

# **Investment Activities and Performance of Selected Commercial Banks**

**(With Reference to NSBIBL, KBL, and CBINL)**

**A Thesis**

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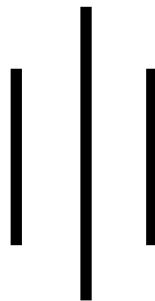
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## **VIVA-VOCE SHEET**

We have conducted the viva voce examination of the thesis presented by

**Rishi Ram Koirala**

Entitled

**Investment Activities and Performance of Selected Commercial  
Banks**

(With reference to NSBIBL, KBL, and CBINL)

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

**Master's Degree in Business Studies**

### **VIVA-VOCE COMMITTEE**

Head of Research Department :.....

Thesis Supervisor :.....

External Expert :.....

## **DECLARATION**

I, hereby, declare that the work reported in this thesis entitled **Investment Activities and Performance of Commercial Banks** with respect to Nepal SBI Bank Ltd, Kumari Bank Ltd, and Citizens Bank International Nepal Ltd submitted to Shankar Dev Campus, Faculty of Management, Tribhuvan University is my original work done in the form of partial fulfillment of the requirement of the degree of Masters in Business Studies (MBS) prepared under the supervision of Associate Professor Mrs Ruchila Pandey.

Rishi Ram Koirala

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Rishi Ram Koirala

## **ABBREVIATIONS**

AD	: Anno Domini
ATM	: Automated Teller Machine
CBINL	: Citizens Bank International Nepal Limited
CV	: Coefficient of Variation
DPS	: Dividend per Share
EPS	: Earning per Share
etc.	: et cetera
FY	: fiscal Year
GON	: Government of Nepal
i.e.	: id est (that is)
KBL	: Kumari Bank Limited
NSBIBL	: Nepal SBI Bank Limited
NEAT	: Net Earnings after Tax
PEr	: Probable Error
r	: Correlation Coefficient
NRB	: Nepal Rastra Bank
PD	: Preference Dividend
ROA	: Return on Assets
Rs	: Rupees
R <sup>2</sup>	: Coefficient of Determination
SBI	: State Bank of India
SD	: Standard Deviation
VS	: Vikram Sambat

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# CHAPTER I

## INTRODUCTION

### **8. Background of the Study**

Economic activities should occur there are the most important to boost the development of a nations. Off course, to increase economic activities in a nation availability of capital is essential. In poor and least developed country like Nepal capital is not available easily. Nepali people have low income and it is, almost, used for foods and other consumption purposes. It has been a problem in fostering economic activities and development of nation.

But, in recent years, remittance, growing business activities, presence of multinational corporations, etc have changed this situation. After government took liberalization policy in 1990s it helped to foster business activities in the country. The policy of liberalization, globalization and privatization pursued in the overall economic sector during 1990s has led to speedy financial liberalization as well. During the last two and half decades the number of financial institutions has grown significantly. At the beginning of the 1980s there were only two commercial banks and one development bank in the country. After the induction of economic liberalization policy, particularly the financial sector liberalization, that impetus in the establishment of new banks and non-bank financial institutions. Consequently, by the end of 2010 altogether 31 commercial banks, 83 development banks, 79 finance companies, 19 micro credit development banks, and 16 saving and credit cooperatives licensed by NRB for limited banking are in operation. Similarly 45 non-government organizations licensed by NRB are in operation.

A commercial bank as a financial intermediary collects the scattered fund and channels it to the productive sector which is known as investment activities. Thus, investment activity is the major function of financial intermediary. A Commercial bank, being a financial intermediary, has its concern towards investment activity. Banks and financial institutions facilitate on capital

formation and investment activities. Therefore for boosting economic activities in poor countries like Nepal Banks play important roles. One who has entrepreneurial capability but lacking capital can also get funds for investment activities which at last helps to increase economic activities.

Efficiently managed investment activities enhance the performance of banks. Performance here in our study represents the financial performance. Financial performance is the combination of two words “finance” and “performance” and it gives an integrated meaning. The financial performance is the quantitative analysis of firm’s efficiency. The company’s financial plan and policy prepared and implemented by management should be judged on the basis of its financial performance. Conceptually, the vocabulary financial performance concerns with the measurement and analysis of financial operation of a firm through ratio analysis, correlation and regression analysis and trend analysis. The basic financial statements- balance sheet, income statement, statement of profit and loss appropriation, and cash flow statement-are used for analyzing and study financial performance of an institution. The information contained in those statements is used by management, creditors, investors and others to judge about the operation performance and financial performance of the firm. The analysis of performance is designed to make a careful study of recent financial records of banks. Through financial statements, the performance of financial companies is analyzed.

The proper analysis and interpretation of financial statement is a felt necessity in our corporations, banks, private enterprises, and other similar organizations to find out what information are indicated from the balance sheet, income statement, and other accounting information. On the basis of this information, it becomes easy to chalk out the problems faced by the financial and other corporations of Nepal. A capable financial manager, if he wants to prove his competence, must select the best analytical tools to determine the liquidity, profitability, turnover, and capital structure of corporations and enterprises.

## 9. Introduction to the Commercial Banks

Amongst the three sample banks in my study their date of establishment, capital, and location of corporate office is as follow.

### 2.1 Introduction to Nepal SBI Bank Ltd

Nepal SBI Bank Ltd had come in operation in FY 2050/51 VS. It has its corporate office in Hattisar, Kathmandu. It is a Joint Venture bank with State Bank of India Ltd. At the end of FY 2066/67 it has authorized capital Rs 2000 million and paid up capital Rs. 1,653,623,880. Majority of its shares are held by State Bank of India Ltd. Its proportion and share holders are as follows:

Owner	Amount Owned(Rs. '000)	Proportion
Karmachari Sanchaya Kosh	249318.0	15%
General Public	490139.88	29.98
Foreign Investor	914166.0	55.05

Present board of directors consists of

1. Bala Krishna Shrestha : Chairman–From General Public
2. Pratip Chaudhuri- From SBI Ltd
3. Rajiv Pal Singh- From SBI Ltd
4. S K Bhattacharya- From SBI Ltd
5. Hasana Sharma- From Karmachari Sanchya Kosh
6. Manoj Kumar Agrawal- From General Public
7. Mohan Raj Joshi- From NRB as expert
8. N Krishnamchari- From SBI Ltd

### 2.2 Introduction to Kumari Bank Ltd

Kumari Bank Ltd was established by well known Nepalese industrialists in the FY 2057/58 VS. It has its corporate office in Durbar Marga Kathmandu. At the end of FY 2066/67 it has paid up capital Rs 1,306,015,920 out of authorized capital of Rs 2000 million. Its current board of directors consists of the following persons:



1. Shiva Ratan Sharada: Chairman- From promoters
2. Noor Pratap JB Rana- From promoters
3. Pro. Dr. Rajan Bahadur Poudel- From NRB as expert
4. Dr. Shova Kanta Dhakal- From general public
5. Min Bahadur Gurung- From promoters
6. Amir Pratap JB Rana- From promoters
7. Rishi Agrawal- From promoters
8. Rasendra Bahadur Malla- From general public

### **2.3 Introduction to Citizens Bank International Ltd**

Citizens Bank International Nepal Ltd was established and came in operation in FY 2063/64. The bank has paid up capital of Rs 1000 million out of authorized capital Rs 2000 million. Its major shareholders consist of Rodaso Real Estate Pvt Ltd and Akara Developers Pvt Ltd. Its share ownership and proportion is as follows:

<b>Owners</b>	<b>Amount (Rs. '000)</b>	<b>Proportion</b>
General Public	300000	30%
Promoters	700000	70

Its board of directors consists of:

1. Kul Chandra Gautam: Chairman- From Promoters
2. Pradeep Jung Pande- From Promoters
3. Bhola Bikram Thapa- From Promoters
4. Balkrishna Prasai- From Promoters
5. Manohar Das Mul- From Promoters
6. Prakash Chandra Mainali- From general public
7. Anil Raj Bhandari- From general public

## **10. Statement of Research Problem**

In the beginning of the 1980s there were only two commercial banks and one development bank in the country. But today, there are 31 commercial banks operational and more number of development banks is operational. Capital is prerequisite for commencing any business. Establishment of so many numbers of commercial banks in only about two decades is amazing. Instead of using capital in establishing manufacturing organizations and any other service business investors are attracted in to banking sector. Even development banks are turning in to commercial banks though they require high amount of paid up capital. As investors talk those commercial banks earn attractive profit that might have attracted them to commence new commercial banks. It is necessary to analyze the performance of these institutions regarding their investment, profit, and leverage or risk to identify that whether they are operating effectively, and whether it, therefore, attracted the new investors to commence new banks or not. It is necessary to find out that new investors have seen only profit aspects and investment or they have also considered risk aspects. Such issue is to be solved as there are other banks in channel to establish. We can find answer by analyzing financial performance of old banks which are operational for long time and those which are operational for less than five years. Banks are suffering increase in proportion of non-performing assets. Executives have been given high benefits and lower level employees get very low benefits. Off course, banking industry lacks proper institutionalization and practices. However for the study following research questions have been raised:

- a. To what sectors have Nepalese commercial banks channel funds?
- b. How is the commercial banks financial performance?
- c. How the investment activities in terms of fund mobilization
- d. Does the change in total assets results change in net profit
- e. What are the implications of the study on investment activities and performance of concerned banks?

- f. Whether the banks are successful to manage their investment activities by utilizing their available fund for the future?

## **11. Objectives of the study**

The main objective of the study is to have in depth analysis of investment activities and performance of listed commercial banks of Nepal. The objectives written in the specific form are presented below:

- a. To examine relationship between various important variables pertinent to investment activities and performance i.e. deposits, loans and advances, investments, net profit, etc and make comparisons between the selected banks.
- b. To examine whether there is gradient effect on net profit by change in total assets.
- c. To provide viable suggestions to the concerned parties regarding the enhancement of investment activities and performance of banks.

## **12. Significance of the Study**

The significance of this study is associated with the investors seeking investment in banking industry. The existing banks and new entrants can get information regarding performance of existing banks and new entrants to analyze the industry. The banks in recent years have increased their areas of operations manifold and become global. This has also made the banks more concern about customers and their convenience regarding the products and services offered by them. Increased inflation, deposit problem, globalization, and increased level of customer base have intensified the threat of risk from the different players of the market. These problems have affected performance of banks. Even in such situation new banks have been established. Therefore the scope of this research studies involves the investment areas, performance, and reasons of attraction in the industry. This study will be a significant for understanding financial performance of related commercial banks. It will also benefit those investors who are fascinated in the industry.

### **13. Limitation of the Study**

Like every research this study also has some limitations. They are as follows:

- a. The data used in this study ranges from 2062 to 2066. It means the results thus obtained will explain about situation concerning investment activities and performance from 2062 to 2066 (not before 2062).
- b. The study is based on only 3 commercial banks listed in Nepal Stock Exchange: Kumari Bank Ltd, SBI Bank Nepal Ltd, and Citizens Bank International Nepal Ltd.
- c. The study is fully based on the student's limited financial resources within a limited time frame.
- d. Non probability sampling i.e. purposive sampling technique is used for sampling. Therefore, the result of the sample might not be generalized to the population.
- e. The study is not a final study on the subject.

### **14. Organization of the Study**

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

Chapter 1: Introduction

It includes background of the study, statement of research problems, research questions, objectives of study, research methodology, limitation of the study, and organization of the study.

Chapter 2: Review of Literature

This chapter consists of the review of books, articles, journals, reports and other relevant materials.

Chapter 3: Research Methodology

It covers on research design, population of sample, nature and sources of data, analytical tools and techniques, data gathering procedure etc.

Chapter 4: Data presentation and Analysis

This chapter attempts to analyze and evaluate data with the help of analytical tools and interpret the results obtained.

#### Chapter 5: Summary, Conclusion and Recommendation

It sums up the results obtained through analysis and recommends some suggestions for improvement in the areas of inefficiency.

## **CHAPTER II**

### **REVIEW OF LITERATURE**

Review of literature is the study of previous research or studies' article or book in the related field and topics for finding the conclusion and deficiencies that may be known for further research. It helps to identify gaps in past studies and thus the weakness could be overcome in present study. Therefore, this part of the study describes the conceptual framework- fundamental of supportive text that will ensure the interpretation whether it is under the principles and doctrine of the theories related to the topic, Review of related studies- is about the studies and findings of previous thesis, related books and previous researcher in similar topics. The last section is research gap- describes the gap between previous and current thesis. This researcher has gone through various books, articles, journals, papers, periodicals, related books, booklets, etc. The relevant findings of academicians, researchers, and professionals of related field have been reviewed throughout this chapter. This chapter will be helpful to provide the foundation knowledge in order to undertake this research more precisely.

### **3 Conceptual Framework**

#### **3.1.1 Commercial Bank**

American Institute of Banking ;1972:325 defines “A commercial bank is a corporation which accepts demand deposits to check and makes short-term loans to business enterprises, regardless of the scope of its other services”.

Commercial Bank Act 1975 AD (2031VS) defines, “ A commercial bank is one which exchange money , deposits money, accepts deposits, grant loans and performs commercial functions and which is not a bank meant for co-operative, agriculture, industries or for such specific purpose”.

The commercial bank has its own role and contributions in the economic development. It is a resource for the economic development; it maintains

economic confidence of various segments and credit to people. (Grywinshki, 1991:87)

Commercial bank deals with others money. They have to find ways of keeping their asset liquid so that they could meet the demand of their customers on time. Liquidity is the lifeblood of the bank. Any bank perceived to be lack of liquidity cannot attract deposit from the public. Inadequate liquidity does harm to the credit standing of an organization. This leads to ‘runs’ in the bank and probably bankruptcy thereof. Trade off between liquidity and profitability is thus a crucial task for any bank. Satisfactory trade off is possible through correct prediction of liquidity needs and rational distribution of resources in various forms of liquid and high earning assets.

The main function of commercial banks is concerned with the accumulation of the temporarily idle money of the general public to advance it to deficit sectors i.e. trade and commerce for expenditure. Its main functions are as follows:

- To accept various types of deposits,
- Lending money in various productive sectors,
- Letter of credit(LC),
- Guarantee,
- Remittance,
- Exchange ,
- Bills,
- Others

Hence, a commercial bank can be defined as a financial institution which renders a host of financial services besides taking deposits and giving loans.

### **3.1.2 Financial Analysis**

Every business organization is established with view of earning the profit and the bank is not an exception. Profit maximization is necessary for long term existence of any business and for bank as well. An investor always spends in those sectors where profit is maximized. Financial statement is the indicator of

a business' performance that whether business is profitable or not. Therefore, financial analysis reflects the financial position of a firm. It is the process of determining the operational and financial characteristics of a firm. Different types of financial statement analysis can be used on the basis of this research's objectives. Financial statement analysis is helpful to the decision maker for finding out favorable or unfavorable situation of a business concern. Financial performance is the main indicator of success or failure of the company.

The main function of financial analysis is the pinpointing of the strengths and weaknesses of a business undertaking by regrouping and analyzing figures contained in financial statements, by making comparison of various components and by examining their contents. This can be used by financial managers as the basis to plan future financial requirement by means of forecasting and budgeting procedures. [Man Mohan and Goyal S N, 1997:356]

Weston and Brigham states, "Financial statement analysis involves a comparison of a firm's performance with that of other firms in the same line of the business, which often is identified by the firm's industry classification. Generally speaking, the analysis is used to determine the firm's financial position in order to identify its current strengths and weaknesses and to suggest actions that might enable the firm to take advantage of its strengths and correct weaknesses. [Weston, J F, and Brigham, E F, 1996:78]

Financial analysis is the process of determining financial strengths and weaknesses of any company by establishing strategic relationship between the components of balance sheet and other operative data. [Pandey, I M, 1994:96]

Financial analysis involves the use of various financial statements. These statements do several things. First, the balance sheet summarizes the assets, liabilities, and owners' equity of a business at a moment in time, usually the end of a year or a quarter. Next, the income statement summarizes the revenues and expenses of the firm over a particular period of time, again usually a year a quarter. Though the balance sheet represents a snapshot of the firm's financial position at a moment in time, the income statement depicts a



summary of the firm's profitability over time. [Vanhorn, J C & Wachowicz, J M, 2009:128]

Thus, the analysis of financial statement is an important aid to financial analysis. It is helpful in assessing the financial position and profitability of any business concern. [Pandey, I M, 1994:500]

“It is both analytical and judgmental process that helps answer questions that have been posed. Therefore, it is means to end. Apart from the specific analytical answer, the solutions to financial problems and issues depend significantly on the views of the parties involved in the related importance of the issue and on the nature and reliability of the information available.”[Helfert, E A, 1992:2]

It is both the analytical and judgmental process that helps answer and question that have been posed. Therefore, it is means to end. Apart from the specific analytical answer the solutions to financial problems and issues depend significantly on the view of the issue and on the nature and reliability of the information available.

### **Objectives of financial analysis**

The main objective of financial analysis is to explain various facts related to the past performance of business and predict the potentials for achieving desired results. Some of the other objectives of financial analysis are as follows:

- To understand the solvency of short term and long term of a firm.
- To know the present and future profitability of the firm.
- To compare with different firms.
- Forecast the future and preparing budgets.
- The financial stability of a business firm.
- To correct weaknesses in time.

## **Needs of financial analysis**

The analysis of financial statement is mainly focused with the some questions such as what is the present performance of the firm. On which areas do problem exists, etc. The needs of financial analysis can be for:

- What is the present performance of the firm?
- What will be the position of the firm in future? What are the projections? Is there any likely problems area in the future?
- What are the recommendations?

### **3.1.3 Investment Activities:**

Investment, in its broadest sense, is the sacrifice of current rupees and resources for the sake of future rupees and resources. In other words, it is commitment of money and other resources that are expected to generate additional money and resources in the future. Such a commitment takes place in the present and is certain to occur but the reward comes in the future and always remains uncertain. Investments are made on assets. Assets can be real such as land, building, factories, etc or Financial assets such as stocks, bonds, treasury bills, etc.

## **3.2 Review of Related Studies**

### **3.2.1 Review of Journals and Articles**

Under this heading some related articles published in different books, economic journals, bulletin, magazines, and news papers have been examined and reviewed.

**Dr M K Shrestha** (2047), in his article *Commercial Banks Comparative Performance Evaluation* published in Karmachari Sanchaya Kosh Publication stresses on a proper risk management with appropriate classification of loans under performing and nonperforming category. He further clarifies that adequate provisioning is the surest way to get relief from sinking loan after careful consideration of portfolio risk. A clear cut criterion is necessary to treat interest suspense account and it is advisable that all interest unpaid for more than six months need to be treated as unearned income.” Regarding the risk

management of the bank Dr Shrestha's other suggestions can be outlined as follows:

- Any customer having overdue loan of two years or more in his account should not be given other loan facilities.
- Strong provisioning or reservation is required in restructuring portfolio relating to overdue loans.
- All credit including overdrafts should be given a maturity date and should be subjected to revision at that date and consequently categorized as good, standard, or doubtful loans.
- Financial creditworthiness of the borrower must be evaluated properly before granting the loans.

He found that private sector banks are operationally more efficient, have better performance in comparison to state owned banks. Better performance of private sector banks is due to their sophisticated technology, modern banking methods, and skills.

**Sunity Shrestha (1995)**, in her study *Portfolio Behavior of Commercial Banks in Nepal* had analyzed the financial performance of the commercial banks through ratios and management achievement index. She also analyzed the investment and lending operations of commercial banks and their contribution to the national economy. She used data from 1075 to 1990 and analyzed the portfolio composition of the commercial banks and their behavior by testing relationship with economic and fiscal variables of the country.

Some of her conclusions relevant to this thesis are as follows:

- Per capita deposits as well as per capita credit in commercial banks have increased tremendously. The contribution of deposit in GDP has also been increasing.
- Structural ratios show 75% of their total deposits invested in the government securities and shares.
- Reserve position shows quite high percentage of deposit as cash reserve.

- The commercial banks are highly leverage and highly risky.
- By risk and return private sectors Banks are aggressive.
- By comparative total management achievement index the banks are better.
- Amongst the commercial banks, Standard Chartered Bank seems to have highest growth rate of EPS.

**Shrestha(1997)**, in his article *Nepalma Banijya Bankharuko Bhumika: Ek Paridristi* pointed out some important activities, seen in the banking sector, that deserves reviews:

- a. Possibility if capital flight: The unstable political situation caused the possibility of capital flight soaring high. Joint venture banks can become the main source of capital flight. It should be seriously considered and analyzed and corrective actions to be taken in time.
- b. Minimum deposit amount: Commercial banks and financial institutions have increased the minimum deposit amounts (threshold). This policy harasses depositors. Therefore this policy deserves review.
- c. Debt recovery and its effectiveness: Debt recovery has become a problem to the banks. Therefore, effective evaluation of collateral and monitoring of loans use should be done effectively.

**Dhungana (2005)**, in article, *Nonperforming Loan and Commercial Banks* said that the banking sector is severely affected by the nonperforming loan. It is estimated that nonperforming loan of the Nepalese banking system is around 16%. Due to the nonperforming loan, two old commercial banks, RBB and NBL, are the worst position today. Other commercial banks are also performing loan problem. It has serious implications on economic performance of the country. Hopefully, the Debt Recovery Act 2058 will tackle this problem.

### 3.2.2 Review of Previous Thesis

Prior to this study several research works have been done by the students on the performance of commercial banks of Nepal. For review purpose relevant studies have been gone through. Some of the conclusion they drew are as follows:

**Mr Dev Raj Adhikari (1993)**, in his study *Evaluating the Financial Performance of Nepal Bank Limited* has calculated and analyzed the different ratios by observing figures of balance sheet of Nepal Bank Ltd for the period of FY 2038/39 to 2046/47. He remarked that the bank is not found to have been able to utilize its fund effectively and efficiently for the uplifting the economy. He also stated in his report that “The bank has been unable to utilize its resources on high yielding investment portfolio to maximize returns. Operational efficiency of the bank is indicated by the operational loss which has been found unsatisfactory. Hence, the bank is indicated by the operational loss as operationally inefficient or unsatisfactory. Hence, the bank has been suggested to manage its investment portfolio efficiently. It is recommended that the bank should try to mobilize its resources efficiently by creating new businesses and service ideas which will certainly help for the better utilization of ideal resources and for the economic development of the country.” He has focused on utilization and mobilization of funds and resources of Nepal Bank Ltd. His study especially concentrated on the deposit collection of the bank and disbursement of the fund as loan and advances. Therefore, his main study areas were uses and sources of funds and income and expenses trends of the banks.

**Maharjan (2000)**, made a study on topic *A Comparative Analysis of Financial Performance of Nepal Bangladesh Bank Ltd and Nepal Grindlays Bank Ltd* with main objective to analyze and evaluate the financial position of these banks in order to benefit management, shareholders, stock traders, customers, depositors, and debtors by his findings. He used financial tools such as ratio analysis and some statistical tools like average, CV, trend analysis, Hypothesis tests. He used the data of five years till 2000. At liquidity position NGBL

doesn't meet the required standard but it is consistent over the years. At funds utilization NBBL is better. NBBL is more aggressive in mobilizing the fund bearing higher risk. At profitability NBBL has increasing trend till 1997. NGBL has higher fluctuation at profitability. Overall capital position is better at NGBL.

**Deoja (2004)**, made a study on topic *A comparative Study of the Financial Performance Between Nepal SBI Bank Ltd and Nepal Bangladesh Bank Ltd*. His main objective was to make comparative study of financial performance of the above mentioned banks. He used financial tools like ratio analysis and statistical tools like average, CV, SD, trend analysis, hypothesis tests in his study. And after having studied their performance for five consecutive years till 2000 he concluded that a sound liquidity position has been maintained in the both banks. NBBL is better for utilizing resources to generate income than NSBIBL. Profitability of NBBL is better than that of NSBIBL. Interest earned to total assets and return on net worth of NBBL is superior to that of NSBIBL. Both are highly leveraged.

**Maharjan (2006)**, made a study on topic *A Comparative Study of Financial Performance of Commercial Banks with Respect to Himalayan Bank Ltd, Nepal Investment Bank Ltd, and Everest Bank Ltd* with main objectives to analyze, examine, and interpret the financial position of HBL, NIBL, and EBL. He used ratio analysis as main tool for analyzing performance. He has also used statistical tools such as average, standard deviation, CV, correlation coefficient, probable error of correlation coefficient, coefficient of determination, trend analysis, simple regression analysis, and test of hypothesis. He reached on conclusion that overall performance of sample banks is satisfactory. EBL is better in liquidity than others. HBL and NIBL have aggressive working policy. All the banks are successful in managing assets and EBL is best for mobilizing assets and deposits in profitable sectors in form of loan and advances, Investment in Government securities and shares & debentures. NIBL is found to be better from profitability point of view

amongst the banks as they pay lower interest for debt fund and charge higher interest on loan given. NIBL has lower leverage than rest banks and hence is less risky as it uses less debt fund. NIBL has strongest capital base as it has higher capital adequacy ratio. NIBL also have more assets from its shareholders' fund which shows it is strong from point of view of shareholders' fund. EBL has highest growth rate of net profit and HBL has negative growth in EPS but NIBL and EBL have positive. EBL has highest growth of net profit. HBL and NIBL has negative growth rate of DPS. The banks have positive relation between the deposits and loan and advances and investment. EBL and NIBL have a higher positive correlation between the investments and net profit than HBL. There is also a positive perfect correlation between loan and advances and net profit in EBL. Increase in loan and advances increases net profit in the banks.

