CHAPTER-I

INTRODUCTION

1.1 General Background of the Study

Rapid economic development is important for all countries of the world. It is more urgent for the least developed countries like ours. In this context, it is but natural that existing agricultural predominance in our country has to be reduced. Nepal like other developing countries has been facing the problem of accelerating the pace of economic development.

The evolution of the organized financial sector in Nepal has more recent history compared to that in other developing south Asian countries. The financial structure which reflects the relative position of the financial system in comparison to the non-financial system has a bearing not only on the propensity to save and inducement to invest but also on the conduct of monetary policy, for the financial institutions and instruments serve as the channels of the central bank in conducting monetary policy (Shrestha, 1993;32).

Banking plays a significant role to the development of economy It provides an effective payments and credit system, which facilitates the channeling of funds from the surplus spending units (savers) to the deficit spending units (investors) in the economy. The basic task of the financial institution is to mobilize the saving of the community and ensure efficient allocation of these savings to high yielding investment projects to offer attractive and secured returns to the different sectors of the economy according to the plan priorities of the country, on the other. This process of the financial institutions gives rise to money and other financial assets, which therefore have a central place in the development process of the economy. The crated assets provide vital links between saving, investment and income.

A bank is an institution whose debt (bank deposits) are widely accepted in settlement of their people's debts to each other. Commercial banks are the largest and most diversified intermediaries in range of assets held and liabilities issued. The salient feature of commercial banks lies, in fact, not in their assets, but in their liabilities.

Financial institutions are mushrooming in Nepal in line with open door policy adapted by the government. There is keen competition among the financial institutions in accepting as much deposits as possible. Nepal has seen the deregulated and expanded financial system widely participated by the private sector over the years. This has resulted in substantial growth in deposit mobilization and loan disbursement. The competitiveness among the banks due to the autonomy given to them in the later years has led to varied activities that increased risk on the part of depositor.

The financial system in Nepal has form a narrow, repressed regime till the eighties to a dynamic expanding sector in the nineties. Indicators of the last decade shown that the sector has growth both quantitatively and qualitatively. It could be observed that, at the same time, the financial market has become more competitive, dynamic and also compels. This constitutionals network and the volume of operations of financial system have expanded and diversified with the number of increased in commercial banks.

The adoption of the market economy has given birth to too many private commercial banks in the country as said earlier. So far, all these banks are doing very well in the slowdown in the economy, interest rates are falling down. All the banks are with funds and looking for safe and profitable avenues to invest in it.

It has been attempted to analysis the comparative overall performance of BOK and NSBI and their individual strength on the basis of their internal reports and published annual reports. For the purpose, different tools and techniques have been applied to judge the performance of these organizations, drawn out the strength and weakness of the firms and try to prescribe measures to improve the performance of these two banks.

1.1.1 Brief Introduction of Sample Banks

Presently, there are altogether 31 commercial banks operating in the country. The large numbers of commercial bank is leading them to huge competition. This study focuses on the overall performance of the commercial banks. The limited resources and time has lead to make this study, a comparative study of overall performance between two leading commercial banks of Nepal. This study focuses on the overall performance of Bank of Kathmandu Limited and Nepal SBI Bank Limited.

Bank of Kathmandu Limited

Bank of Kathmandu Limited was established in 2050 B.S. in collaboration with the Siam commercial Bank PLC, Thailand under the company Act. The Siam commercial Bank has diluted and reduced its equity to 25% by selling 25% of Nepalese citizen in 1998 of its initial holding. The bank has 45 branches in operation. Authorized capital and paid-up capital of Bank of Kathmandu Limited are Rs. 2,000, 000,000 and Rs. 1,604,187,300 respectively.

Vision

To become a significant contributor to the economic development of Nepal by distinguishing the Bank as an efficient, competitive, safe and top-quality financial institution.

Mission

To offer financial services and become the “Bank of Choice” by dedicating the progress and growth of the institution to the community, customers, employees and stockholders by:

- Promoting economic growth and becoming a caring corporate citizen
- Providing excellent customer services by offering personalized quality services and products
- Including modern technologies of banking that add value to customer services

- Following strict risk-control mechanisms
- Enhancing shareholders value
- Providing challenging career and learning opportunities for the employees

Nepal SBI Bank Limited

Nepal SBI Bank is a joint venture between employee provident fund and state bank of India. It is the first Indo-Nepal joint venture in the financial sector sponsored by 3 institutions. The main objective of the bank is to carryout modern banking business in Nepal under the commercial bank Act 1974. This bank has been providing full-fledged commercial banking service to its clients. It has launched its new service-Nepal SBI mobile Shakha. The bank providing facilities are Loans and Advance, Trade finance, Bank guarantees, Hire purchase loan, Education / Housing loan, Foreign exchange facility, Automated Teller Machine (ATM) facility etc.

Here most of the ownership holds by state bank of India i.e 50.61%, where as Karmachari Sanchaya Kosh holds 15.18%, ADBN holds 5.06% and General Public of Nepal holds 29.15% owership. The main mission and objectives of this bank are as follows;

The mission

NSBI having local roots aims to achieve excellence in banking services by providing financial products, in keeping with the best international practices, to all categories of people for their own progress as well as the economic development of the Nation.

Objectives

The ever increasing competition and global changes indicate that 21st century will be full of challenges in every field, particularly, in the economic sector. Through SBI Bank has local roots, its vision, as the mission Statement mentions, is to be the foremost bank in the kingdom, bring home international standards in banking. Human resources development is uppermost on its agenda, in order to carry its people in tandem with its progress.

1.2 Scope of the Study

Commercial banks in developing countries like Nepal have the greatest responsibility towards the economic development of the country. “In the present-day world in the developed and developing money economies, the vital process of production and consumption are significantly affected by the aggregate money supply consisting of the currency, demand and time deposit with banks.

In modern times, Since credit or bank money or credit rather than changes in the total supply of the high powered money issued by the reserve held by the bank against their deposit liabilities that account for changes in the aggregate money supply.

Earlier days when commercial banks were regarded as merely purveyors of money. They are today not merely purveyors of money but are also the creators or manufacturers of money in the system. It is the banks that set the tempo of the aggregate economic activity in the system. The main goal of the banks as a commercial organization is to maximize the surplus by the efficient use of its funds and resources. In spite of being a commercial institution, it too has a responsibility (obligation) to provide social service oriented contribution for the socio-economic enlistment to the country by providing specially considered loans and advancement towards less privileged sectors.

Hence, the study is needed to examine the overall performance of the bank especially in collection of deposits and utilization. This study will help to know the overall performance of BOK and NSBI. So it will be useful for managers, shareholders, customers, public and student who would conduct further study on performance analysis of BOK and NSBI.

1.3 Statement of the Problem

A commercial bank is essentially a dealer in money. It is a financial institution, which receives deposits from public and invests it to business and enterprises against approved securities at certain rates of interest. Higher the investment on loans and advances higher will be the profit. Since investment is the major source of earning, the bank should invest as much as possible on loans and advances. But there are two major problems in front of economy, first to mobilize the greatest amount of saving for the development of the country and second, the collected saving have to be channelized in the productive sector in a planned way. The objective of domestic resource mobilization is essentially to finance development expenditure. Therefore, it is a great concern to our community to accumulate idle resource of the country and utilize them into productive uses and involve in development activities. On the one hand there is capital shortage in the country. It means, the financial resources required for various development opportunities, are not sufficient. As a result commercial banks are not making effort to attract the saving. But on the other hand the real problem is concerned with the utilization of collected resources. Such resources are sometimes looked up and not forwarded to desired sector of the country. Thus a gap is existing between the deposits collected and amounts spent on loan and advancement.

Although, joint venture banks are operationally more efficient, having better performance while comparing with local banks, but they face many problems. The main focus of statement of the problem will be toward the overall performance of NSBL, one of the well-known joint venture banks, especially in the collection of deposit and their utilization. The present study helps to evaluate the overall performance and efficiency of BOK and NSBI in utilizing the funds that are collected from public and shows how the banks has been managing its position in relation to liquidity, activity, profitability, capital structure and capital adequacy.

