percent of the risk weighted assets and total capital at the level of 9 percent of risk weighted assets of the commercial banks (NRB 2058). In this table we see that all sampled banks are success to mention the level except three banks NB Bank Limited in FY 2010/11 to 2015/16, NCC Bank Limited in FY 2009/10 to 2013/14 and Lumbini Bank Limited in FY 2011/12 to 2014/15. This Data also presented in Bar Chart in Figure 4.3.
5. The amount of the supplementary capital should not exceed the amount of the core capital. In this table all sampled banks have mention the satisfactory level of supplementary capital but NB Bank has not any Supplementary capital level in FY 2011/12, 2013/14 and 2014/15 and Lumbini Bank limited has Negative ratio in FY 2014/15 and zero level in FY 2011/12 & FY 2013/14. Similarly NCC Bank has also Zero Level of this Ratio in FY 2013/14. This data also presented below in Figure 4.4.
6. NRB uses composition of assets, nonperforming loan to total loan ratio, net nonperforming loan to total loan ratio as the indicators of the quality of assets of commercial banks (NRB 2005). NRB has directed the commercial banks in regards to the concentration of the loan. Any licensed financial institutions can grant the fund base loan to a single borrower or borrowers related to the same business group up to the 25 percent of its primary capital in the same vein, it can provide the non-fund base loan up to 50 percent of its core capital (NRB

2005). Similarly, it has directed FIs to classify the loans into performing loan and nonperforming loans. The loans that are not due and 3 months past due fall in the class of performing loans/performing assets and others do in the non-performing loans. Further, non-performing loans are classified into three groups: substandard, doubtful, and bad Debt/loss (for detail classification see NRB directive 2/061/62).

7. Commercial banks have to make 1 percent provision for pass loan/performing loan, 25 percent for substandard loan, 50 percent for doubtful loan and 100 percent for bad loan (NRB 2005). Non-performing assets in the total assets of commercial banks was 22.77 percent in the FY 2010/11. But the percentage of non-performing assets of an individual commercial bank varies from 0.76 percent to 57.64 in the same fiscal year. But the normal international standard of the percentage of non-performing assets is 5-8 percent of the total assets. In above table we can see that average nonperforming assets ratio is 16 % to 38 % . which is in satisfactory level.
8. In the table 4.6 shows the loan loss reserve ratio beside other sampled bank Nepal Bangladesh Bank, NCC Bank and Lumbini Bank has grater ratio which indicate poor performance because it shows the higher loan loss. Because Commercial banks have to make 1 percent provision for pass loan/performing loan, 25 percent for substandard loan, 50 percent for doubtful loan and 100 percent for bad loan (NRB 2005). Non-performing assets in the total assets of commercial banks was 22.77 percent in the FY 2010/11. But the percentage of non-performing assets of an individual commercial bank varies from 0.76 percent to 57.64 in the same fiscal year. But the normal international standard of the percentage of non-performing assets is 5-8 percent of the total assets. So higher ratio shows the poor performance or poor quality of assets.
9. Now a days the business age is in cut-throat so for better performance of management is seen if management success to reduce operating and other costs for better target profit. The table shows that management of each sampled banks are succeed to maintain average 29.09% to 45.75% operating expenses ratio. Lower the ratio shows better the management quality. In this data Standard Chartered Bank has lower ratio ie, better management quality and Machhapuchhre bank has some poor Management quality comparatively.

