

Financial Performance Analysis
(Application of CAMEL on Selected Commercial Banks in Nepal)

A Thesis

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Gopal Pokhrel

Siddhartha Campus Kapilvastu

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त्रिभुवन विश्वविद्यालय तथा उच्च माध्यमिक शिक्षा परिषद्द्वारा सम्बन्धन प्राप्त

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बाणगांगा, कपिलवस्तु
Banganga, Kapilvastu

पत्र संख्या :

चलानी नं.:

नेपाल
स्था : २०४८

मिति :

RECOMMENDATION

This is to certify that the thesis

Submitted by
Mr. Gopal Pokhrel

Entitled

Financial Performance Analysis

(Application of CAMEL on Selected Commercial Banks in Nepal)

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

.....
Mr. Indra Mani Pandey
(Thesis Supervisor)

.....
Mr. Kamal Prasad Pokhrel
(Asst. campus chief &
Head of Research Department)

.....
Mr. Khemraj Sharma
(Campus Chief)

Date:.....



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Banganga, Kapilvastu

पत्र संख्या :

नेपाल
स्था : २०४८

मिति :

VIVA-VOCE SHEET

We have conducted the viva-voice of the thesis

Submitted by:

Mr. Gopal Pokhrel

Entitled

Financial Performance Analysis

(Application of CAMEL on Selected Commercial Banks in Nepal)

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 requirement for the degree of Master of Business Studies (M.B.S).

Viva-voce Committee

Asst. Campus chief &
Head Research Department Kamal Prasad Pokharel

Member (Thesis Supervisor) Indra Mani Pandey

Member (External Expert) Dr. Santosh Gyawali

Date :-

DECLARATION

I hereby declare that the work reported in this thesis entitled “**Financial Performance Analysis (Application of CAMEL on Selected Commercial Banks in Nepal)**” submitted to Office of the Dean, Faculty of Management, Tribhuvan University, is my original work done in the form of partial fulfillment of the requirement for the Degree of Master of Business Studies (MBS) under the supervision and guidance of Indra Mani Pandey, Siddhartha Campus.

Date:

.....

Gopal Pokhrel

Researcher

Siddhartha Campus

Tribhuvan University

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ABBREVIATIONS

AQ	:	Assets Quality
CAR	:	Capital Adequacy Ratio
CA	:	Capital Adequacy
CCAR	:	Core Capital Adequacy Ratio
CCR	:	Core Capital Ratio
CRR	:	Cash Reserve Ratio
C&B	:	Cash and Bank
C.V	:	Coefficient of Variation
E	:	Earning
EPS	:	Earning Per Share
FDIC	:	Federal Deposit Insurance Corporation
FIs	:	Financial Institutions
FY	:	Fiscal Year
KBL	:	Kumari Bank Limited
L	:	Liquidity
LC	:	Letter of Credit
LLP	:	Loan Loss Provision
LLR	:	Loan Loss Reserve

MER	:	Management Efficiency Ratio
NBL	:	Nepal Bank Limited
NMBL	:	Nepal Merchant Bank Limited
NPAR	:	Non Performing Assets Ratio
NPAT	:	Net Profit after Tax
NPL	:	Non Performing Loan
NRB	:	Nepal Rastra Bank
NSBI	:	Nepal State Bank Limited
PARCA	:	Performance Analysis and Root Case Analysis
P/E	:	Price Earning
PM	:	Profit Margin
RBBL	:	Rastriya Banijya Bank Limited
ROA	:	Return on Assets
ROE	:	Return on Equity
SCBL	:	Standard Chattered Bank Limited
SCR	:	Supplementary Capital Ratio
SD	:	Standard Deviation
SWIFT	:	Society for Worldwide Interbank Financial Telecommunication
TU	:	Tribhuvan University

CHAPTER-I

INTRODUCTION

1.1 Background of the Study

Banks are those financial institution that offer the wider ranges of financial services-especially credit, saving and payments services-and perform the widest range of financial functions of any firm in economy (BAFIA, 2017). This multiplicity of bank services and functions has led to banks being labeled financial department stores. Banks offers the various types of services to their customers to facilitate the economic transactions. Commercial banks are major financial institutions which occupy an important place in the economy. It performs various functions such as payments, financial intermediation between depositors and borrowers and other financial services.

Bank is very old institution that is contributing toward the development of any economy and it's treated as an important service industry in modern world. Nowadays the function of bank is not limited to within the same geographical limit of any country. It is an important source of financing for most business (Nimalathasan, 2008). Bank are the such financial institution which play an important role to collect scattered insufficient saving and use them into productive sector .most people like to save little money when they have a chance. They may save because they have no urgent need for the money later time when they do need the money, they may not have save enough. Many people who save much deposit into some kind of bank .the borrower pay interest (price for the use of money) to the bank and the bank pay interest to the people, who have deposited their saving. The bank make a profit by changing more for lending money that it pays for holding money. Thus banking is the business of receiving, safeguarding and lending money.

Financial performance covers the financial analysis and other portfolio. Financial analysis is the process of determine the significant operation and financial characteristic of a firm from accounting data and financial statement. The goal of financial analysis is to determine the efficiency and performance

of the firm's management as reflected in the financial record and report. Financial performances are the picture of the organization that shows how the organization is doing. Profit is the one of the basic indicator of sound financial performances.

The performances of commercial bank are governed by the policy and regulation set by government. Central bank represents the government and plays the role of monitor and controller in every country. The primary function of the central bank is to provide the nation money supply, but more include controlling interest rate and acting as a lender of last resort to the banking sector during time of financial crisis. It may also have supervisory power to ensure that bank and other financial institution do not behave carelessly or fraudulently. In our country Nepal Rastra bank (NRB) deserve the authority to monitor and control the financial system of Nepal.

Commercial banks and other financial institutions (FIs) have to be operated according to the directive issued by NRB. NRB as an apex body of monetary authority of the country and it is monitoring and controlling the financial institution by issuing various directive & policies to the financial institution. As the bank play pivotal role in the economy, their performances should supervised by the central bank and take necessary corrective action if health is poor. Smooth and effective regulation of banking activities is a must for sustainable economic growth of a country.

NRB does the regular auditing and timely supervision FIs have been inspecting their activities to maintain their sound financial health and to build up the confidences of private sector in the liberalized economy and protect the interest of the investor. It has adopted the international rating system (CAMEL) to assess the financial performances of commercial bank (Baral, 2005).

The methods used by the regulatory agencies in promoting safety and soundness are on-site supervision and off-site supervision. On-site examination ratings like CAMEL are useful in the analysis of the bank at the time of the examination. The CAMEL rating ranges from 1 to5, lower rating representing better and well managed bank. CAMEL framework is a common

method for evaluating financial performance. NRB central office prepared a working paper in 2006 about supervisory provision for foreign bank branches in Nepal. NRB supervises joint venture banks of financial information and compliance of applicable rules regulations and legal provisions including NRB directives. Performance of joint venture banks has been better than profitability position, non-performing assets levels and capital adequacy domestic banks reflected position.

The commercial banks in Nepal can be broadly classified into two categories: public banks and private banks. The banks which are owned by government are called as public banks while the banks owned by the private sector are categorized as private banks. The private banks can be further regrouped into the domestic banks and joint venture banks. Nepal has adopted most liberal economic policies since 1990. The country is open to foreign investment and a numbers of joint venture banks came into existence. Out of 27 commercial banks 5 are joint venture (NRB, 2019).

Joint venture bank is bank own by the joint investment of domestic investors and foreign banks. Joint venture banks have Joint venture is a contractual business under taking between two or more parties been increasing with an aim to provide modern banking services and facilities more effectives.

1.2 Statement of Problems

Profitability position of all commercial banks is generally known through annual reports. But information given in the annual report is not enough to look into the performance of the commercial banks. Investors should analyze the performance on the one hand and on the other hand regulatory body should carry out off-site and onsite supervision of commercial banks and keep their sound financial health. The major problem of this study is to check up the financial health of commercial banks of Nepal in the framework of CAMEL. One ratio each is selected based on parameters of CAMEL rating system like capital Adequacy, Asset Quality, Management Efficiency, Earning Capacity and Liquidity per parameter to explain the efficiency level of banks (Babu & Dr.Kumar 2017).

The functions that CAMEL-Test covers are analysis of capital adequacy, quality of assets, effectiveness of management, earning capacity and liquidity position. Thus, the study has been focused on how the commercial banks are performing its financial activities. A part from this study also discusses on matter regarding banking obstacles and hindrance in the process of performing its functions that covers by CAMEL. Therefore, this study has attempted to solve the following specific research questions:

1. What is the trend of non-performing assets and loan loss provision in commercial banks?
2. In What way CAMEL is associated with Bank performance?

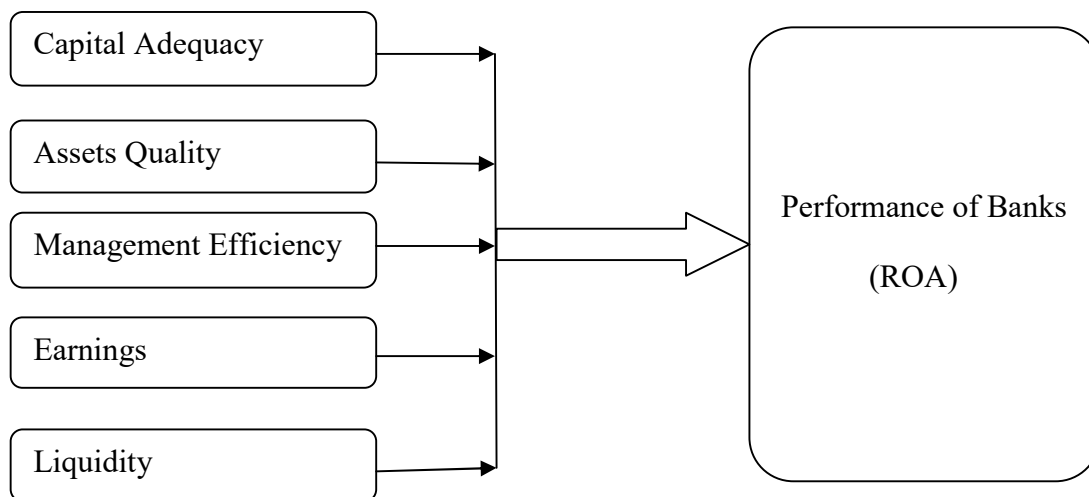
1.3 Objectives of the Study

Fundamental objective of this study is to analyze the financial performance analysis of the sample commercial banks in the framework of CAMEL. The specific objectives of the study are given below:

1. To explore Capital Adequacy, Assets Quality, Managerial Efficiency, Earning and Liquidity of Commercial Bank.
2. To examine relationship between CAMEL and performance of Bank.

1.4 Theoretical Framework

Theoretical framework reveals the relationship between dependent and independent variables. CAMEL has been common rating system applied by government, regulators and researchers in measuring the soundness of the banks. (Dang, 2011) noted that the scholars often used the CAMEL framework to proxy bank specific variables. These variables are internal factors, which are under the control of the banks to manipulate and are different from each bank. In this study, performance of the banks is taken as dependent variable and factors affecting performance of banks under CAMEL framework -capital adequacy, assets quality, managerial efficiency, earning and liquidity are taken as independent variables.



1.5 Research Hypothesis

H₁: There is significant relationship between capital adequacy and Performance of Banks.

H₂: There is significant relationship between Assets Quality and Performance of Banks.

H₃: There is significant relationship between Management Efficiency and Performance of Banks.

H₄: There is significant relationship between Earnings and Performance of Banks.

H₅: There is significant relationship between Liquidity and Performance of Banks.

1.6 Significance of the Study

This study is the financial performance analysis (application of CAMEL on selected commercial banks in Nepal). It helps to know the existing problem of banks and give implication their sound financial health. This research would help to managers to evaluate performance of their banks. CAMEL rating system is crucial and convenient technique to assess the financial performance of any financial institutions and it will provide a framework for the supervisory authority.

Although the various studies have been carried out regarding financial performances of banks, very few studies have been employed in term of CAMEL framework analysis. This study aims to analyze the financial performance of the commercial banks of Nepal in the framework of Nepal. This research will be very useful to the financial sector of Nepal. This study

will be fruitful to investor, equity shareholders, bankers, government, financial institutions, researchers and students.

1.7 Limitation of the Study

Although various methods are used in financial performance of commercial banks, CAMEL Rating System is focused of the study. It has covered only 6 years of period beginning from the fiscal year 2014/15 to 2019/20. This study is mainly based on secondary data. The accuracy of the study is based on annual reports, NRB publication and work papers of respective banks.

1.8 Chapter Plan

This study has been divided into five chapters:

Chapter 1: Introduction

It deals with introduction of the main topic of the study like general background, focus of the study, statement of the problem, objective of the study, limitation of the study and chapter plan and other introductory framework.

Chapter 2: Literature Review

It includes review of available relevant studies. It also includes the conceptual review of the related book, journal, article and public and unpublished research work as well as thesis.

Chapter 3: Research Methodology

It describes the research methodology employed in the study i.e. research carried out in this size and shape. For the purpose various financial and statistical tools and techniques are defined which use for analysis of the present data.

Chapter 4: Data Presentation and Analysis

This chapter is the major part of whole study in which all collected relevant data are analyzed and interpreted with the help of different financial &

statistical tool, in this chapter the major finding of the study has also been explained.

Chapter 5: Summary, Conclusions and Recommendations

It consists of the summary of the study, conclusion, implication and suggestion on the basic of the study.

CHAPTER-II

LITERATURE REVIEW

Literature review means reviewing research study or other patient proposition in the related area of study so that, all the past studies their conclusions and their deficiencies may be known and further research can be conducted. A literature review is a critical and depth evaluation of previous research. It is summary and synopsis of particular area of research, allowing anybody reading the paper to establish why you are pursuing this particular research program. This chapter deals with the conceptual review regarding financial performances analysis and CAMEL framework of financial performances analysis. Past studies carried out on financial performances analysis are also incorporate here. This chapter is divided into two sections. Section I deal with theoretical review whereas the section II present the review of relevant part of studies.

2.1 Conceptual Review

This sub-chapter presents the theoretical aspect of the study. It includes historical background of banking industry, evolution of banking in Nepal, concept of bank, and concept of commercial bank, function of commercial bank, financial performances analysis and concept of financial performances analysis in the framework of CAMEL.

2.1.1 Financial Performance Analysis

In this chapter, approach of financial performances analysis is presented. By the help of financial performances analysis, we can identify strength and weakness of financial institution. Under this sub heading type of financial analysis, concept of financial performances analysis in the framework of CAMEL and objective of financial analysis is discussed.

Baral (2005) has examined the financial health of joint venture banks in the CAMEL framework. The health check up conducted on the basis of publicly available financial data concludes that the health of joint venture banks is better than that of the other commercial banks. In addition, the perusal of the indicators of different components

of CAMEL indicates that the financial health of the joint venture banks is not so strong in withstanding the possible large scale shocks to their balance sheet and that their health is merely fair. Accordingly CAMELS rating system shows that 3 banks are 1 or Strong, 31 banks were rated 2 or satisfactory, rating of 7 banks are 3 or fair, 5 banks were rated 4 or marginal and 2 banks get 5 or unsatisfactorily rating. 1 Nepalese Commercial Bank have unsatisfactorily rating and other 3 banks have marginal rating.

Sangmi and Nazir (2010) have analyzed the financial performance of commercial bank in India by using the CAMEL model. This study has found that all the samples have been sound and satisfactory so far as their capital adequacy, management capacity and liquidity are concerned.

Tatom and Huston (2011) have used the CAMELS rating system and national economic variables to forecast failure for the entire commercial banking industry in the United States. The model predicts failure (survival) accurately during both the saving and loan crises and the mortgage failure foreclosure crisis. He showed the insignificance of total assets, real prices of energy, currency ratio and interest rate spread.

Eari, Salim, Idrus, and Djumhir (2013) have examined financial performance of PT. Bank Papua by using CAMEL model. They have used secondary data from financial statement in 2003-2011. They have found that results of the above three models is similar, i.e., Bank Papua earned good profit during the analyzed period.

Profit is the essential for a firm for its survival, Growth and to maintain capital adequacy through profit retention. The objective of maximizing profit with a level with a level of risk acceptable to the banks stakeholder is not easy to archive, as the recent upsurge in the bank failures around the globe clearly suggests. Under the free economic system like USA of liberal economic system of Nepal, the interest of the nation as well as those of the individual stakeholders are supposed to be best served by vigorously seeking profit.

Although the profit is important for any business motive firm, it cannot be the sole objective of an enterprise of financial institution a financial enterprise should not be evaluate just on the ground of the profit it has earned. Neither

the bank nor the community will be best served if the banker unreasonably sacrifices the safety of his fund or liquidity of his bank in an effort to increase income.