1.4 Objectives of the Study

The primary objective of this study is to analyze the overall performance of NSBL. However following are the specific objectives of the study:-

- To examine the overall performance of sample banks.
- To study the achievements of sample Banks.
- To evaluate the collection of deposits and their utilization.
- To provide suggestion and recommendation for the improvement of the future performance and maximum utilization of deposits.

1.5 Limitations of the Study

As every study has been conducted within certain limitations, thus the present study has the following limitations:

- This study is based only on the financial report i.e. Secondary data.
- This study has covered a five year period i.e. from 2007/08 to 2011/12.
- The study has not paid attention towards the funds flow, cash flow pattern etc.
- The data available in published annual reports have been assumed to be correct and true.
- Only limited financial tools and technique are used for analysis, so this study may not be sufficient for depth analysis.

1.6 Chapter Plan

A study on performance of BOK and NSBI on its deposits and investments has been divided into five chapters, viz, introduction, Review of Literature, Research Methodology, Presentation, Analysis and Interpretation of data and Summary, Conclusion and Recommendation.

Chapter-I: Introduction :

The introduction chapter describes an introduction of research study, which explains the statement of the problem, objective of the study, scope of the study, Limitations of the study.

Chapter-II: Review of Literature:

In this chapter, presentation of the related studies and findings as well as review of various articles similar to this study is discussed briefly.

Chapter-III: Research Methodology:

This chapter explains about the research methodology, which is used to evaluate the overall performance of the bank. It consists of research design, population, nature and sources of data, data collection procedure, data processing procedure, tools and techniques of performance analysis.

Chapter-IV: Presentation, Analysis and Interpretation of Data :

In this fourth chapter, the data required for the study are presented, analyzed and interpreted by using the tools and technique of financial management, i.e. ratio analysis and statistical tools correlation, probable error and presents the result relating to the study.

Chapter-V: Summary, Conclusion and Recommendation:

The last chapter is concerned with summary of the study, conclusion of the study and various suggestions and recommendations for the improvement of the future performance.

At the beginning of the thesis viva voce sheet, recommendation, declaration, acknowledgement, table of content and abbreviation are also submitted. And finally, bibliography and appendix are presented at the end of the study.

CHAPTER-II

REVIEW OF LITERATURE

Literature refers to the detail of anything. Review of literature is basically a stock taking of available literature in the field of research. It supports the researcher to explore the relevant and true facts for the reporting purpose in the field of study. In the course of research, review of existing literature would help the researcher to find out what studies have been conduct and what remaining to go with. In this section relevant contents related with the topic of the study are mentioned or arranged like, concepts of banks commercial banks.

2.1 Conceptual Review

2.1.1 Concept of Financial Performance

Financial performance analysis can be considered as a heart of the financial decisions. The growth and development of any enterprise is directly influenced by the financial policy. Rational evaluation of the financial performance of the financial management in public enterprises is too much involved in record keeping, raising necessary funds and maintaining relationship with the bank or other financial institutions. But financial aspect is one of the most neglected aspects of public enterprises in Nepal. However joint venture banks have analyzed financial performance for their corrective actions. But their analysis is limited within the banks themselves.

Financial performance as a part of the financial management is the main indicator of the success or failure of the firm. There are different institutions that affect or are affected by the decision of the firm. Financial condition of business firm should be sound from the point of view of shareholders, debenture holders, financial institution and nation as whole.

Though the type of analysis varies according to the specific interest of the part involved, shareholders of the firm are concerned principally with the present and expected future earnings of other enterprise. This indicates that they concentrate their analysis on the profitability of the firm.

Management of the firm is interested in all aspects of financial analysis to adopt a good financial management system for the internal control of the enterprise. Similarly, trade creditors are primarily interested in the liquidity position of the firm. Long-term creditors are more interested in the cash flow ability of the enterprise to service debt over a long run. Similarly, all the concerned groups are directly or indirectly interested about the financial performance of the firm.

The absolute accounting figures are reported in the financial statement: the balance sheet, the profit and loss account and the other statements do not provide a meaningful understating of the performance and financial position of the firm. An accounting figure conveys meaning, when it is related to some other relevant information. A quantitative judgment about the firm's financial position and performance should be made from the point view of a firm's investment. Thus financial analysis is the main qualitative judgment process of identifying the financial strengths and weaknesses of the firm by properly establishing the relationship between the items of the balance sheet and profit and loss account.

Ratio analysis is a powerful tool of financial analysis. A ration is designed as "the indicated quotient of two mathematical expressions" and as "the relationship between two or more things". In financial analysis, ratio is used as a benchmark for evaluating the financial position and performance of a firm *(Pandey: 1996; P.104).*

In the financial world, a bank's performance has mainly focused on financial performance decision. A commercial bank's performance is to be examined for various reasons. Bank regulators identify banks that are experiencing severe problems so that they can give remedy to them.

Joint venture banks in Nepal are profit making business institutions. So, the profit earned by a joint venture commercial bank in Nepal is the main financial performance indicator of the bank. However, it can not solely predict the performance of the bank by analyzing the profitability status only. Every aspect of the financial analysis is to be considered for financial performance of the bank. An analysis of income and expenditure and bankruptcy score of the bank is also the important indicators of the bank's performance.

2.1.2 Concept of Financial Analysis

Financial analysis is the process of identifying the financial strength and weakness of the concern. It is the process of critically examining in detail the accounting information given in the financial statement to gain better understanding of the firm's financial position and performance. It is performed to determine the liquidity, solvency, efficiency and profitability position of the organization. It gratifies the need of the concerned parties like potential investors, shareholders, government, general public, short term as well as long term creditors and management itself about their vested interest providing them with adequate information. "Ratio analysis is such a powerful tool of financial analysis that through its economic and financial position of a business unit can be fully x-rayed" (Kothari,1996:487).

Financial Analysis is a process if identifying the financial strength and weakness of the firm by properly establishing relationship between the items of balance sheet and the profit and loss Account. Financial Analysis of a firm consists different kinds of indicators out of which financial statement analysis, ratio analysis, sources and uses of funds are the major indicators to measure the strength & weakness of a firm. But here the study is mainly focused on the ratio analysis and some other financial indicators to analyze the financial position & performance of bank. A quantitative judgment of the financial performance and financial position of the firm should be made from viewpoint of the firm's investment. "A ratio is defined as the indicated quotient of two mathematical expressions and as the relationship between two or more figure (Pandey, 1996; P.87).

Financial analysis is a study of relationship among the various financial factors in a business as disclosed by a single set of statements and a study of trend of these factors as shown in a series of statements. By establishing a strategic relationship between the items of a balance sheet and income statement and operative data, the financial analysis unveils the meaning and significance of such items. The analysis of financial statement is necessary, the reason is that balance sheet, profit and loss account and fund flow statements even are successful to fulfill their targets but they cannot meet the requirement of different interests. To obtain the meaningful information according to own need, they should be analyzed. Ratio Analysis is widely used.

It is defined as the systematic use of ratio to interpret the financial statements so that the strength and weakness of a firm as well as its historical performance and the current financial condition can be determined.

The function of financial analysis of institution can be broken down into three major decisions a firm can make; the investment decision, the financing decision and the dividend decision. An optimal combination of the three decisions will be maximizing the value of the firm.

A powerful and most widely used tool of financial analysis is ratio analysis. A ratio is a relationship between two accounting figures expressed mathematically; the term ratio refers to the numerical or quantitative relationship between two items. The type of relationship can be expressed as percentage, fraction and proportion to number. Ratio helps summarize large quantities of financial data and to make qualitative judgment about the performance. (Source: http://www.ask.com/questions-about/ Importance-of-Ratio-Analysis)

2.1.3 Objectives of Financial Analysis

Basically there are three major objective of financial analysis.