His recommendations are that the banks should modify their working policy to maintain standard ratio. HBL should increase loan advances to different productive or profitable sectors, EBL should mobilize its fixed deposit funds more efficiently and NIBL should make more effort to mobilize its deposit.

**Dahal (2007)**, made a study on topic *A Comparative Study of Financial Performance of HBL and NBBL*. His main objective was to make comparative study of financial performance of the above mentioned banks. He had an intention to benefit the management, shareholders, stock traders, customers, depositors, and debtors from his findings. He used financial tools like ratio analysis and statistical tools such as average, CV, SD, Hypothesis tests (F-test) in his study. And he concludes that NBBL maintains above the standard liquidity ratio, NBBL is better at mobilizing the deposits, at mobilizing fixed deposits HBL is better, and HBL is more leveraged and riskier. NBBL has been found better performed at utilizing overall resources, where as net profit to total deposit ratio is higher with HBL, HBL is better in mobilizing equity. NBBL has higher fluctuation at net profit margin so it has high risk of solvency,

NBBL is better at commission and discount whereas HBL is better at interest income, Operational costs of HBL is higher.

**Chand (2009)**, made a study on topic *A Comparative Study of Financial Performance of Joint Venture Banks in Nepal*. He had conducted the study with main objectives of making the comparative study of the financial performance of the selected joint venture banks. He used financial tools such as ratio analysis and statistical tools such as correlation coefficient, probable error in correlation, and CV. After studying the various aspects of performance of the selected banks he reached in conclusion that NBBL is more competent in payment of deposits, and it has more liquidity than EBL. Liquidity position of EBL is stronger and EBL has deposited excess cash in NRB. EBL has NRB balance to fixed deposit ratio NBBL and EBL has lower fixed deposit as compared to NBBL. EBL has greater leverage ratio which indicates successful utilization of deposit. EBL has higher net worth to total assets ratio. EBL has more consistent debt ratio than NBBL, shows that NBBL is riskier and may fail to satisfy the creditors. EBL has higher interest coverage ratio. Debt serving capacity of EBL is higher than that of NBBL. EBL's profitability is more satisfactory than that of NBBL's. He has recommended that EBL should prioritize to collect fixed deposits, NBBL has to seek new area for investment to reduce high cash and bank balances. NBBL has been recommended to reduce debt ratio. NBBL has to increase coverage ration by increasing operating profit and maintaining interest on deposits in the reasonable. NBBL should strictly follow NRB's directives as its capital adequacy is below the NRB's requirement. EBL should reduce office operating expenses to total income ratio as to minimize it.

### **3.3 Research Gap**

Commercial banks invest their deposit in different profitable sector according to the directives and circulars of the NRB and their own guidelines and policy. Financial analysis statement has to be prepared according to direction of NRB. NRB's policy and guidelines are changing according time. So the up to dated



study and analysis over the change of time frame is major concern for the researcher and concerned organization as well as industry as a whole. This study covers the more recent financial data, and analysis is done within the latest guidelines and curriculum of NRB.

After studying previous thesis I knew that no research has been undertaken regarding the performance and investment activities of Nepal State Bank of India Nepal Ltd, Kumari Bank Ltd, and Citizens Bank International Nepal Ltd. Some researchers have conducted comparative studies of other joint venture banks. But studies for the purpose of comparison between these banks performance have not been conducted yet. Similarly as sample of study these banks have not been used here before for the purpose of studying performance and investment activities of Nepalese commercial Banks. Financial analysis is the major function of every commercial bank for evaluating their financial performance. Therefore it is essential to have knowledge regarding performance of the bank for its stakeholders.

NSBIBL, KBL, and CBINL are well known banks in Nepal. They have state able market shares and investment activities. Therefore, these banks have significant impact on developing the economy of the country. Due to fragile economic and political situations different factors cause changes in financial performance of corporations. The banks are not exceptions. Therefore, to some extent this study addresses the research gaps prevailing about the in-depth analysis of the financial performance and investment activities which is major concern of the shareholders, stakeholders, and other investors.

## **CHAPTER III**

### **RESEARCH METHODOLOGY**

To solve research problems and achieve the objectives stated in chapter one, this study goes through research methodology. Research methodology is the process of arriving at the solution of problems through planned and systematic dealing with the collection, analysis, and interpretation of the facts and figures. It presents research methodology adopted in achieving the objective stated in the earlier chapter. It contains research design, sources of data, gathering and data analysis tools. It also contains population and sample, nature and sample of data, and financial statement analysis.

#### **3.1 Research Design**

Kerlinger (1994) opined that research design is the plan, structure, and strategy of investigation conceived so as to obtain answers to the research questions and to control variance. As this opinion suggests any research project would be unthinkable without the research design clearly conceived by the researcher before the research has actually started. Research design is highlighted for ascertaining the basic objectives of the study.

Research design is plan, structure, and strategy of investigation conceived. The Research design of this study is based on exploratory as well as analytical type. The study is more perspective than descriptive since the employment of secondary data to analyze the investing activities and performance of selected commercial banks of Nepal. However, qualitative information regarding management aspects of the commercial banks related to investment activities and performance has also been considered.

#### **3.2 Population and Sample**

The population of this study constitutes all the commercial banks operating in the country. There are, so far, thirty one commercial banks in Nepal. Amongst them, three commercial banks have been taken as sample for the purpose of

studying performance and investing activities of Nepalese commercial banks. The sampling technique used here is non-probability sampling i.e. purposive sampling to select the sample for study. The sample covers only 9.68% of the population. The sample commercial banks of the study are:

- i. Nepal SBI Bank Ltd
- ii. Kumari Bank Ltd
- iii. Citizens Bank International Nepal Ltd

### **3.3 Sources and Collection of Data**

For the purpose of study only the secondary data are used. The required data and information for analysis are directly collected from the annual reports of the respective banks. The supplementary data are collected from number of institutions like Shankar Dev Campus Library, Tribhuvan University's Library's documentation section, and NEPSE, company office. Similarly, related books and journals articles, reports, bulletins, and data from SEBON have been also used. Further the secondary data have been collected from reports and financial statement of the company, published and unpublished official records, books, articles, and magazines, annual reports, economic journals, etc. all the data are compiled, processed and tabulated in time series as per need and objectives.

### **3.4 Analytical Tools and Methods**

In order to analyze the data the researcher employs different financial tools and statistical tools as well. Financial tools comprise ratio analysis that the researcher uses. The researcher will employ various ratios under activity, operating, profitability, and growth ratios. Similarly, under statistical tools the researcher will employ mean (average), Standard Deviation, Coefficient of variances, correlation analysis, regression analysis, and time series analysis according to the demand of objectives set previously.

### **3.4.1 Financial Statement Analysis**

Financial statements have two major parts. Quantitative and verbal information both contained in the annual report explains firm's conditions. The statements explain what actually has happened to the firm's financial position and to its earnings and dividends over the past few years and the verbal statements attempt to explain why things turned out the way they did. This study aims to find out investment activities and performance of selected commercial banks which are listed in NEPSE as 'A' class firms trading in it. Financial statements contain the data which are pertinent to analyze investment activities and performance of any firm. The data themselves are not meaningful. Therefore they are required to be analyzed to get meaning and result that could be able to answer the question raised and objectives set previously. For this purpose financial statements analysis is highly desired.

**Pandey (1997)** explains, financial statement analysis is largely a study of relationship among the various financial factors in a business as disclosed by the single set of statement and a study of those factors as shown in a series of statements. It is the process of identifying the financial strengths and weaknesses of the firm by properly establishing the relationship between the items of balance sheet, and profit and loss account. Thus, the analysis of financial statement is an important and aid to financial analysis. It is helpful in accessing the financial position and profitability of a business concern.

Financial statement analysis is a process of evaluating the relationship between components/parts of a financial statement to obtain a better understanding of a firm's position and performance. Generally speaking, the analysis is used to determine the firm's relative strengths and weaknesses whether the firm is financially sound and profitable relative to other firms in its industry, and whether the firm is improving or deteriorating overtime. Hence, it helps to managers, investors, and creditors to make a good decision about the recent and current financial situation together with investment activities and performance.

The purpose of evaluation of financial statements differs amongst various groups such as creditors, shareholders, potential investors, etc. interested in the results and relationship reported in financial statements. Internally, financial managers use the information provided by financial analysis to help make financing and investment decisions to maximize the firm's value. Externally, stockholders and creditors use financial statements analysis to evaluate attractiveness of the firm as an investment by examining its ability to meet its current and expected financial obligations.

Researcher uses many financial tools to analyze investing activities and performance of an organization. Ratio analysis is the main financial tools used to analyze financial performance and investment activities of financial institutions. Ratio analysis is described below:

#### **A. Ratio Analysis**

Ratio analysis is technique of analyzing and interpretation of financial statement. A ratio is the relationship between two accounting figures expressed mathematically. "Ratio analysis is used to compare a firm's financial performance and status to that of other firms or to itself overtime." Evaluation of the performance of an organization by creating the mathematical relationship between the different accounting figures from balance sheet, and income statement. It provides guides especially in spotting trends toward better or poor performance and in financing out significant deviation from any average or relatively applicable standard. Ratios help researcher to make qualitative judgment about the firm's financial position. Ratios are broadly categorized in to four type viz. liquidity ratio, activity ratio, profitability ratio, and leverage ratio. There are so many ratios. Here, in this research, only the following ratios have been used assuming that only they are pertinent with the explanation of investment activities and performance of the selected banks in Nepal.

**a. Liquidity Ratio**

A firm's ability to meet its short term obligations is known as liquidity. A liquid asset is one that can be easily converted in cash without significant loss of its original value. A firm's Liquid position deals with the question of how well the firm is able to meet its current obligations. In order to maintain short term solvency the company must maintain adequate liquidity. Higher liquidity means more assets are idle and low liquidity means the firm is in risk of not meeting short term obligation. Therefore, liquidity ratio should be neither too low nor too high. If the liquidity ratio of the company is too low it will result bad credit rating, and less creditors' confidence ultimately lead to bankruptcy. If the company has high degree of liquidity, it will unnecessarily tie up current assets reducing profit earning capacity. Thus the company should make effort to maintain proper balance between inadequate liquidity and unnecessary liquidity for the long term survival and avoiding risk of insolvency. Liquidity ratios can be as follows:

**(i) Current Ratio**

It indicates the extent to which current liabilities are covered by assets expected to be converted in to cash in the near future. It is, clearly, the relationship between current assets and current liabilities. Hence,

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Current assets in general are those assets which can be converted in to cash in short period of time without significant loss of its original value. The assets those can be converted in cash within a year are known as current assets. Normally, current assets include cash and bank balances, money at call or short notice, loans and advances, investment in short term securities issued by government, marketable securities, account receivables, and inventories. Similarly, interest receivable, debtors, bills purchased and discounted and miscellaneous current assets are the examples of current assets. Likewise, current liabilities normally consist of accounts payable, short term notes payable, current maturities of long term debt, accrued income taxes, and other

accrued expenses (principally wages). Current liabilities are those obligations which are to be retired within a short period, generally one year. Deposits and other short term loans, bills payable, staff bonus, dividend payables, and miscellaneous are also included in current liabilities.

Current ratios, sometimes also called working capital ratio, should be, generally, 2:1 to be technically solvent for companies in many types of business. It means current assets of the company should be twice of its short term obligations. Current ratio Less than 2:1 means the liquidity position of the firm is not good. A relatively high values of current ratio means the firm is liquid and posses the ability to pay its bills and vice versa. We should notice that 2:1 is the widely accepted standard, but accurate standard depends on circumstances in case of seasonal business ratio, and the nature of the business.

**(ii) Cash and Bank Balance to Total Deposit Ratio**

For financial institutions current ratio itself could not be taken as prime consideration for analyzing performance and investment activities. Therefore, many other ratios regarding liquid assets are sought. It is well known that cash and bank balances are most liquid current assets. This ratio measures the percentage of most liquid fund with the financial institutions (here, with banks) to make immediate payment to the depositors. This ratio is calculated by dividing cash and bank balances by total deposit. Thus,

$$\frac{\text{Cash and Bank Balances}}{\text{Total Deposit}}$$

Cash and bank balances here include cash on hand, foreign currencies on hand, cheques, and other cash items, balance with domestic banks, and balance held in foreign banks. The total deposit comprises current deposits, fixed deposit, money at call and short deposit, and other deposits. The Higher the ratio indicates that the firm has higher ability to meet their deposits, and vice versa. Moreover, too high ratio is unfit as capital will be tied up and opportunity cost will be higher and hence return of the firm is reduced.

**(iii) Cash and Bank Balance to Current Assets Ratio**

This ratio measures the financial institutions' liquidity on the basis of its most liquid asset i.e. cash and bank balance. This ratio reflects the ability of the bank to make the quick payment of its customers' deposit. Cash and bank balance is divided by current assets to compute this ratio. Thus,

$$\frac{\text{Cash and Bank Balances}}{\text{Current Assets}}$$

The higher ratio indicates the more sound ability of the firm to meet its daily cash requirements of its customer deposits, and vice versa. An optimal ratio should be maintained. Both higher and lower ratios are not preferred as if a bank maintains higher ratio of cash, it has to pay interest on deposits and some earnings may be lost. In the contrary, if the bank maintains low ratio of cash, it may fail to make payments for presented cheques by its customers. Therefore sufficient and appropriate level of cash reserve should be maintained properly.

**(iv) Investment on Government Securities to Current Assets Ratio**

This ratio examines that portion of a bank or financial institution's current assets which is invested in government securities. More or less each bank or financial is interested to invest their collected fund on different securities issued by government in different time to utilize their excess funds and other purpose. It is due to minimize risk to some extent as government securities are assumed to be risk free. Though government securities are not liquid as liquid as cash and bank balance of banks, they can easily be sold in the market or they can be converted in to cash in other ways. This ratio is computed by the sum invested in government securities by current assets. It can be stated as:

$$\frac{\text{Investment on Government Securities}}{\text{Total Current Assets}}$$

Here, investment on government security includes treasury bills and development bonds, etc. This ratio shows that out of total current assets, how much percentage of it has been occupied by the investments on government securities.



#### **(v) Loan and Advances to Current Assets**

Loan and advances are included in the current assets of a financial institution because generally they provide short term loan, advance overdraft and cash credit. However in case of bank also loan and advances are used as current assets as they provide loans on installment basis. This ratio shows the percentage of loan and advances in the total current assets. This ratio can be computed dividing loan and advances by current assets. Symbolically,

$$\frac{\text{Loan And Advances}}{\text{Total Current Assets}}$$

Loan and advances comprises loans, advances, cash credit, overdraft, local and foreign bills purchased and discounted. In order to make high profit by mobilizing its fund in the best way, a bank should not keep its all collected funds as cash and bank balances but they should be invested as loan and advances to the customers. But high funds investment on loan and advances may prove harmful to maintain the banks in most liquid position as they can only be collected at the time of maturity only. This is why a bank must maintain its loan and advances in appropriate level and to find out position of current assets, which is granted as loan and advances.

#### **b. Activity Ratio (Assets Management Ratio)**

Activity ratio evaluates the efficiency with which the firm manages and utilizes its assets. These ratios are used to measure how effectively the firm is managing its assets. Effectiveness of the company in employing the resources at its command is measured by this ratio. Activity ratios serve as one of the powerful tools to analyze investment activities and performance of banks and financial institutions. These ratios are also called turnover ratio. It is useful in analyzing whether the assets are utilized properly or not. Funds are collected by collection of shares and debts owners, creditors, and outside parties. The funds are invested in processing various kinds of assets to generate profits. The better management of asset turnover is the better indication of its financial performances and large amount of profit. Activity ratios are the indicators of a concern with regard to its efficiency in assets management. Hence, they are

often referred as efficiency ratios are computed to assess financial institution's efficiency in utilizing available resources. The types of activity ratios, taken in to consideration, for the research purpose are explained below:

**(i) Loan and Advances to Total Deposit Ratio**

This ratio measures the extent to which the banks are successful to utilize the outsiders fund (Total Deposit) for the profit generating purpose on the loans and advances. Generally, a high ratio reflects higher efficiency to the utilization of fund and vice-versa. It can be calculated by dividing the amount of loans and advances by the amount of total deposits. Thus,

$$\frac{\text{Loan And Advances}}{\text{Total Deposits}}$$

Here, loan and advances refers to total loan, advances and overdraft, and total deposits refer to total of all kinds of deposits.

**(ii) Loan and Advances to Fixed Deposit Ratio**

This ratio indicates how much of loan and advances is from the main account of the banks fixed deposit. Fixed deposit is the highest interest rate payable deposit. Hence, banks must utilize fixed deposits properly. This ratio is obtained by dividing loan and advances by fixed deposits. This is expressed as:

$$\frac{\text{Loan And Advances}}{\text{Fixed Deposit}}$$

Loan and advances to fixed deposit ratio indicates how effectively the firm has utilized its funds from fixed deposits. The higher ratio indicates the firm's strength and effectiveness in mobilizing funds in fixed deposits account deposited by its customers.

**(iii) Loan and Advances to Total Working Fund Ratio**

Loan and advances is the major component in the total working fund (Total Assets), which indicates the ability of banks on mobilizing their loan and advances on the working fund for the purpose of income generation. Where, working fund comprises all the assets of on balance sheet items. More precisely, it includes current assets, net fixed assets, loans for development

bonds, and other investment in shares, debentures, and other assets. Thus the ratio is calculated using the following relation:

$$\frac{\textit{Loan And Advances}}{\textit{Total Working Fund}}$$

A higher ratio is better as it indicates the firm's strength in mobilizing its working fund in the form of loan and advances, lower one indicates weakness of the bank in mobilizing working funds in form of loan and advances.

**(iv) Investment on Government Securities to Total Working Fund Ratio**

This ratio indicates that how much funds invested on government securities are from the total working fund. It is very important to know capacity of a bank to mobilize its working fund investing on government securities so that its value could be maximized. All the deposits of the banks should not be invested in loan and advances and other credit from view point of security or risk and liquidity. Therefore, some extent, banks should invest to the government securities. We calculate this ratio dividing investment on government securities by total working fund as below,

$$\frac{\textit{Investment on Government Securities}}{\textit{Total Working Fund}}$$

This ratio indicates that how much working fund has been invested on government securities. As government securities are assumed as default risk free higher ratio can be taken as less risky but at the same time government securities' yield is lower and therefore it can be said a higher ratio reduces profitability.

**(V) Total Investment to Total Deposit Ratio**

Investment is said to be one of the major forms of credit created to earn income. This implies the utilization of firm's deposit on investment in government securities and shares, debentures of other companies and banks. This ratio measures the extent to which the financial institutions are successful in mobilizing total investment on total deposit. The number of deposit should soundly as the banks have to put only interest on its deposit but also has to

declare handsome dividend to its owners i.e. shareholders. This ratio can be calculated dividing total investment by total deposit as follows.

$$\frac{\textit{Total Investment}}{\textit{Total Deposit}}$$

Total investment in numerator comprises investment on government securities, investment on debentures and bonds, share in subsidiary companies, shares in other companies and investment on other forms. A higher ratio indicates that the bank is efficient in mobilizing deposits in form of investment.

### **c. Profitability Ratios**

Profitability ratios show the overall efficiency of a business concern. The relation of the return of the firm to either its sales or its equity of assets is known as profitability ratio. Profit is necessary to survive in any business for its successful operation and further expansion. It measures overall effectiveness of management of the firm as reflected by the return generated on sales and investment, or equity and assets.

The difference between total revenues and total expenses over a period is known as profit. Efficient operation of a firm and its ability to pay and adequate return to different parties depends upon firm's growth, survival, and to compete with competitors. In fact sufficient profit must be earned to maintain the operation of the company to be able to acquire funds from investors for expansion and to contribute towards the goals of nation. This implies that the measuring rod of companies for the investing activities and financial performance. Higher the profitability ratio better is the investing activities and financial performance of the firm or the banks, and vice versa. Profitability of the banks can be evaluated through the following different ways.

#### **(i) Net Profit to Total Assets Ratio**

Net profit refers profit after interest and taxes. Minimizing taxes within the legal options available will also improve the return. It is also known as return on assets (ROA). ROA evaluates the efficiency of a company in utilization and

mobilization of assets and its survival. This ratio is calculated by net profit (loss) by total assets. This can be expressed as,

$$\frac{\text{Net Profit (Loss)}}{\text{Total Assets}}$$

The numerator indicates the position of income left to the interval equities after all costs charges expenses have been deducted. Total assets comprise those assets, which appear asset side of the balance sheet. The high return on total assets ratio usually indicates that high profit margin and high turnover of total assets and vice versa.

### **(ii) Net Profit to Total Deposit Ratio**

Net profit to total deposit ratio evaluate whether management has been capable to mobilizing and utilizing the deposit. It also helps to know the overall performance and generation of profit of a bank. This ratio is most important to identify whether the organization is sufficiently efficient or not in mobilizing its total deposits, so that corrective action could taken on time. This can be shown as

$$\frac{\text{Net Profit(loss)}}{\text{Total Deposits}}$$

A higher positive ratio is preferred as it reflects that the bank is mobilizing its total deposits well.

### **(iii) Net Profit to Net worth Ratio**

Net profit to net worth ratio measures the profitability of the owner's investment or company's earning power against owner's equity. The excess amount of total assets over total liabilities is known as net worth. Net worth refers to the owner's claim of a finance company. This ratio is calculated dividing net profit by net worth or total equity capital. This can be as,

$$\frac{\text{Net Profit}}{\text{Net Worth}}$$

Net worth focuses not only the paid up capital but also include general reserve, capital reserve, ordinary shares, preference shares, premium on shares, and other reserves which may be distributed to share holders as dividend.

**(iv) Total Interest Earned to Total Working Fund Ratio**

To give a picture of earning capacity of a bank on its total assets or working fund, total interest earned to total working fund ratio is very helpful and significant. In other words, this ratio reflects the extent on which the banks are capable to mobilize their total assets to generate high income as interest. This ratio is calculated to find out the percentage of interest earned to total assets (working fund). It is calculated as,

$$\frac{\textit{Total Interest Earned}}{\textit{Total Working Fund}}$$

Total interest earned comprises interest income from loans, advances, cash credit, and overdrafts, government securities, interbank and other investments. A higher ratio indicates high earning power and better performance of a bank on its total working fund, and vice-versa.

**(V) Total Interest Paid to Total Working Fund Ratio**

It measures the percentage of total interest paid on liabilities with respect to total working fund. This ratio can be calculated dividing total interest paid by total working fund, which can be as,

$$\frac{\textit{Total Interest Paid}}{\textit{Total Working Fund}}$$

Total interest paid includes interest expenses on total deposits, debts, borrowings, and other deposits. A higher ratio indicates high interest expenses on the total working fund and vice versa.

**d. Leverage Ratio**

A firm should have a strong short-term as well as long term financial position. These ratios are very useful to judge the long term financial position of the firm and to measure financial contribution of owners and creditors comparatively. These ratios also reflect the firm's or bank's capital structure situation which is calculated to measure the company's ability of using debt for benefit of

shareholders. Long term creditors like debentures holders, financial institutions, etc. are more interested to the bank's long term financial strength. The capital structure ratio generally focuses on long term financial soundness, debt servicing capacity, and strengths and weaknesses of the concerns. This ratio may be computed from the balance sheet items to determine the proportion of debt in total financing. In summary, debt ratios reveal us those relative proportions of capital contribution by creditors and by owners. These ratios are often called as solvency ratio. These ratios are powerful financial tools to assess the performance of the organizations.

**(i) Debt-Assets Ratio**

Debt-Assets ratio, often called as Debt Ratio, shows that what proportion of the assets is financed by outside funds and measures the financial safety to the outsiders. It is calculated dividing debt by total assets.

$$\frac{\textit{Total Debt}}{\textit{Total Assets}}$$

Total debt comprises short-term and long term debt. Debt is the sum of money that must be paid either in near future or far. Creditors, bills payables, etc. are the examples of debt. A high debt to total assets ratio represents a greater risk to creditors and shareholders, and vice-versa. This ratio reveals a bank's success in exploiting debt to be more profitable.