Financial performances analysis is a process of identifying the financial strength and weakness of the firm by properly establishing relationship between the item of balance sheet and the profit and loss statement. It is also a study of relationship among various financial factors in the business as disclosed by a single set of statements and study of the trend of these factors as shown in a series of statements. By establishing a strategic relationship between the item of a balance sheet and income statement and other operative data, the financial analysis unveils the meaning and significance of such items. Thus, financial performance analysis is required to take managerial and financial decisions. Financial decision cannot be made in a vacuum. They are to be based on proper financial analysis by using financial tools such as financial ratios to maximize the financial performances of a company. Annual reports contain financial statements as well as management opinions of the past years' performances and firm future prospects. In financial analysis, certain guideline criteria include:

Economic consideration- gaining additional perspective and improve insight of both trend and averages such as price level, business profits, interest rate, dividends and security price movement.

Analysis of these financial statements helps in measuring the overall financial performances of a company. Obtained information can be used for decision making, judging performance and management effectiveness, identify the deficiency and weakness. Take corrective action timely to improve the performances. Gain adequate insight into the possibilities of making changes worthwhile. Evaluate the possible implications of alternative courses of action. Those roots of major management decisions revolve around financial information. A careful scrutiny of alternatives based on projected information depicting the comparative results of each is needed to arrive at the selection of the most favorable decision for eventual implementation. This brings us to the question what constitutes financial information. The basic source covering

financial information about a firm affair is its annual financial account i.e. profit and loss statement for the last operation period (quarter/half year/ year etc.) and balance sheet as the end of the period. Profit and loss account reveals the operating result of the business activities of the firm. These sources, however, reveal only part of the necessary to further examine and breakdown the information in these statements with a much greater elaboration and detail to decipher the complete strength and weakness of the firm. For these purpose, we can employ certain analytical tool and perceptive statement based on the sources data from the balance sheet and profit and loss account. Financial analysis serves the following purpose to the concerned authorities/bodies.

The government for compiling national statistics relating to the status and growth of each industry; the shareholders as well as perspective investor desirous to know the present and anticipated trend of the business, Bank and financial institution who are interested with project appraisal and conducting feasibility and viability studies to ascertain the credit worthiness of the applicant firms project, supplier who want to know how viable the business is in order to enter in to long term contracts, the same need arise for customer who need to procure product from the business regularly, credit rating agencies, stock exchange authority who study the risk factor affecting the innumerable small investors who have parked their life- saving in the firm by way of equity or debt.

Financial data is to be analyzed with reference to the particular objectives of the person concerned either external or internal as regards the firm. Before commencing analysis the type of analysis and the type of information needed are to be ascertained as well as identification of the source- data and the analytical tool to be employed analysis may be done with reference to a particular financial year in respect of different firms of a particular group or industry to assess their comparative status and performances or it may be restricted to a particular firm for a stretched period of 5 to 10 years to decipher its strength and weakness and to analyze how it is progressing indifferent direction over this period.

Basically, a financial analysis consists of a three- step process. Identify the source information relevant to the decision to be made from the total pool of data provided by the annual financial statements. Re-arrange the particular data selected to highlight significant relationship. Study the analyzed information critically and draw pertinent conclusion the firm.

2.1.1.1 Type of Financial Analysis

It may be categorized as external or internal analysis based to whom it is intended. Internal analysis for management information and decision thereon are generally more detailed than external analysis intended for trade creditors, investor's term lending institutions and bankers supplying working capital (Abdulraheem, 2004).

The analysis may be classified as Horizontal or vertical analysis. Horizontal analysis is conducted to compare the annual financial statement of the current year with that of the previous year to ascertain the comparative trend of the progress of the business, while vertical analyses is restricted to an in-depth study of the current years financial statement (Satish, Jutur, & Surender, 2005). It covers each element of the information in to a percentage of the total amount of statement (like profit to sales turnover) so as to establish relationship with other component of the same statement.

Trend Analysis: Trend analysis is a comparative analysis of a company financial ratio over time. This is arrived by preparing relevant ratio of the firm for a series of year (three or more) to study the comparative performances (Defranco & Lattin, 2007). The different performances ratios related to the previous year are compared with that of the current year to draw such conclusion.

Ratio Analysis: An arithmetic ratio explains the relationship between two numbers. The ratio should be meaningful, the number selected must be co-related or must bear a concern relationship. The one must have an influencing effect on the others (Schmidgall & Defranco,2004). Ratio analysis establishes meaningful quantitative relationship two linked item of financial statement so that the strength or weakness of the business is brought out. For example

current assets are the sources to meet the current liability. Availability of the current assets capable of quickly being converted to cash will assure that creditor for liabilities in the short run will be promptly discharged. The quantitative relationship of the set of item is indicated by the current ratio. Banks are happy if the borrowing firm to whom working capital accommodation is extended has a current ratio 1.4 or more similarly, net profit is related to both capital employed and the sales turnover. Therefore net profit can be compared either to net worth or sales turnover. The net profit to net worth ratio indicates the return on the investment, while the net profit to sales turnover indicates the operational efficiency.

Fund Flow Statement: This is a statement which explains the various sources from which fund were raised and the used to which the funds are put. The statement indicates the changes which have taken place between two accounting period. While the balance sheet as at a particular data presents a static picture of the sources and use of the fund. The fund flow statement capture the movement of fund over a specific period. A fund flow statement, therefore explain the transformation or change underwent by individual assets and liability of a firm from one balance sheet date to another (Agrawal, 2020). A projected fund flow for a future span of period can also be prepared. This will facilitate budgetary control and capital expenditure control to be excised in the organization.

2.1.2 Financial Statements of Commercial banks

Financial information of a Banks is reported in two basis documents. The report of the condition (Balance sheet) presents financial information on a Bank's assets, abilities and equity capital. The balance sheet reports a Banks condition at a signal point of time. The report of income (Income statement) presents the major categories of revenues and expenses (cost) and the net profit or loss for a bank over a period of time. Financial statement of commercial banks must be submitted to regulators and stakeholders. Financial institutions are also engaged in increasing level of off – balance sheet activities. These activities produce income some time loss for a financial institution that are reported on the income statement. Retails banks focus on

individual consumer banking relationship such as residential mortgage and consumer loans on the assets side of the portfolio and individual demand, saving and time deposit on banking relationship, such as residential, mortgage and consumer loan of the liability side (Said & Saucier, 2003). In contrast, wholesale bank focus their business activities in business banking relationship, they hold more business loan and fewer mortgage and consumer loan and use fewer consumer deposit and more purchase fund then retail banks do.

Financial statement report both on the firm's financial position at a point in time and on its operation over some past couples of year regarding what they have performed financially, this is reporting about what the company has done in terms of assets, liabilities, income and expenses. Alternatively they highlight in important financial aspect such as liquidity, profitability, and activity capital and structure and market capitalization value. Annual report made available to the shareholder in annual general meeting is the basic raw material of the financial analysis, comment and interpretation. Shareholders raise various issue regarding irregularities, operations inefficiency and internal management deficiencies causing poor performances of a company. Financial statements collected, consolidate and analyzed by Nepal Stock Exchange Limited Provide better insights about the companies performances. In other words, financial statements included:

2.1.2.1 Balance Sheet

As the name implies, the balance sheet list balance that is, it has the characteristics that $\text{Total Asset} = \text{Total Liability} + \text{Capital}$. Hence, the balance sheet is a statement of the firm's financial position at a specific point of time regarding assets, liability and stockholders' equity to balance debt and ownership position. The balance sheet is a statement of resources at the disposal of the firm and how they are put to use. In other word the acquire asset at the disposal of the firm and liability that the firm has incurred and remains in debt to others.

Furthermore, a bank's balance sheet lists it source of bank fund and use to which they are put (assets) Bank obtain fund by borrowing and by issuing

other liabilities such as deposit. They then use this fund to acquire assets such as securities and loans. Bank makes profit by charging in interest rate on their holding of securities and loans that is higher than the expenses on their liabilities.

Assets

Banks assets are grouped in to four major subcategories: 1) cash and balance due from other depository institutions, 2) investment in securities, 3) loan and lease and 4) other assets. Investment security and loan and lease are the banks earning assets. Cash and balance due from depository institution consist of vault cash, deposit in the Central Bank, deposit at other financial institution, and cash in the process of collection. None of these items generate much income for the bank, but each is hold because they perform specific functions. Vault cash is composed of the currency and coin need to meet consumer withdrawals. Deposits at the central bank are used primarily to meet legal reserve requirement to assist in cheque, clearing, wire transfer, and the purchase or sale of treasury securities. Deposit in the other financial institution is primarily used to purchase services from those institutions. These banks generally purchase services such as cheque collection cheque processing and investment advice from the correspondent banks. Cash item in the process of collection are cheque written against accounts at other institution that have been deposit at bank.

Credit is given to the depositor of this cheque only after they clear. Investment securities consists of items such as interest bearing deposit at other financial institution, repurchase agreements, treasury and agency security, securities issued by central bank and other debt and equity security. These securities generate income for the bank and are used for liquidity risk management purpose. Investment securities are highly liquid, have low default risk and can usually be traded in secondary market. Banks generally maintain significant amount of these securities to ensure that they can easily meet liquidity needs that arise unexpectedly. However, because the revenue generated from investment securities low compared to that from loan and lease, many banks attempt to minimize the amount of investment security they hold.

Although bank with excess cash reserve invest some of this in interest-earning liquid assets such as T- bills and short term securities, they have the option to lend excess reserve for short intervals to others banks seeking increased short term funding. In an interbank transaction, the bank with excess reserve seal fund for one day to the purchasing bank. The next day, purchasing bank return the fund plus one days interest reflecting the market rate. Since credit risk exposure exit for the sealing bank, because the purchasing bank may be unable to repay the funds the next day, the seller may seek collateral backing for the one day fund loan. In the context to Nepalese banking sector bank generally do not seek collateral but set the limit to exposure to the other bank. In the transaction, the fund sealing bank received government securities as collateral from the fund- purchasing bank that is the fund purchasing bank temporarily exchanges securities for cash. The next day this transaction is reversed, the fund purchasing bank sends back he fund it borrowed plus interest rate.

Long maturity investment such as NRB bond usually offer somewhat higher expected return that short maturity investment since they are subject to greater interest rate risk exposure. Treasury security and NRB bond are fully backed by the government and thus carry no default risk.

Loans are the major items in banks balance sheet and generate the large flow of revenue income. However, loans are also the least liquid assets item and the major sources of credit and liquidity risk for most banks. Leases are use as alternative to loans when the bank as, owner of a asset aloud a customer too use an asset in return for the periodic lease payment. Loans are categorized as commercial and individual loan, loan secured by real state individual or commercial loan and other loans. Commercial and industrial loans are used to finance a firms capital needs, equipment purchase and plant expansion.

Commercial loan can be made an either fixed rate or floating rate of interest. This rate remains in force over the loan concept period no matter what happens to market rate the interest rate on revolving loans such as cash credit loan and overdraft loan can be adjusted periodically so that the interest rate risk is transferred in large part from the bank to the borrowers. Commercial

loan can be made for period as short as few weeks to as long as eight year or more. Traditionally, short term commercial loan are used to finance credit needs that extend beyond one year, such as the purchase of real assets new venture start up cost, and payment increase in working capital. Commercial loan can be secured or unsecured. A secured loan is backed by specific assets of the borrower while unsecured loan gives the lender only a general claims on the assets of the borrower should default occur.

However, in Nepalese banking sector all most all the loan are secured by the collateral or fixed property such as real state, house building, equipment and machineries. Housing loan is primarily mortgage loan which are generally long term loan with a average maturity to approximately 10 years. Housing loan is made to purchase construct and repair a house. Another major category of loan is individual or consumer loan. Each loan category entails a wide variety of characteristics that must be evaluate to determine the risk involved whether the bank should grant the loan and if so, at what price.

Unearned income and the allowance for loan and lease losses are contra-assets account that are deducted from gross loan and lease on the balance sheet to crate net loan and lease. Unearned income is the amount of income the bank has received on the loan from customer but has not yet recorded as income on the income statement. Over the life of the loan, the bank earns interest income and accordingly transfers it out of unearned income in to interest income. The allowance for loan and lease loss is an estimate by the banks management of the percentage gross loan that will not be repaid to the bank. Although, tax law influence the maximum amount of reserve, the managements actually sets the level based on loan growth and recent loan loss experience. The allowance for loan losses is an accumulated reserve that is adjusts each period as management recognized as possibility of additional bad loan and make appropriate provision for such losses. Actual losses are then deducted from and recovers are added to their accumulated loan and lease loss reserve balance. Investment securities plus net loan and lease are earning of the depository institution. It is this item in the balance sheet that generates most interest income.

Others assets in the bank's balance sheet consist of such item as premises and fixed assets, other real estate own ,investment in unconsolidated subsidiaries, intangible assets and other. These account are generally a small part of the banks overall assets.

Liabilities

A bank liability consists of various type of deposit account and other borrowing used to fund the investments and loan on the asset side of the balance sheet, liabilities vary in term of their maturity, interest payments, and check writing privileges. And deposit insurance coverage. A bank acquire fund by issuing liabilities, which are consequently also referred to as source of funds. The fund obtain from issuing liabilities are used to purchase income earning current account are transaction accounts held by individuals, business firm, corporation and other institution that pay no explicit interest. Saving deposits are all saving account other than current account.

Depositor can be spreads foreign from domestic deposit on the balance sheet but it is not generally practiced in Nepal. Foreign deposit is generally large and held by corporation with a high level of international transaction activities. The liabilities describe above are all deposit liabilities, reflecting deposit contract issue by bank in return for cash. However, bank not only fund their assets by issuing deposit but borrow in varies markets for purchasing fund since the fund generated from the purchase are not deposit, they are subject neither reserve requirement nor deposit insurance premium payment. The bank can also borrow fund from the other bank for certain period. Generally short term of 2/4 day and this transaction can be rolled over each day if the contemporary is willing. Some bank in search of stable source of fund with low withdrawal risk has begun to issue subordinate note and debenture, often in the five to seven year range.

2.1.2.2 Income Statement

Income statement show that the result of business operations. Bank has to be efficient to prove their viability depending upon their income generating power and cost minimizing strategy. The income statement reflects the

earning capacity of the bank. The success or failure of bank largely depended on the difference between income and expenditures. The major determining factor of the banks soundness is supposed to be a net income though there are other factor too are equally important. The success is the measure of the excess of income over expenditure over income. Interest income by nature should be sufficient to cover interest expenses plus other overhead cost of the banks revenues and expenses. Revenues are the interest received from loan value supplied to the customers. Expenses are the paying interest to depositors. Generally, commercial bank earns profit by mobilizing deposit of the customer.

The major source bank income is interest earning assets held by the bank such as loans, which generated interest income. Beside, commission and discount, exchange fluctuation gain, investment in securities, share and debenture and other operating income are the source of bank income.

2.1.3 Concept of Financial Performances Analysis in the framework of CAMEL

CAMEL rating system is an international bank rating system with which bank supervisory authority rate institution according to various factors. These factors are examined represented by the acronym CAMEL. In this acronym, each letter stands:

C = Capital Adequacy

A = Assets Quality

M = Management Quality

E = Earning

L = Liquidity

a) Capital Adequacy: The Capital is defined as wealth employed in the production process to generate the more wealth and profit. Capital includes any funds thus employed. Capital can also be defined as the money contributed by the proprietors to an organization to enable it to functions, thus

share capital is the amount provided by way of loans. However, the capital of the proprietors of the companies not only consists of the share and loan, capital, but also includes retained profit, which accrues to the holder of the ordinary shares (Dang, U 2011). Commercial bank should have adequate capital to support its risks assets in accordance with the risk weighted capital ratio framework. It has because recognized that capital adequacy more appropriately relates to assets structure than to the volume of liabilities. Meeting Statutory Minimum Capital Requirement is the key factor in deciding the capital adequacy, and maintaining an adequate level of capital is a critical element (Uniform Financial Institutions Rating System, 1997). Adequacy and inadequacy of bank capital directly affect the banking transition. The adequacy of bank capital is the more important aspect of the bank. If there is inadequate of capital, the bank should take step for the adequacy of capital as per legal requirement. They should remove inadequate of bank capital through the medium of collecting of ownership and borrowed capital. If there is scarcity of capital in the bank, its financial health cannot be regarded capable and healthy. If the bank has an adequate bank capital, people trust upon such banks, such bank become successful to gain the trust of all sectors. If the bank has adequate capital, it can invest in to any sectors at any time. The bank does not face problem to collect the capital. The bank does not need to take loan, and do not have to pay interest. There will not be possibility of liquidation of bank.

To vide the fund needed to get the bank chartered, organized and operating before deposit come following in. Thirdly, capital promotes public confidence in the bank and reassures its creditors of the bank financial strength. Fourthly, capital provides fund for the organizations growth and the development of new services programs, and facilitates. Finally capital serves as a regular of bank growth, helping to ensure that the individual banks growth is held to pace that is sustainable in the end.

B) Assets Quality: A banks assets are grouped in to four subcategories:

- 1) Cash and balance due from other depository institution.
- 2) Investment securities.

3) Loan and lease.

4) Other assets.