- To select the pieces of financial information that is relevant to a particular problem.
- To fit these into a coherent picture of the problem in relation to the firms aims and financial resources.
- To suggest alternative solution to the problem.

As a matter of facts the objective of analysis depends upon the analyst as quality if the data available.

2.2 Scenario of Commercial Bank

2.2.1 Concept of Commercial Bank

A bank is an institution, which deals in money, receiving it on deposit from customers, honoring customer's drawing against such deposit on demand, collecting cheque for customers and lending or investing surplus deposit until they are required for repayment.

Simply, commercial bank means the bank, which deals in exchanging currency, accepting deposit, giving loans and doing commercial transactions. According to black's Law Dictionary Commercial bank means a bank authorized to receive both demand and time deposits, to engage in trust services, to issue letter of credit, to rent time deposit boxes, and to provide similar services.

According to commercial bank Act 2031 B.S.: Commercial bank means a bank which operates currency exchange transactions, accepts deposits, provides loan: performs, dealing, relating to commerce except are banks which have been specified for the co-operative, agricultural, industry of similar other specific objectives.

Commercial banks are the major component in the financial system. They work as the intermediary between depositors and lenders and facilitate in overall development of the economy with major thrust in industrial development.

Commercial bank came into existence mainly with the objectives of collecting the idle funds, mobilizing them into productive sector and causing and overall economic development. The bankers have the responsibility of safeguarding the interest of the depositors, the shareholders and the society they are serving. A sound banking system is important because of the key roles it plays in the economy, intermediation maturity transformation, facilitating payments, flows, credit allocation and maintaining financial discipline among borrowers.

The main activities of commercial bank are as follows:

i) Accepting various types of deposits from people, institution or company.

ii) Providing loan to various productive sectors to earn a lot of profit from it.

ii) Acting as agency functions.

iv) Providing general utility functions.

v) Providing overseas trending services.

vi) Providing information and other services.

2.2.2 Historical development of Banking System in Nepal

"Banking concept existed even in the ancient period when the rich people used to issue the common people against the providers of safe keeping of their valuable items on the presentation of the receipt: the depositors would get bank their gold and valuables of the paying a small amount of safe keeping and saving" *(Samuelson 1973; 27).*

The history of banking in Nepal can be described as a component of gradual and economic sphere of the Nepalese life. Even the financial system is still in evolutionary phase. Though establishment of banking industry was very recent, some crude bank operation was in practice even in ancient times. In Nepalese history, it was recorded that “Shankhadhar” a merchant introduced the new era known as “Nepalese Sambat” from Kantipur in 880 A.D. after having paid all the outstanding debt of the country. This shows basic of money lending practice in ancient Nepal. In 11th century during Malla Regime there was an evidence of professional moneylenders and bankers. It is further believed of professional moneylenders and bankers. It is further believed that money- lending business; particularly for financing the foreign trade with Tibet became quite popular during regime of Mallas. However, in the absence of any regulatory measures, the unscrupulous moneylenders were known to have changed exorbitant rate of interest and other extra dues on loans advanced.

The establishment of the "Tejarath Adda" by prime minister "Ranoddip Singh" during the year 1877 AD was fully subscribed by government of Kathmandu valley, which played vital role in the banking system, was regarded as the father of the modern banking institution. The prime task of "Tejarath Adda" was granting of loans and safeguarding of total national deposits. At that time, Indian currency was commonly used in most part of Terai. The primary task of the Tejarath Adda" was to attract the deposits in government exchequer at the beginning but later on public was also allowed to take the loan at the same rate of interest with gold and silver ornaments as securities and collateral. Although the institution did not accept any deposits, it had played an important role n development process of banking system in Nepal.

The main defects of this institution showed that there was no further financial institution set-up and there was no effort to expand the services. Above all of the defects, this institution did not accept any deposit from the public. In the absence of saving mobilization, the "Adda" faced financial problems making it impossible to charter to the country. Udyog Parished (Industrial Development Board) was constituted in 1936 A.D. One year after its establishment, it formulated the "Company act" and "Nepal Bank Act" in 1937 A.D.

In the year 1994 B.S. the establishment of Nepal Bank Limited, with the Imperial Bank of India came into existence under "Nepal Bank Act 1993 B.S." as the first commercial bank of Nepal. At that time Nepalese economy was characterized by the existence of dual currency system (Indian and Nepalese), which was effecting economic stability and development of nation. Thus, the need of establishment of the central bank required great urgency. As result, Nepal Rastra Bank was established as central bank of country on 13th Kartik 2013 under NRB Act 2012 with the authorized capital of Rs. 10 million fully subscribed by government.

Integrated and speedy development of the country is possible only when the competitive banking services reach nook and corners of the country. To cope this situation government setup Rastriya Banijya bank in 2022 B.S. as a fully government owned commercial bank. With the come up of RBB, banking services spread to both urban as well as rural area. Agriculture Development Bank was established for the promotion of agriculture sector in country. When the government adopted liberal and market oriented economic policy in the mid 80's Nepal allowed the entry of foreign banks of joint venture basis with foreign capital, technology and experience. Nepal Arab Bank Ltd. was the first joint venture bank established on 2041 B.S. under the commercial bank act 2031. With the opening of NABIL the door of opening joint venture banks was opened to the private sector.

2.2.3 Function of Commercial Bank

The most important function of a commercial bank is to mobilize deposits from the public. Depending upon the nature of deposits, funds deposited with bank also earn interest. The second important function of a commercial bank is to grant loans and advances. A loan is granted for a specific time period. Generally, commercial banks grant short-term loans. An advance is a credit facility provided by the bank to its customers. It differs from loan in the sense that loans may be granted for longer period, but advances are normally granted for a short period of time. Banks grant short-term financial assistance by way of cash credit, overdraft and bill discounting or both. Besides the functions of accepting deposits and lending money, banks perform a number of other functions .These is as follows –

- Issuing letters of credit, travelers' cheques, circular notes etc.
- Undertaking safe custody of valuables, important documents, and securities by providing safe deposit vaults or lockers.
- Providing customers with facilities of foreign exchange and remittance service.
- Transferring money from one place to another; and from one branch to another branch of the bank.
- Standing guarantee on behalf of its customers, for making payments for purchase of goods, machinery, vehicles etc.
- Collecting and supplying business information.
- Issuing demand drafts and pay orders.

2.2.4 Role of Commercial Banks in the Development of the Economy

In fact, the development of a country is linked with the economic development of that country. Economic development is connected with banking system. Without economic development, there is no possibility of raising the living standard of the people of that place. A great amount of capital needs to be utilized for the economic development. It is possible to utilize a great amount of capital only with the medium of commercial banks. Thus, we can say that development of the commercial banking system is the backbone of the economic development.

Commercial banks play and important role in directing the affairs of the economy is various ways. The operation of commercial banks records the economic pulse of the country. The size and composition of their transaction reflect the economic happening in the country. Commercial banks have played a vital role in giving the direction of economic growth over the time by financing the requirement of industries and trade in that country. By encouraging the thrift among the people, banks have fostered the process of capital formation in the country. In the context of deposit mobilization, commercial banks include the savers to hold their savings in the form of bank deposits thus help brining the scattered resources into the organized banking sector which and be allocated to the different economic activities. In this way, they help in country's capital assets formation. Through, their advances banks also help the creation of income out of which further saving by the community and further growth potentials emerge for the good of the economy. In a planned economy, banks make the entire planned productive process possible by providing funds to the public sector, joint sector or private sector of any type of organization. All employment income distribution and other objectives of the plan as far as possible subsumed into the production plan which banks finance.

The importance of commercial banks in directing the economic activities in the system is immense. Not only in the highly developed economics where the commercial and industrial activities are paralyzed in the absence of banks, even in the developing countries, most of the economic activities particularly or organized sectors are bank based. Therefore, in a nutshell, it can be said that the growth of the economy is tied up with the growth of the commercial banks in the economy.