**(ii). Debt-Equity Ratio**

Debt equity ratio measures the relative claims of creditors and owners against the firm's assets. In other words, the debt equity ratio indicates the combinations of debt capital and equity capital fund to the total investment. The ratio is calculated as follows,

$$\frac{\textit{Total Debt}}{\textit{Total Equity(Net Worth)}}$$

It is noteworthy that equity comprises shareholders capital, general reserve, general loan loss provision, inappropriate profit and loss balance etc. This ratio helps in ascertaining stake in bank between creditors and owners. Higher proportion of debt means there is danger tempting irresponsibility in the parts of the owners.

**e. Capital Adequacy Ratio**

Capital adequacy ratio is one of the powerful tools to analyze the investing activities and performance of the organization as it measures the strength of the capital. A high or low capital adequacy ratio is undesirable items of lower return or lower solvency respective. Hence, appropriate capital adequacy is needed but is a controversial matter. Capital adequacy ratio is measured by analyzing the following ratios.

**(i) Shareholders' Fund to Total Deposit Ratio**

Shareholders' fund to total deposit ratio shows how well banks are maintaining sufficient amount as shareholders' fund in comparison with the amount of total deposits. It is computed as follows,

$$\frac{\textit{Shareholders' Fund}}{\textit{Total Deposits}}$$

It is noteworthy that shareholders' fund is equal to the equity or net worth. Higher ratio shows banks are maintaining sufficient amount of shareholders' fund in comparison with the amount of total deposit.

**(ii) Shareholders' Fund to Total Assets Ratio**

This ratio is concerned with the sufficiency of shareholders' fund against the total assets. It is very essential for every financial institution to have a balance of required percentage of total assets at shareholders' fund i.e. capital fund. This ratio is derived by dividing shareholders' fund by total assets. This is computed as,

$$\frac{\textit{Shareholders' Fund}}{\textit{Total Assets}}$$

This ratio, generally, measures the relative claim of owners of the banks over the bank's assets. A high ratio indicates that out of total assets shareholders have more control and command and vice-versa.

**f. Growth Ratio**

The growth ratio represents how well the banks are maintaining their economic and finance position. This ratio can explain regarding the performance of banks. The ratio can be calculated dividing the last period figure by the first



period figure then by referring to the compound interest tables. Alternatively, it is calculated as follows,

$$D_n = D_0 (1+g)^n$$

Where,

$D_0$ = Dividend per share of base year

$n$ = Number of years or periods

$g$ = Growth rate

A higher ratio, in general, indicates better performance of banks and vice-versa. To examine and analyze the expansion and growth of the banks' business, following growth ratios are calculated in this study.

#### **(i) Net Profit**

Net profit measures the profitability performance of any business concern including banks. It is essential for its survival and growth and maintain capital adequacy through profit retention. This indicator is computed by subtracting total expending and interest and taxes. It is calculated by using following formula,

$$EAIT = OI - (TE + I + T)$$

Where,

EAIT= Net Profit after Interest and Taxes

OI=Operating Income

TE= Total Expenditure

I=Interest Expenses

T=Tax paid

Actually, sufficient profit explains better financial performance and properly managed investment activities of the banks and financial institutions.

#### **(ii) Earnings per Share**

Earnings Per share (EPS) explain that the owners are theoretically entitled to get from the company. It is used to measure the profitability of the shareholders' investment. It simply reveals a bank's profitability on per share basis. This is computed dividing net profit after interest, taxes and preferred

stock dividend by total number of outstanding shares of the bank. Symbolically,

$$EPS = \frac{EAIT - PD}{N}$$

Where,

EPS=Earnings per share

EAIT=Earnings after interest and taxes

PD=preferred stock dividend

N=number of equity shares

The higher the EPS the better is the achievement of profitability of the banks by mobilizing their funds and vice versa.

### **(iii) Dividend per Share**

Banks pay certain portion of earning available to shareholders in form of cash as dividend to its shareholders under its dividend policy. The term dividend means the earning distributed to shareholders in form of cash from the earnings available to shareholders. It is distributed as return to the investment that shareholders had made. Generally, dividend implies that portion of net profit, which is allocated to shareholders as their return in term of cash or share. The difference amount of fund between EPS and DPS is retained in the business as retained earnings. Retained earnings are the earning retained in the business for the betterment of the business. DPS is computed dividing total dividend by number of outstanding shares of the bank. Symbolically,

$$DPS = \frac{TDD}{N}$$

Where,

DPS=Dividend per Share

TDD=Total Dividend Distributed

N=Number of Shares Outstanding

It is noteworthy that higher DPS explains the better performance of banks and any other businesses. To earn high DPS properly managed investment activities for a bank is highly desired.

#### **(iv) Retention Ratio**

Retention ratio indicates the growth aspects and availability of investment opportunity to a bank. Retention ratio is the proportion of earning after tax and preferred dividend retained in the business to grab new and profitable investment project. Generally, a growth firm has higher and growing retention ratio. It is computed as,

$$\frac{EPS - DPS}{EPS}$$

#### **B. Statistical Tools**

Various statistical tools related to the study are employed to make the conclusion more reliable and realistic according to the available financial data. For this following statistical tools are used.

##### **a. Arithmetic Mean or Average**

The average value is a single value within the range of the data that is used to represent all of the values in the series. Since, and average is somewhere in the range of that data, it is also called a measure of central value or measure of central tendency. Since, average represents the entire data, its value lies somewhere in between the two averages. Amongst them I have used the arithmetic mean or simply average which is more popular to denote particular type of average. It is obtained dividing sum of observations by the number of observations or items. Mathematically,

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

Where,

$\bar{X}$ =Arithmetic Average

$\sum X$ =Summation for total values of the variables or observations

N= Number of observations or items

##### **b. Standard Deviation**

Standard deviation is the most important and widely used statistical measure of dispersion which helps in studying the degree of heterogeneity in variables. It is known as root mean square deviation for the reason that it is calculated as the square root of sum of squares of deviation of each variable from the mean. It is

denoted by the small Greek letter  $\sigma$  (sigma). The standard deviation measures the absolute dispersion or the variability of distributions. A small value of standard deviation means a high degree of uniformity or consistency of the observations as well as homogeneity of a series; a large standard deviation means lack of homogeneity or high degree of variability. Hence, standard deviation is very much useful tool in judging the representativeness of the mean. The formula is,

$$\sigma = \sqrt{\frac{\sum d^2}{N-1}}$$

Where,

$\sigma$  = Standard Deviation

$d^2$  = Square of the deviation measured from the arithmetic mean

$n$  = Number of items or observations

### c. Coefficient of Variations

The coefficient of variations is the corresponding relative measure of dispersion, comparable across distribution, which is defined as the ratio of the standard deviation to the mean expressed in resulting percentage. It is used in cases where have to compare the degree of variability of two or more than two distributions. The distribution which has coefficient of variation (CV) greater is said to be more variable or conversely low degree of consistency, less uniform, less stable, or less homogeneity in the data. On the other hand, the distribution which has small CV it is said to have less variability, or more consistency, more uniformity, more stability, or more homogeneity. Symbolically,

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

Where,

CV = Coefficient of Variation

$\sigma$  = Standard Deviation

$\bar{X}$  = Mean or average of the distribution

#### d. Coefficient of Correlation

The term correlation indicates the relationship between two such variables in which changes in the values in one variable, the values of the other also change. Karl Pearson's coefficient of correlation is calculated to study the extent or degree of relatedness or relation between two variables. It can either be positive or negative. If the both series and distributions move in the same directions and the variations are proportionate there would be a perfect positive correlation between them. On the other hand, the two series move in opposite direction to each other, and the variations in their values are proportionate, it is an example of perfect negative correlation. It is also likely that there may be no relationship between the variations of the two series in such a case there do not exist any correlation between them.

The coefficient of correlation always varies between their two limits of +1 and -1. When there is perfect positive correlation its value is +1 and when there is a perfect negative correlation its value is -1. Its mid point is 0, which indicates absence of correlation. Lastly, the value of this coefficient of correlation is always between +1 and -1.

The formula for the calculation of coefficient of correlation is given below:

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

Where,

r = Coefficient of correlation

$\sum XY$  = The total of the product of items in two series

$\sum X$  &  $\sum Y$  = the total of X and Y series respectively

$\sum X^2$  &  $\sum Y^2$  = the total of square items in X and Y series respectively

N = the number of items in X and Y series

Karl Pearson's coefficient of correlation has been employed to find out the relationship between the variables as follows:

1. Coefficient of correlation between total deposit and total investment
2. Coefficient of correlation between debt and return

### e. Probable Error

Once the correlation coefficient is calculated next we have to find out the extent to which it is dependable. For this purpose the probable error of the coefficient of correlation is calculated. If the probable error is added to and subtracted from the coefficient of correlation it would give two such limits in which we can reasonably expect the value of coefficient of correlation to vary. The formula for finding out the probable error for the Karl Pearson's coefficient of correlation is as follows,

$$P. Er. = 0.6745 \times \frac{1 - r^2}{\sqrt{N}}$$

Where,

P. Er. = Probable error of coefficient of correlation

r = Coefficient of Correlation

n= Number of pairs of observation

To ascertain whether the coefficient of correlation is significant or not the following points are noteworthy:

- i. If the coefficient of correlation is less than six times its probable error it is not at all significant
- ii. If the coefficient of correlation is more than six times its probable, error it is definitely significant.
- iii. If the probable error is not much and if the coefficient of correlation is 0.5 or more it is, generally, considered to be significant.

It is to be noticed that the coefficient of correlation expresses the relationship between two series, and not between individual items of the series.

### f. Coefficient of Determination

The coefficient of determination is a measure of the degree of linear association or correlation between two variables, one of which happens to be independent and the other being dependent variable. In other coefficient of determination measures the percentage of total variation in dependent variable explained by independent variables. The coefficient of determination can have value ranging zero to one. If  $R^2$  is equal to 0.65 that indicates that the independent variables

used in regression model, explain 65% of total variation in dependent variable. A value of one can appear only if the unexplained variation is completely nil i.e. zero which simple means that all the data points in the scatter diagram fall exactly on the regression line. Coefficient of determination is the square of the coefficient of correlation. Symbolically,

$$R^2 = (r)^2$$

Where,

$R^2$  = coefficient of determination

r = correlation coefficient

#### **g. Regression Analysis**

Regression analysis is an important statistical tool which helps in estimation or prediction of the unknown value of dependent variable from the known value of other variable. It is one of the scientific techniques and is considered as a useful tool for determining the strength of relationship between two or more variables. Predication or estimation has an important role in the banking and financial sectors; this tool has been employed for the study purpose. The regression line describes the average relationship between the two series. In actual, there is no difference between the lines of best fit and best fit and best fit is generally used when X series related to time and Y series to the value of a variable. If both X and Y series are variables, the line of best fit is known as line of regression. The equation describing the regression line is often called as regression equation.

There are generally two types of regression analysis are used- the first is simple regression and the second is multiple regression. The analysis used to describe the average relationship between only two variables at a time sis known as simple regression analysis. It is used to study how independent variable influences dependent variables. The extension of simple regression techniques i.e. the uses of two or more independent variables are used to estimate the values of a dependent variable is known as multiple regression analysis. Regression analysis should include three tools as explained below,

### (i) Regression Constant

The value of constant which is the intercept of the model indicates the average level of dependent variable when independent variable is zero. In other words, it is better to understand that constant indicates the mean of average effect on dependent variable if all the variables omitted from the model. Symbolically,

$$a = \frac{\sum Y}{N}$$

Where,

a = Regression constant

$\sum Y$  = The total value of dependent variable

N = Number of observation

### (ii) Regression Coefficient

The regression coefficient of each independent variable indicates the managerial relationship between that variable, holding constant the effect of all other independent variables in the regression model. In other words, the coefficient describes how changes in independent variables affect the value of dependent variable estimate. Symbolically,

$$b = \frac{\sum XY}{\sum X^2}$$

Where,

b = Regression coefficient

$\sum XY$  = The total value of the product of items in two series

$\sum X^2$  = The total of the squares of items in X series

### (iii) Standard Error of Estimate

With the help of regression equations perfect prediction is practically impossible. A measure of precision of the estimates so obtained from the regression equation is provided by the standard error (S. E.) of the estimate. Standard error is a word analogous to standard deviation and gives us a measure of the nearness of observation about the line of regression the formula for calculating the standard error of estimate. Symbolically,

$$S_{YX} = \sqrt{\frac{\sum (Y - Y_c)^2}{N}}$$



Where,

$S_{YX}$  = The S. E. of regression of Y values from  $Y_c$

$Y_c$  = The estimated value of Y for given value of X obtained from the line of regression of Y and X.

N= Number of observation

The smaller the value of S. E. if estimate, the closer will be the data to the regression line and better the estimates based on the equation for this line. If standard error of estimate is zero, then there is no variation about the line and the correlation will be perfect. Thus, with the help of S.E. of estimate, it is possible for us to ascertain how well and representative the regression line is as a description of average relationship between two series. For the study purpose, simple regression analysis is applied to find out the effect between the following variables.

(i). Net profit (NP) as dependent variable and independent variable is total assets (TA) regression equation.

$$NP = a + b \times TA$$

#### **h. Trend Analysis**

Trend analysis describes the average relationship between two series where the one series relates to time and other series to the value of a variable. It generally shows that the line of best fit or straight line is obtained or not. The line of best fit describes the changes in a given series accompanying a unit change in time. In other words, it gives the best possible mean values of dependent variable for a given value of independent variable. The following equation is employed to calculate the Line of Best Fit:

$$Y_c = a + b X$$

Where,

$Y_c$ = the estimated value of Y for given value of X, obtained from the line of regression of Y on X

a = Y-intercept / or mean value

b = slope of line or rate of change

X = the variable in time series analysis represents time

The term best fit is interpreted in accordance with the principle of least squares which consists in minimizing the sum of the squares of the residual or the errors of estimates i.e. The deviations between the given observed value of the variable and their corresponding estimated values as given by the line of best fit.

This equation is used to compare the overall performance of different selected banks during the study period plus projection of next five years. Under this topic the following sub topics have been presented,

- i. Trend analysis of loan and advances
- ii. Trend analysis of total investment
- iii. Trend analysis of net profit
- iv. Trend analysis of deposit

The researcher had made an attempt to use the financial and statistical tools discussed above to analyze and interpret the data of the banks taken under sample. The study period covers five years 2006/07 to 2010/11.

## **CHAPTER IV**

### **DATA PRESENTATION AND ANALYSIS**

In order to reach in the objectives for the study we set in first chapter i.e. introduction chapter the data relevant to the objectives are presented and analyzed in this chapter by using both financial tools and statistical tools. This chapter is also called the central nervous system of the report as it helps to provide conclusion and recommendation after the detail analysis with the aid of this chapter the pertinent and relevant conclusion can be made. Similarly, strengths and weaknesses of the sample organizations are identified and suggestions can be made to overcome weaknesses.

Various ratios have been employed which explain the investment activities and performance of selected commercial banks. The ratios used here are basically categorized in five heads viz. liquidity, activity, profitability, leverage, and capital adequacy and growth ratios. These are the sub indicators of financial position and strengths and weaknesses of the banks as well. However the ratios are absolute measure in order to analyze them. In a relative term various statistical tools such as mean, standard deviation, and coefficient of variation have been employed. Moreover the coefficient of correlation and regression analysis, and time series analysis has been conducted by the help of which investment activities and performance of the banks can be explained.

#### **4.1 Investment Activities**

Commercial banks could earn an attractive sum of profit only when they properly manage their investment activities. We generally mean investment activity as the activity of flowing the available fund to that sector that yield benefits over cost. By going through the reports of banks that are selected for the purpose of the study, the researcher has found that the investment activities of most of the banks are broadly confined within loans and advances, government securities, shares and debentures. From loan and advances they get interest as their return; government securities give interest mentioned on the

bond, shares provide dividend, and debentures yield interest. Banks are generally relying upon deposits as their source of funds to invest. The return they get from their investment activities are the basic source of their survival. As Nepalese banks are basically relying upon funds based activities as opined by Dr Manohar Krishna Shrestha, managing investment activities for good performance is the key issue to them. It is because proper management of fund would yield optimum benefits over cost of the fund invested.

The data from fiscal year 2062/63 to fiscal year 2066/67 as presented in table 4.1(next page) reflect the investment activities of the selected commercial banks of Nepal for during the period.

In the table 4.1 we see that investment on shares consists of investment on corporate shares, foreign bank placement, and interbank lending as investment on licensed national institutions. From the table above, it has been clear that the banks have invested their major part of the fund on loan and advances. For the period of study, each year, NSBIBL stands first on the investment on loan and advances whereas for the same CBINL comes last. Similarly, NSBIBL stands first for investing its funds on government securities and CBINL stands last. Commercial banks as financial institution invest their fund in various sectors which yield high return. But, investment on different sectors also increases exposure to risk. Therefore, to offset risk from other sectors banks invest some part of their fund on government securities such as treasury bills Treasury notes, treasury bonds, etc which are also assumed to be riskless or more precisely they are default risk free. Only KBL has invested its fund on debentures which was issued by Nepal Electricity Authority. Even for investment on shares NSBIBL stands first and for this last is KBL. But for the year of 2063/64 and 2064/65 CBINL stands first and KBL stands second for investment on shares and for year 2062/63 KBL is first for the same dominating NSBIBL where CBINL was not operational for in first fiscal year of our study period. NSBIBL only in last two fiscal years stands first for investment on shares.

**Table 4.1**  
**Investment of Banks Fund in Loans, Government Securities, Shares and Debentures**

(Rs. in million)

<b>Banks</b>	<b>Investment Areas</b>	<b>2062/63</b>	<b>2063/64</b>	<b>2064/65</b>	<b>2065/66</b>	<b>2066/67</b>
Nepal SBI Bank Ltd	Loan and Advances	7626.74	9460.45	12113.70	15131.75	17480.55
	Government Securities	3591.77	2345.58	3035.55	3306.57	4313.32
	Shares	167.74	313.87	53.33	9979.61	11992.32
	Debentures	-	-	-	-	-
Kumari Bank Ltd	Loan and Advances	6891.86	8929.01	11335.09	14593.35	14765.91
	Government Securities	1114.32	1297.86	1469.10	1080.1	1729.92
	Shares	280.63	380.55	652.72	413.75	549.97
	Debentures	-	-	16.99	16.99	16.99
Citizens Bank International Nepal Ltd.	Loan and Advances	-	2026.21	4750.34	8128.11	10924.88
	Government Securities	-	-	177.62	336.54	1355.71
	Shares	-	1221.39	996.41	1690.8	1324.46
	Debentures	-	-	-	-	-

Source: Annex B

From the data above in table-4.1 it can be concluded that Nepalese commercial banks channelize their most of funds in to various sectors as form of loan and advances and amongst the sample banks of study Nepal SBI Bank Ltd stands first for the same. Government securities are second preference for investment but in last two years investment in shares has got second preference. Least preference has given to investment on corporate debentures and other debt

securities. It is may be due to immature debt market in Nepal. However investment on corporate shares has led to Nepali commercial banks diversify their investment to hold a well diversified portfolio of investment. Similarly, increasing investment in government securities means that banks are holding portfolios with reducing their exposure to default risk.

#### 4.2 Liquidity Ratios

With the help of the following liquidity ratios the ability of the banks to retire short term liabilities has been measured. On the basis of the ratios calculated comparison between selected banks' strengths has been made.

##### i) Current Ratio

Current ratio is one of the major ratios amongst the ratios that measure a firm's liquidity. The following table reveals the current assets to current liabilities of the selected commercial banks that are sample of our study.

**Table 4.2**  
**Current Ratio (Times) of Current Assets to Current Liabilities**

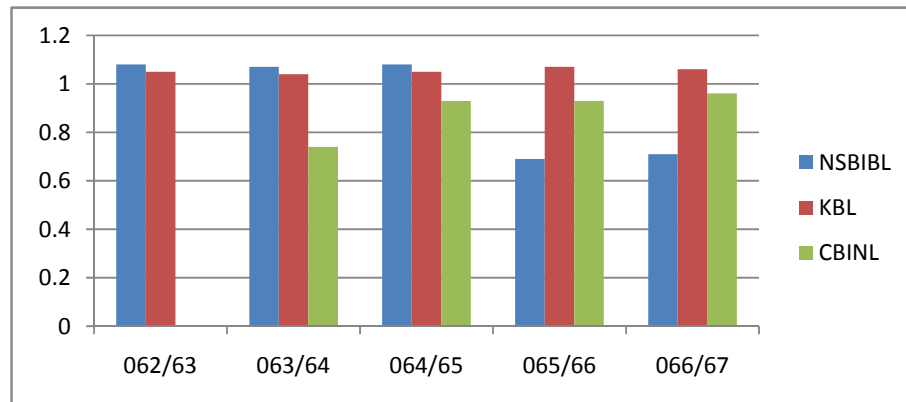
Banks	062/63	063/64	064/65	065/66	066/67	Mean	SD	CV
NSBIBL	1.08	1.07	1.08	0.69	0.71	0.926	0.206	22.297
KBL	1.05	1.04	1.05	1.07	1.06	1.054	0.011	1.081
CBINL	-	0.74	0.93	0.93	0.96	0.89	0.100	11.347

Source: Annex B

From the table above, KBL has highest average current ratio whereas CBINL has the lowest. Generally, 2:1 current ratio is assumed as standard. However, it depends upon the nature of the industry the firm is operating in. All the banks fall below the general standard current ratio. More over only one bank KBL has its current ratio more than 1. It implies it has excess current assets over current liabilities or it has positive net working capital. Other two banks, NSBIBL and CBINL have their current ratio below 1 means they have negative net working capital or lesser total current assets than total current liabilities. Regarding CV, NSBIBL has the highest CV 20.64 but KBL has the lowest CV 1.14 where

CBINL has CV 10.10. KBL has not only least CV but also lowest SD as it has highest mean current ratio. It reflects more consistent the bank, KBL, is in holding current assets with relation to current liabilities. NSBIBL is less consistent in maintain current ratio. And CBINL falls in middle of the two banks. Current ratio less than 1 may lead to the banks in the situation that they cannot retire short term obligations and ultimately they may get insolvent. Though less than or about 20% CV means overall situation of current ratio is not much alarming, less than 1 current ratio is not desirable. All the commercial banks should try to maintain current ratio to the level of standard or more than 1. Graphical representation of the ratio can be viewed from the figure below.

**Figure 4.1**  
**Current Ratio of Current Assets to Current Liabilities**



**ii) Cash and Bank Balance to Total Deposit Ratio (%)**

It reflects the amount of cash and bank balances as percentage of total deposit that the banks has from its customers. The table 4.3, below, exhibits cash and bank balance to total deposit ratio of selected commercial banks of our sample of study.

It is demonstrated from the table-4.3 in next page that in an average KBL holds least amount of fund i.e. about 10.46% in the form of cash and bank balances whereas, CBINL holds largest amount of fund i.e. about a7.41% in form of

cash and bank balances. NSBIBL also holds fund as cash and bank balances a bit more than KBL i.e. about 10.50%.

**Table 4.3**  
**Cash and bank balance to total deposit ratio (%)**

Banks	62/63	63/64	64/65	65/66	66/67	Mean	SD	CV
NSBIBL	13.46	12.87	12.08	4.21	9.86	10.496	3.77	35.92
KBL	6.88	9.89	7.74	11.5	16.31	10.464	3.74	35.71
CBINL	-	9.45	19.14	22.18	18.86	17.408	5.51	31.68

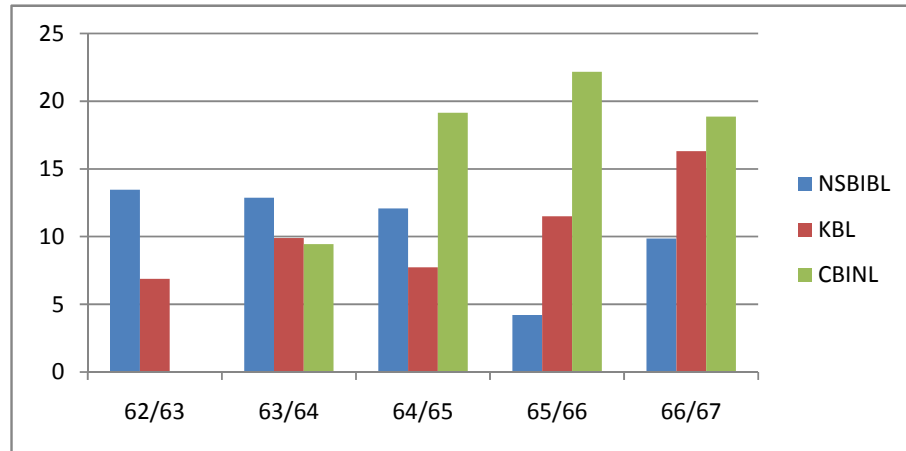
Source: Annex B

As we know that cash is idle asset, improper amount of fund held as cash and bank balance increases cost and reduces profitability. Meanwhile higher amount of cash and bank balances reflects inability of bank to mobilize its fund. It means, from data above CBINL has less ability to mobilize funds in comparison to other two banks. And KBL has sound investment activities as it has mobilized its fund soundly. At the same time it also shows ability to meet current demand of cash or ability to retire current liabilities on time. Considering the CV, CBINL has the most consistent cash balance as it has least CV of 31.68 percent and NSBIBL has the most inconsistent Cash balance as it has highest CV of 35.92 percent. KBL has dominated in consistency by a little differences of CV as it has CV of 35.72 percent lesser than that of NSBIBL. But CBINL has highest variations in holding cash and bank balances as it has the highest standard deviation of 5.51%. Though, CBINL has consistent holding of cash and bank balances in relation to total deposit, it has to mobilize its fund in to more investment activities and performance without deteriorating its consistency.