Among them loan and advances dominate the asset side of the balance sheet of the banks (ADB 2002). Similarly, earning from such loan and advances occupy a major space in income statement of the bank. Hence asset is the critical factor in determining the strength of any bank. Primary factors that can be considered are the quality of loan portfolio, mix of risk assets and credit administration system (Keshar j.Baral, 2005). Many financial crises in the past have been caused or amplified by downturn in particular sector of the economy spilling over in to the financial system via concentrated loan books of financial institution.

However, loans are also being the least liquid asset item and the major sources of credit and liquidity risk for most banks. Thus, quality of assets has direct impact in the financial performances of a financial institution. The quality of assets particularly, loans assets and investment, would depend largely in the risk management system of the institution. We can use number of measure to indicate the quality of assets held by the banks. An increasing trend in the ratio of nonperforming loan to total loans signal a deterioration in the quality of credit portfolios and consequently, in financial institution cash flows, net income, and solvency. It is often helpful to supplement this information with information on non performing loans net of provisions and on the ratio of provision plus interest suspension on impaired loan to total loans particularly, if impaired loans have not yet been classified as nonperforming.

Although these indicators are primarily backward looking, reflecting past problem that have already been recognized, they can be useful indicator of the current health of the financial system and are often used in connection with stress test of financial institution. Trend in nonperforming loan should be looked at in conjunction with information on recovery rates for example using the ratio of cash recoveries to total nonperforming loans. Such information points to the level of effort or the ability of financial institution to cope with high non performing loan portfolios. Loans outstanding to loss- making public sector entities are often the result of past directed lending may also significant

credit risk. Depending on the country, loans to loss- making public enterpriser regional government may not be classified as nonperforming, even though they may not be repaid on the timely basis and or in full (NRB 2019).

Non – Performing Assets: Nonperforming Assets means an assets or account of borrower, which have been classified by a bank or financial institution as sub- standard, doubtful and loss assets in the accordance's with the directions or guidelines relating to assets classification issue by RBI (Athmanathan & Venkatakrishna, 2001). Non-performing assets and its impact in banking sector. Report submitted to RBI). An amount due under any credit facility is treated as past due, when it has not been paid within 30 days from the due date. Due to the improvement in the payment and settlement system, recovery climate, up gradation of technology in the banking system, it was decided it dispense with past due concept with effect from March 31, 2001. Interest and installment of a principal remain overdue for a period of more than 180 days in respect of a Term loan. The account remains out of ordered for a period of more than 180 days in a respect of an overdraft/cash credit. The bill remains overdue for a period of more than 180 days in the case of bills purchase and discounted. Interest and / or installment of principal remains overdue for two harvest season but for the period not exceeding two half year in the case of an advance granted for agricultural purpose and Any amount to be received remains overdue for a period of more than 180 days in respect of other accounts.

As per the Nepal Rastra Bank Directives Non – performing assets are the classified loans and advances and this includes sub- standard, doubtful and bad loans categorized as defined by *NRB Directives 2019*,

With an objectives of minimize the possible loss of credits extend by commercial banks, Nepal Rastra bank amended the policies relating to loan classification and provision. As per the new circular of NRB the commercial banks should classify the principal amount of the loan and advance on the basic of aging. Under the new rules the loans and advance are classified in to the following categories:

Pass Loan: Loan in this category is performing and has sound fundamentals, which includes borrowers overall financial condition, resources and cash flow, credit history and character. They also includes purpose of loan, type of secondary sources of payment, Loan and advance whose principal amount are not past due and past due for a period up to 1month shall be included in this category. These are classified and defined as performing loan performing assets.

Watch List Loan: These types of loans are similar to 'pass' loans. "Watch list" is the new category of loan to discourage growing practice of borrowers not utilizing the loans in projects. Loans which are due for a period of 1 month to 3 months shall be included under this category.

Substandard Loan: Loan in this category have well defined weakness, where the current sound worth and repayment capacity of borrower is snort assured. All loan and advance that are past due for a period of 3 months to 6 months shall be included under this category.

Doubtful Loan: Doubtful loan exhibits all the characteristics of substandard loans, with the added characteristics that collection I full is highly questionable and improbable. Classification of loss is deferred because of specific pending factor that may strength the quality of assets. Such factor includes merger, acquisition, liquidation procedure, capital injection, performing lion on additional collateral and refinancing plan. All loan and advance, which are past due or period of 6 months to 1 year, shall be included in this category.

Bad Loan: these loan are considered uncollectible and of such little value that their continuance as bankable assets is not warranted. This classification does not mean that the assets has absolutely not recovery or salvage value, but rather it is not practical or desirable to defer full provision or writing of this basically worthless loan. Partial recovery of this may be possible in future. All loan and advance which are past due for a period of more than 1 year as well as advance which have least possibility of recovery or considered unrecoverable and those having thin possibility of even partial recovery in future shall be included in this category.

Loan Loss Provision: Nepal Rastra Bank has made it mandatory to commercial bank to make the loan loss provision on the basic of outstanding loan and advance and bills purchase on the following basis:

Types of Loans	Loss Provision	Time Period
Pass	1 percentage	up to 1 months
Watch List	5 percentage	1 month to 3 months
Substandard	25 percentage	3 months to 6 months
Doubtful	50 percentage	6 months to 1 year
Loss/Bad	100 percentage	more than 1 year

(Source: NRB Directive, 2020)

Apart from the above mentioned arrangement following additional arrangements are provided by the following provision:

1. Where the loan is extended only against the personal guarantee statement of the assets, equivalent to the personal guarantee amount not claim by another shall be obtained. Such loans shall be classified as per above and where the loans fall under the category of, pass, watch list, substandard and doubtful, in addition to the normal loans loss provision applicable for the category, an additional provision 20 percentage shall also be provided.
2. The loan loss provision in respect of rescheduled, restructured and swap loans shall be provided at minimum of 12.50 percentage.
3. In case of priority sector loan the provisioning are made 1%,5%, 25%, 50% and 100% to the loan categorized as pass, watch list, substandard, doubtful and loss respectively (NRB Directive, 2020).

C) Management Efficiency: Good management can make, and poor management can break an organization. Banks are no exception to this universal phenomenon. Sound management is a key to financial institution

performances (Keshar j.Baral, 2005). Although several indicator can be use as proxies for the soundness of management, such evaluation is still primarily a qualitative exercise, particularly when it comes to the evaluation of the management of operational risk, that is the functioning of internal control system. The quality of management is the most important element in CAMEL framework of financial performances analysis. The Nepali banking sector has matured over the last 20 year and there is sufficient evidence of professional management being able to translate their efficiency toward producing wonderful result for the banks. At the same time we also have enough case where due to poor management bank have performed poorly. Human resources management translates in to staff efficiency of a particular bank.

Grier, W. A. (2007) suggests that management is considered to be the single most important element in the CAMEL rating system because it plays a substantial role in a bank's success; however, it is subject to measure as the assets quality examination.

The productivity of the employee can be used as a measuring rod for evaluation. Likewise sustainability of earning shows the efficiency of management. Expenses ratio, earning per employee, cost per loan, average loan size and cost per unit of money lent can also be used as proxy of the management quality. A high or increasing ratio of expenses to total revenues can indicate that financial institution may not be operating efficiency. This can be, but is not necessarily due to management deficiencies. In any case, it is likely to negatively affect profitability. Similarly, low or decreasing earning per employee can reflect inefficiencies as a result of overstaffing, with similar repercussion in terms of profitability. Another possible ratio of management soundness is the rate of expansion in the number of branches whereas some expansion may reflect a healthy degree of competition, too rapid a rate of expansion may indicate lax licensing requirement unsound management, and a gap in the supervisory capacity.

Although there is a risk of being slightly subjective, the issue of evaluating management quality cannot be completed if we do not consider corporate governance factor. While management must work to maximize shareholders

value in any organization, there must be a clear line between management and shareholders or board of director in term of authority, responsibility and accountability level. Good corporate governance require policies, procedures and operating manuals to be supreme in any bank, whereby only professional consideration should play a role in strategic decision- making.

The board of director plays a key role in formulation of policies, supervision and control. On the other hand managing director is liable to the successful operation of the bank. The success of any bank is largely determined by the efficiency of its management. Poor loan policy and the poor assets/ liability management lead by any bank to failure. The problematic variable for researcher in the development of CAMEL model has largely been the choice of a representative measure for management quality. NRB also has evaded this component of CAMEL in the performance evaluation of commercial bank in Nepal.

D) Earnings: An analysis of the earnings helps the management, shareholders and depositors to evaluate the performances of the banks, sustainability of earnings and to forecast growth of the bank. The success of the bank heavily relies upon the efficiency of the management to drive the bank to earn good profit. Net profit is the major component to measure such profit. A required level of profit is necessary for the firm's growth and survival in the competitive environment. Profitability is the measurement of the worth of the selected investment in various categories of assets depending largely on sales performances and operative efficiency. Profitability is vitally more important for assuring that a bank stay in business or activity. Net profit of any bank decreases resulting from high non- performing loans, lack of avenues for earning fee based income and operating inefficiencies. The future performance in earning should be given equal or greater value than past and present performance (Uniform Financial Institutions Rating System, 1997).

Net income (after tax) to total assets, net earnings (after tax) to core capital, net spread, net interest margin and net operating margined can be used to assess the earning performances of the bank.

E) Liquidity: Banks are in business where liquidity (ability to pay cash to its depositors) is of prime important. Liquidity ratios are used to judge a bank's ability to meet short- term obligation. It is the comparison between the short-term obligation short- term resources available to meet such obligation. Liquidity risk threatens the solvency of financial institution. In case of commercial bank first type of liquidity risk arises when depositor of commercial banks seek to withdraw their money and the second type does when commitment holders want to exercise the commitment recorded off the balance sheet. Commercial bank has to borrow the additional funds or sell the assets at fire sale sell price to pay off the deposit liabilities. They become insolvent if sale proceed of the asses are not enough to meet the liability withdrawals. The second type of liquidity risk arises when demand for unexpected loan cannot be meet due to the lack of the fund. The banks can raise the funds by running down their cash assets, borrowing additional fund in the money market and seeking off other assets at distressed price.

Commercial banks are directed by NRB to maintain five percentage of their deposit as CRR in NRB account to ensure adequate liquidity. As per the NRB regulations banks have to maintain CRR on a weekly basis. Therefore, if a bank has maintained higher NRB balance on other days of the weak, it can afford to maintain lower than five percentage balance on next days. Therefore, rather than disclosing the CRR of year end, bank should report the exact CRR ratio maintained during the weak, in which yearend falls. Deposit organization like banks, showing lower than regulatory CRR in the annual accounts, might lead to depositors mistrust toward the bank. NRB should ensure that the banks report correct CRR ratio in their annual accounts.

Cash and bank balance to total deposit ratio is designed to measure the bank's ability to meet immediate obligation, mainly cash withdrawal by depositors. Lower ratio indicate that bank might face a liquidity crunch while paying its obligation, where as a very high ratio points out that the bank have been keeping idle fund and not deploying them properly.

Bank around the world invest a significant portion of their deposit in government securities because maintaining adequate CRR and cash and bank

balance only cannot be considered sufficient for liquidity maintenance. There are occasions when a bank may need to face unexpected withdrawals. In such case, as bank are run from depositors money they need to maintain adequate investment in government securities as such investment can be liquidated at any point in time.

2.2 Review of Related Study

Adolphus J. Toby (2007) did a study on “CAMEL Analysis, prudential regulation and banking system soundness in Nigeria”. This paper examined the select financial indicator and their prudential implication for banking system soundness in Nigeria. For each of the hypothesized functional relationship, the spearman rank correlation coefficient and the corresponding Freund –Williams’s significant test at the 5% level were calculated, under regimes of rising portion of non- performing loan in the distressed bank, bank increasing bank liquidity and falling profitability the paper found the selected capital adequacy ratio to be significantly correlated with bank solvency. Cash reserve ratio correlated negatively and significantly with the portion of non- performing loan. It was also found that the cash and bank balance ratio correlates positively and significantly with the return on total assets. While the ratio of loan to deposit correlates negatively and significantly with bank solvency. The pre- tax profit margin correlates positively with bank solvency. Incremental capital requirements should be graduated in line with selected bank solvency and profitability projection. An optimal loan to deposit ratio must have the objective of increasing assets quality, long run corporate growth and facilitation of the monetary transmission mechanism.

Altan, Yusufazari&Beduk (2014) authors madean attempt to investigate the performance and financial soundness of State-owned and private-owned banks in community of Turkish banks for the period 2005-2012 by using CAMEL approach. The study examined performance of private and state owned banks among fifteen banks in Turkey during 2005-2012. Moreover, the paper highlights ranking of fifteen banks for their performance with respect to CAMEL ratios. Writers expressed that in terms of capital adequacy, Ada bank was at the top position. In terms of asset quality, Zirratt Bank stood on the top position. In context of management quality, Ak Bank was at the top position. Halk bank stood at the top position in terms of earning quality and finally in terms of liquidity Ziraat bank stood at top position. Analyzing through

CAMEL showed that Ziraat bank was very first among other banks, and then Ak Bank, Vakif Bank, Is Bank, and Garanti Bank are the other efficient performance banks. The weakest banks among fifteen banks were Tekstil Bank, Yapıkerdi Bank, Seker Bank, Ada Banks

Baral (2005) conducted a study on “Health Check up of Commercial Banks in the Framework of Camel: A Case Study of Joint Venture Banks in Nepal”. The researcher’s main objective was to examine the financial health of joint venture banks in the CAMEL framework. The study has brought into being that the financial health of joint venture banks is not so strong to manage the possible large-scale shocks to their balance sheet and their health is fair. Joint venture commercial banks are well capitalized but their capital base relative to the risk-weighted assets is not strong. According to the international convention of rating, their capital base is fair. This implies that their financial health is not so strong to manage the strong balance sheet shocks. The researcher explained that quality of assets of joint venture banks on the average is satisfactory. Nonperforming assets of all joint venture banks under study are far below the aggregate percentage of nonperforming assets of commercial banks. Both NPAR and LLRR show that joint venture banks are improving the quality of their assets year by year. Overall, both NPAR and LLRR imply the sound financial health of the joint venture banks.

Further, this study argued that both indicators operating expenses ratio and earning per employee of management quality of joint venture banks are above the industry average during the study period. Therefore, relative to the industry average, performance of management of joint venture banks is satisfactory. Overall, indicators of management efficiency show relatively healthy joint venture banks in Nepal. The study also pointed toward Earning/profitability indicators ROE, ROA, and PM show that financial health of joint venture banks is not so weak. In general, earning performance of joint venture banks, as indicated by ROA, is fair.

Lastly, author explored that the liquidity indicators of joint venture banks showed that they have stored high level of liquidity and are not facing the liquidity deficit problem; instead, they are facing the high liquidity problem. Their high liquidity is affecting their financial health adversely by deteriorating their profitability. Thus,

with a viewpoint of liquidity position, the health of joint venture banks is looked like a little bit unhealthy.

Getahun (2015) conducted a study on, “Analyzing Financial Performance of Commercial Banks in Ethiopia: CAMEL Approach”. The major objectives of the study were to find out the relationship between capital adequacy ratios, asset quality ratio, management efficiency ratio, earning ratio and liquidity ratio and the performance of the banks.

Over the study period, researcher has found that In terms of Capital adequacy as measured by the ratio of total capital to total asset Bunna International Bank is rated first i.e. with the average value of 24.15%. During the study period, 14.26% of the commercial banks asset was financed by capital. Commercial Bank of Ethiopia maintained the last position with the average ratio of 5.39 Percent. With regard to asset quality ratio as measured by the ratio of provision for loan loss to total loan again, Buna International bank is the first with an average value of 1.1 % .During the study period the commercial banks provide 2.77% for loan loss. With the average Value of 7.8% Business and Construction bank takes the last position among the banks. Management efficiency as measured by the ratio of Non interest expense to Net-interest income plus Non-Interest income Commercial Bank of Ethiopia is the first with the average ratio of 25.31% in average the commercial banks spend 46.44% of their income to cover Noninterest expense. With an average value of 78.40% Berhan International Bank maintained the last position among the banks. In terms of earning ratio as measured by Net Interest Income to total loan Commercial bank of Ethiopia stood on the top with the average ratio of 8.84 % while Zemen Bank was the last with the average ratio of 3.77%. The earnings ratio of the banks in Ethiopia was on average 6.65% during the study period. Liquidity ratio as measured by the ratio of total loan to total deposit Buna International Bank was the first with the average ratio of 70.10% while Commercial bank of Ethiopia was the last with the average ratio of 46.6%.The liquidity position of the commercial banks in Ethiopia was 56.36% on average. According to the Composite rating of CAMEL, Wogagen Bank stood on the top followed by Bunna international bank. The Construction and Business Bank maintained the last position among commercial banks in Ethiopia. The Industry giant Commercial Bank of Ethiopia maintained the Sixth position

Gupta, R. (2014) did study on, “*An Analysis of Indian Public Sector Banks using Camel Approach*”- author made an expression that the progression of an economy is significantly dependent upon deployment as well as optimum utilization of resources and most importantly operational efficiency of the various sectors, of which banking sector plays a very vital role. Banking sector helps in stimulation of capital formation, innovation, and monetization in addition to facilitation of monetary policy. It is imperative to carefully evaluate and analyze the performance of banks to ensure a healthy financial system and an efficient economy. Thus, this paper has made an attempt to evaluate the performance of public sector banks in India using CAMEL approach for a five-year period from 2009-2013.