2.3 Review of Related Studies

2.3.1 Review of Books

In the words of "Financial ratio can be derived from the balance sheet and the income statement. They must be analyzed on a comparative basis. A comparison of ratio of the same firm over time uncovers leading clues in evaluating changes and trend in the firm's financial condition and profitability. Ratio may also be judged in comparison with those of similar firms in the same line of business and when appropriate, with an industry average and we can look to further progress in regard" (Van Horne 2001).

The profit earned by the firm is the main financial performance indicator of business enterprises. Profit result mainly from successful business management, cost control, credit extension, risk management and general efficiency of operation. 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 the trend of these factors as shown in a series of statement. (Altmann and Myer; 2003).

Ratio analysis is used to compare a firm's financial performance and status to that of other firms or to itself over time." Ratio helps to analysis the financial statements may be termed as ratio analysis. When this definition of ratio is explained with reference to the items shows in financial statements, then it is called accounting ratio. It is a mathematical relationship between two related items expressed in quantitative form. The ratio is the measurement of quantitative relationship between two or more items of financial statement connected with each others. Erich has described financial analysis as "Financial analysis is both an analytic and judgmental process that helps to answer the questions that have been properly posed to and therefore, it is a mean to an end. We can stress enough that financial analysis is an aid that allows those responsible for results to make sound decisions" (Erich and Gitman; 2006).

"Financial statements provide information about a firm's position as well as its operations over same period. However, the real value of financial statement uses in the fact that they can be used to predict the firm's financial position in the future and to determine expected earnings and dividends. From an investor's stand point predicting the future is what financial statement is all about, while management stand points financial statement is useful to anticipate future conditions and for planning actions that will influence the future course of events." "Financial analysis is a process of identifying the financial strength and weakness of the firm by properly establishing relationship between item of balance sheet and the profit and loss account. The ratio analysis is defined as the systematic use of ratio to interpret the financial performance so that the strength and weakness of firm as well as its historical performance and current financial condition can be determined (Besley and Brigham;2007).

2.3.2 Review of Journals and Articles

In this section, effort has been made to examine and review of some related articles in different economic journal, discussion papers, magazines and other related books.

Bhandari, (2008) in his article *"Joint Venture Banks in Nepal"* it focused that despite the increase in numbers, the joint venture banks are concentrated in urban centers, especially in major cities, with will all their headquarters in Kathmandu. This trend has resulted two ways effect on the operation of the government owned commercial banks in Nepal. First, the comparatively attractive interest rate and service promptness of these private banks have drawn the public deposit's to their side there by reducing financial liabilities of the former, Second, as a result of reduction in financial liabilities government operated commercial banks have been forced to shut down some of their branches in remote area of the country. Nevertheless, look at the activities of these joint venture banks provide a boost into the tremendous aid they provide to the national economy. They have been instrumental in mobilizing capital more efficiently and to be a larger extent especially, and they have been more helpful in funding the private sectors.

Karki, (2009). in his article, *"Priority on Financial Sector"* concludes that following an introduction of the reform in the banking sectors as an integrate part of the liberal economic policy more banks and finance companies have come up as a welcome measure of competition. Slowly and steadily, the two governments controlled banks, Nepal Bank Ltd. and Rastriya Banijya Bank has also shown an improvement of non-performing loans and is taking steps to adopt improved technology. However, higher economic growth with social justice bringing a significant benefit to the poor is yet to the activated as envisaged by the NG".

NRB, (2010) in the article *"Financial Supervision of commercial Bank."* Nepal Rastra Bank concludes that, Banks are gradually starting to realize that, in today's competitive banking environment, exemplary customer service is one of the distinguishing characteristics that banks can exploit to establish a competitive edge. Since most banks offer comparable products and services, they should continually search for a competitive advantage that will attract new customers and help them retain existing ones. Banks are therefore, looking to develop innovative products and services to maintain superior customer service levels while at the same time remaining profitable. With the number of market players in the rise, the competition has been obviously growing in the banking industry. The most obvious effect of the rising competition can be seen in the interest rates offered by the banks. The banks, which some years ago, used to charge rates in the range of 15 to 20 percent, have dramatically reduced their interest rates to 8 to 12 percent, in order to remain competitive. Banks are now gradually shifting towards IT based solutions to enhance service delivery in order to address customer concerns. More and more banks are embracing E-banking and provision of ATMs to reduce long queues in banking hall. In addition, some of the banks have launched mobile phone banking services which facilitates several account enquiry tools, including account balances, thereby, minimizing the need for customers to visit banking halls. This drive towards IT based solutions will continue to gather momentum in the future as banks will find it be very difficult to survive in the ever growing competition without some form of competitive advantage. Another trend observed in banking industry in 2004/05 is the shift towards multiple banking relationships explored by large corporate houses. In order to remain competitive, Banks are seen to be increasingly encouraging business houses to transact with them. This has lead to a creation of large volume of unutilized limits with the bank and in order to get a large piece of the pie banks are increasingly accepting risks, which they otherwise would not have taken. The unyielding competition has also leaded the banks to accept collaterals that are more risky and unsecured. The volume of loans against the hypothecation of stocks, receivables and other assets are on the rise. In the absence of statute for registration of charges (hypothecation) in the current assets, the risk of over financing is eminent and banks are exposed to a higher degree of risk.

Tamang, (2011) in the article *"Financial performance of the commercial banks"* using descriptive and diagnostic approach. she has concluded that Per capita deposits as well as per capita credit in commercial banks have increased tremendously. The contribution of deposits on GDP has also been seen increasing. The assets holding of commercial banks are growing with 42.12% rate that is supposed to be higher for a developing country. It can be concluded that the commercial banks in Nepal are performing their function of collecting the domestic property.

The structural ratio of commercial banks shows that banks invest on the average 75% of their total deposits on government securities and the shares of other financial institutions. The analysis of reserve position of commercial banks showed quite high percentage of deposit as cash reserve. The debt equity ratio of commercial banks is more that 100% in most of the time period under study period. It leads to conclude that the commercial banks are highly leverage and highly risky. Joint venture banks had higher capital adequacy ratio but has been declining every year. Return ratios of all banks show that most of the time foreign banks have higher return as well as higher risk that the government owned banks. In case of the analysis of management achievement, foreign banks were found to have comparatively higher risk than local banks.

2.3.3 Review of Previous Thesis

Khatiwada, (2007) has conducted thesis research on *"A Comparative study on investment Policy on Joint Venture banks and financial companies of Nepal"*

Main Objectives

- To examine the financial performance of sample banks in terms of Liquidity, Activity, Profitability, Leverage and capital adequacy ratios.
- To examine the causes of gap existing between deposits and loan.
- To provide suggestion and recommendation for the improvement of the future performance and maximum utilization of deposits.

Major Findings

- All the selected firms have not successfully been mobilization their deposits but the finance companies have mobilize their deposits smoothly in comparison with JVBs.
- The profitability position of all finance companies was better than that of JVBs.
- The liquidity position of all JVBs is comparatively better than that of finance companies.
- There is significant relationship between deposit and loan and advance of BOKL. Similarly there is significant relationship between deposits and total investments, total assets and net profit of Kathmandu finance company.
- The JVBs have less interest risk and capital risk in comparison to finance companies.

Koirala, (2008) has conducted thesis research on *"An investment policy of joint venture banks in Nepal"*

Main Objectives

- To examine the financial performance of sample banks.
- To study the achievements of sample banks.
- To evaluate the effectiveness of collection of deposits and their utilization.

Major Findings

- The mean ratio of total investment to total deposit/ ratio of SBI has lowest than other on the other hand SCBNL has the highest mean ratio. Moreover Everest bank ratios are more consistent.
- Investment on government securities to total financial investment ratios of NB has lowest mean ratio and SCBNL has highest meant ratio. SBI'S ratios are homogenous and NB has less homogenous.
- The mean ratio of investment on shares/debentures to total investment ratios of SCBNL has quite lowest ratio and NB highest. NB less n/homogenous ratio and NABIL has more homogenous ratio.
- The trend value of all JVBs has an increasing trend. It means if other things remaining same, JVBs will increase their investment in future.