Graphical representation of the ratio calculated above in table 4.3 can be viewed from the figure 4.2 next page.



**Figure 4.2**  
**Cash and bank balance to total deposit ratio**



**iii) Cash and Bank Balance to Current Assets Ratio**

The following table 4.4 exhibits cash and bank balances to current assets ratio of the commercial banks for the period of study. It measures the portion of cash and bank balance in current assets of the banks.

**Table 4.4**  
**Cash and Bank Balance to Current Assets Ratio**

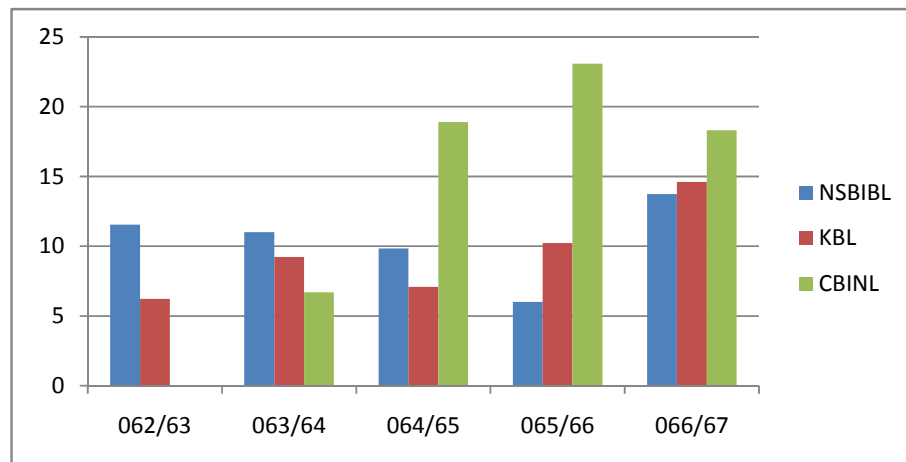
Banks	062/63	063/64	064/65	065/66	066/67	Mean	SD	CV
NSBIBL	11.54	11.01	9.84	6.01	13.74	10.428	2.85	27.30
KBL	6.23	9.23	7.09	10.23	14.61	9.478	3.29	34.68
CBINL	-	6.7	18.89	23.09	18.31	16.748	7.03	41.97

Source: Annex B

It is seen in the table above that in an average CBINL has held highest percentage of current assets in form of cash and bank balances, whereas KBL has held least of the same. It shows that CBINL has highest ability to meet customers demand for cashing their cheque on time. For the same, KBL has less ability and NSBIBL has higher ability than that of KBL. But in case of CBINL it has held high portion of current assets means it has higher amount of idle type of current assets which reduces profitability of the bank. It reflects the

bank is being unable to channelize funds in productive and juicy sectors. With consideration to CV and Standard Deviation the proportion of Cash and Bank Balances on total current assets NSBIBL is consistent in holding it as it has least CV and Standard deviation of 27.30 percent and 2.85 respectively. Least consistency is of CBINL as it has CV and SD of 41.97 and 7.03 respectively and KBL, even though it has least average Cash and Bank Balances, falls in between these two banks in holding cash and bank balances as it has CV 34.68% and SD 3.29. From the data calculated above NSBIBL and KBL have utilized their funds in fruitful sectors and it is desirable to CBINL to channelize its more fund in innovative and fruitful sectors so that average cash and bank balance to Total current assets would fall down and more consistent will be the ratio increasing profitability at the same time. The following figure reveals the ratios.

**Figure 4.3**  
**Cash and Bank Balance to Total Current Assets Ratio**



**iv) Investment on Government Securities to Current Assets Ratio**

Government securities such as treasury bills, treasury notes, treasury bonds, etc issued by government are considered as risk less security. However, commercial banks invest their funds on the government securities in order to lessen the burden of idle cash balance. Moreover, the investment on government securities in total portfolio of investment held by commercial banks reduces risk. Therefore there should be a good combination, diverting to

the larger portion of fund to the government securities means that banks are unable to seek the reward yielding sector for investment. But that does not mean that no penny should be invested to the government securities. Of course the short term remedy to manage excess liquidity is doubtlessly the government securities, unless the more profitable areas emerge. Considering riskiness of other investable areas some portion of funds can be channelized in to government securities. It without deteriorating liquidity and riskiness of the bank provides return.

The following table 4.5 reveals the ratio of selected commercial banks.

**Table 4.5**  
**Investment on Government securities to Current Assets Ratio (%)**

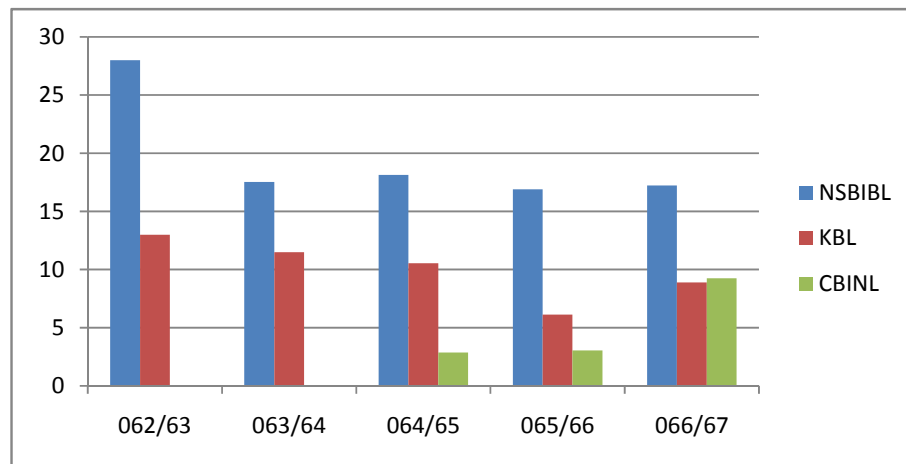
Banks	062/63	063/64	064/65	065/66	066/67	Mean	SD	CV
NSBIBL	27.99	17.54	18.13	16.9	17.22	19.56	4.74	24.22
KBL	12.99	11.49	10.54	6.12	8.89	10.01	2.63	26.32
CBINL	-	-	2.86	3.04	9.26	5.05	3.64	72.11

Source: Annex B

From the data in the table above it is clearly seen that average amount current assets held as investment on government securities is highest of NSBIBL i.e.19.56%. The least is of CBINL for the same i.e. only 5.05%. Where, KBL with 10.01% falls in between these two banks. As in Table-4.3 and 4.4 we have noticed that CBINL has more cash balance than other banks, and from this table-4.5 we can conclude that it is due to that CBINL has invested less amounts in government securities. Considering Standard Deviation the highest is of NSBIBL 4.74% and lowest is of KBL 2.63% while CBINL has 3.64. Considering Standard deviation KBL is most consistent for investment on government securities to total current assets ratio while NSBIBL is least inconsistent and CBINL falls in between KBL and NSBIBL. But considering CV NSBIBL seems consistent in investing funds on government securities as

riskless investment and KBL has been closely following NSBIBL but falls far behind these two banks as their CV are respectively 24.22, 26.32, and 72.11 percent. In order to be competitive, to have worthwhile operation, and to yield higher return less amount should be invested on government securities and instead they should invest fund on more fruitful sectors. NSBIBL would be better to reduce its reliance on government securities by searching other profitable sectors and investing on those sectors. However they should invest on government sectors at an optimum level to reduce risk of investment portfolio. Following figure reveals the ratios.

**Figure 4.4**  
**Investment on government Securities to current assets ratio**



**v) Loan and Advances to Current Assets Ratio**

Generally, as banking business commercial banks channelize their funds large portion in form of loan and advances to their customers for various purposes. This ratio reveals that what percent of loan and advances matures within a year. The table 4.6 in next page reflects the loan and advances to current assets ratio of selected commercial banks for the study period of this study.

From the data in the table 4.6 we see that Kumari bank Ltd has the highest average ratio of loan and advances to current assets i.e. 79.836%. Citizens bank has followed Kumari bank closely with mean ratio of 78.975%. But least mean ratio is of Nepal SBI bank Ltd i.e. 69.94%.

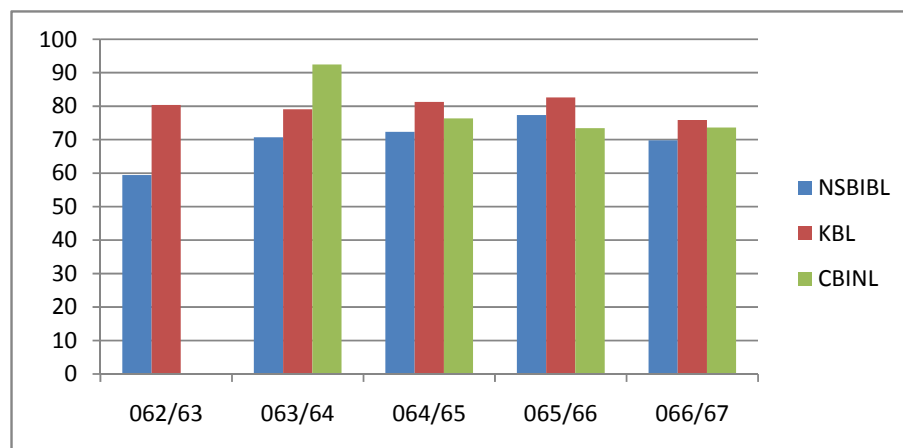
**Table 4.6**  
**Loan and Advances to Current Assets Ratio (%)**

Banks	062/63	063/64	064/65	065/66	066/67	Mean	SD	CV
NSBIBL	59.44	70.75	72.35	77.36	69.8	69.94	6.55	9.37
KBL	80.33	79.07	81.29	82.62	75.87	79.84	2.57	3.22
CBINL	-	92.43	76.37	73.44	73.66	78.98	9.07	11.48

Source: Annex B

Even if we consider standard deviation and CV Kumari bank has better performance than others. Since Kumari bank has its Standard deviation 2.57 and CV 3.22 whereas Nepal SBI bank has standard deviation 6.55 and 9.37, and Citizens bank has Standard deviation 9.07 and CV 11.48. In case of mean ratio Citizens bank has been successful than Nepal SBI bank to mobilize funds in form of loan and advances but when we consider standard deviation and CV Nepal SBI bank dominates Citizens bank ltd. Hence it is concluded that amongst the sample banks for the study Kumari bank is best in mobilizing fund in form of loan and advances. The figure below presents the ratio.

**Figure 4.5**  
**Loan and Advances to Current Assets Ratio**



### 4.3 Activity Ratio

Activity ratio is measurement of effectiveness of the firm in mobilizing funds. Activity ratios of commercial banks are measured through the following ratios. By the aid these ratio we can draw a clearer picture regard to investment activities and performance of the commercial banks taken for the purpose of study.

#### (i) Loan and Advances to Total Deposit Ratio

How much amount of total deposit has gone as loan and advances is analysed. The following table exhibits the ratio of loan and advances to total deposits of financial institutions or banks during the study period.

**Table 4.7**  
**Loan and Advances to Total Deposit Ratio (%)**

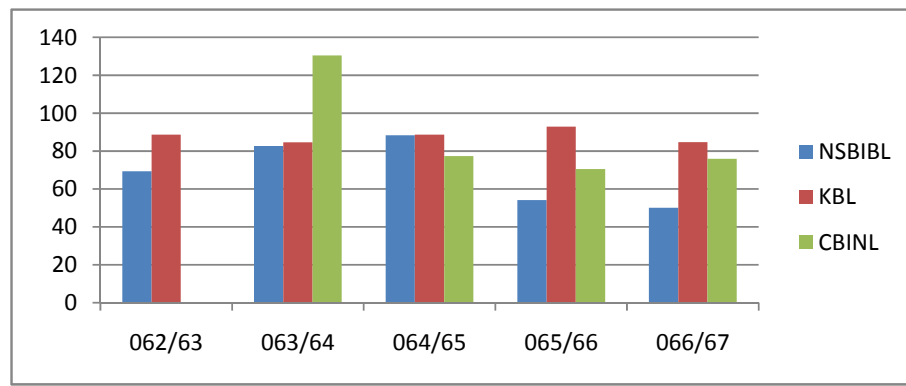
Banks	062/63	063/64	064/65	065/66	066/67	Mean	SD	CV
NSBIBL	69.32	82.66	88.32	54.12	50.09	68.90	16.87	24.49
KBL	88.71	84.58	88.73	92.89	84.7	87.92	3.45	3.92
CBINL	-	130.46	77.37	70.53	75.88	88.56	28.09	31.72

Source: Annex B

The table above exhibits that the mean or average loan and advances to total deposit ratio for the study period is the highest for Citizens Bank International Nepal Ltd i.e. 88.56 and lowest for Nepal SBI Bank Ltd i.e. 68.90. It means that CBINL has channelized more of its funds in to loan and advances than rest sample banks for the study and the bank is good in mobilizing its fund in form of loan and advances. However, CBINL is decreasing the proportion of using fund as loan and advances. KBL is a near behind CBINL with mean of 87.92. Similarly, standard deviation of NSBIBL, KBL, and CBINL are respectively 16.87, 3.45 and 28.09, and coefficient of variance of corresponding banks are 24.49, 3.92 and 31.72 respectively. We can clearly see that KBL is more consistent in mobilizing deposit in form of loan and advances and most

inconsistent is CBINL. Even with considering CV KBL is good in mobilizing deposit as loan and advances whereas CBINL is least consistent. If we analyze all the data it can be concluded that KBL is best in mobilizing deposit as loan and advances amongst the sample banks. It is because we should consider different factors while doing investment viz. risk diversification, bank's credit policy, social responsibility, limits of lending power, etc. The figure below shows the ratio of loan and advances to total deposit.

**Figure 4.6**  
**Loan and Advances to Total Deposit Ratio**



**(ii) Loan and Advances to Fixed Deposit Ratio**

By this ratio we can understand how much fund in loan and advances comes from fixed deposits. The following table presents the ratio of loan and advances to fixed deposit of sample banks of our study.

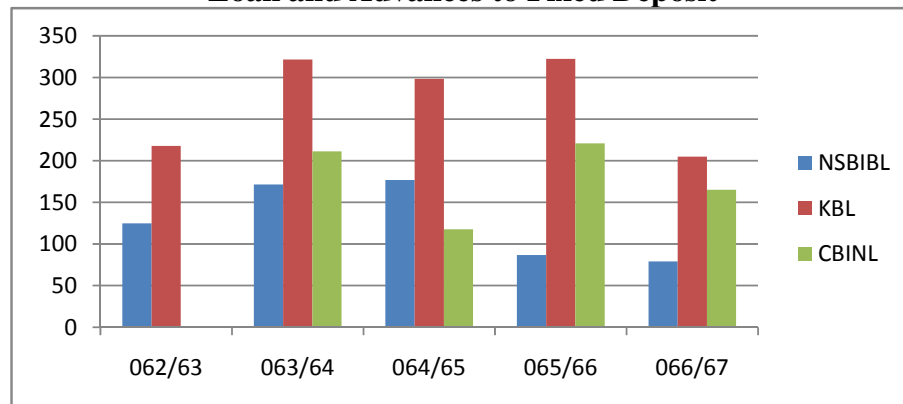
**Table 4.8**  
**Loan and Advances to Fixed Deposit (%)**

Banks	062/63	063/64	064/65	065/66	066/67	Mean	SD	CV
NSBIBL	124.7	171.46	176.72	86.77	78.92	127.71	45.78	35.84
KBL	217.9	321.59	298.33	322.36	204.9	273.02	57.26	20.97
CBINL	-	211.3	117.64	220.96	165.14	178.76	47.47	26.56

Source: Annex B

From the data in the table 4.8 above we see that KBL has the highest mean Loan and Advances to Fixed Deposit ratio amongst the sample banks where Nepal SBI bank has the least mean ratio of Loan and Advances to Fixed Deposit. KBL has 273.02 percent the highest ratio and SBI bank has 127.71 percent the lowest ratio for the study period. It resembles that KBL is good in mobilizing fixed deposit and deposit as well. But in term of standard deviation which measures consistency in mobilizing fixed deposit here KBL is least consistent with SD 57.26 and the most consistent is the NSBIBL with SD 45.78. Where, CBINL fall in between the two banks in both terms of mean ratio and standard deviation. But in term of CV which is relative measure of riskiness of activities taken KBL, again, is superior to amongst the sample banks of the study with CV 20.97% and the riskiest is NSBIBL with CV 35.84%. We should notice that portion of ratio excess to 100% resembles the banks portion of loan and advances from other than fixed deposit. Using the gauge of loan and advances to fixed deposit ratio, Kumari Bank Ltd taken as the sample of our study is doing best performance amongst the banks in the sample of our study. However, all the banks have to increase the investment to loan and advances by making good portfolio of them channelizing funds in different sectors in form of loan and advances so that they could perform better in the market. The figure below shows the ratio of loan and advances to fixed deposit.

**Figure 4.7**  
**Loan and Advances to Fixed Deposit**





**(iii) Loan and Advances to Total Working Fund Ratio**

The following table 4.9 exhibits the ratio of loan and advances to total working fund of commercial banks of our study.

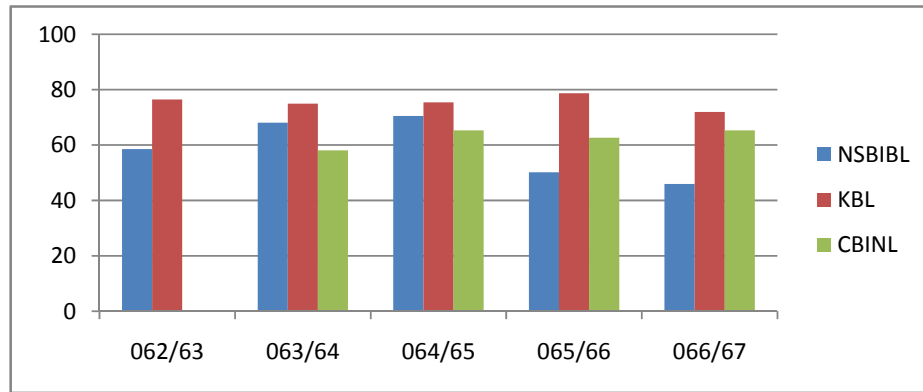
**Table 4.9**  
**Loan and Advances to Total Working Fund Ratio**

Banks	062/63	063/64	064/65	065/66	066/67	Mean	SD	CV
NSBIBL	58.51	68.05	70.48	50.16	45.94	58.63	10.75	18.33
KBL	76.49	74.92	75.43	78.72	71.95	75.50	2.46	3.26
CBINL	-	58.1	65.35	62.69	65.3	62.86	3.41	5.42

Source: Annex B

Total working fund and total assets of a financial institution can be interchangeably used. We can obtain an insight regarding the mobilization of assets to loan and advances with the help of loan and advances to total working fund ratio. The figures in mean column of the table -4.9 resembles that the average of 5 years investment activities of the selected commercial banks to loan and advances out of its total assets. Comparing the ratios from the table KBL stood in first with an average ratio of 75.50% amongst the banks in mobilizing its assets to loan and advances. It is due to investment out of its total assets or total working fund is 75.50% where CBINL has only 62.86 and NSBIBL has 58.63%. Even with considering Standard Deviation KBL is more consistent with SD 2.41 and least consistent is NSBIBL with SD 10.75, where CBINL has SD 3.41. Similarly, considering CV KBL, again, stands first with CV 3.26%, where CBINL has CV 5.42% and NSBIBL has CV 18.33%. We can conclude that KBL has most consistently held highest portion of its assets in form of loan and advances resembling strongest amongst the sample banks whereas NSBIBL has held least consistently and has lowest portion of its assets as loan and advances, and CBINL falls in between the two banks. The figure 4.8 shows the ratio of loan and advances to total working fund.

**Figure 4.8**  
**Loan and Advances to Total Working Fund Ratio**



**(iv) Investment on Government Securities to Total Working Fund Ratio**

Following table-4.10 exhibits the ratio of investment on government securities to total working fund of the sample commercial banks of our study.

**Table 4.10**

**Investment on Government Securities to Total Working Fund Ratio (%)**

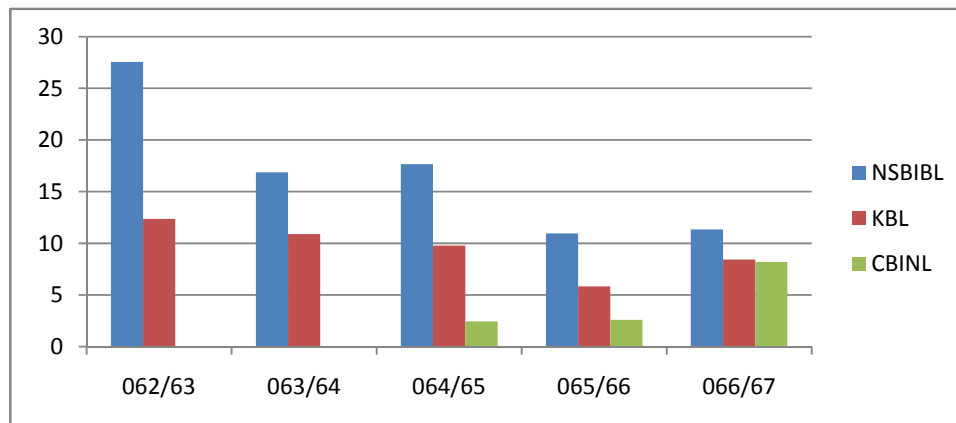
Banks	062/63	063/64	064/65	065/66	066/67	Mean	SD	CV
NSBIBL	27.55	16.87	17.66	10.96	11.34	16.88	6.0	35.57
KBL	12.37	10.89	9.78	5.83	8.43	9.46	2.23	23.57
CBINL	-	-	2.44	2.6	8.21	4.42	2.68	60.75

Source: Annex B

Considering the table above, the mean ratio of investment on government securities to total working fund of NSBIBL is the highest and the least is of CBINL where KBL falls in between the two banks. In an average NSBIBL invests 16.88 percent of total fund in government securities where KBL has invested 9.46 percent and CBINL has held 4.42 percent of total assets as investment on government securities. Though, NSBIBL has less risk due to holding highest portion of investment on government securities it has been unable to invest fund in the investment sectors which yields higher return. In the sense of utilizing funds in high yielding sectors CBINL is good and it has

been followed by KBL. But KBL has most consistently held its working fund in form of investment in government securities than other bank during the period of study where least consistent is NSBIBL and CBINL has closely followed to KBL. If we consider CV KBL is good with CV 23.57% to hold working fund in form of investment on government securities and it has been followed by NSBIBL with CV 35.57% where CBINL is highest CV 62.75%. We can conclude that KBL is less risky in term of holding assets as investment in government securities. Though less percent assets has been held as government securities by CBINL it is less consistent and has highest CV. Hence, we can conclude KBL is performing better than others. The figure below shows the ratio of investment on government securities to total working fund.

**Figure 4.9**  
**Investment on Government Securities to Total Working Fund Ratio**



**(v) Total Investment to Total Deposit Ratio**

Banks receives deposit from customers or from those having excess fund and pays interest to them and hence deposit involves cost to the bank. Bank invests those deposits in to productive sectors to yield interest or return which should be more than the interest paid on fund to the depositors. The difference between the interest earned and interest paid generates return to the bank. Therefore, holding idle deposit proves costs and reduces profitability of the bank. This is why they should be invested making a sound portfolio

management making the investment activity of the company more fruit giving results a sound performance as to maximize value of shareholders.