Moreover, due to radical changes in the banking sector in the recent years, the central banks all around the world have improved their supervision quality and techniques. In evaluating the function of the banks, many of the developed countries are now following uniform financial rating system (CAMEL RATING) along with other existing procedures and techniques. Various studies have been conducted in India as well on various banks using CAMEL framework. Different banks are ranked according to the ratings obtained by them on the five parameters. The results show that there is a statistically significant difference between the CAMEL ratios of all the Public Sector Banks in India, thus, signifying that the overall performance of Public Sector Banks is different. In addition, it was concluded by the writer that the banks with least ranking need to improve their performance to come up to the desired standards.

Poudel (2012) in his article ‘Financial Statement Analysis’ published in Nepal Rastra Bank Samachar on 2067 is reviewed. According to Mr. Poudel, the principal objectives of analyzing financial statements are to identify financial adoptability (liquidity), financial performance (profitability) and financial position of the bank (solvency). The other factors, to be considered in analyzing the financial the risks of the depositors were too high. Poudel further put forward that a good banking system is, therefore a sine qua non for maintaining financial balance in the country and NRB’s efforts in this direction are really worthy.

Zeb (2011) accomplished a study paper, “Camels Rating System for Banking Industry in Pakistan, Does CAMELS System Provide Similar Rating as PARCA System in

Assessing the Performance of Banks in Pakistan?” In that author explained CAMELS system, provide similar rating as PARCA system in assessing components in detail and implement it on the sample banks of population they selected from the banking industry of Pakistan. As per the researcher the primary objective of the research was to compare similarity of the results generated from the CAMELS rating system with respect to the rating of external credit rating agency in Pakistan called PARCA. For that purpose, he analyzed sample banks on the criteria that are presented in CAMELS system. His sub purpose was to rank sample banks that will be based upon the results generated from implementation of CAMELS rating system.

The main objective of the study was to find out the answer of research question, “Does CAMELS system provide similar rating as PARCA system in assessing the performance of banks in Pakistan”. The research adopted deductive research approach that is mostly suited with quantitative research strategy. For the study, he used criteria sampling method that is a type of non-probability sampling and only secondary data were used. In addition, the writer explained that the results of both CAMELS and PARCA rating systems were similar in reference to large banks such as ABL, HBL, MCB, NBP and UBL where as there was not similarities in the results of medium sized banks such as Askari Bank, Bank Al-Falah and Standard Chartered bank Limited. Results of the small banks such as Faysal Bank, JS Bank, My bank and NIB banks shows complete difference in the their results. PARCA Rating of all sample banks in his research ranged AAA and BBB for long-term rating whereas its short-term rating was A1 and A2. Lastly, the writer ends up by saying that the similarities in the large banks cannot be considered as accuracy of rating systems but it is coincidentally in the same rating scale as other small and medium sized banks.

Finally, primary purpose of researcher was to analyze similarities in the results generated by CAMELS rating system and PARCA rating agency. The research finding showed that rating published by PARCA rating agency showed almost all banks are financially strong and stable where as results of CAMELS rating system are completely different from these ratings. So it can be concluded that there are no similarities in the results of these rating systems.

2.3 Research Gap

Although various studies have been carried out, regarding the financial performances analysis of the bank and other financial institution in Nepalese context. These studies mainly focused on liquidity, leverage and profitability of the bank. The financial performances analysis made in the past lacks the analysis in the framework of CAMEL, a new technique of assessing financing performances of the bank. However very few studies have been done applying this technique, they also lack through study using appropriate model. This study attempts to analysis the financial performances of Nepalese selected commercial bank in the framework of CAMELS using appropriate models.

CHAPTER-III

RESEARCH METHODOLOGY

This chapter provides the overall framework or plane for the collection, analysis and presentation of data required to fulfill the objective of the study. Objective of using different tools and technique for the analysis and presentation as well as is to answer the research question as explain under this section. It includes types of information to be collected and sources of the information for the study purpose. To meet the objective, the methodologies applied in the study are described below:

3.1 Research Design

This research study aims at portraying accurately on the financial performances of selected commercial bank of Nepal. Therefore, a case study analytical is used for the study purpose to achieve the desired end. The study period covers fiscal year starting from 2014/15 to 2019/20. This research will follow analytical and descriptive research design.

3.2 Population and Sample

There are twenty seven commercial banks in Nepal which includes three government owned banks, five foreign joint venture banks and remaining nineteen private sector banks. For this research purpose, the researcher takes only six banks into consideration which consists two banks from government sector namely Rastriya Banijaya Bank Ltd and Nepal Bank Limited; two foreign joint venture banks namely Standard Chartered Bank Nepal Limited and Nepal SBI Bank Ltd; and remaining two from private sector banks namely NMB Bank Limited and Kumari Bank Ltd.

The main intention of the researcher is to find out the performance of all these three sectors investment namely government, foreign joint venture and private sector.

Only two government-owned banks are taken since both of this banks' capital are approximately same. Two joint venture banks are taken since both of these banks have approximately same capital base. EPS of this aforementioned two private sector banks is also same so these banks are taken into account.

3.3 Nature and Sources of Data

This study is fully based on the secondary data. Therefore, the main sources of data are the historical data disclosed by published reports of commercial bank especially annual report of sample banks. The regulatory data has been collected from NRB directives and reports. The basic conceptual information has been collected through BASEL, FDIC and NRB publications and working papers which are available in website. The major sources of data use in this study are:

- NRB Reports and Bulletins, and its website.
- Various articles published in journals and financial magazine;
- Basel Committee publications through its official website;
- Nepal Stock Exchange Reports;
- Research paper and dissertations of website of the sample bank in addition supportive qualitative information was collected by formal and informal discussions with the senior staff of the banks.

3.4 Data Collection Procedure

The required data of this study is entirely based on the historical data disclose in annual reports. NRB publications have download from the website of NRB. Relevant information and annual report of respective commercial banks has been obtained from the Head office and website of the bank. Reviews of working paper written by various international scholars have download from the related websites respectively.

3.5 Data Processing Procedure

At first relevant data were extracted from above mentioned sources and recorded in the master sheet. The data has then entered into the spread sheet to workout. The financial ratios have worked out with the help of applicable software such as Microsoft word, Microsoft excel. In addition tables were generated with the help of Microsoft excel

3.6 Data Analysis Tools & Techniques

Financial ratios in the framework of CAMEL related Statistics tool have been used to analyze the financial performance of commercial banks. The relevant ratios used in this study are given in ensuring part of this section.

3.6.1 Financial Tools

For proper financial analysis of data ratio analysis is the best tool. It is very simple analyzing tool under which ratio are taken to express relation between two or more data. Through ratio analysis we can establish the relation among the data and research into conclusion. Under ratio analysis following ratio related to bank are analysis.

1) Capital Adequacy ratio (CAR)

The term used to describe or measure a bank's capital fund. It is expressed as a percentage of a bank's risk weighted credit exposure. Capital adequacy ratio is calculated on the basic of core capital, supplementary capital and total risk weighted assets of the bank. This ratio is used to protect depositor and promote the stability and efficiency of financial system around the world and to examine adequacy of the total capital fund and core capital which is yield by the following formula:

$$CAR = \frac{\text{Total capital fund}}{\text{Total risk weighted assets}}$$

(Source: Basel Committee on Banking Supervision, 2007)

Where,

Total capital fund = Core capital + Supplementary capital

Total risk weighted assets = on balance sheet risk weighted item + off balance sheet item.

2) Core Capital Adequacy Ratio (CCAR)

Core capital adequacy ratio, is the expression of numerical relationship between the total core capital and total risk adjusted assets. It measures the adequacy of core capital. The ratio is expressed as:

$$CCAR = \frac{\text{Totalcorecapital}}{\text{Totalriskweightedassest}}$$

(Source: Basel Committee on Banking Supervision, 2007)

Where,

CCAR = Core Capital Adequacy Ratio

Core Capital = (Paid-up Capital + Share Premium + Non-redeemable Preference share + General reserve + Cumulative profit)

3) Supplementary Capital Adequacy Ratio

Supplementary capital ratio is the expression of numerical relationship between supplementary capital and total risk adjusted assets of a bank. It measures the proportion of supplementary capital to total risk adjusted assets. The ratio is used to analyze the supplementary capital adequacy of the banks and determined in the given way:

$$SCR = \frac{\text{Supplementary Capital}}{\text{Total Risk Adjusted Assets}}$$

(Source: Basel Committee on Banking Supervision, 2007)

Where,

SCR = Supplementary Capital Ratio

Supplementary Capital = (Loan loss provision + exchange equalization Reserve + assets revaluation reserve + hybrid Capital instrument + unsecured sub-ordinate term debt + interest rate fluctuation fund + other free reserves)

4) Nonperforming loan ratio (NPL)

This ratio is use to find out the portion of non-performing loan in the portfolio of total loan and advance. Higher ratio shows that bank has bad quality of assets in the form of loan and advance. Hence, lower ratio is preferred. There is no fixed ratio to be maintained but as per international standard only 5% is allowed. It calculated as follows;

$$\text{NPL ratio} = \frac{\text{Non performing loan}}{\text{Total loan and advance}}$$

(Source: NRB Directive, 2021)

5) Loan Loss Provision Ratio(LLP)

Loan loss provision signifies the cushion against future contingencies created by the default of the borrower in the payment of loan and ensures the continued solvency of the bank. Since low ratio reflects the good quality of assets in the volume of total loan and advances, low ratio is preferred. It indicate how efficiency is manages loan and advances makes effort to cope with probable loan loss, since high provision has to be made for non performing loan, high ratio implies, higher portion of NPL in the total loan portfolio. It is calculated as below;

$$\text{LLP ratio} = \frac{\text{Loan Loss Provision}}{\text{Total loan and advance}}$$

(Source: NRB Directive, 2021)

6) Management Efficiency Ratio (MER)

For effective management environment employees are the most valuable assets of organization because they are the only one who controls other resources. The training and other opportunities for growth of their motive employs to perform better. Thus by calculating the contribution of each employee in bank, management efficiency can be judge. The management efficiency of a bank can be calculated using the formula given below;

$$\text{MER ratio} = \frac{\text{Total Net Profit after Tax}}{\text{Total No. of staff}}$$

(Source: Uniform Financial Institutions Rating System, 1997)

7) Earnings per share (EPS)

It measure the profit available to the equity shareholder on a per share basic, i.e., the amount that they can get on each share held. In other words, this ratio measures the earning available to equity shareholders on as per share basic. It is calculated as;

$$\text{Earnings per share (EPS)} = \frac{\text{Total Net Profit after Tax}}{\text{Total No. of share}}$$

(Source: Uniform Financial Institutions Rating System, 1997)

8) Return On Assets (ROA)

Every financial institution has their own assets and ROA shows the productivity of these assets. It measure how efficiently the assets are utilized in the financial organization. The ratio judges the effectiveness in using the total fund supplied by the owner and creditors. Higher ratio shows the higher return of assets used in the bank thereby indicating effective use of the resources available and vice-versa. It is calculated in term of relationship between net profit and assets.

$$\text{Return on Assets (ROA)} = \frac{\text{Total Net Profit after Tax}}{\text{Total Assets}}$$

(Source: Uniform Financial Institutions Rating System, 1997)

9) Price earnings ratio (P/E ratio)

Price earnings ratio relates the price currently paid by the market for each rupee of currently reported earnings per share. It can be calculated as below;

$$\text{P/E ratio} = \frac{\text{Market Price Per Share}}{\text{Earning Per share}}$$

(Source: Uniform Financial Institutions Rating System, 1997)

10) Cash reserve ratio(CRR)

According to the NRB directive all commercial bank are required to maintain 5% of their deposit as CRR in their NOSTRO account maintain with NRB. NRB has issued this guideline to the bank to ensure that the bank maintain their adequate liquidity. NRB has prescribed liquidity risk. It is calculated as;

$$\text{CRR} = \frac{\text{NRBBalance} + \text{CashAtVault}}{\text{TotalDeposits}} \times 100$$

(Source: Uniform Financial Institutions Rating System, 1997)

11) Investment in government security ratio

Government security is a risk free security. The bank instead of keeping their fund idle invest in various government securities such as treasury bill and bonds that are

liquid in nature as they are easily convertible in to cash anytime. This ratio measures how much the total deposit is utilized in investing in government securities;

$$\text{Investment in government ratio} = \frac{\text{Total Investment in Govt. Securities}}{\text{Total Deposit}}$$

(Source: Uniform Financial Institutions Rating System, 1997)

12) Cash and Bank Balance Ratio(C&B Ratio)

The bank must be able to meet its immediate obligation of customers. Cash & bank balance ratio shows the percent of deposit maintain as liquid assets. A higher ratio represents a greater ability to meet any unexpected demand made by the customers. If the bank cannot deep adequate amount of deposit it cannot operate its daily transition. But maintaining very high ratio also indicates the losses of opportunity cost so the bank should manage C&B ratio properly. It is calculated as;

$$\text{Cash and Bank Balance Ratio} = \frac{\text{Cash and Bank Balance}}{\text{Total Deposit}}$$

(Source: Uniform Financial Institutions Rating System, 1997)

3.7.2 Statistical Tools

a. Average

In this study a simple arithmetic average has been used to find out the average value of different financial ratio of sampled domestic commercial bank. The average is expressed as:

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

Where,

X= Mean Value of Arithmetic Mean

N= Number of Observations

$\sum X$ = Sum of Observations.

b. Standard Deviation

In this study standard deviation has been employed to know the dispersion of different ratio of sampled domestic commercial banks in absolute term. Standard deviation is determined in the following ways:

$$\text{Standard Deviation } (\sigma) = \sqrt{\frac{\sum(x-\bar{x})^2}{N}}$$

c. Coefficient of Variation (CV)

The coefficient of variation is measure the relative measure of dispersion, hence capable to compare to variables independently in term of variability.

$$CV = \frac{\sigma}{\bar{x}} \times 100$$

d. Karl Pearson's Correlation

Co-efficient of correlation is used for measuring the magnitude of linear relationship between two variables. The co-efficient of correlation measures the degree of relationship between two sets of figures in quantitative terms.

Among the various methods of finding out co-efficient of correlation, Karl Pearson's method is applied in this study.

Where,

$$\text{Correlation } (r) = \frac{\sum xy}{\sum x \cdot \sum y}$$

$$\text{Or, } (r) = \frac{n \sum xy - \sum x \cdot \sum y}{\sqrt{n \sum x^2 - (\sum x)^2} \times \sqrt{n \sum y^2 - (\sum y)^2}}$$

CHAPTER-IV

DATA PRESENTATION AND ANALYSIS

This chapter deals with the presentation and analysis of data collected from different sources with the focus on the CAMEL component. As stated in the theoretical perspective, the financial performance analysis of Standard Chartered Bank Nepal Limited, Nepal SBI Bank Limited, NMB Bank Nepal limited, Kumari Bank Limited, Rastriya Banijya Bank Limited and Nepal Bank Limited are concentrated in the five component of CAMEL i.e. Capital Adequacy, Assets Quality, Management Quality, Earning Quality and Liquidity. The data collected from annual reports of respective banks and from NRB publications have been analyzed with the application of CAMEL.

4.1 Data Presentation and Analysis

The data collected from different sources has been refined and documented in Excel tables, which are further analyzed and arrived at certain conclusion on the financial conditions of above-mentioned banks analysis standard Chartered bank Nepal Limited, Nepal SBI bank Limited, NMB Bank Nepal Limited, Kumari Bank Limited, Rastriya Banijya Bank Limited and Nepal Bank Limited in terms of CAMEL Analysis are also described on each section as a part of CAMEL Analysis.