Singh, (2009) conducted a study on the *"Financial performance of Bank of Kathmandu and NABIL Bank Ltd."*

Main Objectives

- To find out the Assets and Liabilities of sample banks.
- To find out the Eps, Dps, Mps and Bvps of sample banks.
- To examine the causes of gap existing between deposits and loan, investment etc.

Major Findings

- In compare with BOK, NABIL is doing well. NABIL has invested most of its capital in profitable sectors. NABIL and BOK both have meet the normal; standard current assets ratio to meet the short term obligation of its customers.
- NABIL suffers less from loan provision than BOK due to efficient loan policy.
- Due to NABIL has more deposits of non bearing interest, it has low interest to its depositors and gain the profit from this interest also. While, BOK's interest bearing depositors are high and have paid the interest to them.
- To make the profit, BOK is taking a higher risk than NABIL by providing the higher portion of its deposit as a loan.

Thapa (2010), conducted a study on the *"Financial Performance of Commercial Banks in Nepal: A comparative study of Nepal Bank Ltd. and NABIL Bank Ltd"*.

Main Objectives

- To examine the financial performance of sample banks in terms of Liquidity, Activity, Profitability, Leverage and capital adequacy ratios.
- To examine the causes of gap existing between deposits and loan, investment etc.
- To provide suggestion and recommendation for the improvement of the future performance and maximum utilization of deposits.

Major Findings

- The activity ratio measuring the efficiency achievement towards the income generating activities of the NBL. The bank should invest all the excess balance of liquid fund in income generating sector.
- NBL should move towards the modern banking facilities and prompt service in each branch and provide incentive and new product to attract relative growth trend of deposit.
- Banks are recommended to activate foreign technology and investment in Nepal by means of their wide international banking sector and make Nepalese personnel capable of operating these banks as efficiently as international banks.

Yadav (2011) conducted a study on the *"A study on comparative Financial Performance Analysis of Joint Venture Banks in Nepal".*

Main Objectives

- To examine the financial performance of sample banks.
- To study the achievements of sample banks.
- To evaluate the effectiveness of collection of deposits and their utilization.

Major Findings:

- Capital structure ratios of both banks are low. Debt portion is more used in NBBL but profitability position is lower than NABIL Bank Ltd.
- The trends of total deposits, total investment, total income. Total expenses, total net income, interest expenses and interest earning of NBBL is exceptionally higher than NABIL Bank Ltd.
- NBBL is more risky bank than NABIL Bank Ltd. so, researcher recommended that portfolio situation should be carefully examined from

time to time. The varied rate of return should be verified in such a way that balances the conflicting goal of maximum yield and minimum risk.

- It should be careful in increasing profit in real sense to maintain the confidence of shareholders, depositors and its customers. Comparatively NABIL profitability position is better than NBBL.

Satula, (2012) in the thesis entitled "*Financial performance of commercial banks and returns to investors: With special reference to BOK, EBL, SCBNL, NIBL, NABIL"*

Main Objectives

- To evaluate Liquidity position of these Banks, to analyze comparative financial performance of these banks,
- To study comparative position of selected banks, to offer a package of suggestion to improve the financial performance.

Major Findings

- Commercial Bank except SCBNL and NABIL are not maintaining constant DP Ratio, It is recommended to maintain a constant DP Ratio so as to have the confidence of general shareholders.
- Net income of SCBNL is the highest and that of BOK is lowest during the study period.
- SCBNL has highest EPS and that of BOK is the lowest. SCBNL and NABIL are continuously paying the dividend maintaining higher DP Ratio. SCBNL provides the highest return on equity as compared to other commercial banks under study.

2.4 Research Gap

Research gap focuses that the researcher how much trying to give new things from his/her study with compare to previous studies held by different researcher. Due to changing the time and circulation of environment the previous and present may be different in many ways. This is a research gap between the present research and previous research. Though many affiliated researchers have been done in this area but these have been very few exclusive researchers on this subject.

To achieve the target goals of Financial Performance are not enough. To achieve target goals, Financial policies and acts must be implemented in effective manner. In Nepal more financial policies and acts are made but it is not implemented so the target goal is not achieved. Financial policy is an important part of the Bank who play vital role on economy in Nepal.

All the researchers mentioned in review of literature are concerned with the study of laws, provisions and structure of financial performance of commercial bank. Hence in this study overall commercial banks are taken in a definable way which makes sense. The selection of the banks is made here on the basis of commercial banks.

CHAPTER-III

RESEARCH METHODOLOGY

This study is analytical in nature. A true research design is basically concerned with various steps to collect the data for analysis and draw a relevant conclusion. The research design allows the researchers to take an appropriate measure and direction towards the predetermined goals and objectives.

"A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure" (Kothari; 1992:25).

The research examines the facts and postulates in certain frameworks on details and supplies the important information on subject matter, summary of the study, major findings of the study, recommendations, conclusion etc. are the most significant information among them, they are derived with the help of some financial and statistical tools were adapted to evaluate and collection procedure of commercial banks viz. NSBI and BOK in consideration not only to research about them but also to facilitate among them.

Research methodology may be defined as "a systematic process that is adopted by the researcher in studying problem with certain objective and view". In other word, research methodology describes the methods and process applied in the entire aspect of the study focus of data, data gathering instrument and procedure, data tabulating and processing and methods of analysis. It is really a method of critical thinking by defined and redefining the problems, formulating hypothesis or suggested solution and collecting and organizing and evaluating data, making deduction and making conclusions.

In addition, "Research methodology is a way to systematically solve the research problem. It may be understood as a science of studying how research is done scientifically. In this study, the various steps are generally adopted by a researcher in studying his/her research problem along with the logic behind them” *(Kothari 1990; P.10).*

Research methodology is a path from which we can solve research dilemma systematically to accomplish the basic objective of the study. It consists of a brief explanation of research design, nature and sources of data, method of data collection and methods of tools used for analyzing data.

3.1 Research Design

Research is a theory building activities. Theory is a relationship between two or more facts. The research design refers to the conceptual Structure within which the research is conducted. "A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure." Thus, research design is a plan to obtain the answer of research question through analysis of data. The first step of the study is to collect necessary information and data concerning the study of NSBI and BOK. The task will be fulfilled by the collection of secondary data and various published information regarding the context. In this study, two different research designs are used to meet the objective of the study. These designs are analytical and descriptive.

Analytical, descriptive and exploratory research design will be used for clearing the situation on the basis of presented data and facts. The data is carefully studied and analyzed systematically under specific major headings so as to meet the objective of the study. On the other hand, the accumulated data is described and tabulated systematically. In this study ratio analysis and statistical tools has been designated to analyze the overall performance.

3.2 Population and Sampling

The total variables/observation is simply called population. There are 31 commercial banks (including government owned, private and joint ventures) at present in the market and only one banks is taken as sample of the study. The process of selecting the sample out of the population is called sampling. In this study, the population size is 31 and the sample size are 2. The sample size is 6.26% of the population size in this study, there are various types of sampling procedure but researcher selects judgment sampling.

3.3 Nature and Sources of Data

The various data required for the study, but mainly the study is conducted on the basis of secondary data. It is collected from the NSBI and BOK. The published financial data are mostly used in this study to analyze the overall performance of NSBI and BOK especially on its deposits and investments, viz. Balance Sheet and Profit and Loss Account of NSBI and BOK are the only base of this study which are of secondary in nature.

This study is mainly based on secondary data, which are the annual report especially from Balance Sheet and Profit and Loss Account published by NSBI and BOK from 2007/08 to 2011/12. Thus, the sources of data are the published annual reports and data are of secondary nature. The primary data will not be used throughout the study.

3.4 Data Collecting Procedure

The basic secondary data in forms of published reports by NSBI and BOK of different years are collected from the bank. In other words, the published financial statements, viz. Balance Sheet and profit and Loss Account of Nepal SBI Bank Ltd and Bank of Kathmandu have been collected from the account department as I myself work in the same department therefore it has been convenience for me to collect the data.