10. Performance of management also shows the how employee gives the performance. So Earning per Employee is also the indicator of management quality. In this table Standard Chartered Bank's Employees are Succeed to earn average 3206.641 thousand rupees per employee which is better management quality of SCBN but NB Bank in FY 3004/05 to 2013/14 has negative earning that is very poor management quality and NCC Bank and Lumbini Bank has also negative earnings (loss) in FY 2011/12, 2013/14 and FY 2011/12, 2011/12, 2013/14 respectively.
11. From table 4.9 ROE of these sampled banks are average 7.92% to 27.95% except NCC Bank limited. Among them NB Bank, NCC Bank and LUMBINI Bank have negative ROE in some year which is presented in above table beside these all banks have better ROE. Standard deviation of the ROE also lies between 1.2% to 5.38% beside these three bank lower the standard deviation shows the consistence in data so standard chartered bank have lowest standard deviation it indicate that it has consistency in its ROE. And NIC Bank have 5.38% of standard deviation which is greatest deviation among sampled bank we can also see each year ROE of that bank of study period that is 4.66% in 2009/10 and 21.32 % in FY 2016/17 but it also indicate that the bank is success to improve its performance.
12. The table 4.10 shows the ROA of sampled bank taken in this study. All above data shows the NB Bank, NCC Bank and Lumbini Bank have faced poor performance in some FY. Beside this all bank have positive ROA higher the ROA shows better the performance in this table average ROA of NABIL Bank is 3.06% which is better among these sampled bank and NB Bank in FY 2011/12 to FY 20016/17 is in loss similarly NCC Bank also loss in FY 2011/12 to FY 2006/7 and Lumbini Bank is also in loss in FY 2011/12 and FY 2011/12. So in average Nepalese commercial bank's performance in earning is satisfactory.
13. Table 4.11 is related with profit margin and figure 4.11 is graphical presentation of these data which is indicator of earning performance. In this table average PM lies between 24.42% to 44.92% except NB Bank, NCC Bank and Lumbini Bank because these three banks are in loss in some FY. Higher the PM shows better the earning performance. Among these sampled

banks Standard Chartered Bank has higher average PM ie, 44.92% and NABIL Bank has also similar performance among these data Machhapuchhre Bank has 24.42% PM

14. The table 4.12 is related with Loan to Deposit Ratio which shows the liquidity position of the firms. From this table we can see that average LDR is lies between 39.57% to 81.34%. Among above sampled bank of this study the highest LDR is 81.34% of Machapuchhre Bank and the lowest LDR is 39.57 of Standard chartered Bank. In this study the standard deviation of average LDR of Everest Bank Limited is 1.79% which is minimum standard deviation of these study sample and 11.99% of standard deviation of LDR of Nepal SBI Bank is highest among these sampled Bank. Average LDR of these sampled banks is also presented in figure 4.12.
15. The table 4.13 is concerned with Cash and Equivalent to Total Asset Ratio (CETAR). It is an indication of liquidity position of the firm. In this table average CETAR is lies between 9.13% to 15.60% the Himalayan Bank Limited has 9.13% of average CETAR which is lowest value of the sampled study and Machapuchhre Bank limited has average 15.60% of CETAR which is biggest value among studied bank. In this calculate average CETAR the heist deviation is 4.54% which is concerned with Nepal Bangladesh Bank Limited and Bank of Kathmandu has 1% of standard deviation which is lowest value among these sampled banks
16. Cash and equivalent to total deposit ratio (CETDR) is presented in table 4.14. In this table in this table average CETDR is lies between 10.26% to 18.40%. Himalayan Bank Limited has average 10.26% CETDR which is lowest value among these sampled banks and Machapuchhre bank has average 18.40% of CETDR which is heist value among these sampled banks. Standard deviation of these average values is also presented in table 4.14 from this we find that average CETDR of BOK has 1.25% of standard deviation which is lowest value and average CETDR of NCC Bank Limited has 3.97% of standard deviation which is heist value among these sampled Banks.
17. Cash Balance with NRB to Total Deposit Ratio (CBNRBR) is presented in table 4.15 which is the indicator of liquidity position. Average CBNRBR is lies between 1.96% to 9.12%. Everest Bank Limited has average 9.12 % of