4.1.1 Analysis of Capital Adequacy

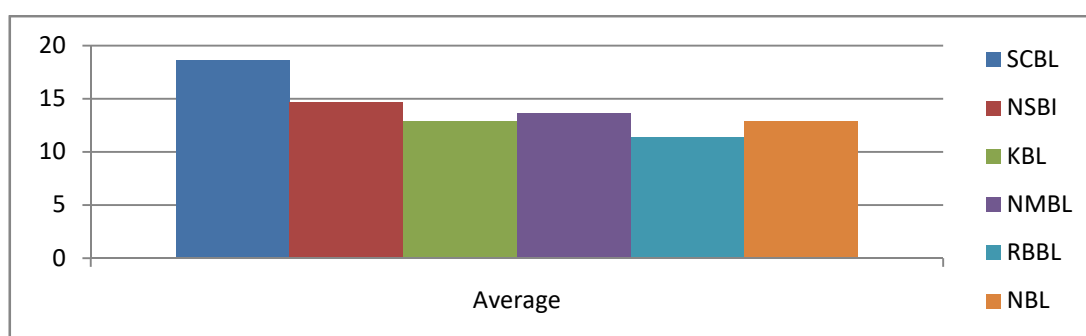
Table 4.1 Capital Adequacy Requirement Ratio (CAR)

Year	SCBL		NSBI		KBL		NMBL		RBBL		NBL	
	CAR	Dif	CAR	Dif	CAR	Dif	CAR	Dif	CAR	Dif	CAR	Dif
2014/15	13.1	2.1	14.1	3.1	10.84	-0.2	11.13	0.13	10.16	-0.8	7.49	-3.5
2015/16	16.3	5.3	13.49	2.49	11.69	0.69	10.98	0	10.46	-0.5	10.2	-0.8
2016/17	21	10	15.71	4.71	14.5	3.5	13.61	2.61	10.39	-0.6	14.47	3.47
2017/18	22.9	11.9	15.15	4.15	13.36	2.36	15.75	4.75	11.46	0.46	11.27	0.27
2018/19	19.6	8.6	14.12	3.12	11.75	0.75	15.45	4.45	13.39	2.39	16.8	5.8
2019/20	18.51	7.51	15.55	4.55	15.35	4.35	15.08	4.08	12.64	1.64	17.01	6.01
average	18.57		14.69		12.92		13.67		11.42		12.87	
Rank	1		2		4		3		6		5	

(Source: Annual Report of respective Bank)

Table 4.1 shows that Standard Chartered Bank Limited holds the top rank with an average of 18.57% while Rastriya Banijya Bank Limited was there in the bottom position with an average of 11.42%. Nepal SBI Bank Limited 14.69%, NMB Bank Limited 13.67%, Kumari Bank Limited 12.92%, and. Nepal Bank Limited 12.87% were in between. The table suggests that all the banks have fulfilled the minimum requirement laid down by Nepal Rastra Bank. Higher CAR reveals better performance in managing capital adequacy.

Figure 4.1 Capital Adequacy Requirement Ratio (CAR)



(Source: Annual Report of respective Bank)

Figure 4.1 shows that Standard Chartered Bank Limited holds the top rank with an average of 18.57% while Rastriya Banijya Bank Limited was there in the bottom position with an average of 11.42%. Nepal SBI Bank Limited 14.69%, NMB Bank Limited 13.67%, Kumari Bank Limited 12.92%, and. Nepal Bank Limited 12.87% were in between. The figure suggests that all the banks have fulfilled the minimum requirement laid down by Nepal Rastra Bank. Higher CAR reveals better performance in managing capital adequacy.

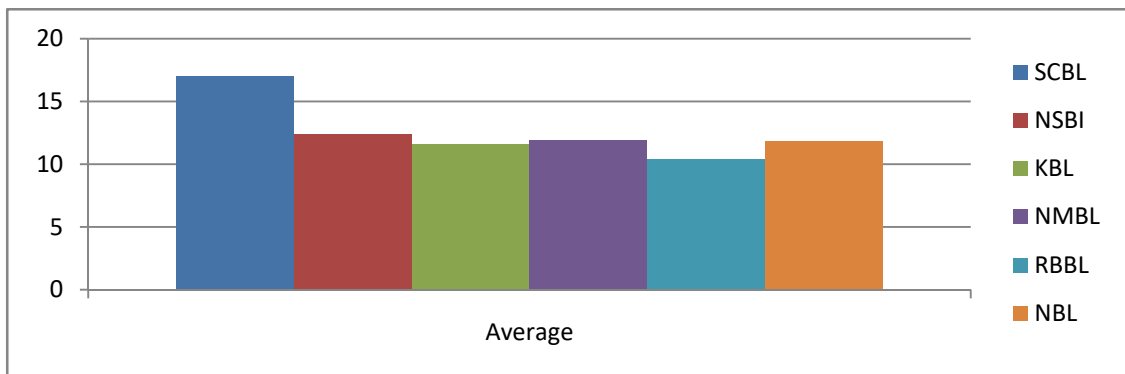
Table 4.2 Core Capital Requirement Ratio (CCRR)

Year	SCBL		NSBI		KBL		NMBL		RBBL		NBL	
	CCR	Diff	CCR	Diff	CCR	Diff	CCR	Diff	CCR	Diff	CCR	Diff
2014/15	11.67	6.17	11.18	5.68	9.89	4.39	8.84	3.34	10.16	4.66	6.32	0.82
2015/16	14.08	8.58	10.98	5.48	10.75	5.25	9.34	3.84	9.31	3.81	9.01	3.51
2016/17	19.58	14.08	13.53	8.03	13.55	8.05	12.39	6.89	9.15	3.65	13.37	7.87
2017/18	21.41	15.91	13.38	7.88	12.48	6.98	14.78	9.28	9.98	4.48	10.29	4.79
2018/19	18.31	12.81	12.72	7.22	10.89	5.39	13.11	7.61	12.31	6.81	15.87	10.37
2019/20	16.85	11.35	12.39	6.89	12.01	6.51	13	7.5	11.42	5.92	16	10.5
average	16.98		12.36		11.60		11.91		10.39		11.81	
Rank	1		2		5		3		6		4	

(Source: Annual Report of respective Bank)

Table 4.2 shows that Standard Chartered Bank Limited holds the top rank with an average of 16.98% while Rastriya Banijya Bank Limited was there in the bottom position with an average of 10.39%. Nepal SBI Bank Limited 12.36%, NMB Bank Limited 11.91%, Nepal Bank Limited 11.81, and Kumarai Bank Limited 11.60% were in between. The table suggests that all the banks have fulfilled the minimum requirement laid down by Nepal Rastra Bank. Higher CCRR reveals better performance in managing core capital.

Figure 4.2 Core Capital Requirement Ratio (CCRR)



(Source: Annual Report of respective Bank)

Figure 4.2 shows that Standard Chartered Bank Limited holds the top rank with an average of 16.98% while Rastriya Banijya Bank Limited was there in the bottom position with an average of 10.39%. Nepal SBI Bank Limited 12.36%, NMB Bank Limited 11.91%, Nepal Bank Limited 11.81, and Kumarai Bank Limited 11.60% were in between. The figure suggests that all the banks have fulfilled the minimum requirement laid down by Nepal Rastra Bank. Higher CCRR reveals better performance in managing core capital.

Table 4.3 Supplementary Capital Ratio (SCR)

Year	SCBL	NSBI	KBL	NMBL	RBBL	NBL
2014/15	1.43	2.84	0.96	2.29	-	1.17
2015/16	2.3	2.51	0.94	1.64	1.14	1.19
2016/17	1.5	2.18	0.95	1.22	1.24	1.1
2017/18	1.58	1.77	0.88	0.97	1.48	0.98
2018/19	1.38	1.4	0.86	2.35	1.08	0.93

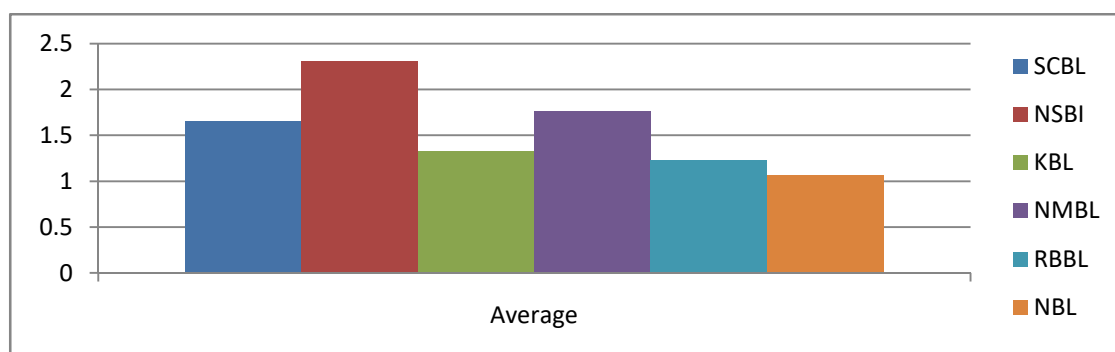
2019/20	1.66	3.16	3.34	2.08	1.22	1.01
Average	1.65	2.31	1.32	1.76	1.23	1.06
Rank	3	1	4	2	5	6

(Source: Annual Report of respective Bank)

Table 4.3 shows that Nepal SBI Bank Limited holds the top rank with an average of 2.31% while Nepal Bank Limited was there in the bottom position with an average of 1.06%. NMB Bank Limited (1.76%), Standard chartered Bank Limited (1.65%), Kumari Bank Limited (1.32%) and Rastriya Banijya Bank Limited (1.23%) were in between.

NRB has regulated the supplementary capital to be maintain by commercial bank should not exceed the core capital of the bank. Thus the table shows that all the bank has meet requirement of NRB during study period.

Figure 4.3 Supplementary Capital Ratio (SCR)



(Source: Annual Report of respective Bank)

Figure 4.3 shows that Nepal SBI Bank Limited holds the top rank with an average of 2.31% while Nepal Bank Limited was there in the bottom position with an average of 1.06%. NMB Bank Limited (1.76%), Standard chartered Bank Limited (1.65%), Kumari Bank Limited (1.32%) and Rastriya Banijya Bank Limited (1.23%) were in between.

NRB has regulated the supplementary capital to be maintain by commercial bank should not exceed the core capital of the bank. Thus the figure shows that all the bank has meet requirement of NRB during study period.

4.1.2 Analysis of Assets

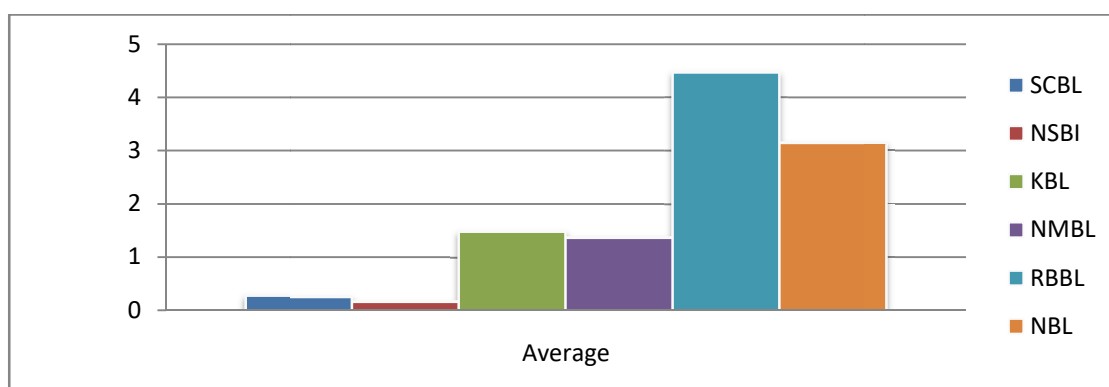
Table 4.4 Non performing loan Ratio (NPL)

Year	SCBL	NSBI	KBL	NMBL	RBBL	NBL
2014/15	0.34	0.19	2.49	0.42	5.35	3.98
2015/16	0.32	0.14	1.15	1.81	4.25	3.11
2016/17	0.19	0.1	1.86	1.68	3.77	3.32
2017/18	0.18	0.2	1.05	0.88	4.75	3.37
2018/19	0.15	0.2	1.01	0.82	4.59	2.64
2019/20	0.44	0.23	1.39	2.68	4.08	2.47
Average	0.27	0.18	1.49	1.38	4.47	3.15
Rank	2	1	4	3	6	5

(Source: Annual Report of respective Bank)

Table 4.4 shows that Nepal SBI Bank Limited holds the top rank with an average of 0.18% while Rastriya Banijya Bank Limited holds the bottom position with an average of 4.47%. Standard Chartered Bank Limited 0.27%, NMB Bank Limited 1.38%, Kumari Bank Limited 1.49%, and Nepal Bank Limited 3.15% were in between. Lower the ratio better is the position of the bank. Thus Nepal SBI Bank Limited holds the first position and Rastriya Banijya Bank Limited holds the lowest Position.

Figure 4.4 Non performing loan Ratio (NPL)



(Source: Annual Report of respective Bank)

Figure 4.4 shows that Nepal SBI Bank Limited holds the top rank with an average of 0.18% while Rastriya Banijya Bank Limited holds the bottom position with an average of 4.47%. Standard Chartered Bank Limited 0.27%, NMB Bank Limited 1.38%, Kumari Bank Limited 1.49%, and Nepal Bank Limited 3.15% were in

between. Lower the ratio better is the position of the bank. Thus Nepal SBI Bank Limited holds the first position and Rastriya Banijya Bank Limited holds the lowest Position.

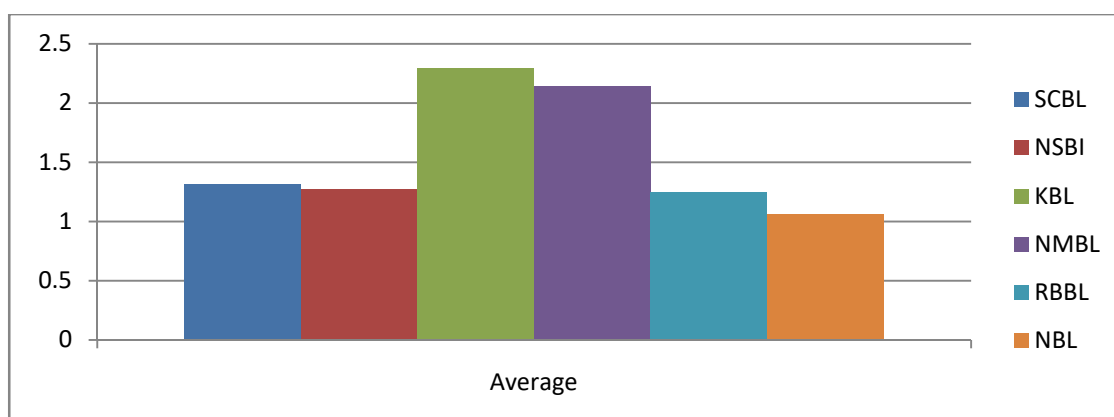
Table 4.5 Loan Loss Provision ratio (LLP)

Year	SCBL	NSBI	KBL	NMBL	RBBL	NBL
2014/15	1.18	1.25	2.87	1.35	1.1	0.89
2015/16	1.24	1.21	2.06	2.67	1.28	0.83
2016/17	1.3	1.13	2.84	2.34	1.78	0.99
2017/18	1.14	1.26	1.86	1.62	1.15	1.15
2018/19	1.11	1.25	1.9	1.51	0.99	1.23
2019/20	1.89	1.49	2.22	3.36	1.17	1.24
Average	1.31	1.27	2.29	2.14	1.25	1.06
Rank	4	3	6	5	2	1

(Source: Annual Report of respective Bank)

Table 4.5 shows that Nepal Bank Limited holds the top rank with an average of 1.06% while Kumari Bank Limited holds the bottom Position with an average of 2.29%. Rastriya Banijya Bank Limited 1.25%, Nepal SBI Bank Limited 1.27%, Standard Chartered Bank Limited 1.31%, and NMB Bank Limited 2.14% were in between. Lower the loan loss provision ratio is better the position of the bank. Thus Nepal Bank Limited holds the first position and Kumari Bank Limited holds the lowest Position.

Figure 4.5 Loan Loss Provision ratio (LLP)



(Source: Annual Report of respective Bank)

Figure 4.5 shows that Nepal Bank Limited holds the top rank with an average of 1.06% while Kumari Bank Limited holds the bottom Position with an average of 2.29%. Rastriya Banijya Bank Limited 1.25%, Nepal SBI Bank Limited 1.27%, Standard Chartered Bank Limited 1.31%, and NMB Bank Limited 2.14% were in between. Lower the loan loss provision ratio is better the position of the bank. Thus Nepal Bank Limited holds the first position and Kumari Bank Limited holds the lowest Position.