**Table 4.11**  
**Total Investment to Total Deposit Ratio (%)**

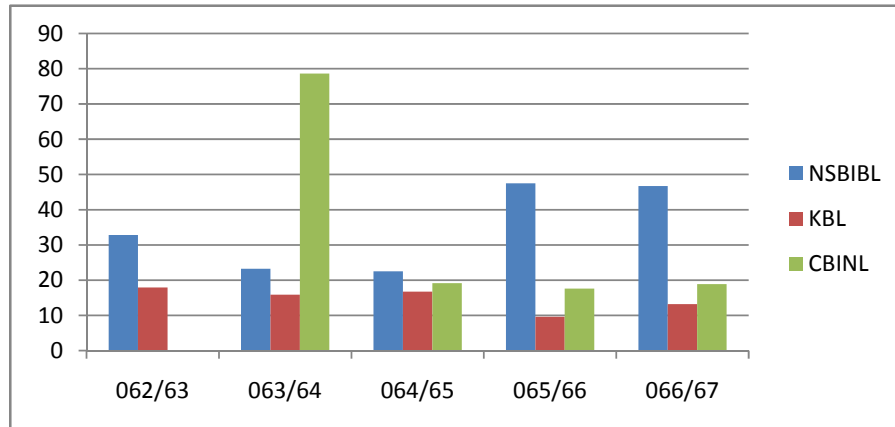
Banks	062/63	063/64	064/65	065/66	066/67	Mean	SD	CV
NSBIBL	32.82	23.24	22.52	47.52	46.73	34.57	12.17	35.20
KBL	17.96	15.9	16.74	9.62	13.18	14.68	3.33	22.68
CBINL	-	78.64	19.12	17.59	18.86	33.55	30.07	89.61

Source: Annex B

Table-4.11, presents the ratio of investment to total deposit of the sample commercial banks of our study. We can say from the ratio that how much deposit has been channelized as investment by the banks of our study. In an average NSBIBL has invested highest amount of total deposit. It has channelized 34.57 percent of total deposit in form of investment in different sectors and is closely followed by CBINL with 33.57 percent of its deposit in form of investment where KBL has only 14.68 percent deposit in form of investment. It shows ability of NSBIBL to utilize deposit in form of investment where KBL has least ability for the same during the study period. But if we consider standard deviation KBL is good as it has most consistently channelized its total deposit as investment in to different sectors where it's been followed by NSBIBL and least consistent is CBINL. KBL has 3.33% standard deviation whereas NSBIBL has 12.17% standard deviation and CBINL has 30.07% standard deviation. As CV is best relative measure, KBL is good in mobilizing total deposit in form of investment followed by NSBIBL and CBINL with CV 22.68%, 35.20%, and 89.61% respectively.

The figure 4.10, in next page, shows the ratios of total investment to total deposit.

**Figure 4.10**  
**Total Investment to Total Deposit Ratio**



#### 4.4 Leverage Ratio

This ratios very concern is debt financing. The significant leverage utilized in the study period are presented as follows

##### (i) Debt Ratio or Debt-Assets Ratio

The table-4.12, below, represents the debt ratio or debt to assets ratio of the selected commercial banks for the study revealing that how much portion of assets has been financed by the debt. It measures how much percentage of funds has been provided by the creditors.

**Table 4.12**  
**Debt to Assets Ratio (%)**

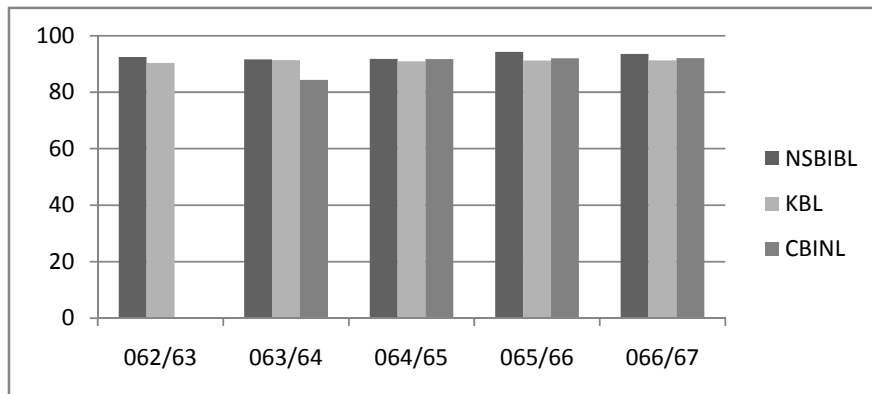
Banks	062/63	063/64	064/65	065/66	066/67	Mean	SD	CV
NSBIBL	92.46	91.63	91.77	94.32	93.56	92.75	1.16	1.26
KBL	90.41	91.39	90.92	91.23	91.3	91.05	0.40	0.44
CBINL	-	84.38	91.75	92.02	92.08	90.06	3.79	4.21

Source: Annex B

From the data in above table, we see NSBIBL has used highest amount of debt and least is used by CBINL amongst the sample commercial banks for study

period. NSBIBL has used 92.75 percent debt to finance its total assets followed by KBL using 91.05 percent debt and CBINL has used 90.06 percent debt. It means NSBIBL has well exploited debt in generating return than other banks. But if we consider standard deviation and CV KBL is most consistent in exploiting debt to finance its assets than other banks where least consistent is CBINL. KBL has standard deviation 0.40 and CV 0.44% where NSBIBL has standard deviation 1.16 and CV 1.26%, and CBINL has standard deviation 3.79 and CV 4.21%. Riskiest is NSBIBL and least risky is CBINL as NSBIBL has used highest amount of debt and least by CBINL. But as KBL has least CV it is considered as least risky. NSBIBL has been more successful to exploit debt to be more profitable than the other banks. The banks are mainly relying on fund based activities. Therefore, in order to get fund for loaning and advancing they have to rely upon debts that include a hefty sum of deposits. Being highly levered their risk has increased significantly. So they are required to reduce the debt portion by making a shift from fund based activities to fee based activities. Graphical representation of debt to asset ratio has been shown below.

**Figure 4.11**  
**Debt to Assets Ratio**



**(ii) Debt Equity Ratio**

To measure the proportion of debt and equity used in the bank’s capital structure debt equity ratio is computed. The following table, table no-4.13, presents the debt equity ratio of the selected commercial banks of our study.

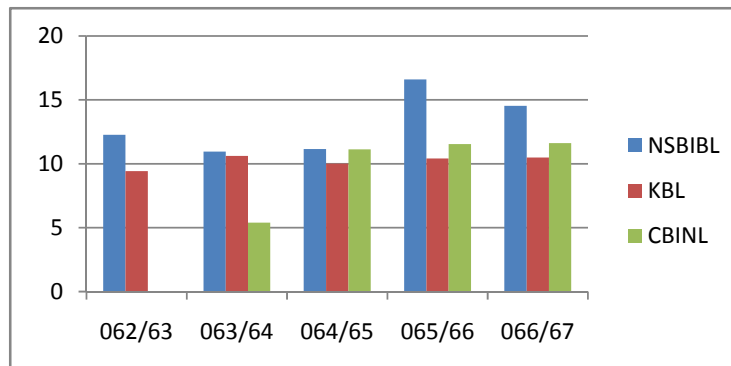
**Table 4.13**  
**Debt Equity Ratio (Times)**

Banks	062/63	063/64	064/65	065/66	066/67	Mean	SD	CV
NSBIBL	12.27	10.95	11.15	16.61	14.53	13.10	2.42	18.49
KBL	9.43	10.62	10.01	10.41	10.49	10.19	0.48	4.74
CBINL	-	5.4	11.13	11.54	11.62	9.92	3.02	30.46

Source: Annex B

Above Table-4.13 exhibits selected commercial banks' debt equity ratio for the study period. From mean column of the table it is seen that NSBIBL has used highest amount of debt fund that is 13.10 times of its shareholders' equity. Amongst the three banks least ratio of debt to equity is of CBINL as it has used debt 9.92 times of shareholders fund. In an average KBL has used debt fund 10.19 times of its shareholders fund during the study period. It means NSBIBL has higher risk of tempting irresponsibility in the parts of owner, which is less in CBINL. But if we consider consistency in using debt KBL dominates CBINL and NSBIBL. KBL has standard deviation 0.48 which is 2.42 for NSBIBL and 3.02 for CBINL. Likewise, CV for KBL is 4.74% where the same for NSBIBL is 18.49% and CBINL is 30.46%. We can say CBINL is least leveraged than rest banks but KBL has most consistently maintained the relation of debt and equity than others during for the study period.

**Figure 4.12**  
**Debt Equity Ratio**



We can have snapshot on the graphical representation of the debt-equity ratios of the banks for the period as on previous page in figure 4.12 below. The figure provides the position of debt and equity ratio in each bank during the study period.

#### 4.5 Profitability Ratio

Profitability is the net result of a number of policies and decisions. The ratios examined thus far provide some information about the way the firm is operating but the profitability ratios show the combined effects of liquidity, activity or assets management, and debt management or capital structure on operation and earning capacity of the banks.

##### (i) Net Profit to Total Assets Ratio

The following table-4.14 portrays the profitability position of the selected commercial banks as sample of our study with respect to their total assets. The data in the table have also been presented in graph.

**Table 4.14**  
**Net Profit to Total Assets Ratio (%)**

Banks	062/63	063/64	064/65	065/66	066/67	Mean	SD	CV
NSBIBL	0.9	1.83	1.44	1.05	1.03	1.25	0.38	30.55
KBL	1.15	1.43	1.16	1.41	1.54	1.34	0.17	13.02
CBINL	-	-0.44	0.75	0.74	1.17	0.56	0.69	124.85

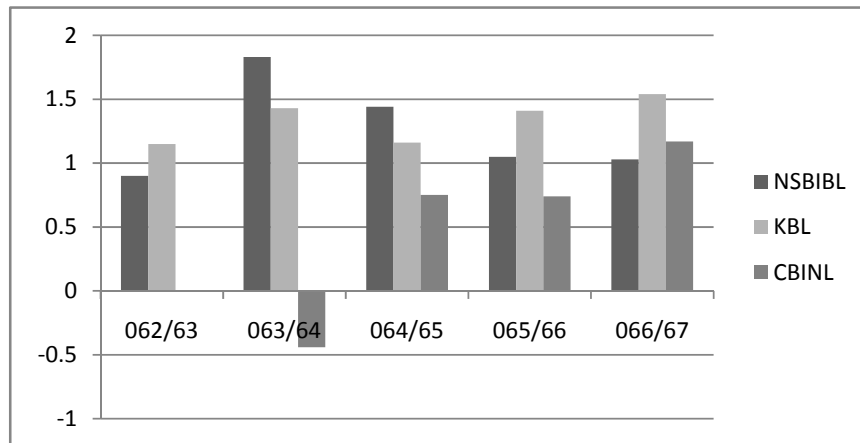
Source: Annex B

Considering table-4.14 the mean net profit to total assets ratio of KBL is highest i.e. 1.338% and its corresponding standard deviation and coefficient of variation are respectively 0.17. Least average net profit to total assets ratio is of CBINL i.e. 0.555% and its corresponding standard deviation and CV are respectively 0.69 % and 124.85%. While NSBIBL has mean ratio 1.25%, standard deviation is 0.38 % and CV 30.55%. KBL has more consistency in



earning whereas CBINL is least consistent. Considering all three measurements KBL has performed best amongst the banks taken in sample for the study period. The ratio can also be viewed in the graph below.

**Figure 4.13**  
**Net Profit to Total Assets Ratio**



**(ii) Net profit to Total Deposit Ratio**

The ratio reveals the percentage of net profit of the total deposit of the banks. The ratio for the banks of our study has been exhibited on the table 4.15, below.

**Table 4.15**  
**Net Profit to Total Deposit Ratio (%)**

Banks	062/63	063/64	064/65	065/66	066/67	Mean	SD	CV
NSBIBL	1.06	2.23	1.81	1.13	1.12	1.47	0.52	35.66
KBL	1.33	1.61	1.35	1.66	1.82	1.55	0.21	13.53
CBINL	-	-0.99	0.89	0.83	1.36	0.523	1.02	198.24

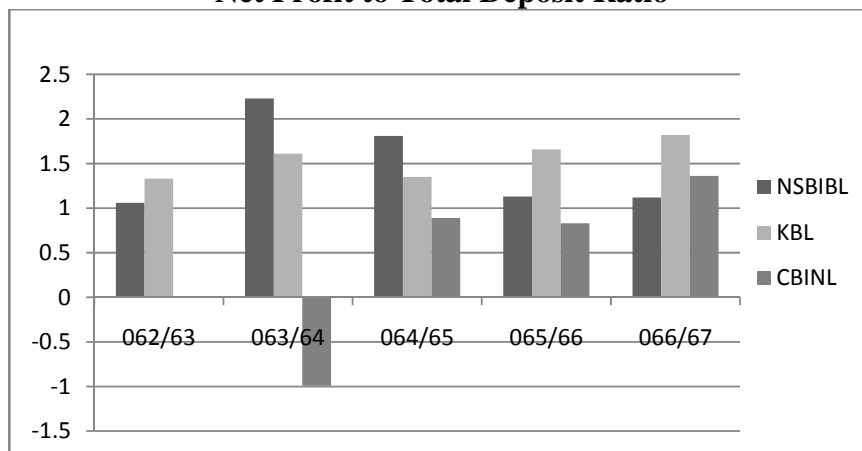
Source: Annex B

We can clearly see from the above table 4.15 of Net profit to total deposit ratios that Kumari Bank Ltd has the highest mean or average net profit to total deposit ratio in percentage of total deposit. NSBIBL has followed KBL but

CBINL is far behind KBL in an average net profit to total deposit ratio. As KBL has average ratio 1.55%; NSBIBL has mean ratio 1.47%; and CBINL has 0.5225%, KBL has strongest performance than other banks. If we consider standard deviation KBL has most consistency with standard deviation of 0.21 where NSBIBL has 0.52 and CBINL has 1.036. Even considering CV KBL is performing well than other banks with CV 13.53% where NSBIBL has 35.66% and CBINL has 198.24% CV. In all three measures KBL has dominated rest banks in case of net profit to total deposit ratio. Hence we can conclude that KBL has been more capable than other banks to mobilize and utilize deposit during the study period. But it is to be noticed that CBINL has its net profit to total deposit ratio growing recent years. It is also doing well in term of this ratio in recent years.

The graphical presentation of the ratios in y-axis against time in x-axis is as below.

**Figure 4.14**  
**Net Profit to Total Deposit Ratio**



(iii) **Net Profit to Net Worth Ratio**

The net profit to net worth ratio of the selected commercial banks for the study period is as follows as in the table 4.16, below.

Net worth includes share capital and shareholder's reserve. Primary share, bonus share, and preference share amount are comprised under the purview of share capital whereas general reserve, capital reserve, exchange fluctuation

reserve, other reserve, inappropriate profit, bills for collection (contra), acceptances (contra), come under the purview of shareholders' reserve. Net worth is shareholders' fund. They invest their money to the business in a condition of participating both gain and loss. In order to know whether their funds are managed properly or not and what is the amount generated from their fund, net profit to net worth ratio is used. To ensure efficient use of fund of shareholders it is good measure.

**Table 4.16**  
**Net Profit to Net worth (%)**

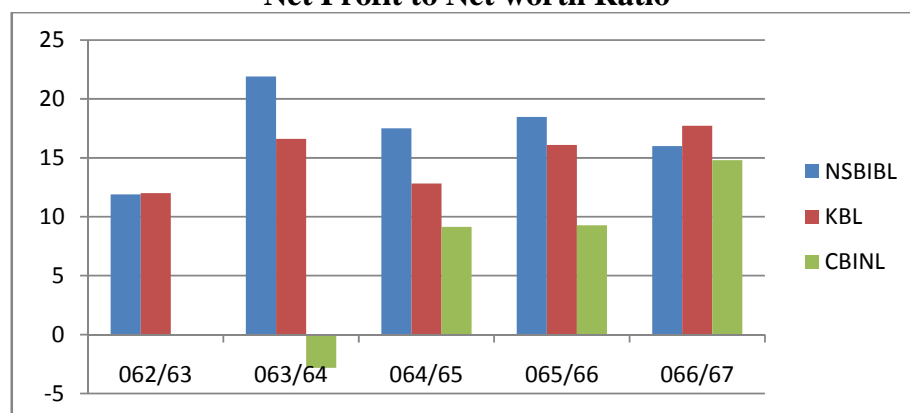
Banks	062/63	063/64	064/65	065/66	066/67	Mean	SD	CV
NSBIBL	11.91	21.91	17.51	18.47	15.99	17.16	3.65	21.28
KBL	12	16.6	12.82	16.09	17.73	15.05	2.50	16.59
CBINL	-	-2.83	9.15	9.27	14.8	7.60	7.43	97.85

Source: Annex B

In the table above we clearly see that Nepal SBI bank has highest average net profit to total deposit ratio i.e. 17.16% followed by Kumari bank with 15.05% and CBINL with 7.60%. It means in an average SBI bank has earned a good return on its shareholders fund or net worth. The least yield has been to shareholders of Citizens International bank. Their corresponding standard deviations are 3.65, 2.50, and 7.43; and coefficient of variations is 21.28%, 16.59% and 97.85%. Considering standard deviation and CV KBL is good over others. Relative to this ratio new banks are good than old i.e. KBL and CBINL new banks are good than NSBIBL. Moreover, low average ratio of CBINL is due to initial year operational loss. In short period its net profit to shareholders' ratio has grown noticeably. Considering this ratios, average, SBI seems to be managing shareholders' fund efficiently. But it has higher CV and from data it is clearly seen that SBI's net profit to net worth ratio is decreasing for last three years and KBL and CBINL has growing ratio. it implies that latter two banks are increasing efficiency in managing shareholders funds.

The ratios have been presented in graph as follows where along x-axis time has presented and along the y-axis ratios have been plotted.

**Figure 4.15**  
**Net Profit to Net worth Ratio**



**(iv) Total Interest Earned to Total Working Fund Ratio (%)**

The table below i.e. table-4.17 shows the total interest earned to total working fund ratio of the banks that are selected for the purpose of study.

Nepalese financial sectors perform to largest extent fund based activities. They perform very little fee based activities. Commercial banks cannot be exception. It implies that Nepalese commercial banks invests large part of their fund in to loan and advances. Interest is received from loan and advances as return for fund based activities. In order to assess the relationship between interest earned and working fund, interest earned to working fund ratio is analyzed.

**Table- 4.17**  
**Total Interest Earned to Total Working Fund Ratio (%)**

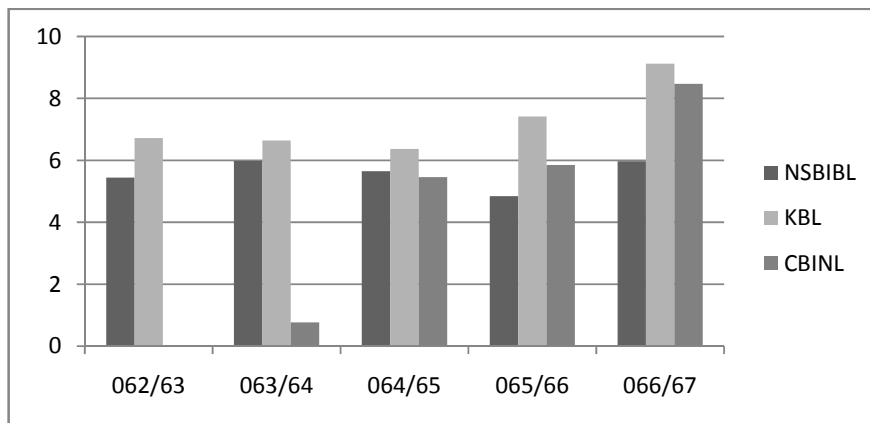
Banks	062/63	063/64	064/65	065/66	066/67	Mean	SD	CV
NSBIBL	5.44	5.98	5.65	4.84	5.97	5.58	0.47	8.43
KBL	6.72	6.64	6.37	7.42	9.12	7.25	1.11	15.34
CBINL	-	0.77	5.46	5.85	8.47	5.14	3.20	62.36

Source: Annex B, C

Above table-4.17 presents the total interest earned to total working fund ratio of the sample commercial banks for the study period. The highest ratio is of Kumari Bank Ltd and lowest is of Citizens Bank International Ltd. The ratio ranges from 7.25% to 5.14%. From the mean total interest earned to total working fund ratio KBL has better earning capacity on its total assets or working fund than other banks taken as sample for the study. But considering consistency NSBIBL has performed best amongst the sample banks which has standard deviation 0.47 and CV 8.43%. For consistency NSBIBL has been followed by KBL with SD 1.11 and CV 15.34% whereas, least consistent ratio is of CBINL which has SD 3.20 and CV 62.36%. These data imply that KBL has good interest recovery due to sound investment policy and it relies on fund based activities more than other sample banks. But consistent recovery is of SBI bank.

The ratios can be presented graphically as follows.

**Figure 4.16**  
**Total Interest Earned to Total Working Fund Ratio**



**(v) Total Interest Paid to Total Working Fund Ratio**

Table-4.18 exhibits Total Interest Paid to Total Working Fund ratio of the selected commercial banks for the period of study.

**Table 4.18**  
**Total Interest paid to Total Working Fund Ratio (%)**

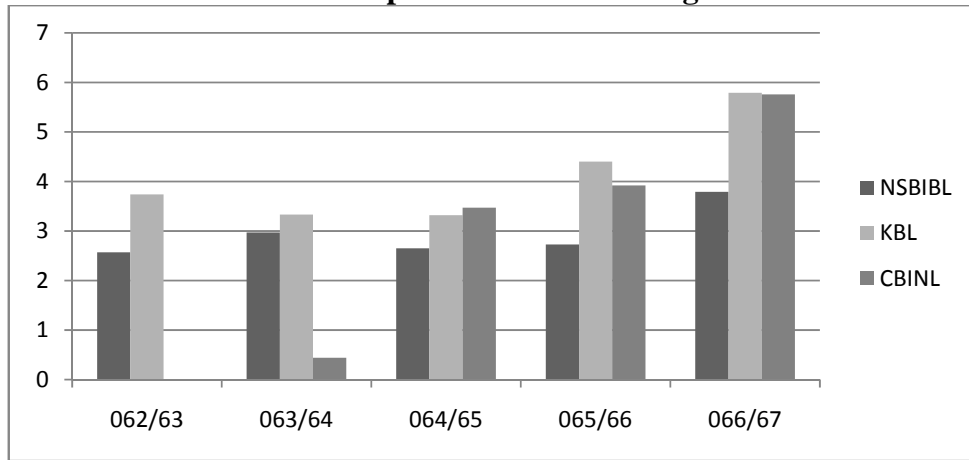
Banks	062/63	063/64	064/65	065/66	066/67	Mean	SD	CV
NSBIBL	2.57	2.97	2.65	2.73	3.79	2.94	0.50	16.90
KBL	3.74	3.33	3.32	4.4	5.79	4.12	1.03	25.12
CBINL	-	0.44	3.47	3.92	5.76	3.40	2.20	64.95

Source: Annex B,C

From the data in table-4.18 we see that the average total interest paid to total working fund ratio of the sample banks for the study period. From the table it is seen that KBL has relatively higher average total interest paid to total working fund ratio, i.e. 4.12% than others. It implies that KBL has paid high interest to the fund it used in comparison to other banks for the study period. Standard deviation and coefficient of variation of Citizens bank international is highest i.e. SD 2.20 and CV 64.95%, amongst the banks for the study during the study period. Nepal SBI bank has low average ratio of interest paid to total working fund means the bank is able to collect fund from less expensive source. SBI bank also has least standard deviation and least CV amongst the banks taken in sample for the study. It has SD 0.50 and CV 16.90%. Least average ratio, least SD and least CV of NSBIBL shows its good efficiency in acquiring fund consistently from cheaper sources than other banks. And it is concluded that Nepal SBI bank has been able to manage interest expense on total working fund.

A snapshot on the graphical representation of the ratio below in figure 4.17 can make easily understand the ratio of the banks for the study period.

**Figure 4.17**  
**Total Interest paid to Total Working Fund Ratio**



#### 4.6 Capital Adequacy Ratio

Capital adequacy ratio measures whether the banks has sufficient capital or not. The capital adequacy of the commercial banks can be measured by analyzing the following ratios.

##### (i) Shareholders Fund to Total Deposit Ratio

The shareholders fund to total deposit ratio for the selected commercial banks for the study period of fiscal year 2062/63 to 2066/67 has been exhibited below in table 4.19.