CBNRBR which is heist value among these sampled banks. And Nepal Bangladesh Bank Limited has average 1.96% of CBNRBR which is lowest value among these sampled banks. Standard deviation of these average is also calculated in table 4.15 the lowest standard deviation of these average is 0.62% which is related with Nepal Bangladesh Bank limited and heist standard deviation is 3.75% which is concerned with average CBNRBR of Everest Bank Limited.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter is the important for the research because this chapter is the extract of all the previously discussed chapters. This chapter consists of mainly three parts: summary, conclusion and recommendations. In summary part, revision or summary of all four chapters is made. In conclusion part, the result from the research is summed up and in recommendation is made based on the result and experience of thesis. Recommendation is made for improving the present situation to the concerned parties as well as further research.

5.1 Summary

The research study is focused on assessing the financial performance of Nepal commercial banks in the framework of CAMEL, by using descriptive research design, prescribed by Uniform Financial Institutions Rating System (UFIRS) and in accordance to BASEL accord. The study focuses the financial performance of NIBL as regard to its capital adequacy, level and trend of risk weighted assets, assets composition and quality of loan assets, management of revenues and expenses, level and trend of earnings, liquidity position and sensitivity to interest rate risk. The bank's audited annual reports of condition for the period FY 2010 to FY 2017 are the secondary source of information and treated as authentic. As CAMELS was little been researched in Nepal. This research would be beneficial to minimize the risk.

During the research work, extensive review of various literature books, past thesis, journals have been studied and consulted. The whole study has been organized into five major chapters. Chapter one deals with introduction which covers background of the study, statement of the problem, objectives of the Study, limitations of the Study and structure of the study. Second chapter deals with different theoretical and empirical reviews which consists of theories, article, books and relevant thesis related to financial analysis. Similarly, third chapter is concern with research question, research design, sources of data, population and sampling, data collection procedures and data analysis procedures. In data analysis there are two parts. One is financial analysis where different CAMEL analysis concern with financial performance is study. Another is statistical analysis where different statistical tools like trend line analysis, correlation analysis and simple regression analysis are mention. Likewise, chapter four presents CAMEL analysis to analyze Capital

adequacy analysis, Assets quality analysis, Management Capability Analysis, Earning Analysis and Liquidity Analysis. Statistical analysis and interpretations of data where study analyze the trend analysis, correlation analysis between different variable terms like total deposit, investment, net profit and loan advances. Finally, summary of whole chapter and different results find in data analysis and recommendation to bank for nation development are included in fifth chapter.

Data relating to activities of the banks have been collected and presented in figures and tabular as far as possible and tried to be interpreted in the study represent in logical ways. Data are analyzed applying CAMEL and statistical tools and finding of the study have been listed in a systematic manner.

5.2 Conclusions

This study reveals that in Capital Adequacy analysis core capital ratio of SCBN is stronger than other similarly MBL, NIC, NSBI & NABIL has also strong position but NBBL has negative core capital ratio in average of the study period. Similarly Leverage Ratio also of MBL has strong and beside NBBL which have negative leverage ratio other bank have not weak position. Total capital ratio and supplementary capital ratio of these sampled banks also not bad beside NBBL. In assets quality all sampled bank have not poor nonperforming assets ratio although Loan loss reserve ratio of NBBL is very high that shows poor assets quality. In management efficiency OER is satisfactory but EPE of NBBL, NCCBL, LBL is Negative in average which shows poor management efficiency. In earning performance NBBL, NCCBL, LBL are in poor position but other sampled banks are in good position. In Liquidity Position all sampled banks are in good position they have some variance. at the end of the conclusion position of Nepalese commercial bank has better performance though there is seen some problem in NBBL, NCCBL and LBL but it has been solved now by NRB which is regulatory body of Nepalese commercial Bank.