3.5 Data Processing Procedure

In this study, the data extracted from the annual reports that were published by NSBI and BOK have been processed and interpreted considering the requirement of the study. This study basically uses the secondary data, which were firstly collected and tabulated into a separate from systematically. Simple statistical analysis, such as, percentageare calculated, where necessary, and these are presented and analyzed in descriptive way. Similarly, the financial ratios and statistical tools are widely used for the analysis and interpretation of the performance of NSBI and BOK.

3.6 Tools and Techniques of Performance Analysis

Some tools and techniques have been followed to analyze and evaluate the information of the financial statements, viz. Balance Sheet and Profit and Loss Account. The below maintained ratios and statistical tools have been used

3.6.1 Financial Tools

1) Liquidity Ratios: This ratio measures the liquidity position of a firm. It measures the firm's ability to meet its short- term obligations. As a Financial Analytical tools, following liquidity ratios will be used.

a) Current Ratio : This ratio shows the bank's short-term solvency. It shows the ratio of current assets over the current liabilities. This ratio can be computed by dividing the Total Current Assets by Current Liabilities, which can be presents as:

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

Higher ratio indicates the strong short – term solvency position and vice versa.

b) Cash and Bank to Total Deposit ratio: Cash and bank balances are the most liquid current assets. This ratio measures the percentage of most liquid fund with the bank to make immediate payment to the depositor. This ratio can be computed by dividing Cash and Bank Balance by Total Deposit can be presented as:

Cash and Bank to Total Deposit Ratio = $\frac{Cash \,\&\, Bank\ Balance}{Total\ Deposits}$

Cash and bank balance includes cash in hand, cheques and other cash items, balance with domestic and foreign banks. The total deposit includes deposit made by customers though different accounts like current (demand deposit), saving, fixed deposit, call deposit and other deposit accounts.

c) Cash and Bank Balance to Current Assets Ratio: This ratio measures the proportion of most liquid assets viz. cash and bank balance among the total current assets of the bank. Higher ratio shows the bank's ability to meet its demand for cash. The ratio is computed by dividing Cash and Bank Balance by Current Assets, presented as under,

Cash and Bank Balance to Current Assets Ratio = $\frac{Cash \,\&\, Bank\ Balance}{Current\ Assets}$

d. Fixed Deposit to Total Deposit

This ratio shows the relationship of fixed deposit to total deposit. Fixed deposit is high interest bearing deposit and it has a fixed maturity period. The greater the proportion of fixed deposits, the lesser will be the proportion of current or shot term deposits in the total deposits, which indicates higher short term liquidity position of a bank

Fixed deposit to total deposit = $\frac{Fixed\ Deposit}{Total\ Deposits}$

e. Saving Deposit to Total Deposit

This ratio is calculated in order to find out the proportion of total deposit which is short term and interest bearing. It is calculated by dividing the amount of saving deposit by the total deposit. The formula is:

Saving deposit to total deposit = $\frac{Saving\ Deposit}{Total\ Deposits}$

f. Short Term Loan to Total Deposit

It shows the portion of short term loan to total deposit it can be expressed as:

Short term loan to total deposit = $\frac{Short\ Term\ Loan}{Total\ Deposits}$

2) Assets Management Ratios (Activity Ratios)

Activity ratios are employed to evaluate the efficiency with which the firm manages and utilizes its assets. These ratios are also called turnover ratios because they indicate the speed with which assets are being converted turnover into sales. Asset management ratio measures how efficiently the bank manages the resources at its command.

The following ratios are used under this asset management ratio.

a) Loan and Advances to Total Deposit Ratio

This ratio is calculated to find out that which banks are able to utilizing their total deposits on loan and advances for profit generating purpose. This ratio can be obtained by dividing loan and advances by total deposits, which can be states as,

Loan and Advances to Total Deposit Ratio = $\frac{Loan\ \&\ Advance}{Total\ Deposits}$

b) Total Investment to Total Deposit Ratio

This ratio implies the utilization of firm's deposit on investment in government securities and share debentures of other companies and bank.

This ratio can be calculated by dividing total investment by total deposit. Which can be states as? Total Investment

Total Investment to Total Deposit Ratio = $\frac{Total\ Investment}{Total\ Deposits}$

Hence, total investment consist investment on government securities, investment on debenture and bonds, share in subsidiary companies, share in other companies and other investment.

c. Loan and Advance to Fixed Deposit

This ratio measures how many times the amount is used on loans and advances in comparison to fixed deposits. Loan and advances are the major sources of investment to generate income for the commercial banks and fixed deposits are high interest bearing obligation. The formula is

$$\text{Loan and advances to fixed deposit ratio} = \frac{Loan\ \&\ Advance}{Fixed\ Deposits}$$

d. Loan and Advances to Saving Deposit

Fixed deposits are the high interest bearing obligation then saving deposits are the second high interest bearing obligation. This ratio measures the extent to which the bank is successful to mobilize the saving deposit on loans and advance for the purpose of profit maximization. The formula is:

$$\text{Loan and advance to saving deposit} = \frac{Loan\ \&\ Advance}{Saving\ Deposits}$$

3) Profitability Ratios

Profitability ratios are used to indicate and measure the overall efficiency of a firm in terms of profit and financial performance. For better performance, profitability ratios of firm should be higher. Under this, the following profitability ratio will be computed.

a) Return on Loan and Advances Ratio: This ratio indicates how efficiently the bank utilizes its resources in the form loans and advances. This also measures the earning capacity of its loans and advances. This ratio is computed by dividing Net Profit (Loss) by Loans and Advances which can be expressed as:

$$\text{Return on Loan and Advances Ratio} = \frac{\textit{Net Profit (Loss)}}{\textit{Loans \& Advance}}$$

b) Return on Total Asset Ratio (ROA): This ratio measures the overall profitability of all working fund i.e. total assets. It is also known as Return on Assets (ROA). This ratio is calculated by dividing net profit (loss) by total working funds. This can be presented as,

$$\text{Return on Total Working Fund Ratio (ROA)} = \frac{\textit{Net Profit (Loss)}}{\textit{Total Working Fund}}$$

c) Interest Income to Total Income Ratio: This ratio measures the volume of Interest Income in Total Income of the bank. The high ratio indicates the high contribution made by the Lending and Investing and Vice Vera. This ratio can be computed by dividing Interest Income by Total Income presented as under,

$$\text{Interest income to Total Income ratio} = \frac{\textit{Interest Income}}{\textit{Total Income}}$$

d) Total Interest paid to Total Asset Ratio: This ratio is computed to find out percentage of interest earned to Total Assets (Working Fund). Higher ratio implies better performance of the bank in terms of interest earning on its total working funds. This fund is computed by dividing Total Interest Earned by Total Working Fund can be presented as

$$\text{Total Interest earned to Total Working Fund Ratio} = \frac{\textit{Total Interest Paid}}{\textit{Total Working Fund}}$$

4) Risk Ratio

Risk and uncertainty is a part of business loss. All the business activities are influenced by risk, so business organization cannot achieve a good return as per their desires. The profitability of risk makes banks investment a challenging task. Bank has to take risk to get return on its investment. The risk taken is compensated by the increase in profit. So the banks options for high profit have to accept the risk and manage it efficiently. A bank has to have ides of the level of risk of risk that one has to bear while investing its funds.

Through following ratios, effort has been made to measure the level of risk inherent in the EBL and NABIL.

a) Credit Risk Ratio: Credit Risk Ratio measures the possibility that loan will not be repaid or that investment will deteriorate in quality or go into default with consequent loss to the bank. By definition, Credit Risk ratio is expressed as the percentage of Non- Performing Loan to Total Loan and Advances.