4.1.3 Analysis of Management Quality

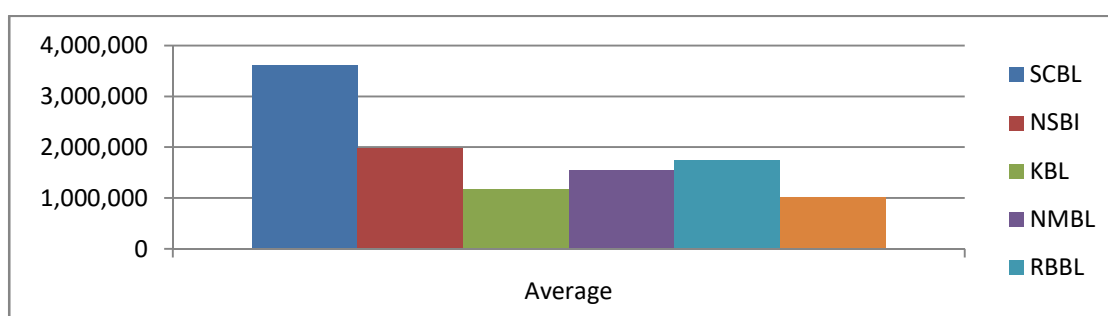
Table 4.6 Management Efficiency ratio (MER)

Year	SCBL	NSBI	KBL	NMBL	RBBL	NBL
2014/15	2,979,000	1,787,645	1,007,113	1,403,332	1,824,703	184,464
2015/16	2,971,000	1,961,534	1,859,908	1,476,907	953,558	1,223,675
2016/17	2,872,000	2,003,711	1,050,521	1,621,587	1,235,013	962,874
2017/18	4,515,000	2,323,205	1,308,910	1,716,475	1,881,371	1,501,252
2018/19	4,585,000	2,227,915	1,179,653	2,015,425	2,407,691	1,120,732
2019/20	3,715,000	1,537,200	650,481	1,035,535	2,213,001	1,074,074
Average	3,606,167	1,973,535	1,176,098	1,544,877	1,752,556	1,011,179
Rank	1	2	5	4	3	6

(Source: Annual Report of respective Bank)

Table 4.6 shows that Standard Chartered Bank Limited holds the top rank with an average of NPR 3,606,167 while Nepal Bank Limited holds the bottom Position with an average of NPR 1,011,179, Nepal SBI Bank Limited NPR 1,973,535, Rastriya Banijya Bank Limited NPR 1,752,556, NMB Bank Limited NPR 1,544,877 and Kumari Bank Limited NPR 1,176,098 were in between. Higher the management efficiency is better the position of the bank. Thus Standard Chartered Bank Limited holds the first position and Nepal Bank Limited holds the lowest Position.

Figure 4.6 Management Efficiency ratio (MER)



(Source: Annual Report of respective Bank)

Figure 4.6 shows that Standard Chartered Bank Limited holds the top rank with an average of NPR 3,606,167 while Nepal Bank Limited holds the bottom Position with an average of NPR 1,011,179, Nepal SBI Bank Limited NPR 1,973,535, Rastriya Banijya Bank Limited NPR 1,752,556, NMB Bank Limited NPR 1,544,877 and Kumari Bank Limited NPR 1,176,098 were in between. Higher the management efficiency is better the position of the bank. Thus Standard Chartered Bank Limited holds the first position and Nepal Bank Limited holds the lowest Position.

4.1.4 Analysis of Earning

Table 4.7 Earning per Share (EPS)

Year	SCBL	NSBI	KBL	NMBL	RBBL	NBL
2014/15	57.38	34.48	16.24	21.48	57.07	7.48
2015/16	45.96	36.78	26.53	22.1	27.42	44.59
2016/17	35.49	33.46	13.29	22.24	32.32	38.77
2017/18	27.33	25.16	14.54	21.86	30.26	39.98
2018/19	30.39	27.13	14.81	18.79	56.04	26.99
2019/20	24.81	17.23	12.08	12.62	48.61	20.68
Average	36.89	29.04	16.25	19.45	41.95	29.75
S.D	11.43	6.67	4.78	3.63	12.33	12.86
C.V	30.98	22.98	29.39	18.69	29.39	43.22
Rank	2	4	6	5	1	3

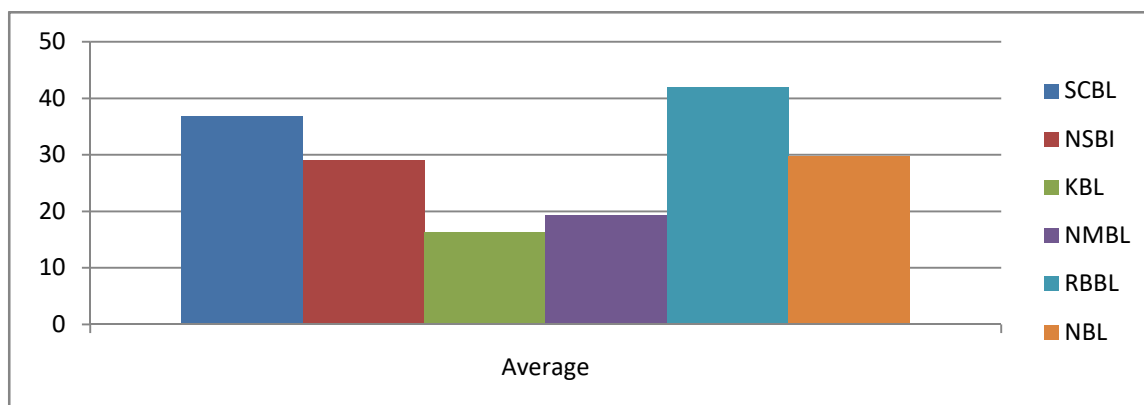
(Source: Annual Report of respective Bank)

Table 4.7 shows that Rastriya Banijya Bank Limited holds the top rank with an average EPS of 41.95 while Kumari Bank Limited holds the bottom Position with an average EPS of 16.25, Standard Chartered Bank Limited 36.89., Nepal Bank Limited 29.75, Nepal SBI Bank Limited 29.04 and NMB Bank Limited 18.69 were in between. Higher the Earning is better the position of the bank. Thus, Rastriya Banijya Bank Limited holds the first position and Kumari Bank Limited holds the lowest Position

According to the coefficient of variation NMB bank Limited hold the top rank with average C.V of 18.69 while Nepal bank hold the bottom position with an average C.V of 43.22, Nepal SBI bank limited 22.98, Rastriya Banijya bank limited 29.39, Kumari Bank limited 29.39 and Standard Chartered bank limited 30.98 were in between .

Lower the coefficient of variation is better for the performances of the bank. Thus NMB bank Limited holds the first position and Nepal bank limited hold the lower position.

Figure 4.7 Earning Per Share (EPS)



(Source: Annual Report of respective Bank)

Figure 4.7 shows that Rastriya Banijya Bank Limited holds the top rank with an average EPS of 41.95 while Kumari Bank Limited holds the bottom Position with an average EPS of 16.25, Standard Chartered Bank Limited 36.89., Nepal Bank Limited 29.75, Nepal SBI Bank Limited 29.04 and NMB Bank Limited 18.69 were in between. Higher the Earning is better the position of the bank. Thus, Rastriya Banijya Bank Limited holds the first position and Kumari Bank Limited holds the lowest Position.

Table 4.8 Return on Assets (ROA)

Year	SCBL	NSBI	KBL	NMBL	RBBL	NBL
2014/15	1.99	1.64	1.06	1.4	3.22	0.55
2015/16	1.98	1.59	1.69	1.92	1.42	2.79
2016/17	1.84	1.57	1.29	1.82	1.6	2.78
2017/18	2.61	1.97	1.26	1.8	1.42	2.41
2018/19	2.61	1.94	1.17	1.83	2.23	1.51
2019/20	1.71	1.17	0.76	1.09	1.64	1.22
Average	2.12	1.65	1.21	1.64	1.92	1.88
S.D	0.36	0.27	0.28	0.30	0.64	0.84
C.V	16.80	16.20	23.12	18.13	33.37	44.90
Rank	1	4	6	5	2	3

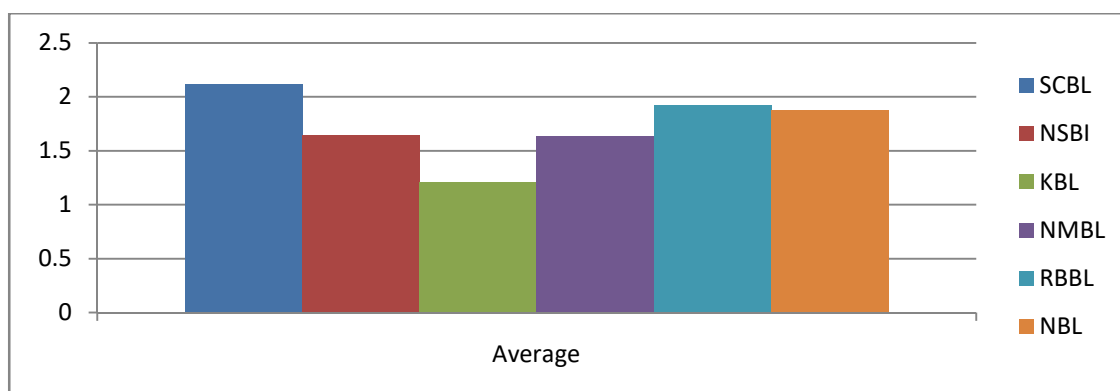
(Source: Annual Report of respective Bank)

Table 4.8 shows that Standard Chartered Bank Limited holds the top rank with an average ROA of 2.12 while Kumari Bank Limited holds the bottom Position with an average ROA of 1.21, Rastriya Banijya Bank Limited 1.92, Nepal Bank Limited 1.88, Nepal SBI Bank Limited 1.65 and NMB Bank Limited 1.64 were in between. Higher the ROA is better the position of the bank. Thus Standard Chartered Bank Limited holds the first position and Kumari Bank Limited holds the lowest Position.

According to the coefficient of variation Nepal SBI bank Limited hold the top rank with average C.V of 16.20 while Nepal bank hold the bottom position with an average C.V of 44.90, Standard Chartered Bank 16.80, NMB bank limited 18.13, Kumari bank limited 23.12 and Rastriya Banijya bank limited 33.37 were in between .

Lower the coefficient of variation is better for the performances of the bank. Thus Nepal SBI bank Limited holds the first position and Nepal bank limited hold the lower position.

Figure 4.8 Return on Assets (ROA)



(Source: Annual Report of respective Bank)

Figure 4.8 shows that Standard Chartered Bank Limited holds the top rank with an average ROA of 2.12 while Kumari Bank Limited holds the bottom Position with an average ROA of 1.21, Rastriya Banijya Bank Limited 1.92, Nepal Bank Limited 1.88, Nepal SBI Bank Limited 1.65 and NMB Bank Limited 1.64 were in between. Higher the ROA is better the position of the bank. Thus Standard Chartered Bank Limited holds the first position and Kumari Bank Limited holds the lowest Position.

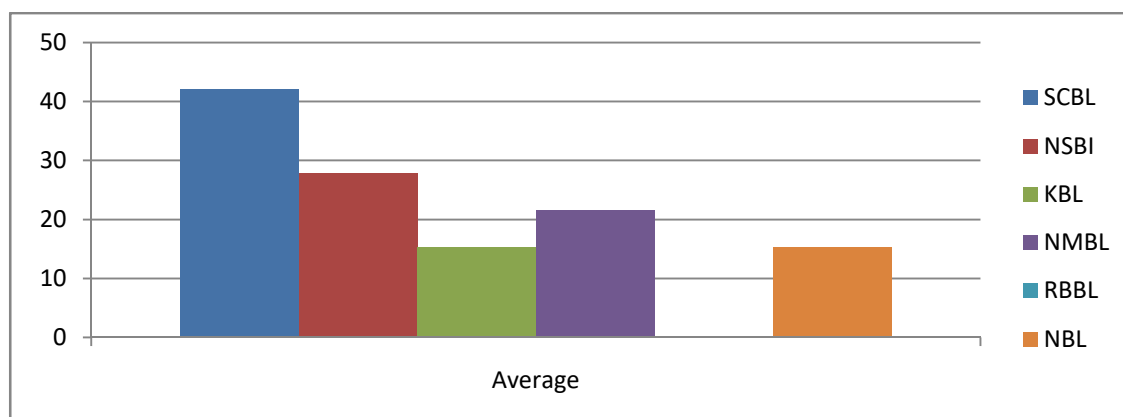
Table 4.9 Price Earnings Ratio (P/E Ratio)

Year	SCBL	NSBI	KBL	NMBL	RBBL	NBL
2014/15	33.86	25.73	23.41	20.24	-	40.78
2015/16	78.33	50.98	0	29.15	-	10.54
2016/17	64.67	27.64	24.61	20.27	-	9.39
2017/18	27.62	19.83	13.68	12.48	-	7.03
2018/19	22.44	17.29	14.85	16.23	-	12.45
2019/20	26	25.24	15.39	31.45	-	12.04
Average	42.15	27.79	15.32	21.64	0.00	15.37
Rank	6	5	2	4	1	3

(Source: Annual Report of respective Bank)

Table 4.9 shows that Rastriya Banijya Bank Limited holds the top rank with an average of 0 while Standard Chartered Bank Limited holds the bottom Position with an average of 42.15, Kumari Bank Limited 15.32, Nepal Bank Limited 15.37, NMB Bank Limited 21.64 and Nepal SBI Bank Limited 27.79 were in between. Lower the price earnings ratio is better the position of the bank. Thus, Rastriya Banijya Bank Limited holds the first position and standard Chartered Bank Limited holds the lowest position.

Figure 4.9 Price Earnings Ratio (P/E Ratio)



(Source: Annual Report of respective Bank)

Figure 4.9 shows that Rastriya Banijya Bank Limited holds the top rank with an average of 0 while Standard Chartered Bank Limited holds the bottom Position with an average of 42.15, Kumari Bank Limited 15.32, Nepal Bank Limited 15.37, NMB Bank Limited 21.64 and Nepal SBI Bank Limited 27.79 were in between. Lower the price earnings ratio is better the position of the bank. Thus, Rastriya Banijya Bank

Limited holds the first position and standard Chartered Bank Limited holds the lowest position.

4.1.5 Analysis of Liquidity

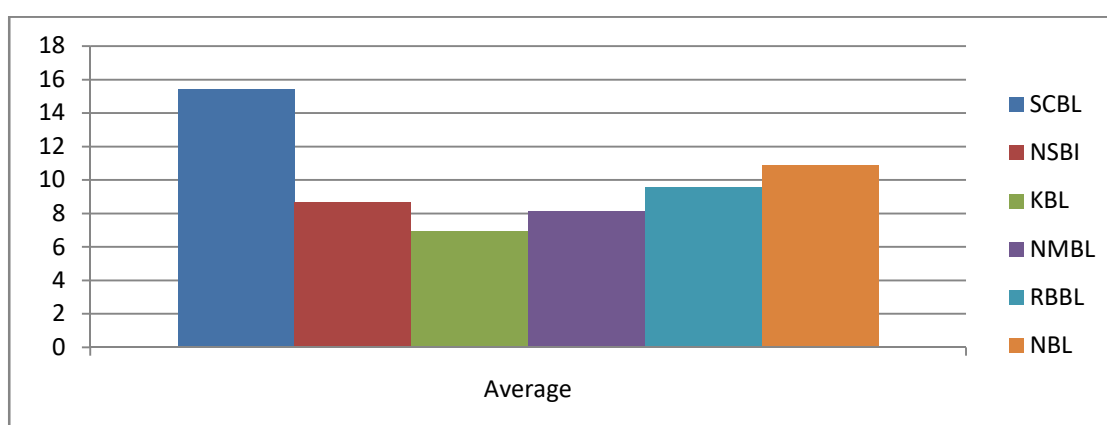
Table 4.10 Cash Reserve Ratio (CRR)

Year	SCBL	NSBI	KBL	NMBL	RBBL	NBL
2014/15	24.03	10.92	7.48	13.32	14.48	11.55
2015/16	7.98	8.33	8.74	10.81	14.09	17.46
2016/17	19.71	10.04	10.33	7.72	9.6	18.81
2017/18	18.91	7.18	6.85	6.68	5.29	9.05
2018/19	7.52	6.65	4.59	4.19	6.44	4.06
2019/20	14.49	8.89	3.78	5.93	7.32	4.53
Average	15.44	8.67	6.96	8.11	9.54	10.91
Rank	1	4	6	5	3	2

(Source: Annual Report of respective Bank)

Table 4.10 shows that Standard Chartered Bank Limited holds the top rank with an average of 15.44 while Kumari Bank Limited holds the bottom Position with an average of 6.96. Nepal Bank Limited 10.91, Rastriya Banijya Bank Limited 9.54, Nepal SBI Bank Limited 8.67 and NMB Bank Limited 8.11 were in between.

Figure 4.10 Cash Reserve Ratio (CRR)



(Source: Annual Report of respective Bank)

Figure 4.10 shows that Standard Chartered Bank Limited holds the top rank with an average of 15.44 while Kumari Bank Limited holds the bottom Position with an average of 6.96. Nepal Bank Limited 10.91, Rastriya Banijya Bank Limited 9.54, Nepal SBI Bank Limited 8.67 and NMB Bank Limited 8.11 were in between.