**Table 4.19**

**Shareholders fund to Total deposit ratio (%)**

Banks	062/63	063/64	064/65	065/66	066/67	Mean	SD	CV
NSBIBL	8.93	10.16	10.31	6.13	7.02	8.51	1.87	22.00
KBL	11.12	9.72	10.68	10.34	10.24	10.42	0.52	5.00
CBINL	-	35.06	9.76	8.97	9.2	15.75	12.88	81.79

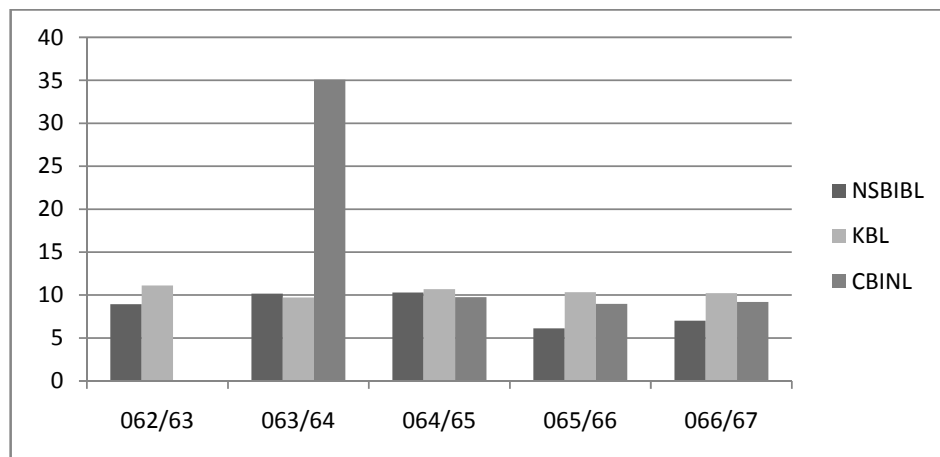
Source: Annex B, C

The data in table 4.19 exhibits that Citizens bank has highest ratio of shareholders' fund to total deposit than other sample banks for the study

period. Citizens bank has 15.75% shareholders' fund in relation to total deposit followed by Kumari bank with average ratio of shareholders fund to total deposit 10.42% where Nepal SBI bank has least ratio i.e. 8.51%. It implies Citizens bank has maintained sufficient fund from shareholder in relation to total deposit than other banks where SBI has maintained least amount than others. But if we consider variability least variable is Kumari bank in maintaining shareholders fund in relation to total deposit as it has SD 0.52 and CV 5% while most variable is Citizens bank as it has SD12.88 and CV 81.79 percentage. And SBI bank falls in between these banks. SD and CV reveal Kumari has good ability to maintain fund from shareholder in relation to total deposit consistently.

Following graph represents the banks' shareholders fund to total deposit ratio for the period of study.

**Figure 4.18**  
**Shareholders fund to Total deposit ratio**



**(ii) Shareholders Fund to Total Assets Ratio**

The ratio of share holders fund to total assets of the sample commercial banks for the study period has been exhibited in the table-4.20, in next page.



**Table 4.20**  
**Shareholders fund to Total assets Ratio (%)**

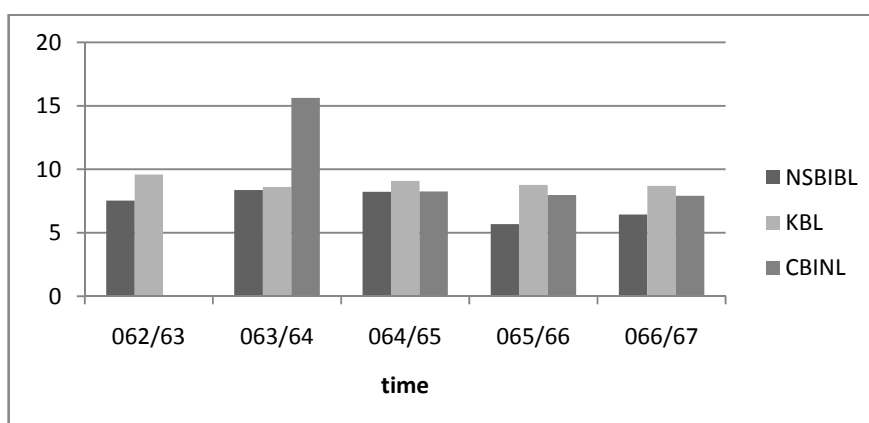
Banks	062/63	063/64	064/65	065/66	066/67	Mean	SD	CV
NSBIBL	7.54	8.37	8.23	5.68	6.44	7.25	1.16	16.05
KBL	9.59	8.61	9.08	8.77	8.7	8.95	0.40	4.46
CBINL	-	15.62	8.25	7.98	7.92	9.94	3.79	38.10

Source: Annex B, C

This ratio, generally, measures the relative claim of owners of the banks over the bank's assets. In the table-4.20 we see that Citizen bank has highest ratio of shareholders' fund to total assets i.e. 9.94% followed by Kumari bank with 8.95% and Nepal SBI bank with 7.25%. It means that comparatively share holders of Citizens bank's share holders have highest claim over their bank's assets than other banks' share holder in their corresponding bank. If we consider standard deviation and Coefficient of Variation, Kumari bank's share holder has consistent claim over the bank's assets as KBL has SD 0.40 and CV 4.46%. Whereas Nepal SBI bank has SD 1.16 and CV 16.05%, and Citizens bank ha SD 3.79 and CV 38.10%.

The ratio of shareholders fund to total assets has been presented graphically in the following simple bar diagram.

**Figure 4.19**  
**Shareholders fund to Total assets Ratio**



#### 4.7 Growth Ratios

This ratio reflects the growth of the banks in study period regard to various aspects. Here, growth ratios have been described on the basis of the following indicator.

##### (i) Net Profit

The table 4.21, below, portrays the net profit of selected commercial banks for the study period started from fiscal year 062/63 to 066/67.

**Table 4.21**  
**Net Profit (in Rs. Millions)**

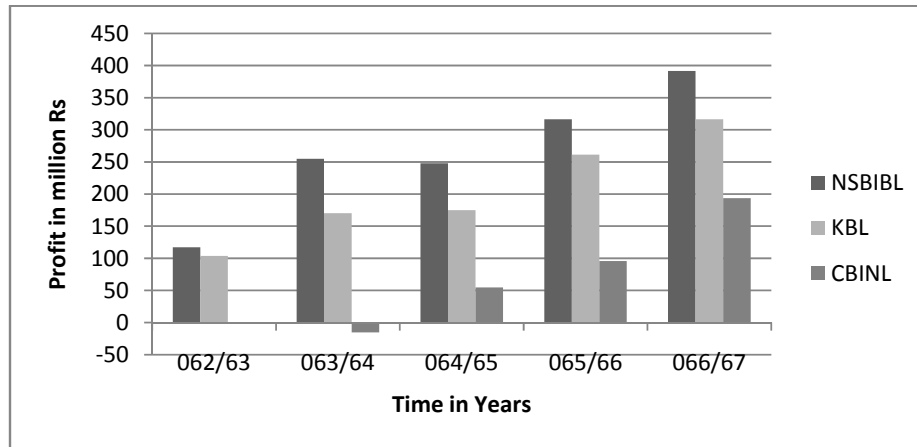
Banks	062/63	063/64	064/65	065/66	066/67	GR%	AGR
NSBIBL	117	254.91	247.77	316.37	391.74	35.27	51.78
KBL	103.67	170.26	174.93	261.44	316.54	32.19	51.78
CBINL	-	-15.42	54.84	95.81	193.56	87.87	51.77

GR%=Growth Rate in Percentage, AGR=Average Growth Rate

Source: Annex B, D

From the table 4.21 above we see that NSBIBL has net profit growth rate 35.27%, KBL has 32.19%, and CBINL has 87.87%. The data reveals that CBINL has the superior growth rate than any other banks taken as sample for the study period. It has growth rate above average of the sample banks for the study period. NSBIBL and KBL both have net profit growth rate less than average of the banks taken as sample for the study period of five year. KBL has the least growth rate of 32.19 percent only where NSBIBL has 35.27% a bit more than that of KBL. Hence we can conclude that in term of net profit growth rate CBINL is superior amongst the sample banks for the study period. The amount of net profit can also be viewed in the simple bar chart as in figure 4.20.

**Figure 4.20**  
**Net Profit**



**(ii) Earnings per Share (EPS)**

The earnings per share of the commercial banks for the period of study can be seen in the table 4.22, below.

**Table 4.22**  
**Earnings per Share (Rs)**

Banks	062/63	063/64	064/65	065/66	066/67	GR%	AGR
NSBIBL	18.27	39.35	28.33	36.18	23.69	6.71	21.94
KBL	16.59	22.7	16.35	22.04	24.24	9.94	21.94
CBINL	-	-2.75	8.7	9.58	19.36	49.17	21.94

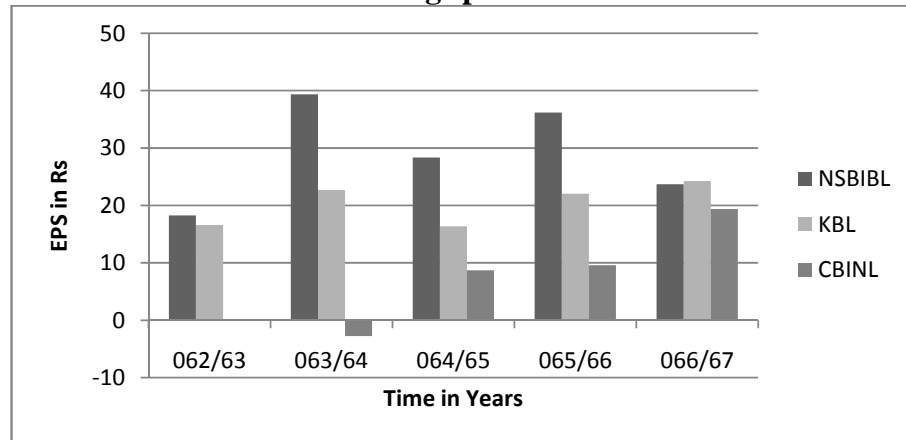
GR%=Growth Rate in Percentage, AGR=Average Growth Rate

Source: Annex B, D

In the table 4.22 we see that NSBIBL has average Earning per share growth rate 6.71 percent, KBL has 9.94%, where CBINL has 49.17 percent. CBINL has dominated all other banks for average growth rate of earnings per share for the study period. NSBIBL has the least average growth rate amongst the sample banks taken as example for the study. KBL falls in between the two banks for the same. CBINL has the average the average growth rate CBINL has the average growth rate of earning greater than average of sample banks'

growth rate for the study period. We have, now, concluded that CBINL has superior performance regarding growth rate of earnings per share amongst the banks for the study period.

**Figure 4.21**  
**Earnings per Share**



**(iii) Dividend Per Share (DPS)**

The following table, table-4.23, shows the dividend per share the banks distributed through the study period.

**Table 4.23**  
**Dividend per Share (Rs)**

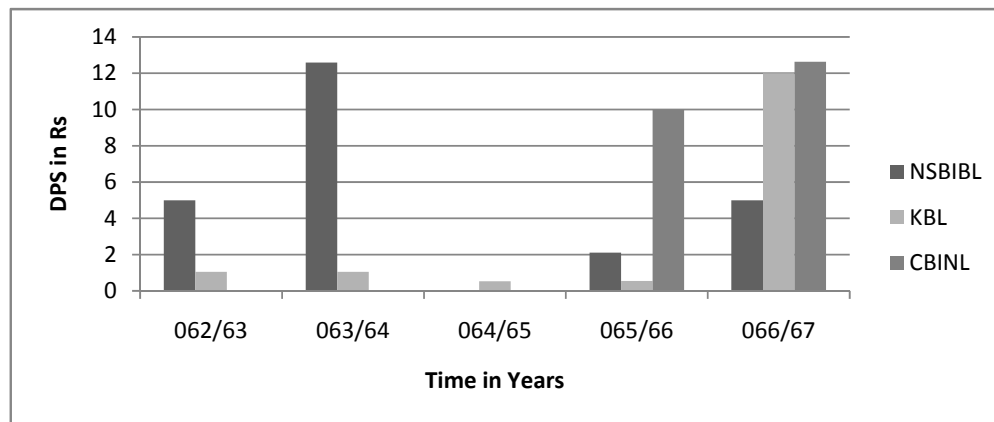
Banks	062/63	063/64	064/65	065/66	066/67	GR%	AGR
NSBIBL	5	12.59	-	2.11	5	0	36.72
KBL	1.05	1.05	0.53	0.55	12	83.86	36.72
CBINL	-	-	-	10	12.63	26.3	36.72

Source: Annex B, D

From the data in table-4.23 we see that only Kumari bank has distributed cash dividend in each year during study period. During the period, growth in dividend payment by Kumari bank is highest amongst the sample banks. Average growth of SBI banks dividend payment is zero though it has paid dividend for some years but not all years during the study period. Growth of

KBL dividend is more than double of average growth of each bank's average annual dividend growth for the study period. KBL has dividend growth rate of 83.86% in an average where average growth rate of all the banks' dividend is 36.72%. These are why Kumari bank is performing well in terms dividend per share during the period. High positive growth rate in dividend payment is very useful in attracting the attention of the investors towards the companies which leads to boost the market value per share, resulting better performance of the company. Graphical presentation of dividend per share of the banks for the study period is shown below. In spite of late coming into operation CBINL has also performed well in short period. Low growth of SBI bank dividend means it is not performing well in term of dividend payment. The following figure also reveals the information regarding growth rate of dividend per share of the companies for the study period.

**Figure- No: 4.22**  
**Dividend per share**



**(iv) Retention Ratio**

The following table no 4.24, shows the earning retention ratio for the banks during the study period.

**Table 4.24**  
**Earning Retention Ratio (%)**

Banks	062/63	063/64	064/65	065/66	066/67	GR (%)	AGR
NSBIBL	72.63	68.01	100	94.17	78.89	2.09	-17.76
KBL	93.67	95.37	96.76	97.50	50.50	-14.31	-17.76
CBINL	-	-	100	-4.38	34.76	-41.04	-17.76

Source: Annex B, D

Except Nepal SBI bank Ltd all other banks taken as sample for the study during study period have negative growth rate of retention ratio of earning. Nepal SBI bank has positive growth rate of retention ratio i.e. 2.09% while KBL and CBINL has negative growth rate of retention ratio of earning per share i.e. -14.31% for KBL and -41.04% for CBINL. Negative growth rate in retention ratio means the bank has enough cash than required and less investment opportunities. We can conclude from the table above that Nepal SBI bank is in need of cash as its retention ratio has grown by 2.09% and it may have some investment opportunities. But KBL and CBINL has negative growth rate of retention ratio means they are lacking investment opportunities.

#### **4.8 Coefficient of Correlation**

Under this topic, Karl Pearson's coefficient of correlation has been employed to find out the relationship between total deposit and total investment; and total debt and return.

##### **4.8.1 Coefficient of Correlation between Total Deposit and Total Investment**

In order to measure the degree of relationship between total deposit and total investment the coefficient of correlation between these variables has been employed. Under this study, total deposit is assumed to be independent variable (X) and investment is dependent variable (Y). It is being computed with aim

that whether there exists a significant relationship between these variables or not.

To find out the correlation, a sample calculation of KBL has been given in detail in Annex E. The following table-4.24 reveals the coefficient of correlation ( $r$ ), probable error of the coefficient (PEr), six times probable error (6 PEr), and coefficient of determination ( $r^2$ ) between total deposit and total investment of the commercial banks during the period of study.

**Table 4.25**  
**Correlation between Total Deposit and Total Investment**

Banks	$r$	$r^2$	PEr	6PEr
NSBIBL	0.9913*	0.9827	0.0052	0.0313
KBL	0.6678	0.4459	0.1171	1.0026
CBINL	0.9202*	0.8467	0.0517	0.3102

Source: Annex B, E

Note: \* denotes most significant correlation between deposit and total investment amongst the sample banks.

The correlation coefficients between total deposit and total investment presented in the table-4.26 are positive due to as values of 'r' are positive for the banks. For each bank it is positive. NSBIBL has 0.9913 and CBINL has 0.9202 correlation coefficients which are high degree of positive correlation. But in case of KBL it is just above moderate degree of positive correlation. However, the coefficient of determination ' $r^2$ ' explains clearly regarding the relationship between dependent and independent variables. The values of  $r^2$  here are 0.9827, 0.4459, and 0.8467 for Nepal SBI Bank Ltd, Kumari Bank Ltd, and Citizens Bank International Ltd respectively. These data indicate that 98.27%, 44.59%, and 84.67% of the total variation in the dependent variable i.e. in total investment is explained by the independent variable i.e. total deposit with respect to Nepal SBI Bank Ltd, Kumari Bank Ltd and Citizens Bank

International Nepal Ltd respectively. Moreover, if we consider the Probable error, since the value of 'r' is greater than six times of the PEr except 1.0026 for Kumari bank correlation coefficient has significance for other banks.

As conclusion, it can be said that in case of Kumari Bank the value of 'r' is insignificant as 'r' is lesser than the value of 6 times of PEr i.e.  $0.6678 < 1.0026$ . But, value of 'r' is significant in case of NSBIBL and CBINL as  $r > 6 \text{ PEr}$ :  $0.9913 > 0.0313$  for NSBIBL and  $0.9202 > 0.3102$  for CBINL.

#### 4.8.2 Coefficient of Correlation between Total Debt and Return

In order to find out relationship between total debt and return widely used technique of Karl Pearson's Correlation has been employed. In the analysis here total debt is assumed to be independent variable and return is assumed to be dependent variable. Debt includes both long term and short term debt and return means operating income of the commercial banks. This analysis endeavors to find out the significance of the relationship between debt and return. The researcher thinks that with aid of this relationship, performance of the banks regarding debt utilization can be measured and evaluated. Table 4.27 below shows the coefficient of correlation between debt and return, coefficient of determination, PEr, and 6PEr of selected commercial banks for the purpose of study.

**Table 4.26**  
**Correlation between Total Debt and Return Evaluation Criteria**

Banks	r	r <sup>2</sup>	PEr	6PEr
NSBIBL	0.8741	0.7641	0.0712	0.427
KBL	0.9731	0.9467	0.0161	0.0964
CBINL	0.9712	0.9432	0.0171	0.1023

Source: Annex B, E

In table 4.27 it seen that total debt and return of all banks taken as sample for the study period are correlated positively as the respective value of 'r' is



positive and lies above 0 and below 1. The correlation coefficient of Nepal SBI bank, Kumari bank, and Citizens bank are respectively 0.8741, 0.9731, and 0.9712. These values of 'r' resemble that total debt and total return of the banks are highly positively correlated. But we could make more profound analysis using coefficient of multiple determination as it is more powerful tool for analysis of relationship between two variables and is denoted by 'r<sup>2</sup>'. It is more powerful in a sense that it explains the correlation, taking dependent and independent variables as its consideration. The coefficients of multiple determinations of the banks are 0.7641, 0.9467, and 0.9432 respectively. These values of r<sup>2</sup> determine that 76.41%, 94.67%, and 94.32% variation in the dependent variable i.e. return has been explained by the independent variable i.e. total debt for NSBIBL, KBL, and CBINL respectively. If we consider probable error, since the value of 'r' for all sample banks is greater than the value of PEr multiplied by 6 i.e. 6PEr it is significant the value of r or correlation between total debt (independent variable) and return (dependent variable) for all the sample banks during the study period.

Regarding performance, by the evaluation criteria we used above, it can be concluded that all the banks have performed well in terms of their debt and return since the correlation coefficient is high. KBL has properly utilized debt than other banks as it has the highest correlation coefficient. It can increase debt to increase return as the degree of correlation coefficient of KBL between total debt and return is highest and highly positive. It has been followed by CBINL. Least is NSBIBL. Commercial banks taken as sample has properly utilized debt fund for generating earning.

#### **4.9 Simple Regression Analysis of Total Asset and Total Profit**

Regression analysis without any doubt is the most powerful statistical tool to explain the relationship between two or more variables. Here, this tool has been utilized for determining whether variables total assets is related with net profit. Here, two variables- first one Total asset (X) and second one Net profit (Y) are assumed as independent and dependent variable respectively. The analysis

between these variables is performed through the help of computer. These values are tabulated and interpreted as follows:

**Table 4.27**  
**Regression of Net Profit on Total Assets**

Regression Equation:  $NP = a + b \cdot TA$

Banks	No of Observations	Constant 'a'	Regression Coefficient 'b'	R <sup>2</sup>	SE of Estimate	F Value	Sig
NSBIBL	5	85.566	0.0080	0.771	56.01	10.07	0.0504
KBL	5	-54.129	0.0173	0.944	22.81	50.80	0.0057
CBINL	4	-64.691	0.0146	0.943	25.54	33.06	0.0289

Source: Annex B, F

The table above portrays the major outputs of simple regression between net profits (NP) and total assets of the commercial banks selected as sample for study purpose. The regression coefficient of beta is positive for all the banks means that one rupee increase in total assets leads to an average increase of 0.008, 0.0173, and 0.0146 rupees increase in net profit of Nepal SBI Bank Ltd, Kumari Bank Ltd, and Citizens Bank International Ltd respectively.

Similarly, the value of standard error of estimate (SEE) of concerned commercial banks have not been found zero. It implies that variations exist in regression line. The value of constant i.e. a, indicates that the mean or average effect on dependent variable i.e. on Net Profit. It is to be concluded from seeing the list of F-statistics that the results of all the sample banks are significant at 1% level of significance.

#### **4.10 Trend Analysis and Forecasting For Next Three Years**

Under this heading trend of total deposit, loan and advances, total investment, and profit has been presented as below for the period of study and on the basis of the period trend their forecast is made for next three years.

##### **4.10.1 Trend Analysis of Loan and Advances**

Under this topic, the trend values of loan and advances of concerned banks selected for study has been calculated for five years from fiscal year 2062/63 to fiscal year 2066/67. The forecasts for next three years FY 2067/68, FY 2068/69 and FY 2069/70 have also been made. The table below exhibits the trend values of 8 years for the banks.

**Table 4.28**  
**Trend Values of Loan and Advances (2062/63-2069/70)**

<b>Year</b>	<b>NSBIBL</b>	<b>KBL</b>	<b>CBINL</b>
2062/63	7286.856	7020.552	-
2063/64	9824.748	9161.796	1974.162
2064/65	12362.64	11303.04	4939.774
2065/66	14900.53	13444.28	7905.386
2066/67	17438.42	15585.53	10871
2067/68	19976.32	17726.77	13836.61
2068/69	22514.21	19868.02	16802.22
2069/70	25052.1	22009.26	19767.83

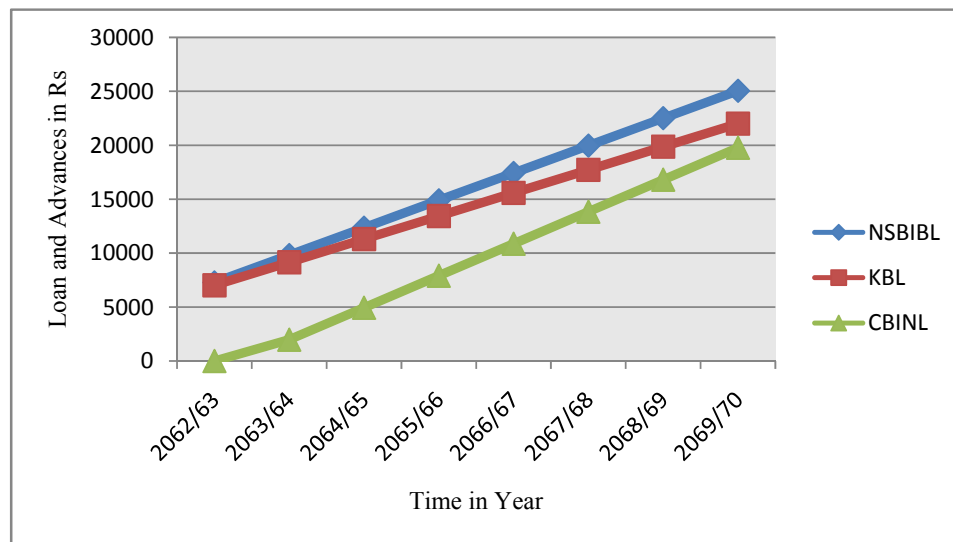
Source: Annex G

It is clear from the above comparative table of trend and forecasts of loan and advances that all the banks have an increasing trend of loan and advances annually. If environmental factors remain same as of study period during the forecast period loan and advances of Nepal SBI bank in fiscal year 2069/70 will be Rs 25,052.1 millions which is the highest as revealed by the study. In

the same way, consecutively Kumari Bank will have 22009.26 and Citizens Bank will have 19767.83 by the end of fiscal year 2069/70.

From the data in table above of trend analysis, we are clear that Nepal SBI bank's utilization of deposits in terms of loan and advances is comparatively better than that of other commercial banks taken as sample for study purpose. Trend values of the banks of study have been fit in the trend lines presented in the figure below.

**Figure 4.23**  
**Trend value of loan and advances (Rs in Millions)**



#### 4.10.2 Trend Analysis of Total Deposit

Here, I have made an attempt to analyze total deposit of sample commercial banks of our study for five years from FY 2062/63 to FY 2066/67 and forecasts for the FY 2067/68, FY 2068/69, and FY 2069/70. Table 4.29, in the next page, exhibits that the trend values of total deposits of the selected commercial banks in our study for 8 years is increasing.