Bank utilizes its collected fund by providing credit to different sections. There is risk of default or non- repayment of loan. While making investment, bank examines the credit risk involved in the project. The Credit Risk Ratio shows the proportion of non- performing assets in total Loan and Advances of the bank and vice- versa.

$$\text{Credit Risk Ratio} = \frac{\textit{Loan and Advance}}{\textit{Total Assets}}$$

b) Liquidity Risk Ratio: The Liquidity Risk of the bank defines its Liquidity needs for deposit. The cash and bank balance are the most liquid assets and they are considered as banks liquidity sources and deposit as the liquidity needs. The ratio of Cash and Bank Balance to Total Deposit is an indicator of bank's liquidity of need. This ratio is low if funds are kept idle as sash balance but this reduces profitability increase and also the risk.

Thus, higher liquidity ratio indicates less profitable return and vice-versa. This ratio is calculated as below:

$$\text{Liquidity Risk ratio} = \frac{\textit{Cash and Bank Balance}}{\textit{Total Deposit}}$$

3.4.2 Statistical Tools

Statistical methods are the mathematical techniques used to facilitate the analysis and interpretation of numerical data secured from groups of individuals or groups of observation from a single individual. The figures provide details description and tabulates as well as analyze data without subjectivity, but only objectivity. The result can be presented in brief and complicated problems can be studied in very simple way. It becomes possible to convert abstract problems into figures and complex data in the forms of table.

Some important statistical tools will be used to achieve the objective of this study. In this study statistical tool such as Arithmetic mean, standard deviation, coefficient of variation, coefficient of correlation and trend analysis will be used.

i) Arithmetic Mean: In mathematics and statistics, the arithmetic mean, often referred to as simply the mean or average when the context is clear, is a method to derive the central tendency of a sample space. The term "Arithmetic Mean" is preferred in mathematics and statistics because it helps distinguish it from other averages such as the geometric and harmonic mean

In addition to mathematics and statistics, the arithmetic mean is frequently in fields such as economics, sociology, and history, though it is used in almost every academic field to some extent. For example, per capita GDP gives an approximation of the arithmetic average income of a nation's population. The most popular and widely used measures of representation from the entire data by one value are what most laymen call an ‘average’ and what the statistician call the arithmetic mean. Its value is obtained by adding together all the times and by dividing this total by the number of items.

The formula to calculated mean is given by,

Mean, $\overline{X} = \frac{\sum X}{N}$

Where, X = Mean of the values

$\sum X$ = Summation of the values

N = No of observation

ii) Standard Deviation (S. D.): Standard deviation is a widely used measurement of variability or diversity used in statistics and probability theory. It shows how much variation or ‘ Dispersion’ there is from the ‘Average’. A low standard deviation indicates that the data points tend to be very close to the mean, where as high standard deviation indicates that the data are spread out over a large range of values.

Technically, the standard deviation of a statistical population, data set, or probability distribution is the square root of its variance. A useful property of standard deviation is that unlike variance, it is expressed in the same units as the data.

The standard deviation is absolute measures of dispersion. A small standard deviation means a high degree of uniformity of the observation as well as homogeneity of series and vice – versa.

Standard Deviation $(\sigma) = \sqrt{\frac{1}{n}\sum\left(X - \overline{X}\right)}$

Where, σ = Standard Deviation

N= number of items

iii) Coefficient of Variation: The calculated standard deviation gives an absolute measure of dispersion. Hence where the mean value of the variable is not equal, it is not equal, it is not appropriate to compare two pairs of variables based on standard deviation only. The coefficient of variation (C.V.) is given by the following formula in the percentage basis:

Coefficient of Variation $$C.V. = \frac{\sigma}{\overline{X}} \times 100$$

iv) Measures of Correlation: We examine the relation between the various variables. The correlation between the different variables of a bank is compared to measure the performance of these banks. Correlation refers to the degree of relationship between variables. If between two variables, increase or decrease in one causes increase or decrease in another, then such variables are correlated variables. The reliability of the value of coefficient of correlation is measured by probable error. The correlation coefficient describes the degree of relationship between two variables. It interprets whether variables are correlated positively by which it is helpful to make appropriate investment policy for profit maximization. The Karl Pearson coefficient of correlation (r) is given by following formula

Coefficient of Correlation $$(r) = \frac{\sum XY}{N\sigma_1\sigma_2}$$

Where, $X = X - \overline{X}$

$Y = Y - \overline{Y}$

σ_1= Standard series of X

σ_2= standard series of Y

N= Number of pair of Observations

The Karl Pearson coefficient of correlation always falls between - 1 to +1. The value of correlation in minus signifies the negative correlation and in plus signifies the positive correlation. As the value of correlation reaches to the value of Zero, it is said that there is no significant relationship between the variables.

v) Trend Analysis: Among the various methods of determining trend of time series, The most popular and mathematical method is the least square method. Using this least square method, it has been estimated the future trend values of different variables. For the estimation of linear trends line following formula can be used:

$Y = a + bx$

Where, Y = Dependent variable

X = Independent variable

A = Y - intercept

B = Slope of the trend line

CHAPTER-IV

DATA PRESENTATION AND ANALYSIS

Introduction, review of literature and research methodology are presented in the previous chapters that provide the basic inputs to analyze and interpret the data. Presentation and analysis of data is the main body of the study. In this chapter collected data are analyzed and interpreted as per the stated methodology in the previous chapter. The main sources of data are secondary data, which are mainly related to the overall performance and fund mobilization of BOK and NSBI Bank Limited. All the performance is analyze by calculating following ratios.

4.1 Financial Tools

4.1.1 Ratio Analysis

Ratio analysis shows the mathematical relationship between two accounting figures. It helps to analyze the financial strengths and weaknesses of the banks. It is also inevitable for the quantitative judgment with which the liquidity management of banks can be presented properly.

4.1.1.1 Liquidity Ratio

Commercial bank must maintain its satisfactory liquidity posting to satisfy the credit needs of community, to meet demands for deposit–withdrawals, pay maturity obligation in time and convert non-cash assets into cash to satisfy immediate needs without loss to bank and consequent impact on long-run profit. Liquidity ratio is mainly used to analyze the short-term strength of commercial banks.

A) Analysis of Current Ratio

This ratio measures the liquidity position of the commercial banks. It indicates the ability of Banks to meet the current liquidity.

Table: 4.1

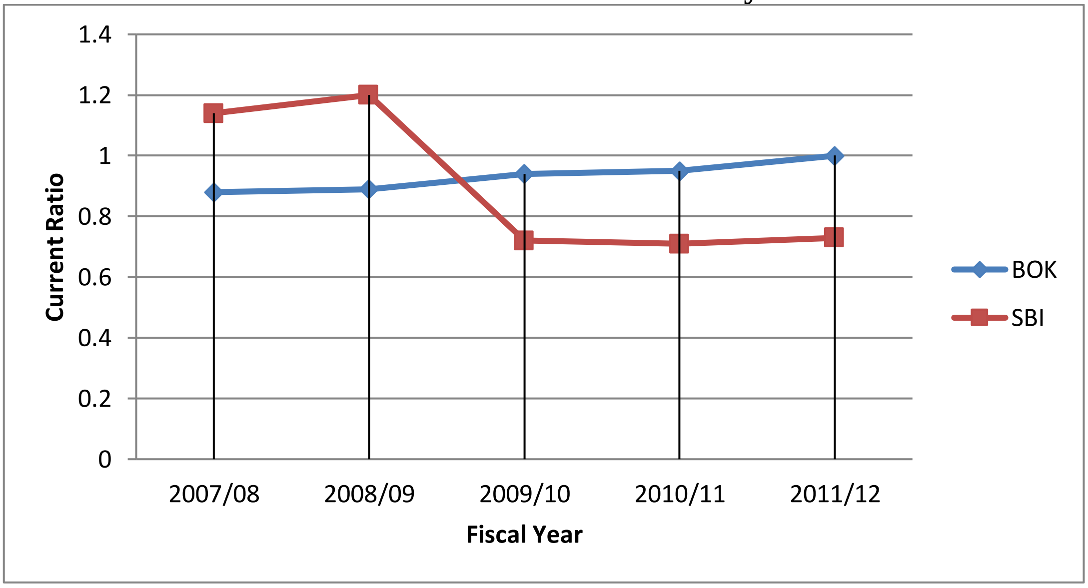
Current Assets to Current Liability (in times)