5.3 Recommendations

Based on the analysis, interpretation & conclusions, some of the major recommendations are mentioned as bellow:

-)] While lending loans and advances, banks should keep in account that the fund they are going to lend is collected from public and hence should be carefully treated on behalf of the depositors to protect their interest.
-)] The existing capital adequacy directives issued by Central bank of Nepal (Nepal Rastra Bank) had been prepared considering only credit risk. So, it is recommended that Nepal Rastra Bank should issue new directives on capital adequacy which can cover other risk in banking sectors such as operational risk, market risk, liquidity risk, reputational risk, strategic risk etc. For this purpose, new Basle capital Accord 2005 (revised) should be implemented with customization as per Nepalese requirements in Nepal in the context of liberalized economy after WTO membership of Nepal, new international branches will be established in Nepal after 2010 A.D.
-)] For the preparation and successful implementation of new capital adequacy framework, concerned authorities should initiate following activities. :
 - a. Capacity Building in financial sector:
 -)] by developing supervisory and regulatory activities,
 -)] Home/Host Supervisions,
 -)] Cross Boarder Supervision
 - b. Developing financial infrastructure:
 -)] By establishing Credit Rating Agency and Asset Management Company.
 -)] By issuing prudential rules and regulations on securities firms
 - c. Developing Management Information System and risk management practices
 -)] By improving portfolio management skills in banking sectors
 -)] By improving traditional risk management/manual banking practices
 -)] By solving the problem with huge negative net worth problem
 -)] By strengthening corporate governance in banking sectors

BIBLIOGRAPHY

- Acharya, S.P. (2003). *Modern Banking, Role of Central Bank and the Nepalese Context*. Kathmandu: Nepal Rastra Bank, Bankers's Training Centre.
- Ahmad, N. (2014). *Credit Appraisal Techniques*. International Journal of Research in.
- Asian Development Bank. (2000). *Asian Development Bank Outlook 2000*. New York: Additional Book by Oxford University Press.
- Baral, D. (2015). *A study of Non- performing Loans of Nepalese Commercial Banks*. Kathmandu: An Unpublished Master Degree Thesis Submitted to Office of the Dean Faculty of Management T. U.
- Besis, J. (1998). *Risk Management in Banking*. Chichester: John Wiley and Sons Ltd.
- Bhandari, D.R (2003). *Banking and Insurance: Principle and Practice*. Kathmandu: Aayush Publication.
- Bhandari, K.R. (2016). *The Financial Performance of Himalayan Bank Ltd. in the Framework of CAMEL*. An Unpublished Master Degree Thesis submitted to Faculty of Management, T.U.
- Bhusal, M. (2014). *Financial Performance Analysis of commercial banks In Nepal the Frame work of CAMEL (A Comparative Study of Kumari Bank and Machhapuchhre Bank)*. An Unpublished Master Degree Thesis submitted to Faculty of Management, T.U.
- Dahal, S. & Dahal, B. (2002). *A Handbook of Banking*. Kathmandu: Ashmita Publication.
- Desta, T.S (2016). *Financial Performance of “The Best of African Banks”* ... Journal of Accounting and Management,
- Graham Banock and William Manser (1995). *International Dictionary of Finance*. England : Clays Ltd.
- Grewal, T. S. (1974). *Management Accounting*. New Delhi: Sultan Chand and Sons.
- Gurung, A. (2017). *Financial Performance Analysis of Domestic Private Commercial Banks in Nepal in the framework of CAMEL*. An Unpublished Master’s Thesis, Central Department of Management, Tribhuvan University.
- Hennie, V.G. and Sonja, B.B. (2000). *Analyzing Banking Risk*. New York: The World Bank.