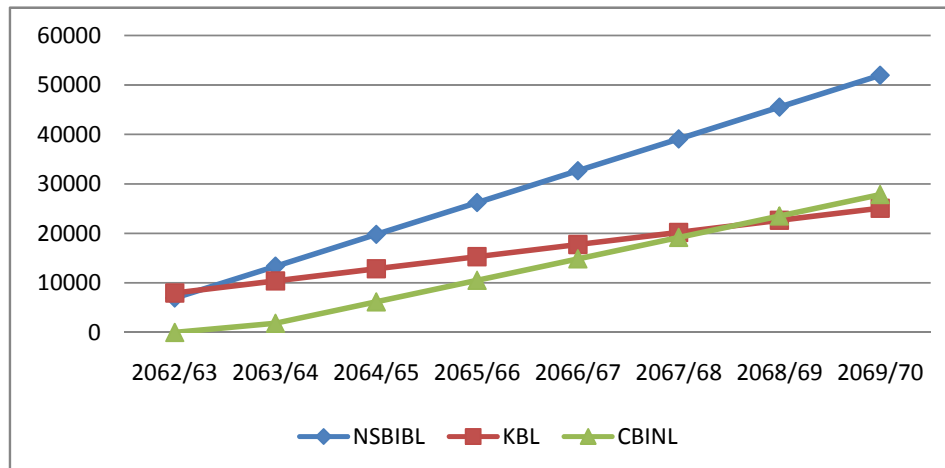
**Table 4.29**  
**Trend Values of Total Deposit**

Year	NSBIBL	KBL	CBINL
2062/63	6943.132	7952.618	-
2063/64	13373.2	10400.61	1852.598
2064/65	19803.27	12848.6	6189.476
2065/66	26233.34	15296.59	10526.35
2066/67	32663.41	17744.57	14863.23
2067/68	39093.48	20192.56	19200.11
2068/69	45523.55	22640.55	23536.99
2069/70	51953.62	25088.54	27873.87

Source: Annex G

From the comparative table of selected commercial banks' trend values of total deposit we have got result that the expected amount is in increasing trend. Other things remaining the same in forecast period as in the study period, the total deposit of Nepal SBI bank in fiscal year 2069/70 will have the highest amount of total deposit of amount Rs 51953.62 millions. Similarly, total deposit of Citizens bank and Kumari bank will have Rs 27873.87 and 25088.54 million respectively. Even though Kumari bank has been dominating Citizens banks during study period Citizens bank will start to dominate Kumari bank from the fiscal year 2068/69 in terms of total deposit collection. It is clearly seen in the trend lines below in graph. The trend line in the beginning of study period i.e. for FY 2062/63 of CBINL is curved because the bank was no operational in the fiscal year where the trend line for CBINL is calculated based on latter four years data but figure consist five year. Therefore the line seems as hockey stick.

**Figure 4.24**  
**Trend Value of Total Deposit (Rs in Millions)**



It is to be concluded from the above trend values and trend lines that all banks total deposit is in increasing trend. Increase in deposit needs proper utilization of it by proper mobilization of it to the profitable sectors in order to have properly managed investment activities and performance.

#### **4.10.3 Trend Analysis of Total Investment**

We have made an attempt here to analyze total investment of selected commercial banks for five years period of study i.e. from 2062/63 to 2066/67 and have made forecasts of the same for the period of next three years. The table below, table-4.31, shows the trend values of total investment of commercial banks for eight years period i.e. from 2062/63 to 2069/70.

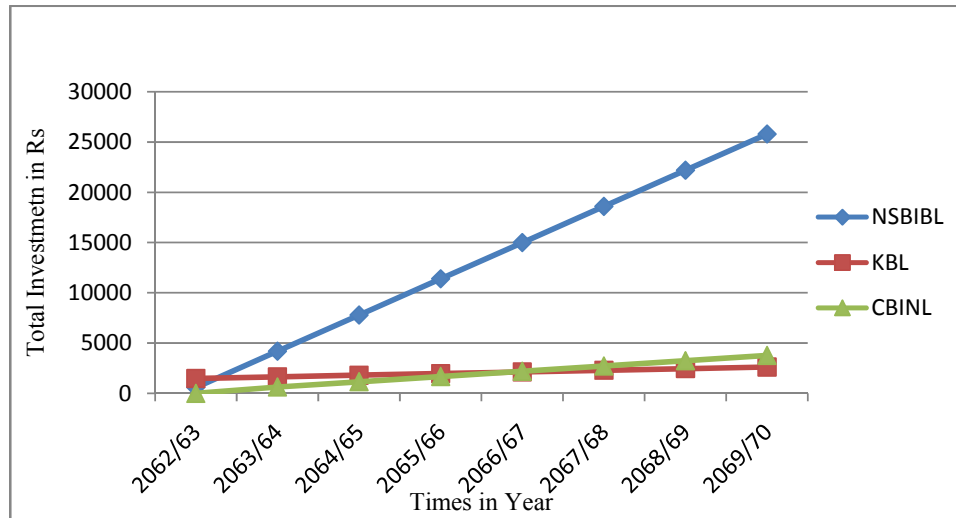
**Table 4.30**  
**Trend values of total investment**

Year	NSBIBL	KBL	CBINL
2062/63	586.948	1476.724	-
2063/64	4188.539	1640.349	636.1385
2064/65	7790.13	1803.974	1159.104
2065/66	11391.72	1967.599	1682.069
2066/67	14993.31	2131.224	2205.034
2067/68	18594.9	2294.849	2727.999
2068/69	22196.49	2458.474	3250.964
2069/70	25798.09	2622.099	3773.929

Source: Annex G

It is crystal clear from the above table of trend values of total investment that the total investment of selected commercial banks for the purpose of study is in increasing trend. Nepal SBI bank will have the highest amount of total investment by the fiscal year 2069/70 i.e. Rs 25798.09 millions. Similarly, Citizens bank and Kumari bank will have Rs 3773.929 and Rs 2622.099 million total investment by the end of fiscal year 2069/70. Though Kumari banks was dominating Citizens bank during study period in total investment amount the latter one will start to dominate the first one from the fiscal year 2067/68. The trend values in table 4.31 have been presented in the graph below.

**Figure 4.25**  
**Trend Value of Total Investment (Rs in Millions)**



From the above figure and values in above table we came to conclusion that Nepal SBI bank has utilized available fund properly in form of investment. Kumari bank's trend line has least slope. Kumari bank is inefficient to mobilize available funds in form of total investment in comparison of rest banks.

**4.10.4 Trend Analysis of Net Profit**

We have made an attempt to analyze the net profit of selected commercial banks for the study period of 2062/63 to 2066/67, under this study. And additionally trend of profit has been studied and on the basis of trend a forecast has been made for each bank's profit for the period of next three fiscal years. The table below i.e. table-4.32 exhibits the trend values of net profit of the banks for eight years i.e. from fiscal year 2062/63 to 2069/70



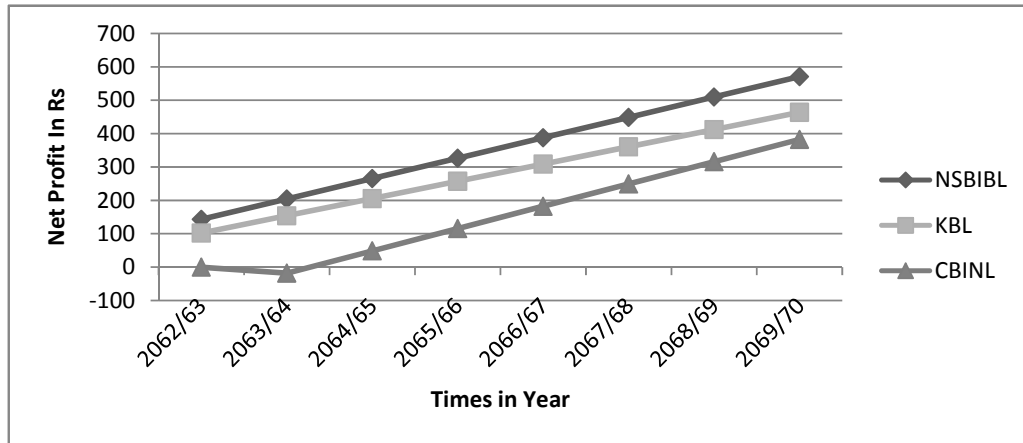
**Table 4.31**  
**Trend values of net profit**

Year	NSBIBL	KBL	CBINL
2062/63	143.37	101.984	-
2063/64	204.464	153.676	-17.989
2064/65	265.558	205.368	48.802
2065/66	326.652	257.06	115.593
2066/67	387.746	308.752	182.384
2067/68	448.84	360.444	249.175
2068/69	509.934	412.136	315.966
2069/70	571.028	463.828	382.757

Source: Annex G

From the data in table-4.32 with selected commercial banks' net profit trend values, we have got result that the expected amount of net profit is in increasing trend. Other factors remaining the same, net profit of Nepal SBI bank will be Rs 571.028 million in the fiscal year of 2069.70 which is the highest amongst the selected commercial banks taken in sample for the purpose of study. In the same way, Kumari bank and Citizens bank will have Rs 463.828 and Rs 382.757 million net profit in the fiscal year 2069/70 respectively. The trend values in table 4.32 have been fitted in the figure below.

**Figure No: 4.26**  
**Trend Value of Net Profit (Rs in Millions)**



Hence the data in table 4.32 and figures above help us to reach on conclusion that Nepal SBI bank is in the top list of the study period. All commercial banks' net profit is in increasing trend. Nepal SBI bank is best amongst the sample banks in term of net profit. CBINL's net profit's trend shows that after some year it will dominate KBL for net profit.

#### **4.11 Major Findings of the Study**

The main findings of the study those are pertinent to the investment activities and performance of the sample commercial banks in our study during the study period are as presented below.

##### **4.11.1 Investment Activities**

It is revealed from investment activities of banks that

- All the banks have channelized their fund's largest portion in form of loan and advances
- Second largest portion of funds has been invested on government securities.
- Only Kumari Bank has invested on corporate bond
- Banks have invested least portion of fund on corporate shares

#### **4.11.2 Liquidity Ratio**

It is revealed liquidity position of commercial banks that

- The mean current ratio of Kumari Bank is highest than that of other banks. The difference between mean ratios of sample banks is not great. And similarly, more consistent is the ratio of Kumari Bank Ltd.
- The mean ratio of cash and bank balance to total deposit of Citizens Bank International Ltd is highest. And it also has more consistent ratio of cash and bank balance in relation to total deposit.
- The mean ratio of cash and bank balance to total current assets of Citizens Bank International Nepal ltd is the highest. But cash and bank balance to current assets ratio of Nepal SBI bank is more consistent than the other banks.
- In term of current assets held as government securities Nepal SBI bank has the highest for this. For the same Nepal SBI bank is most consistent amongst the banks.
- In an average Kumari bank has held highest amount of current assets in term of Loan and advances amongst the sample banks. Kumari bank is most consistent in holding current assets in form of loan and advances.

The above finding reveals that liquidity position of Nepal SBI bank comparatively better than that of other banks as its consistency amongst the ratios of the study time period. But Kumari bank has closely followed to NSBIBL for the ratios. Highly fluctuating liquidity position reveals inability in making sound investment activities as result of unstable working capital policy.

#### **4.11.3 Activity Ratio**

The activity ratios of selected commercial banks reflects that

- The mean ratio of loan and advances to total deposit of Citizens Bank International is the highest amongst the sample banks in the study. But more consistent amongst the banks in this regard is Kumari Bank Ltd.

- The mean ratio of loan advances to Total fixed deposit of Kumari bank ltd is highest amongst the sample banks. Most consistent ratio is of Kumari bank for the period.
- The mean ratio of loan advances to Total working fund of Kumari bank is highest amongst the sample banks. Kumari bank has most consistently held loan and advances in relation to total assets or working fund.
- The mean ratio of investment on government securities total working fund of Nepal SBI bank is highest. But Kumari bank is more consistent for holding assets in term of investment on government securities.
- The mean ratio of total investment to total deposit of Nepal SBI bank is highest amongst the sample banks. But most consistent is Kumari bank for holding investments in relation to total deposit.

Activity ratios in clear sense describe the investment activities of the commercial banks and effectiveness of the activities. Commercial banks are better to diversify scope of activity by identifying new area of investable sectors rather than concentrating in one sector. Though, they channelize most of their funds in form of loan and advances they would better to for well diversified investment portfolio so that yields would be good. Regarding activity ratio Kumari bank has been found good and efficient in utilizing funds. Nepal SBI bank has larger ratio of investment on government securities than other banks, which can't be viewed as good.

#### **4.11.4 Leverage Ratio**

The banks in our sample has leverage ratios revealing following conclusions

- Most of the commercial banks have used maximum amount of debt. In an average Citizens bank ltd has used least amount of debt or funds provided by creditors whereas most consistent I holding debt is Kumari bank ltd.
- Amongst the sample banks Citizens bank has the least ratio of debt to equity means it has used relatively higher amount of shareholders' fund

in an average than any other banks taken for study purpose. The most consistent is Kumari bank ltd

In order to have sound investment activity and performance commercial banks have to use various sources of fund appropriately. More precisely, they should have a proper mix of debt and equity capital. They also have to use long term debt. Generally debt can't be more than equity of owners. In this sense Citizens bank is good and for stability Kumari bank is good. However, all the banks have performance closely same.

#### **4.11.5 Profitability Ratio**

Profitability is the result of a number of policies and decisions. The profitability ratios of concerned commercial banks in sample reveal as follows:

- Amongst the sample banks Kumari bank ltd has highest net profit to total assets ratio. At the same time Kumari bank has the highest consistency in the ratio. Moreover, Kumari bank has increasing trend of net profit to total assets ratio. While Citizens bank ltd has least average ratio of net profit to total asset and it also has most inconsistency of the same.
- In an average Net profit to total deposit ratio of Kumari bank is highest amongst the commercial banks taken as sample for the purpose of the study. And similarly, Kumari bank has the most consistency of the same ratio.
- The average ratio of net profit to net worth of Nepal SBI bank is the highest amongst the commercial banks in sample of study. But if we consider consistency in ratio Kumari bank is the most consistent amongst the commercial banks.
- Kumari bank has the highest mean ratio of total interest earned to total working fund. But most consistent is the ratio of Nepal SBI bank amongst the commercial banks.
- Kumari bank has the highest mean ratio of total interest paid to working fund amongst the commercial banks taken as sample for the study. But if

we consider consistency amongst the banks in sample for study Nepal SBI bank is best.

Profitability ratio resembles the performance of the commercial banks to some extent in different aspects. The commercial bank which have highest profitability ratio is said to be performing well. Larger profit is prerequisite to have larger profitability ratio. Proper investment policies and investment activities helps to have higher profitability. If a bank invests on proper portfolio its profitability will be strengthened. Hence, we can conclude that good profitability ratios are the good indicator of sound investment activities and financial performance. Regarding the profitability Kumari bank is best among the sample banks and is followed by Nepal SBI bank ltd while Citizens bank is worst.

#### **4.11.6 Capital Adequacy Ratio**

Capital adequacy ratio measures sufficiency of capital in the banks. The capital adequacy ratios of selected commercial banks reveal that

- The ratio of shareholders fund to total deposit of Citizens bank ltd is highest and Nepal SBI has least of the same. But if we consider consistency, Kumari bank is best amongst the sample banks.
- In case of the ratio of shareholders fund to total assets Citizens bank has the highest ratio. But, if we consider consistency in ratio, Kumari bank is the most consistent.

It can be concluded from above findings that Kumari bank and Citizens bank seem to have good ability to keep adequate capital fund. It results good performance of the selected commercial banks in Nepal.

#### **4.11.7 Growth Ratios**

Growth ratios resemble growth of the commercial banks during study period. From the analysis of growth ratios of concerned banks we are clear that:

- From the growth rate analysis we see that Citizens bank has the highest positive growth for the study period where it has 87.87% average

growth rate. At the same time, Kumari bank has lowest average growth rate of 32.19% during the study period.

- Growth rate of EPS of Citizens bank is the highest in average which is of 49.17 percentages. The least is of Nepal SBI bank's EPS growth rate of 6.71%.
- The growth rate of cash dividend of Kumari bank is highest in an average amongst the commercial banks. And the least is of Nepal SBI bank with no growth in DPS.
- The retention ratio of Nepal SBI bank has positive growth rate while the others have negative average growth in retention ratio. it means except Nepal SBI bank other banks are not getting investable opportunities.

If we analyze findings from above growth ratios, Citizens bank and Kumari bank have good performance amongst the sample banks. Nepal SBI bank has to make investment activities and performance better in order to win the confidence of shareholders, depositors, creditors, and their customers as well.

#### **4.11.8 Management Quality**

The cost per unit money lent is measured by this ratio. The assessment of management quality reveal as follows

- The cost per unit money lent of Citizens bank is least and the highest is of Nepal SBI bank. But if we consider variability in cost per unit money lent the most homogenous is Kumari bank ltd.

From above finding it is to be clear that Kumari bank and Citizens bank's management are efficient amongst the bank. And Nepal SBI bank is not efficient as Kumari and Citizens bank's management.

#### **4.11.9 Coefficient of Correlation Analysis**

We have used coefficient of correlation analysis to analyze the relationships between different variables of sample banks in our study. The analysis conducted here reveals that:

- Coefficient of correlation between deposit and investment of banks other than Kumari bank are significant. Due to fluctuation in data the correlation coefficient between total deposit and total investment is insignificant.
- The correlation coefficient between total debt and return of all the sample banks are significant. Most significant is of Kumari bank ltd. And least is of Nepal SBI bank.

It is to be concluded from above findings that most of the commercial banks are good in total investment by mobilizing total deposit. Kumari bank is not good in investment by mobilizing deposit. But all banks have well mobilized debt to earn proper amount of return.

#### **4.11.10 Regression Analysis**

Simple regression analysis between net profit and total assets of selected commercial banks reflects that

- All selected commercial banks have positive beta-coefficient which obviously reflects if total assets of all banks are increased by Re 1 its net profit will increase by the amount shown in the column of beta.
- Coefficient of determination of all banks are larger means that net profit's larger percent is well explained by total assets. Amongst the sample banks Nepal SBI bank has the least coefficient of determination i.e.0.771 means that in comparison to other banks Nepal SBI bank has its profit least explained by total assets.
- In case of standard error of estimate for Kumari bank is least i.e. 22.81 amongst the sample banks in our study, meanwhile highest standard error of estimate is of Nepal SBI bank i.e.56.01 means that Nepal SBI bank has greater scattered variables taken for study.

From the above findings the relation of net profit as dependent variable with total assets as independent variable for Kumari bank is best amongst the sample banks. And Nepal SBI bank has weak relations between total assets and net profit.



#### **4.11.11 Trend Analysis**

The study of trend of loan and advances, investment, deposit, and net profit, and projection for next three years of the selected commercial banks for study purpose reveals the following findings:

- Trend value of loan and advances of selected commercial banks for study is increasing. The highest trend value in fiscal year 2069/70 is of Nepal SBI bank i.e. 25052.10 millions where as Citizens bank has 19767.83 million.
- Trend value of total deposit of sample banks is our study shows increasing trend. The lower value is of Kumari Bank Ltd as it will have least amount of total deposit i.e. 25088.54 millions by the end of fiscal year 2069/70. Highest value is of Nepal SBI Bank Ltd i.e. 51953.62 millions by the end of fiscal year 2069/70. Kumari bank has dominated Citizens bank during study period but Citizens bank will start to dominate Kumari bank from the fiscal year 2068/69.
- Trend value of total investment of all the banks in sample of study is increasing. The highest amount of total investment by the end of fiscal year of 2069/70 will be of Nepal SBI bank ltd i.e. Rs 25798.09 millions where as the least amount of total investment will be of Kumari Bank Ltd i.e. Rs 2622.099 million.
- Trend values of net profit of commercial banks taken as sample of our study have been found increasing. The lower value is of Citizens Bank Ltd as it will have Rs 382.78 million by the end of fiscal year 2069/70 and the highest value is of Nepal SBI Bank as it will have net profit Rs 571.028 by the end of fiscal year 2069/70.

Hence, from above findings we can conclude that Nepal SBI Bank Ltd has greatest trend value in loan and advances, total deposit, total investment, and total profit. All banks have trend increasing for all variables we analysed herein. For total investment increasing trend is slight for banks other than Nepal SBI Bank. For trend of loan and advances, total deposit, total investment, and total profit Nepal SBI Bank is superior to all other banks taken as sample in our study.

## **CHAPTER V**

### **SUMMARY CONCLUSION AND RECOMMENDATIONS**

In the end of completion of research's basic analysis a researcher has an important task of enlisting the findings, issues, and challenges of the study and give suggestions for further improvement if necessary any. It will be meaningful to the top management of the banks to initiate actions and achieve the desired results. As we have objective we have to not only point out errors but also to advise them to correct and give directions for further improvement.

#### **5.1 Summary**

Economic development is crucial for development of any nation. Development of financial sector is very much essential and its plays vital role for economic development of the nation. Development of financial sector is also influenced by economic activities, monetary transaction, attitude of people toward business, and entrepreneurial capacity. Though Nepal has short history of development of financial sector only after 1937 AD (1994 VS) in the year Nepal Bank Ltd was established. For about more than half time period of history there were only few banks established by governments. It has not been more than thirty years that private sector commercial banks had come in operation. In last three decades several commercial banks joint venture and domestic, development banks, and finance companies have come to existence to serve financial needs. After government took liberalization in 1990s there took mushroom growth of commercial banks. There are, now, 31 commercial banks at all.

A commercial bank is a financial institution which, simply, takes deposit from surplus sector and provides loan to deficit sector. Though number of banks has grown vast, the coverage is limited in urban area only. A bank as financial intermediary has its concern towards investment activities. They have channelized funds in limited sectors. However they have been cornerstones for

development of entrepreneurial activities in nation. For collection of savings and provide capital in sectors in which are in need commercial banks have played good role. Their sustenance is essential for providing funds most efficiently and effectively. Therefore it is essential to analyze their performance, identify their problems, and suggest them the ways to overcome the problems. Moreover commercial banking sector has much charm than any other business these days. Why banks have been established in such way?- question has been stroked in mind of people. Is there real charm in term of profit, capital requirement, and performance?- it is question to be quenched. This study has the concern to analyze performance and investment activities of the commercial banks for the purpose.

Various sources of methods and techniques of analyzing financial institutions' performance have been reviewed and studied. Based on those bibliographies, in order to carry out this study, data have been basically obtained from secondary sources such as financial statements and annual reports, official records, periodicals, journals, and bulletins of commercial banks, various published reports and relevant unpublished thesis of masters degree have also been used. Addition to this, personal contacts with the finance company personnel have also been made for assessing managerial behavioral dimension concerning with investment activities and performance of the banks.

The procedure of data presentation and analysis and interpretation has been made using comparative analysis. Under this analysis, various financial ratios related to the performance functions of selected commercial banks i.e. liquidity, activity, profitability, leverage, capital adequacy, growth rate, and management efficiency related ratios have been analyzed and interpreted comparatively. In addition to these financial ratios, some relevant statistical tools such as coefficient of correlation, coefficient of determination, trend analysis, and regression analysis have been used. The analysis provides with clear picture of the investment activities and performance of listed commercial banks which have been taken as sample banks for the study. Sample taken is

about 10 percent of total commercial banks of Nepal one can generalize findings. However due to absence of use of hypothesis test and lack of probability sampling the results are not justified.

## **5.2 Conclusion**

Nepal is an underdeveloped country. She needs to strengthen her economic structure for achieving over all development. Commercial banks should prove great importance of them in economic development playing catalytic role. Commercial banks in Nepal face various problems related to mobilizing funds and investment. Moreover political instability and intervention in economy has proven main hurdles for effective and efficient performance. They work in traditional way and most of them have offered same products. However some of them have offered relatively new products in the market and in an average they are in profit. Growth rate of new banks also have been good and they have earned good profit in short span of time. Most of the funds of banks have been channelized in form of loan and advances. Financing is based on time bound fixed deposit. As owners' capital requirement is less in comparison to funds from customer or deposit, it has charmed entrepreneurs to establish new banks. Moreover, traditional areas of investment and fund mobilization have made entrepreneurs to involve in the industry which later leads to intense competition. Similarly, from above findings we concluded that Nepalese commercial banks' investment portfolio consists very narrow range of investment projects. Loan and advances is the main investment sector of the commercial bank which has helped to uplift economic activities in the nation, but their concern have been only to provide loan, charge interest, and recover the amount of loan and interest. Neither they have assisted the businesses to deal with changing national and international scenario nor tried to fulfill requirements to provide loans and advances.

Rapid technological advancement has caused banks to adapt ultra-modern technology. Changing socio-cultural environment has caused to lunch new products. Generally, financial institutions' products do not differ from each

other's they have to be first in the market to adapt new technology being proactive. Mushroom growth of banks has imposed intense competition in the banking industry. Misuse of public money has been a great problem of Nepalese banking sector. Even though the commercial banks in our sample have not been accused of playing with money of general public there exist such problem. Executives get attractive pay though they are not responsible for any defaults. It is due to lack of effective implementation of policies and directives of NRB and monitoring of banking activities. Moreover, money-laundering has also been great problem in our economy. Effective steps should be taken immediately by central bank and government. Banks balance sheet's liability side consists heavy amount of debt means leverage or risk level of commercial banks is very high. To set policies regarding deposit mobilization, provide good return to shareholders and serve creditors on time, formulate suitable strategies, make plan by NRB is essential so that commercial banks could deliver the packages of financial products that are innovative and appealing to clients in the market.