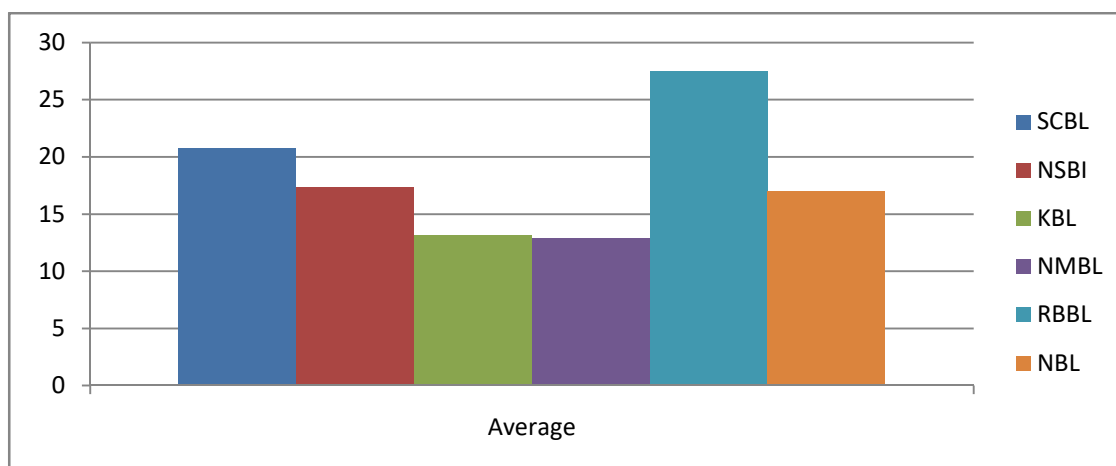
Table 4.11 Analysis of Investment in Government Security ratio

Year	SCBL	NSBI	KBL	NMBL	RBBL	NBL
2014/15	22.9	18.051	14.55	16.77	28.43	21.67
2015/16	41.44	29.58	16.19	12.97	29.94	14.36
2016/17	24.47	25.67	9.92	14.43	24.92	12.97
2017/18	6.95	10.26	14.78	11.25	28.14	16.32
2018/19	15.23	9.46	12.46	10.54	21.23	14.02
2019/20	13.74	11.15	10.95	11.39	32.38	23.03
Average	20.79	17.36	13.14	12.89	27.51	17.06
Rank	2	3	5	6	1	4

(Source: Annual Report of respective Bank)

Table 4.11 shows that Rastriya Banijya Bank Limited holds the top rank with an average of 27.51 while NMB Bank Limited holds the bottom Position with an average of 12.89. Standard Chartered Bank Limited 20.79, Nepal SBI Bank Limited 17.36, Nepal Bank Limited 17.06 and Kumari Bank Limited 13.14 were in between.

Figure 4.11 Analysis of Investment in Government Security ratio



(Source: Annual Report of respective Bank)

Figure 4.11 shows that Rastriya Banijya Bank Limited holds the top rank with an average of 27.51 while NMB Bank Limited holds the bottom Position with an average of 12.89. Standard Chartered Bank Limited 20.79, Nepal SBI Bank Limited 17.36, Nepal Bank Limited 17.06 and Kumari Bank Limited 13.14 were in between.

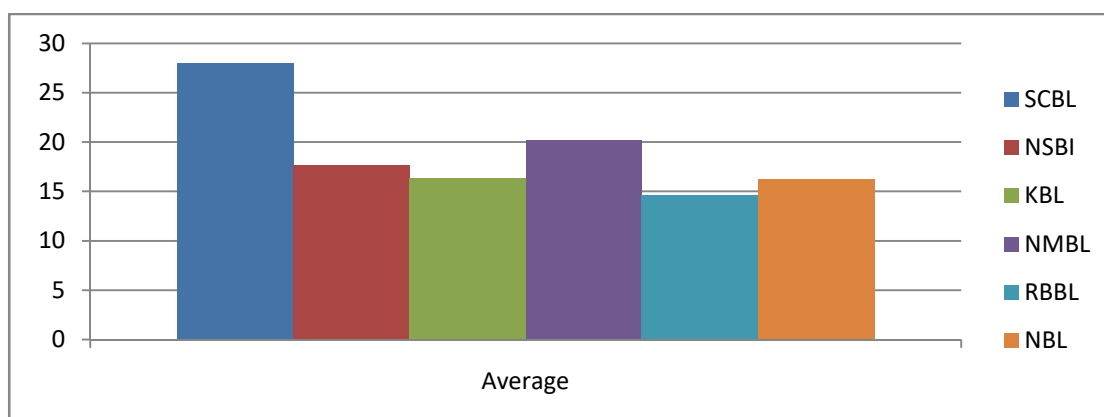
Table 4.12 Cash and Bank Balance Ratio

Year	SCBL	NSBI	KBL	NMBL	RBBL	NBL
2014/15	20.2	16.33	14.93	28.68	18.07	11.55
2015/16	7.12	15.93	11.89	16.2	21.29	17.46
2016/17	13.97	16.22	23.34	17.39	16.52	18.81
2017/18	46.02	19.15	16.92	14.65	9.93	15.1
2018/19	32.99	17.92	17.47	21.55	11.06	22.21
2019/20	47.82	20.55	13.58	22.52	10.86	12.16
Average	28.02	17.68	16.36	20.17	14.62	16.22
Rank	1	3	4	2	6	5

(Source: Annual Report of respective Bank)

Table 4.12 shows that Standard Chartered Bank Limited holds the top rank with an average of 28.02 while Rastriya Banijya Bank Limited holds the bottom Position with an average of 14.62, NMB Bank Limited 20.17, Nepal SBI Bank Limited 17.68, Kumari Bank Limited 16.36 and Nepal Bank Limited 16.22 were in between.

Figure 4.12 Cash and Bank Balance Ratio



(Source: Annual Report of respective Bank)

Figure 4.12 shows that Standard Chartered Bank Limited holds the top rank with an average of 28.02 while Rastriya Banijya Bank Limited holds the bottom Position with an average of 14.62, NMB Bank Limited 20.17, Nepal SBI Bank Limited 17.68, Kumari Bank Limited 16.36 and Nepal Bank Limited 16.22 were in between.

4.1.6 Overall Performances of Selected Nepalese Commercial Banks

To assess the overall performance of Commercial Bank in Nepal, composite ranking has been calculated from the group ranking of the Nepalese Commercial Bank for the

period 2014-15 to 2019-20 and the result is presented in Table 4.13. The bank which has the lowest average occupies is at the top.

Table 4.13 Overall Performances of Selected Nepalese Commercial Banks

Indicators	SCBL		NSBI		KBL		NMBL		RBBL		NBL	
	Average	Rank	Average	Rank	Average	Rank	Average	Rank	Average	Rank	Average	Rank
CAR	18.57	1	14.69	2	12.92	4	13.67	3	11.42	6	12.87	5
CCRR	16.98	1	12.36	2	11.6	5	11.91	3	10.39	6	11.81	4
SCR	1.65	3	2.31	1	1.32	4	1.76	2	1.23	5	1.06	6
NPL	0.27	2	0.18	1	1.49	4	1.38	3	4.47	6	3.15	5
LLP	1.31	4	1.27	3	2.29	6	2.14	5	1.25	2	1.06	1
MER	3,606,167	1	1,973,535	2	1,176,098	5	1,544,877	4	1,752,556	3	1,011,179	6
EPS	36.89	2	29.04	4	16.25	6	19.45	5	41.95	1	29.75	3
ROA	2.12	1	1.65	4	1.21	6	1.64	5	1.92	2	1.88	3
P/E	42.15	6	27.79	5	15.32	2	21.64	4	0	1	15.37	3
CRR	15.44	1	8.67	4	6.96	6	8.11	5	9.54	3	10.91	2
Gov.Sec	20.79	2	17.36	3	13.14	5	12.89	6	27.51	1	17.06	4
C & B Ratio	28.02	1	17.68	3	16.36	4	20.17	2	14.62	6	16.22	5
Factor Rank Average	2.08		2.83		4.75		3.92		3.50		3.92	
Group Rank	1		2		5		4		3		4	

After analyzing the every dimension of CAMEL from 2014/15 to 2019/20, I found that overall performances of a SCBL are the best than other sample taken banks. The best bank is SCBL and least is KBL. NSBI, RBBL, NMBL and NBL stand on 2nd, 3rd, 4th and 4th position.

4.1.7 Correlation analysis between Return on Assets and Capital Adequacy

Correlation between Return on assets and Capital Adequacy measures the degree of relationship between these two variables. It shows effect of return on assets with the variation in the Capital Adequacy. Return on assets is dependent variable and Capital Adequacy is independent variable. The magnitude of return on assets varies as per the change in the magnitude of Capital Adequacy.

Here, X = Capital Adequacy and Y = Return on Assets

Table 4.14 Regression Statistics

Multiple R	R Square	Adjusted R Square	Standard Error	Observations
0.426042528	0.181512236	-0.0231097	2.500908327	6

Calculation shows that the value of coefficient of correlation is 0.426042528 that signifies moderate direct Relationship between Return on assets and Capital Adequacy.

Table 4.15 ANOVA

Source	DF	Sum of Square	Mean Square	F Statistic	P-value
Regression	1	0.0899091	0.0899091	0.887061	0.3996
Residual	4	0.405424	0.101356		
Total	5	0.495333	0.0990667		

Table 4.16 Coefficients

	Coefficients	Standard Error	t-stat	p-value
Intercept	0.97611	0.817915	1.193413	0.29865
CA	0.0542351	0.0575842	0.941839	0.3996

$$Y = 0.976110 + 0.0542351 CA$$

$$T = 1.193413 \quad 0.941839$$

$$\text{Sig}=0.3996 \quad 0.3996$$

When ROA is taken as dependent and CA is taken as independent variable the value of R Square is 0.181512236 it means that 18.15% variability caused ROA size.

Model fit:

$$F=0.887061 \text{ at significant } 0.3996$$

So, model is appropriate.

1 portion change on CA causes 0.00887 portion change ROA.

Testing of first hypothesis:

H₀: There is no significant relationship between ROA and CA.

H₁: There is significant relationship between ROA and CA.

Here,

P-value=0.3996 \geq α (0.05) Therefore, null hypothesis is accepted and alternative hypothesis is rejected. It means that there is no significant relationship between ROA & CA.

4.1.8 Correlation analysis between Return on Assets and Assets quality

Correlation between Return on assets and Assets quality measures the degree of relationship between these two variables. It shows effect of return on assets with the variation in the Assets quality. Return on assets is dependent variable and Assets quality is independent variable. The magnitude of return on assets varies as per the change in the magnitude of Assets quality.

Here, X = Assets quality and Y = Return on Assets

Table 4.17 Regression Statistics

Multiple R	R Square	Adjusted R Square	Standard Error	Observations
-0.07749254	0.00600509	-0.242494	0.90929272	6

Calculation shows that the value of coefficient of correlation is -0.07749254 that signifies very weak direct Relationship between Return on assets and Assets quality.

Table 4.18 ANOVA

Source	DF	Sum of Square	Mean Square	F Statistic	P-value
Regression	1	0.00297452	0.00297452	0.024166	0.88399
Residual	4	0.492359	0.12309		
Total	5	0.495333	0.0990667		

Table 4.19 Coefficients

	Coefficients	Standard Error	t-stat	p-value
Intercept	1.787147	0.354918	5.035378	0.007306
AQ	-0.0298997	0.19234	-0.155453	0.883994

$$Y = 1.787147 - 0.0298997 \text{ AQ}$$

$$T = 5.035378 \quad -0.155453$$

$$\text{Sig} = 0.883994 \quad 0.883994$$

When ROA is taken as dependent and AQ is taken as independent variable the value of R Square is 0.00600509 it means that 0.6% variability caused ROA size.

Model fit:

$$F = 0.024166 \text{ at significant } 0.88399$$

So, model is appropriate.

1 portion change on NPL causes 0.00024166 portion change ROA.

Testing of first hypothesis:

H₀: There is no significant relationship between ROA and AQ.

H₁: There is significant relationship between ROA and AQ.

Here,

P-value=0.883994 \geq α (0.05) Therefore, null hypothesis is accepted and alternative hypothesis is rejected. It means that there is no significant relationship between ROA & AQ.

4.1.9 Correlation analysis between Return on Assets and Management efficiency

Correlation between Return on assets and Management efficiency ratio measures the degree of relationship between these two variables. It shows effect of return on assets with the variation in the Management efficiency ratio. Return on assets is dependent variable and Management efficiency ratio is independent variable. The magnitude of return on assets varies as per the change in the magnitude of Management efficiency ratio.

Here, X =Management efficiency ratio and Y = Return on Assets

Table 4.20 Regression Statistics

Multiple R	R Square	Adjusted R Square	Standard Error	Observations
0.618451167	0.382481846	0.228102	0.276530887	6

Calculation shows that the value of coefficient of correlation is 0.618451167 that signifies strong direct Relationship between Return on assets and Management efficiency ratio.

Table 4.21 ANOVA

Source	DF	Sum of Square	Mean Square	F Statistic	P-value
Regression	1	0.189456	0.189456	2.477542	0.1906
Residual	4	0.305877	0.076469		
Total	5	0.495333	0.099067		

Table 4.22 Coefficients

	Coefficients	Standard Error	t-stat	p-value
Intercept	1.352242	0.269061	5.025787	0.00735529
MER	0.00000020846600	0.00000013244100	1.574021	0.190596

$$Y = 1.352242 + 0.000000208466 \text{ MER}$$

$$T = 5.025787 \quad 1.574021$$

$$\text{Sig} = 0.190596 \quad 0.190596$$

When ROA is taken as dependent and MER is taken as independent variable the value of R Square is 0.382481846 it means that 38.2% variability caused ROA size.

Model fit:

F=2.477542 at significant 0.1906

So, model is appropriate.

1 portion change on MER causes 0.02477 portion change ROA.

Testing of first hypothesis:

H₀: There is no significant relationship between ROA and MER.

H₁: There is significant relationship between ROA and MER.

Here,

P-value (0.1906) \geq α (0.05) Therefore, null hypothesis is accepted and alternative hypothesis is rejected. It means that there is no significant relationship between ROA & MER.

4.1.10 Correlation analysis between Return on Assets and Earning

Correlation between Return on assets and Earning measures the degree of relationship between these two variables. It shows effect of return on assets with the variation in the Earning. Return on assets is dependent variable and Earning is independent variable. The magnitude of return on assets varies as per the change in the magnitude of Earning. Here, X = Earning and Y = Return on Assets

Table 4.23 Regression Statistics

Multiple R	R Square	Adjusted R Square	Standard Error	Observations
0.720384114	0.518953272	0.398692	0.244068883	6

Calculation shows that the value of coefficient of correlation is 0.720384114 that signifies strong direct Relationship between Return on assets and Earning.

Table 4.24 ANOVA

Source	DF	Sum of Square	Mean Square	F Statistic	P-value
Regression	1	0.257055	0.257055	4.315201	0.10635
Residual	4	0.238278	0.0595696		
Total	5	0.495333	0.0990667		

Table 4.25 Coefficients

	Coefficients	Standard Error	t-stat	p-value
Intercept	1.067753	0.337074	3.16771	0.0339322
E	0.0271548	0.0130721	2.077306	0.106347

$$Y = 1.067753 + 0.0271548 E$$

$$T = 3.16771 \quad 2.077306$$

$$\text{Sig} = 0.106347 \quad 0.106347$$

When ROA is taken as dependent and E is taken as independent variable the value of R Square is 0.518953272 it means that 51.9% variability caused ROA size.

Model fit:

$$F = 4.315201 \text{ at significant } 0.10635$$

So, model is appropriate.

1 portion change on E causes 0.04315201 portion change ROA.

Testing of first hypothesis:

H_0 : There is no significant relationship between ROA and E.

H_1 : There is significant relationship between ROA and E.

Here,

P-value (0.106347) > α (0.05) Therefore, null hypothesis is accepted and alternative hypothesis is rejected. It means that there is no significant relationship between ROA & E.

4.1.11 Correlation analysis between Return on Assets and Liquidity

Correlation between Return on assets and Liquidity measures the degree of relationship between these two variables. It shows effect of return on assets with the variation in the Liquidity. Return on assets is dependent variable and Liquidity is independent variable. The magnitude of return on assets varies as per the change in the magnitude of Liquidity.

Here, X = Liquidity and Y = Return on Assets

Table 4.26 Regression Statistics

Multiple R	R Square	Adjusted R Square	Standard Error	Observations
0.870464006	0.757707585	0.697164	0.173216273	6

Calculation shows that the value of coefficient of correlation is 0.870464006 that signifies very strong direct Relationship between Return on assets and Liquidity.

Table 4.27 **ANOVA**

Source	DF	Sum of Square	Mean Square	F Statistic	P-value
Regression	1	0.37533	0.37533	12.51061	0.024078
Residual	4	0.120004	0.0300009		
Total	5	0.495333	0.0990667		

Table 4.28 **Coefficients**

	Coefficients	Standard Error	t-stat	p-value
Intercept	0.430078	0.376109	1.143493	0.316619
L	0.0835682	0.0236266	3.537034	0.024078

$$Y = 0.430078 + 0.0835682 L$$

$$T = 1.143493 \quad 3.537034$$

$$\text{Sig} = 0.024078 \quad 0.024078$$

When ROA is taken as dependent and L is taken as independent variable the value of R Square is 0.757707585 it means that 75.77% variability caused ROA size.

Model fit:

$$F=12.51061 \text{ at significant } 0.024078$$

So, model is appropriate.

1 portion change on L causes 0.1251061 portion change ROA.