- Koirala, D. (2017). *Diagnosis of Financial Health of Nepal Investment Bank Ltd. in the Framework of CAMELS*. An Unpublished Master's Thesis, Center Department of Management, Tribhuvan University.
- Kothari, C R, (1990). *Research Methodology, Methods and Techniques*. New Delhi: Whilley Eastern Ltd.
- Lamsal M. (2016). *NRB Directive: Bankers Plea for Lighter Structure*. Kathmandu: New Business Age.
- Mahat, R.S. (1987). *Capital Market, Financial Flows and Industrial Finance in Nepal*. Lalitpur: Sajha Prakashan.
- Nepal Government, (1997). *Company Act 2053*. Kathmandu: GON.
- Nepal Rastra Bank (2006). *A glimpse of Nepal's Macroeconomic situation 2006, on the occasion of the 35th Meeting of the Board of Governors*. Kathmandu: Asian Clearing Union on May 22-23.
- Nepal Rastra Bank. (2001). *Unified directives issued to banks and financial institutions, 2001 issued by Nepal Rastra Bank*. Kathmandu: Bank & Financial Institution Regulation Department.
- Nepal Rastra Bank. (2015). *Annual Report 2015*. Kathmandu: Bank Supervision Department, Nepal Rastra Bank.
- Nepal Rastra Bank. (2015). *Banking and Financial Statistics*. Kathmandu: Banks and Financial Institutions Regulation Department.
- Nepal Rastra Bank. (2016). *International Convergence of Capital Measurement and Capital Standards: A Revised Framework*, Kathmandu: Basel Committee on Banking Supervision, NRB.
- Nepal Rastra Bank. (2017). *On Site Inspection Manual For Commercial Banks and Finance Companies*. Kathmandu: NRB, Volume II.
- Nepal Rastra Bank. (2017). *On Site Inspection Manual For Commercial Banks and Finance Companies 2017*. Volume II, Kathmandu: Nepal Rastra Bank.
- Pandey I.M. (1997). *Financial Management*. New Delhi: Bikas Publishing House Pvt.
- Pandit, Y. (2015). *Directives of NRB in Maintaining Capital Adequacy Ratio & Its Impact, A Case Study of NIC Bank*. Kathmandu: An Unpublished Master Degree Thesis Submitted to Office of the Dean Faculty of Management T. U.

- Patheja, A. (1994). *Financial Management of Commercial Banks*. New Delhi: South Asia Publication.
- Sharma, S.R. (2016). *Financial Performance Analysis of Nepal SBI Bank Ltd. In the Frame work of CAMEL*. An Unpublished Master Degree Thesis submitted to Faculty of Management, T.U.
- Shekhar, K.C and Shekhar, L. (1998). *Banking Theory and Practice*. New Delhi: Vikas Publishing House Pvt.
- Shrestha, R. (2010), *A Study of Non- Performing Loan and Loan Loss Provision of Commercial Banks, A case study of NIBL, HBL and EBL*. Kathmandu: An Unpublished Master Degree Thesis Submitted to Office of the Dean Faculty of Management T. U.
- Shrestha, S. (2014). *Lending Operation of Commercial Banks of Nepal and its Impact on GDP*. An Article, Published in New Business Age
- Shrestha, S. (2016). *A Study of Nonperforming Loan & loan loss Provision of Commercial Bank, A case study of NABIL, SCB and NBL*. Kathmandu: An Unpublished Master Degree Thesis Submitted to Office of the Dean Faculty of Management T. U.
- Singh, R.B. (2008). *A Study of CAMEL Analysis of Commercial banks (SCBNL, HBL & Nabil Bank)*. An Unpublished Master Degree Thesis submitted to Faculty of Management, T.U.
- United Nations Conferences on Trade and Development. (1998). *Investing in Pre-emerging Markets, Opportunities for Investment of Risk Capital in LDCs*. New York and Geneva: United Nation.
- Wolf, H.K. and Pant, P.R. (1998). *A Hand Book for Social Science Research and Thesis Writing*. Kathmandu: Buddha Academic Enterprises Pvt.
- http://notes.tyrocity.com/functions-of-commercial-_banks
- <http://www.writersdigest.com/whats-new/write-a-how-to-article-in-6-easy-steps>
- https://en.wikipedia.org/wiki/List_of_banks_in_Nepal