Based on above findings Nepal SBI bank has seen well in various aspects followed by Kumari bank. Though Citizens bank is new amongst the sample banks its performance is also satisfactory and it is challenging the bank which has been operating for near two decades.

### **5.3 Recommendation**

Based on above studies and findings that we concluded all banks are not same in all fields. Some commercial banks are stronger in profit making but failing in maintaining the consistency while others are weaker in mobilizing deposits. Few of them are concentrated into very limited diversified investments. For the achievement of better investment activities and performance of the commercial banks they should gradually broaden their investment horizon. They should shift investment from providing loan and advances to real estate sector to export based industry and the industry which are mobilizing unused national resources. Even agro-based industries and farmhouses are also to be prioritized.

Commercial banks have been suggested for improvement of financial performance and investment activities' present status by implementing the following recommendations.

- i. Bank should maintain the liquidity ratio for daily cash transaction and to cash the check written by customers against their deposits. Bank should not invest all deposit as loan and advances. According to the policy of NRB some percentage i.e. 5.5% cash and bank balance should be maintained for fulfilling customers' demand for cash. The standard liquidity ratio is 2:1. The depositor may demand the money at time so bank should be ready at any time. In this research none sample bank has standard ratio due to their aggressive working capital policy. Thus all sample banks should modify their working capital policy to maintain the standard ratio i.e. 2:1. If sample banks do not maintain the ratio they may fail to meet daily cash needs.
- ii. The company must apply different development schemes such as deposit insurance schemes, workers saving scheme, and women development to comply with NRB's rule and to attract more customers.
- iii. NSBIBL have less mobilization of total deposit to loan and advances amongst the sample banks. As we know the purpose of channelizing funds in form of loan and advances is to generate income for the banks. Therefore, NSBIBL should increase loan and advances to different productive and profitable sectors diversifying investment.
- iv. Fixed deposits are deposited for long period of time and need to pay higher amount of interest. Therefore, fixed deposit can be used for long time investment and generate an income for the bank. From the study it is found that fixed deposit mobilization Nepal SBI Bank Ltd is low amongst sample banks of our study. That is why NSBIBL has to mobilize its fixed deposit to different productive sectors in form of loan and advances or investment to earn an attractive income.
- v. Amongst the sample banks of our study KBL has been less successful in mobilizing its deposits by investing in different productive and

profitable sectors. Investment is the key to earn a profit. Therefore, they should invest in different productive sectors by utilizing the various types of deposits.

- vi. The overall investment of the commercial banks should be concentrated on productive sector such as business and industrial loan instead of sector such as hire purchase and housing loan. Because industrial and business generate employment which ultimately facilitate capital formation and economic growth due to multiplier effect.
- vii. KBL also has to increase investment in government securities. Likewise, CBINL has to make consistent investment in government securities to decrease variation of investment in government securities. Even though government securities yield low return, they are default risk free or assumed to be risk free as they have marketability and can sell any time as and when needed. Proper investment in government securities is required to form optimum investment portfolio so that risk of investment can be optimized.
- viii. Profit is the key of success of any business and is motor of the economy. The banks also have to make certain level of profit. That is why they should try to maximize profit. But in long term business bank's concern should be the share holders' wealth maximization as they are the ultimate investors of the bank.
- ix. CBINL is not successful as KBL and NSBIBL are in mobilizing total assets and total deposit to generate profit. That's why CBINL has to invest its fund from deposit in different productive and income generating sectors of investment opportunities managing optimum portfolio. CBINL has to invest funds into different components of banking assets having different level of risks and varying rate of return in such a way there could be maximum risk and minimum risk. They should also match maturity period of loan and advances and deposits. Based on maturity period various weights are assigned to different forms of investment opportunities. Even though NSBIBL has higher net profit

with respect to total assets and deposit they are failed to maintain stability. Variation on return should be decreased.

- x. KBL and CBINL have to maintain stability in earning an interest since they have greater variation in earning interest on total assets. Since HBL have low interest earning amongst the banks in sample they should increase an interest earning because it's direct effect to the net profit.
- xi. Though the banks have earned good interest on fund utilized they have made not so good in paying interest on deposit. As banks are freed through liberalization to determine their own interest rate on deposit collected and lending the gap has been increasing which will ultimately lead to slide of deposit. They should follow NRB rule to determine interest spread.
- xii. Amongst the sample banks KBL has paid the highest amount of interest. It also means that the bank has used higher amounts of creditors' funds. Therefore, the bank should use equity fund rather than debt or should pay less interest rate. KBL and CBINL both have to increase stability.
- xiii. Banks are recommended not discriminate to charge interest at different rate to different customers because this will cause dissatisfaction to general public. Interest rate should not be fixed with intent to compete in unhealthy way. The economic health of the nation should determine the interest rate.
- xiv. As the sample banks have used higher amount of creditors fund they have greater burden of interest payment in regular way. NSBIBL has used highest percentage of creditors fund to fiancé its assets debt financing should be reduced.
- xv. In comparison to other sample banks KBL has the lower growth rate of net profit but NSBIL has the least EPS and DPS growth rate. Such situation may have negative impact on value of shareholders. Therefore they should attempt to increase growth rate of EPS and net profit and DPS growth at the same time.



- xvi. In comparison to other banks in sample NSBIBL has the highest cost per unit money lent. It reflects inefficiency in management. To be efficient in management NSBIBL has to reduce total operating cost or has to lent higher amount fund so that its cost per unit money lent is reduced.
- xvii. Correlation between total deposit and total investment should be maintained at significant level. Investment portfolio should be balanced according to rules and policies of NRB. Similarly, correlation between total debt and total return should also be maintained.
- xviii. The regression analysis of total assets as independent variable and net profit as dependent variable has revealed that NSBIBL has low increase in net profit resulted from each rupee increase in total assets. Therefore in comparison to other banks NSBIBL has to maintain good relation between total assets and net profit.
- xix. From the trend analysis of total investment it is seen that KBL and NSBIBL has relatively low growth in total investment. It means they have to give a bit more emphasis to invest on prioritized sector and other profitable sectors remaining with in policies and guidelines of NRB.
- xx. Nepal Rastra Bank should clearly define its role and strict monitoring for the efficient operations of commercial banks so that they can use the facilities as much as possible. Except this, NRB should show open to all, flexible, and strong supervision rather than imposing rules and regulations only.
- xxi. NRB has not been proactive rather has been reactive to correct commercial banks' and other banks' misdeeds. Due such nature of monitoring regulation general public have to bear financial risk. It means NRB has to implement its guidelines and directives more strictly.
- xxii. There are so many commercial banks in operation. It is only due to that they need not much capital and they operate banking business with public fund which means 'head I win tail you lose' for the shareholders. Avoid mushroom growth of commercial banks and ensure quality NRB has to increase primary capital requirement at time of initiation.

- xxiii. Generally banking products are very similar. The product mixes of each bank are similar. Therefore to attract customers they have to use promotional activities heavily so that people become aware of banking and soundness of the bank. They should get convincing reason about riskiness and safety of their saving and new approach of investment. Coordinating and conducting various programs to inform public about the bank a bank can make people attracted and convinced.
- xxiv. NRB should also encourage frequent trainings to new entrants to provide orientations regarding conceptual aspects and practical aspects of banking operation.
- xxv. In this era of competition everywhere banks can't run away from field leaving competition for continuity. In present most dynamic environment banks should be proactive to adapt new changes rather than being reactive. They should use modern technology such as ATM, credit cards, 365 days banking, any branch banking, mobile banking, e-banking, etc. Similarly various facilities should also be provided to customers. Hassle free banking, health insurance, deposit insurance, etc should also be used.
- xxvi. In the situation of energy and fuel crisis banks should make investment on sectors of energy and fuel. They should invest on medium and small size hydro electricity projects. Instead of giving emphasis to vehicles they would be better to give emphasis to hydroelectricity, wind electricity, solar energy, and herbs farming.
- xxvii. They have to give emphasis to provide loan and advances to those industries which are not centered in capital city. Precisely, the industry which will be established out to Kathmandu valley should be prioritized.
- xxviii. Due to high inflation rate banks' operation scope has been limited. NRB, therefore, has to come with strong policies and directives regarding inflationary control.

In short history of banking industry, we have felt need of commercial banks and financial institutions in economic development of the nation. With the

increase in number of banks and financial institutions quality aspects have also been increased. But the extent of quality is not as much as numbers. Up to two or three years back banking and financial institutions industry has been in boom. Due to global economic crisis they are untouched or there didn't seem immediate impact on Nepalese banking industry. Global crisis was due to heavy investment on unproductive sector such as real estate, and due to crash of the US economy in 2008 resulted from never ending war in Iraq and Afghanistan. Nepalese economy heavily based on remittance later got affected. Banks felt lack of deposit to meet daily transaction. Nepalese banking industry was also turned to invest heavy amount in real estate which caused heavy loss to banks. Even though the situation so frightening Nepalese banking industry remain somehow static. But new banks just established faced difficult situation and are also facing inability to meet paid capital requirement as per directives of NRB. To avoid and overcome financial difficulties or financial distress NRB has brought some motivating policies to encourage merger of banks which may prove good to those banks facing difficulties. Even though commercial banks taken as sample have seemed performing well they may face difficulties due to financial and economic crisis in later years of study period. NRB has to be active to monitor, supervise, and implement its policies strictly to ensure depositors' will be safe. Because some banks have not followed directives, and guidance of NRB on time and gone bankrupt, some were nearly bankrupted, some bank due to corruption are losing public trust. NRB's requires timely intervention to secure general public if the banks do not follow directives on time.

In last it is recommended to NRB to make directives to make banks invest on productive sectors and priority sectors such as energy.

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[www.nepalsbib.com.np](http://www.nepalsbib.com.np)

## ANNEX A

Name and corporate office's address of selected commercial Banks

SN	Name of Bank	Address
1.	Nepal SBI Bank Ltd	Hattisar, Kathmandu Fax: +977-1-4435612 Phone: 4435516, 4435613 Email: <a href="mailto:corporate@nsbl.com.np">corporate@nsbl.com.np</a> URL: <a href="http://www.nepalsbi.com.np">www.nepalsbi.com.np</a>
2.	Kumari Bank Ltd	Durbar Marga, Kathmandu POB: 21128 Fax: +977-1-4226644 Email: <a href="mailto:info@kbl.com.np">info@kbl.com.np</a> URL: <a href="http://www.kumaribank.com.np">www.kumaribank.com.np</a>
3.	Citizen Bank International Nepal Ltd	Sharada Sadan, Kamaladi, Kathmandu POB:19681 Fax:+977-1-4265030 Email: <a href="mailto:info@ctznbank.com">info@ctznbank.com</a> URL: <a href="http://www.ctznbank.com">www.ctznbank.com</a> SWIFT: CTZNNPKA

Source: Annual Reports



## ANNEX B

### Data Related to the Selected Banks in Nepal

#### Nepal SBI Bank Ltd

(Rs. in Millions)

Fiscal Year	2062/63	2063/64	2064/65	2065/66	2066/67
Total Current Assets	12831.95	13371.93	16741.17	19560.53	25044.39
Total Current Liabilities	11853.47	12537.91	15572.80	28253.83	35397.13
Cash & Bank Balances	1481.36	1472.69	1646.97	1176.44	3441.26
Investment on Govt. Securities	3591.77	2345.58	3035.55	3306.57	4313.32
Loan and & Advances	7626.74	9460.45	12113.70	15131.75	17480.55
Fixed Deposit	6116.17	5517.47	6854.88	17438.40	22148.95
Total Deposit	11002.04	11445.29	13715.39	27957.22	34896.42
Total Working Fund	13035.84	13901.20	17187.45	30166.44	38047.68
Total Investment	3610.77	2659.45	3088.89	13286.18	16305.36
Net Profit	117.00	254.91	247.77	316.37	391.74
Interest Earned	708.72	831.12	970.51	1460.45	2269.70

Interest Paid	334.77	412.26	454.92	824.70	1443.69
Total debt	12053.47	12737.91	15772.80	28453.83	35597.13
Net Worth or Total Equity	982.37	1163.29	1414.64	1712.61	2450.55
EPS	18.27	39.35	28.33	36.18	23.69
DPS	5.00	12.59	-	2.11	5.00
Operation cost	631.18	644.98	739.65	1211.0	1980.23

Source: Annual Reports

### **Kumari Bank Ltd**

(Rs. in Millions)

Fiscal Year	2062/63	2063/64	2064/65	2065/66	2066/67
Total Current Assets	8579.08	11292.99	13944	17662.42	19462.31
Total Current Liabilities	8146.43	10892.68	13261.71	16513.61	18336.72
Cash & Bank Balances	534.63	1044.33	989.20	1806.30	2843.83
Investment on Govt. Securities	1114.32	1297.87	1469.10	1080.09	1729.92
Loan and Advances	6891.86	8929.01	11335.09	14593.35	14765.91
Fixed Deposit	3162.83	2776.48	3799.56	4527.05	7206.20
Total Deposit	7768.96	10557.09	12774.28	15710.40	17432.25
Total Working Fund	9010.28	11918.31	15026.60	18538.57	20522.47
Total Investment(Excl. of Loan and Advances)	1394.95	1678.42	2138.80	1510.83	2296.87

Net Profit	103.67	170.26	174.93	261.44	316.54
Interest Earned	605.53	791.28	957.25	1374.72	1871.07
Interest Paid	337.06	397.05	498.73	816.20	1188.92
Total debt	8146.43	10892.68	13661.71	16913.61	18736.71
Net Worth or Total Equity	863.85	1025.63	1364.89	1624.95	1785.76
EPS (Rs.)	16.59	22.70	16.35	22.04	24.24
DPS (Rs.)	1.05	1.05	0.53	0.55	12
Operation cost	511.43	600.23	800.47	1176.09	1562.88

Source: Annual Reports

### **Citizens International Bank Nepal Ltd**

(Rs in millions)

Fiscal Year	2062/63	2063/64	2064/65	2065/66	2066/67
Current Assets	-	2192.10	6220.25	11068.16	14643.12
Current Liabilities	-	2942.72	6669.88	11932.0	15208.61
Cash & Bank Balances	-	146.82	1175.16	2555.75	2680.60
Investment on Govt. Securities	-	-	177.62	336.54	1355.71
Loan and & Advances	-	2026.21	4750.34	8128.11	10785.66
Fixed Deposit	-	958.91	4037.93	3678.51	6531.41
Total Deposit	-	1553.17	6139.58	11524.43	14214.48
Total Working	-	3487.30	7269.30	12966.07	16516.88

Fund					
Total Investment (excl. of loan & advances)	-	1221.39	1174.03	2027.34	2680.17
Net Profit	-	(15.42)	54.84	95.81	193.56
Interest Earned	-	26.95	396.84	758.26	1398.83
Interest Paid	-	14.83	252.03	508.80	950.90
Total Assets	-	3487.30	7269.30	12966.07	16516.88
Total debt	-	2942.72	6669.88	11932.0	15208.61
Net Worth or Total Equity	-	544.58	599.42	1034.07	1308.27
EPS	-	(2.75)	8.70	9.58	19.36
DPS	-	-	-	10.00	12.63
Operation cost	-	50.41	360.26	674.81	1203.12

Source: Annual Reports

## ANNEX C

A sample calculation of Mean, Standard Deviation, and Coefficient of Variation of the Current Ratio of Nepal SBI Bank Ltd

Calculation Table of Mean, SD, & CV of Current ratio

Year	X	d= X- $\bar{X}$	d <sup>2</sup>
2062/63	1.08	0.154	0.0237
2063/64	1.07	0.144	0.0207
2064/65	1.08	0.154	0.0237
2065/66	0.69	-0.236	0.0557
2066/67	0.71	-0.216	0.0467
	$\sum X = 4.63$		$\sum d^2 = 0.1705$

$$\text{Arithmetic Mean } (\bar{X}) = \frac{\sum X}{N}$$

$$= \frac{4.63}{5}$$

$$= 0.926$$

$$\text{Standard Deviation } (\sigma) = \sqrt{\frac{\sum d^2}{N-1}}$$

$$= \sqrt{\frac{\sum 0.1705}{5-1}}$$

$$= 0.2064 \text{ or } 20.64$$

$$\text{Coefficient of Variation (CV)} = \frac{\text{Standard Deviation}}{\text{Arithmetic Mean}}$$

$$\begin{aligned} &= \frac{\sigma}{X} \times 100\% \\ &= \frac{0.2064}{0.926} \times 100\% \\ &= 22.29 \end{aligned}$$

## ANNEX D

A sample Calculation of Growth Rate Analysis of EPS for Kumari Bank Ltd

Banks	062/63	063/64	064/65	065/66	066/67
EPS	16.59	22.7	16.35	22.04	24.24

Here,

EPS in base year 2062/63 ( $D_0$ ) = Rs 16.59

EPS in Current year 2066/67 ( $D_n$ ) =Rs 24.24

No of year (n) = 4

Growth rate (g) =?

We have formulae,

$$D_n = D_0 (1+g)^n$$

$$\text{Or } 24.24 = 16.59 (1+g)^4$$

$$\text{Or } 24.24/16.59 = (1+g)^4$$

Now, taking 4<sup>th</sup> on both side

$$\text{Or } 1+g = 1.461$$

$$\text{Or } g = 1.4611 - 1$$

$$\text{Or } g = 0.4611$$

$$\text{Or } g = 46.11\%$$

## ANNEX E

Sample calculation of Karl Pearson's Coefficient of Correlation (r), between total deposits and total investment for Kumari Bank Ltd Calculation of coefficient of correlation between total deposit and total investment for KBL.

Let, Total Deposit=X, and Total Investment=Y

Year	X	Y	X <sup>2</sup>	Y <sup>2</sup>	XY
062/63	3162.8	1394.95	10003303.8	1945885.5	4411947.86
063/64	2776.5	1678.4	7708952.25	2817026.56	4660077.6
064/65	3799.6	2138.8	14436960.2	4574465.44	8126584.48
065/66	4527.1	1510.8	20494634.4	2282516.64	6839542.68
066/67	7206.2	2296.9	51929318.4	5275749.61	16551920.78
Total	21,472.2	9,019.85	104,573,169.1	16,895,643.75	40,590,073.4

We have formula

$$\begin{aligned}
 r &= \frac{N \sum XY - \sum X \sum Y}{\sqrt{N \sum X^2 - (\sum X)^2} \sqrt{N \sum Y^2 - (\sum Y)^2}} \\
 &= \frac{5 \times 40590073.40 - 21472.20 \times 9019.85}{\sqrt{5 \times 104573169.1 - (21472.20)^2} \sqrt{5 \times 16895643.75 - (9019.85)^2}} \\
 &= \frac{9274343.83}{7861.96 \times 1766.501} = \frac{9274343.83}{13888160.20} = 0.6678
 \end{aligned}$$

Again,

Calculation of Probable Error (PEr)

$$\text{PEr} = 0.6745 \times \frac{1 - r^2}{\sqrt{N}}$$



$$= 0.1671$$

Then,

$$6 \text{ PEr} = 6 \times \text{PEr}$$

$$= 6 \times 0.1671$$

$$= 1.0026$$

## ANNEX F

Calculation of Regression model using Data analysis tool in Excel

Model: Regression of Net Profit (NP) on Total Assets or Total Working Fund (TA)

Model Summary

<b>Bank</b>	<b>R</b>	<b>R<sup>2</sup></b>	<b>Adjusted R<sup>2</sup></b>	<b>Standard Error of Estimate</b>
NSBIBL	0.8778	0.7705	0.694	56.01
KBL	0.9717	0.9442	0.9256	22.81
CBINL	0.9711	0.9430	0.9144	25.5376

Annex F continued.....

ANNOVA

<b>Name of Bank</b>	<b>Model</b>	<b>df</b>	<b>Sum of Square</b>	<b>Mean Square</b>	<b>F</b>	<b>Significance F</b>
NSBIBL	Regression	1	31591.46	31591.46	10.069	0.0504
	Residual	3	9411.567	3137.189		
	Total	4	41003.03			
KBL	Regression	1	26443.17	26443.17	50.799	0.0057
	Residual	3	1561.639	520.5462		
	Total	4	28004.81			
CBINL	Regression	1	21560.18	21560.18	33.059	0.0289
	Residual	2	1304.335	652.1675		
	Total	3	22864.52			

Annex F Continued.....

Banks	Model	Un-standardized coefficients		Standardized coefficient	T	Significance
		B	St. error			
NSBIBL	Intercept	85.566	62.005	0.877	1.379	0.2614
	X Variable 1	0.00801	0.00253		3.173	0.0503
KBL	Intercept	-54.1298	37.8115	0.972	-1.432	0.2477
	X Variable 9	0.01729	0.00243		7.12733	0.0057
CBINL	Intercept	-64.6912	28.5604	0.971	-2.26507	0.1518
	X Variable	0.0146	0.00254		5.74972	0.02894

Where, X variable = total assets

## ANNEX G

Calculation of Trend Value of Loan and Advances, total deposit, total investment and net profit for sample banks for last five years (2062/63-2066/67) and forecasts for next three years.

### Loan and Advances

#### NSBIBL

Year	Loan and advances (Y)	X=t-2064/65	X <sup>2</sup>	XY	Yc =a+b.X Yc= 12362.64+2537.89X
2062/63	7626.7	-2	4	-15253.5	7286.856
2063/64	9460.5	-1	1	-9460.45	9824.748
2064/65	12114	0	0	0	12362.64
2065/66	15132	1	1	15131.75	14900.53
2066/67	17481	2	4	34961.1	17438.42
	∑ Y= 61814.2	∑ X=0	∑ X <sup>2</sup> =10	∑ XY= 25378.92	

Now,

$$a = \frac{\sum Y}{n}$$

$$=61814.2/5$$

$$=12362.64$$

$$b = \frac{\sum XY}{\sum X^2}$$

$$=2537.89$$

Future projection of NSBIBL for next three years

Year (t)	X=t- 2064/65	Trend Values $Y_c=12362.64+2537.89X$
2067/68	3	19976.32
2068/69	4	22514.21
2067/69	5	25052.1

**KBL**

Year	Loan and advances(Y)	X= t-2064/65	XY	X <sup>2</sup>	Yc=a+bX Yc=11303.04+2141.24X
2062/63	6891.9	-2	-13783.7	4	7020.552
2063/64	8929	-1	-8929.01	1	9161.796
2064/65	11335	0	0	0	11303.04
2065/66	14593	1	14593.35	1	13444.28
2066/67	14766	2	29531.82	4	15585.53
N	∑ Y=56515.22	∑ X=0	∑ XY=21412.44	∑ X <sup>2</sup> =10	

Future projections of KBL for next three years

Year	X=t-2064/65	Trend Values, Yc=12362.64+2537.89X
2067/68	3	17726.77
2068/69	4	19868.02
2069/70	5	22009.26

**CBINL**

Year	loan and advances (Y)	X	XY	X <sup>2</sup>	Y <sub>c</sub> = a + b .X Y <sub>c</sub> = 6422.58 + 2965.61X
2062/63	-	-	-	-	-
2063/64	2026.2	-1.5	-3039.32	2.25	1974.162
2064/65	4750.3	-0.5	-2375.17	0.25	4939.774
2065/66	8128.1	0.5	4064.055	0.25	7905.386
2066/67	10786	1.5	16178.49	2.25	10871
	∑ Y = 25690.32	∑ X = 0	∑ XY = 14828.06	∑ X <sup>2</sup> = 5	

Future projections of CBINL for next three years

years	X	Trend Value, Y <sub>c</sub> = 6422.58 + 2965.61X
2067/68	2.5	13836.61
2068/69	3.5	16802.22
2069/70	4.5	19767.83



**Total Deposit**

**NSBIBL**

Year	X= t- 2064/ 65	Total Deposit (Y)	XY	X <sup>2</sup>	Yc=a+bX Yc=19803.27+6430. 069X
2062/ 63	-2	11002.04	-22004.1	4	6943.132
2063/ 64	-1	11445.29	-11445.3	1	13373.2
2064/ 65	0	13715.39	0	0	19803.27
2065/ 66	1	27957.22	27957.22	1	26233.34
2066/ 67	2	34896.42	69792.84	4	32663.41
Total	$\sum X=0$	$\sum Y=99016.$ 36	$\sum XY=64300$ .69	$\sum X^2=$ 10	

Future projection for next three years

years	X	Trend Value $Y_c=19803.27+6430.069X$
2067/68	3	39093.48
2068/69	4	45523.55
2069/70	5	51953.62