Testing of first hypothesis:

H_0 : There is no significant relationship between ROA and L.

H_1 : There is significant relationship between ROA and L.

Here,

P-value (0.024078) < α (0.05) Therefore, null hypothesis is rejected and alternative hypothesis is accepted. It means that there is significant relationship between ROA & L.

4.2 Major Findings of the Study

A) Capital Adequacy Ratio:

The standard prescribed by NRB which is 11%. We have assigned rank 1 for good performances and rank 6 for least performance. NRB will interrupt time to time maintain the capital adequacy at least 11%. Major finding of the study

in term of capital adequacy ratio of the sample taken bank have been presenting as follows:

- i. On the year 2014/15, RBBL, NBL and KBL are unable to meet the standard recommended by NRB. Capital adequacy of the other sample bank are almost par and above the standard given by NRB.
- ii. On the year 2015/16, RBBL, NBL and NMBL are unable to meet the requirement given by NRB.
- iii. On the year 2016/17, RBBL is unable to meet the requirement given by NRB.
- iv. On the year 2017/18, all Banks are able to meet the requirement given by NRB.
- v. On the year 2018/19, all Banks are able to meet the requirement given by NRB.
- vi. On the year 2019/20, all Banks are able to meet the requirement given by NRB.

B) Assets Quality:

Assets Quality indicates what type the loan and advance the banks had made to generate interest income. When loan are given to highly rated doubtful debt blue chief corporate, the rate attract are lower than that by lower rated doubtful debt corporate. After comparing all the dimension major finding of the studying term of Assets Quality of the sample taken bank have been presenting as follows:

- i. On the year 2014/15, NSBI attend on 1st position and RBBL stand on 6th position in term of Assets Quality.
- ii. On the year 2015/16, NSBI stand on 1st position and RBBL stand on 6th position in term of Assets Quality.
- iii. On the year 2016/17, NSBI stand on 1st position and RBBL stand on 6th position in term of Assets Quality.

- iv. On the year 2017/18, SCBL stand on 1st position and RBBL stand on 6th position in term of Assets Quality.
- v. On the year 2018/19, SCBL stand on 1st position and RBBL stand on 6th position in term of Assets Quality.
- vi. On the year 2019/20, NSBI stand on 1st position and RBBL stand on 6th position in term of Assets Quality.

C) Management Quality:

Management Quality evaluates the management skill and quality of the banks and discount poorly managed once. After comparing all the dimension major finding of the study in term of Management Quality of the sample taken bank have been presenting as follows:

- i. On the year 2014/15, SCBL stand on better position and NBL stand on last position in term of Management quality.
- ii. On the year 2015/16, SCBL stand on better position and RBBL stand on last position in term of Management quality.
- iii. On the year 2016/17, SCBL stand on better position and NBL stand on last position in term of Management quality.
- iv. On the year 2017/18, SCBL stand on better position and KBL stand on last position in term of Management quality.
- v. On the year 2018/19, SCBL stand on better position and NBL stand on last position in term of Management quality.
- vi. On the year 2019/20, SCBL stand on better position and KBL stand on last position in term of Management quality.

D) Earning Quality:

Earning quality is important for the banks profit. This quality also explains the sustainability and growth in the future. After comparing all the dimension major finding of the study in term of Earning Quality of the sample taken banks have been presented as follows:

- i. On the year 2014/15, SCBL stand on 1st rank and NBL stand on 6th rank in term of Earning Quality.
- ii. On the year 2015/16, SCBL stand on 1st rank and NMBL stand on 6th rank in term of Earning quality.
- iii. On the year 2016/17, NBL stand on 1st rank and KBL stand on 6th rank in term of Earning Quality.
- iv. On the year 2017/18, NBL stand on 1st rank and KBL stand on 6th rank in term of Earning Quality.
- v. On the year 2018/19, RBBL stand on 1st rank and KBL stand on 6th rank in term of Earning Quality.
- vi. On the year 2019/20, RBBL stand on 1st rank and KBL stand on 6th rank in term of Earning Quality.

E) Liquidity Quality:

Liquidity is a prime important factor for a bank. Among assets, cash and investment are most liquid of bank assets. After comparing all the dimension major finding of a study in term of Liquidity Quality of a sample taken banks have been presented as follows:

- i. On the year 2014/15, SCBL stand on 1st position and KBL stand on 6th position in term of Liquidity Quality.
- ii. On the year 2015/16, NBL stand on 1st position and SCBL stand on 6th position in term of Liquidity Quality.
- iii. On the year 2016/17, SCBL stand on 1st position and NMBL stand on 6th position in term of Liquidity Quality.
- iv. On the year 2017/18, SCBL stand on 1st position and RBBL stand on 6th position in term of Liquidity Quality.
- v. On the year 2018/19, SCBL stand on 1st position and NBL stand on 6th position in term of Liquidity Quality.

- vi. On the year 2019/20, SCBL stand on 1st position and KBL stand on 6th position in term of Liquidity Quality.

F) Overall Performance:

After analyzing the every dimension of CAMEL from 2014/15 to 2019/20, I found that overall performances of a SCBL are the best than other sample taken banks. The best bank is SCBL and least is KBL. NSBI, RBBL, NMBL and NBL stand on 2nd, 3rd, 4th and 4th position.

Calculation shows that the value of coefficient of correlation between Return on assets and Capital Adequacy is 0.426042528 that signifies moderate direct Relationship. Likewise, the value of coefficient of correlation between Return on assets and Assets quality is -0.07749254 that signifies very weak indirect Relationship them. Similarly as per calculation, value of coefficient of correlation between Return on assets and Management efficiency is 0.618451167 that signifies strong direct Relationship. Calculation shows that the value of coefficient of correlation is 0.720384114 that signifies strong direct Relationship between Return on assets and Earning. Calculated result reveals that the value of coefficient of correlation between Return on assets and Liquidity is 0.870464006 that signifies very strong direct Relationship.

According to P-value Approach of hypothesis testing, P Value of ROA and CA shows $0.3996 \geq \alpha (0.05)$, therefore, null hypothesis is accepted and alternative hypothesis is rejected. It means that there is no significant relationship between ROA & CA. Likewise, $P\text{-value}=0.883994 \geq \alpha (0.05)$ Therefore, null hypothesis is accepted and alternative hypothesis is rejected. It means that there is no significant relationship between ROA & AQ. Also, $P\text{-value} (0.1906) \geq \alpha (0.05)$ Therefore, null hypothesis is accepted and alternative hypothesis is rejected. It means that there is no significant relationship between ROA & MER. $P\text{-value} (0.106347) > \alpha (0.05)$ Therefore, null hypothesis is accepted and alternative hypothesis is rejected. It means that there is no significant relationship between ROA & E. As per calculation, $P\text{-value} (0.024078) < \alpha (0.05)$ Therefore, null hypothesis is rejected and alternative hypothesis is accepted. It means that there is significant relationship between ROA & L.

CHAPTER-V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This section of the study is divided into three sub-section. The first section give the brief summary of the study the second section provide the conclusion of the study and third section contains implication of the study.

5.1 Summary

This study was conducted with the objective to analyze the financial performances of SCBL, NSBI, NMBL, KBL, RBBL and NBL with the CAMEL framework. Six-fiscal year from 2014/15 to 2019/20 data are collected for the study purpose. This study is based on secondary data and the data were analyzed using various financial and statistical tool. CAMEL is a technique of evaluating the soundness is judge on the basic of some major factor – Capital adequacy, Assets quality, Management efficiency, earning soundness and Liquidity position.

The study is conducted with the general objective to analyze the financial performances of the SCBL, NSBI, NMBL, KBL, RBBL, and NBL. Moreover, specific objective of the study were to examine the Capital Adequacy, Assets Quality, Management Efficiency, Earning Capacity and Liquidity Position of the banks during the study period 2014/15 to 2019/20.

The study covered Six-fiscal year as sample period from 2014/15 to 2019/20. The study was designed within the framework of descriptive research design and analyses have been made. For the purpose of the study SCBL, NSBI, NMBL, KBL, RBBL and NBL are taken as a sample banks by applying convenient sampling technique out of 27 commercial banks. The required data and information were collected from secondary sources.

In the research work, after compelling all the data (only 6 bank in Nepal) SCBL seems good in overall performances where as the KBL least in the performances among the sample bank. The overall criteria to evaluate the banks rating considered the bank performances as a whole. It does not only considered the best part of the performances but it assumed what is the best to

be the best in all criteria and evaluate the banking performances in term of the quality as a whole. So no loop holes performances are oversees by any good performances above though different banks are good in different aspect in different year.

There is one of the good models to see if the banks are given their best effort. Anyone using this benchmark can develop the basic framework to judge the bank as a whole instead of only one aspect. This model covers all the aspect of banking to be quality, safe and sustainable bank.

5.2 Conclusion

As per the objectives and analyses of the study some major conclusions have been drawn. With some 27 commercial bank operating in Nepal, the market seems overcrowded and the banks are now finding tough competition among themselves. Since the entry barrier are not so high due to the government liberalization policy. This competition is expected to more intense in the near future, as there is always the possibility of new player entering this sector. The commercial bank in Nepal is doing well but they are not giving satisfactory result due to some internal as well as external factors.

The study showed that the capital fund of KBL, NBL and RBBL was below the standard recommended by NRB in first one year, first two years and first three years but it was able to meet the minimum capital adequacy ratio in next five years, four years and three years respectively. SCBL, NSBI and NMBL meet the requirement of the NRB. Lack of the policy in regard of this type of ratio caused to the relaxation of the banks not to meet adequate rations. The percentage of the non performing assets of SCBL and NSBI was below 1% throughout the study period. This has implied that quality of the loan of SCBL and NSBI is strong during the study period. SCBL, NSBI, KBL, and NMBL have managed an adequate loan loss provision throughout the period as prescribe by NRB. It is an indication of bank efficiency to recover its non performing loan.

The number of staff of the sample taken bank has different as per their business volume. SCBL has a highest overall earning per employee during the study period and followed by NSBI. It reflects efficiency of staff and sound

management quality. Return of assets of a SCBL is highest and a KBL is least during the study period. Higher return on assets reflects the bank is in the line of progress, sustainability and giving profitability to the firm in the long run.

The liquidity ratio of the bank shows that the banks have maintained reasonable liquid fund. The cash reserve ratio, investment in government security ratio and cash and bank balance ratio of the sample taken banks have a optimal level of balance as prescribed by NRB.

5.3 Implications

Based on above conclusion, the following implication can be carried out.

1. All the sample bank has maintain a risk based capital ratio as prescribed by NRB except KBL, NBL and RBBL fist one year, first two years and first three years. It is strongly recommended that the bank should maintain total risk based capital adequacy as prescribed by NRB requirement.
2. If any loan turns to default, it directly affects the performance as well as profitability of the bank. The bank should aggressively recover its outstanding loan because larger the non performing assets lesser the profitability of the bank. The bank should maintain a adequate loan loss provision as recommended by NRB.
3. The bank should increase their income and decrease expenses because it gives the life to the bank for future. The bank should try to raise their present net spared level as well as net interest margin level.
4. The liquidity position of the sample bank should meet it current and contingent obligation. It is recommended that the bank should maintain adequate cash balance in vault and NRB.
5. Finally, it is suggested to the further researcher to make the further analysis of banking using the other modern method which are been introduced day by day such as adding sustainability factor in CAMEL.

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APPENDIX-I

Correlation between Return on Assets and Capital adequacy of selected Banks.

BANK	X	Y	X ²	Y ²	XY
SCBL	18.57	2.12	344.845	4.4944	39.3684
NSBI	14.69	1.65	215.796	2.7225	24.2385
KBL	12.92	1.21	166.926	1.4641	15.6332
NMBL	13.67	1.64	186.869	2.6896	22.4188
RBBL	11.42	1.92	130.416	3.6864	21.9264
NBL	12.87	1.88	165.637	3.5344	24.1956
	84.14	10.42	1210.49	18.5914	147.781

X =Capital adequacy

Y = Return on Assets

$$\begin{aligned} \text{Correlation Coefficient (r)} &= \frac{n \sum xy - \sum x \cdot \sum y}{\sqrt{n \sum x^2 - (\sum x)^2} \sqrt{n \sum y^2 - (\sum y)^2}} \\ &= \frac{6 \times 147.781 - 84.14 \times 10.42}{\sqrt{6 \times 1210.49 - (84.14)^2} \sqrt{6 \times 18.5914 - (10.42)^2}} \\ r &= 0.42604 \end{aligned}$$

APPENDIX-II

Correlation between Return on Assets and Assets quality of selected Banks.

BANK	X	Y	X ²	Y ²	XY
SCBL	0.79	2.12	0.6241	4.4944	1.6748
NSBI	0.725	1.65	0.525625	2.7225	1.19625
KBL	1.89	1.21	3.5721	1.4641	2.2869
NMBL	1.76	1.64	3.0976	2.6896	2.8864
RBBL	2.86	1.92	8.1796	3.6864	5.4912
NBL	2.105	1.88	4.431025	3.5344	3.9574
	10.13	10.42	20.43005	18.5914	17.49295

X =Non Performing Loan

Y = Assets quality

$$\begin{aligned} \text{Correlation Coefficient (r)} &= \frac{n \sum xy - \sum x \cdot \sum y}{\sqrt{n \sum x^2 - (\sum x)^2} \sqrt{n \sum y^2 - (\sum y)^2}} \\ &= \frac{6 \times 17.49295 - 10.13 \times 10.42}{\sqrt{6 \times 20.43005 - (10.13)^2} \sqrt{6 \times 18.5914 - (10.42)^2}} \end{aligned}$$

$$r = -0.0775$$

APPENDIX-III

Correlation between Return on Assets and Management Efficiency of selected Banks.

BANK	X	Y	X ²	Y ²	XY
SCBL	3606167	2.12	13004440431889	4.4944	7645074.04
NSBI	1973535	1.65	3894840396225	2.7225	3256332.75
KBL	1176098	1.21	1383206505604	1.4641	1423078.58
NMBL	1544877	1.64	2386644945129	2.6896	2533598.28
RBBL	1752556	1.92	3071452533136	3.6864	3364907.52
NBL	1011179	1.88	1022482970041	3.5344	1901016.52
	11064412	10.42	24763067782024	18.5914	20124007.69

X = Management Efficiency

Y = Return on Assets

$$\begin{aligned} \text{Correlation Coefficient (r)} &= \frac{n \sum xy - \sum x \cdot \sum y}{\sqrt{n \sum x^2 - (\sum x)^2} \sqrt{n \sum y^2 - (\sum y)^2}} \\ &= \frac{6 \times 20124007.69 - 11064412 \times 10.42}{\sqrt{6 \times 24763067782024 - (11064412)^2} \sqrt{6 \times 18.5914 - (10.14)^2}} \end{aligned}$$

$$r = 0.61845$$

APPENDIX-IV

Correlation between Return on Assets and Earning of selected Banks.

BANK	X	Y	X ²	Y ²	XY
SCBL	39.52	2.12	1561.83	4.4944	83.7824
NSBI	28.415	1.65	807.412	2.7225	46.8848
KBL	15.785	1.21	249.166	1.4641	19.0999
NMBL	20.545	1.64	422.097	2.6896	33.6938
RBBL	20.975	1.92	439.951	3.6864	40.272
NBL	22.56	1.88	508.954	3.5344	42.4128
	147.8	10.42	3989.41	18.5914	266.146

X = Earning

Y = Return on Assets

$$\begin{aligned} \text{Correlation Coefficient (r)} &= \frac{n \sum xy - \sum x \cdot \sum y}{\sqrt{n \sum x^2 - (\sum x)^2} \sqrt{n \sum y^2 - (\sum y)^2}} \\ &= \frac{6 \times 266.146 - 147.8 \times 10.42}{\sqrt{6 \times 3989.41 - (147.8)^2} \sqrt{6 \times 18.5914 - (10.14)^2}} \\ r &= 0.72038 \end{aligned}$$

APPENDIX-V

Correlation between Return on Assets and Liquidity

BANK	X	Y	X ²	Y ²	XY
SCBL	21.42	2.12	458.674	4.4944	45.4033
NSBI	14.57	1.65	212.285	2.7225	24.0405
KBL	12.15	1.21	147.704	1.4641	14.7055
NMBL	13.72	1.64	188.33	2.6896	22.5063
RBBL	17.22	1.92	296.643	3.6864	33.0688
NBL	14.73	1.88	216.973	3.5344	27.6924
	93.8167	10.42	1520.61	18.5914	167.417

X = Liquidity

Y = Return on Assets

$$\begin{aligned} \text{Correlation Coefficient (r)} &= \frac{n \sum xy - \sum x \cdot \sum y}{\sqrt{n \sum x^2 - (\sum x)^2} \sqrt{n \sum y^2 - (\sum y)^2}} \\ &= \frac{6 \times 167.417 - 93.8167 \times 10.42}{\sqrt{6 \times 1520.61 - (93.8167)^2} \sqrt{6 \times 18.5914 - (10.14)^2}} \\ r &= 0.87046 \end{aligned}$$