F/Y \ Banks	BOK	SBI
2007/08	0.88	1.14
2008/09	0.89	1.20
2009/10	0.94	0.72
2010/11	0.95	0.71
2011/12	1.00	0.73
Total	4.66	4.5
Mean	0.93	0.90
S.D	0.05	0.25
C.V	0.05	0.28

Source: Appendix 1

Figure: 4.1

Current Assets to Current Liability Ratio



Above Table and figure shows the current ratio of selected commercial banks during the study period. The current ratio of BOK is increasing and SBI Bank is in fluctuating trend. BOK is general said that have sound ability to meet their short-term obligations. In the case of BOK the C.R. is high in 2011/12 i.e 1%. In an average, liquidity position of BOK is greater than SBI i.e. 93>90. Due to high mean ratio BOK is better than SBI. Likewise, S.D. and C.V of SBI is higher than BOK i,e 0.25>0.05 and 0.28>0.05. It can be said that C.R. of SBL is more consistent than BOK. Lastly, from the above analysis it is known BOK have better liquidation position and SBI have improving its liquidation position.

B) Cash and Bank Balance to Total Deposit Ratio

Cash and Bank Balance to Total Deposit Ratio indicates the bank ability to meet their daily requirement of depositors. Higher ratio shows the greater ability of the firms to meet customer demands on their deposits. Following table shows cash and bank balance to total deposit of sample banks during the study period.

Table: 4.2

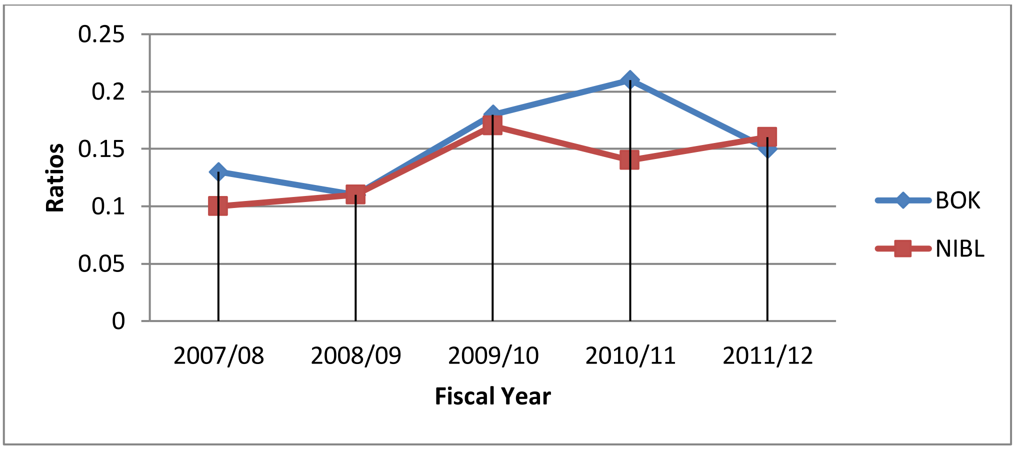
Cash and Bank Balance to Total Deposit Ratio

Banks / F/Y	BOK	SBI
2007/08	0.06	0.10
2008/09	0.05	0.10
2009/10	0.09	0.07
2010/11	0.10	0.10
2011/12	0.07	0.12
Total	0.37	0.49
Mean	0.07	0.10
S.D	0.02	0.02
C.V	0.31	0.18

Source: Appendix 2

Figure: 4.2

Cash and Bank Balance to Total Deposit Ratio



Above Table and figure revels that the Cash and Bank Balance to Total Deposit Ratio of sample banks where both sample banks are in fluctuating trend. The highest ratio of BOK and SBI are 0.10 time in FY 2010/11 and 0.12 times in 2011/12 respectively. Similarly, the lowest ratio of BOK and SBI are 0.05 in f/y 2008/09 and 0.07 in f/y 2009/10 respectively in different year.

The mean ratio of BOK and SBI, is 0.07 times and 0.10 times respectively. SBI has higher ratio than the BOK, which shows its greater ability to pay depositors money as they want. Similarly, BOK and SBI both bank has same S.D i.e 0.02 times and CV of BOK is 0.31 i.e 31%, when SBI CV is 0.18 i.e 18%.

The above analysis has to conclude that the cash and bank balance position of SBI with respect to BOK is better in order to serve its customer's deposits. It implies the better liquidity position of SBI from the viewpoint of depositor demand.

C) Cash and Bank Balance to Current Assets Ratio

Cash and Bank Balance are the most liquid or quick assets. Cash and bank balance to current assets ratio represents the liquidity capacity of the firms as per cash and bank balance. Higher the ratios, better the ability of the firms to meet the daily cash requirement of their customers. But high ratio is not so preferred to the firms because firms have to manage the cash and bank balance to current asset ratio in such manner that firm may not be paid interest on deposits and may not have liquidity crisis.

Following the states the cash and bank balance to current assets of sample banks during the study period.

Table: 4.3

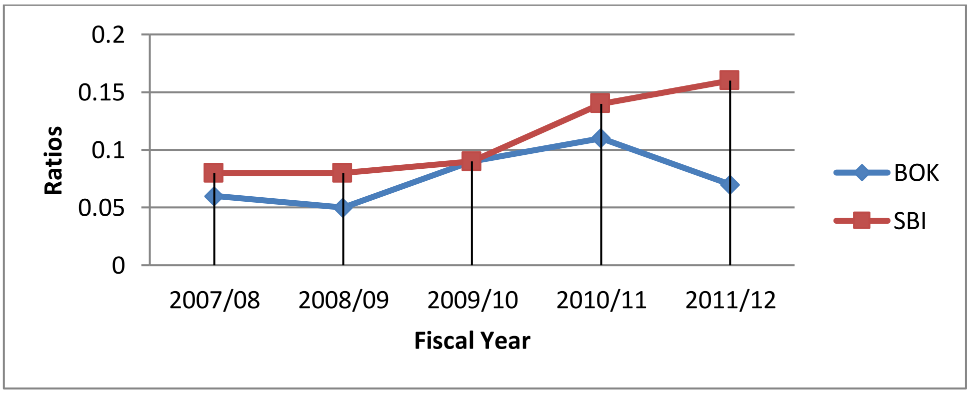
Cash and Bank Balance to Current Assets

Banks / F/Y	BOK	SBI
2007/08	0.06	0.08
2008/09	0.05	0.08
2009/10	0.09	0.09
2010/11	0.11	0.14
2011/12	0.07	0.16
Total	0.38	0.55
Mean	0.08	0.11
S.D	0.02	0.03
C.V	0.29	0.31

Source: Appendix 3

Figure: 4.3

Cash and Bank Balance to Current Assets



Above table and figure reveals that cash and bank balance to current assets ratio of BOK is in fluctuating trend and SBI is in increasing trend. The mean ratio, SD and

CV of SBI is higher than BOK. The higher mean ratio shows SBI's liquidity position is better than that of BOK. That indicates that it has more inconsistency in the ratios in comparison to others.

Regarding the above analysis, it can be concluded that SBI has a little bit better ability to meet daily cash requirements of their customers but there is not any fix policy to maintain the standard ratio of cash balance over the period of both sample banks.

D) Investment on Government Securities to Current Assets Ratio

This ratio examines that portion of a commercial bank's current assets, which is invested on different government securities. More or less, each commercial bank is interested to invest their collected funds on different securities issued by government in different times to utilize their excess funds and for other purpose. Although those securities can be sold easily in the financial market or they can be converted into cash, they are liquid assets like cash and bank balance. It shows the portion of current assets to banks that are invested on various securities. Government securities are the more secured investment alternatives. These securities are also called risk less investment but less return is generated than others risky assets.

Table: 4.4

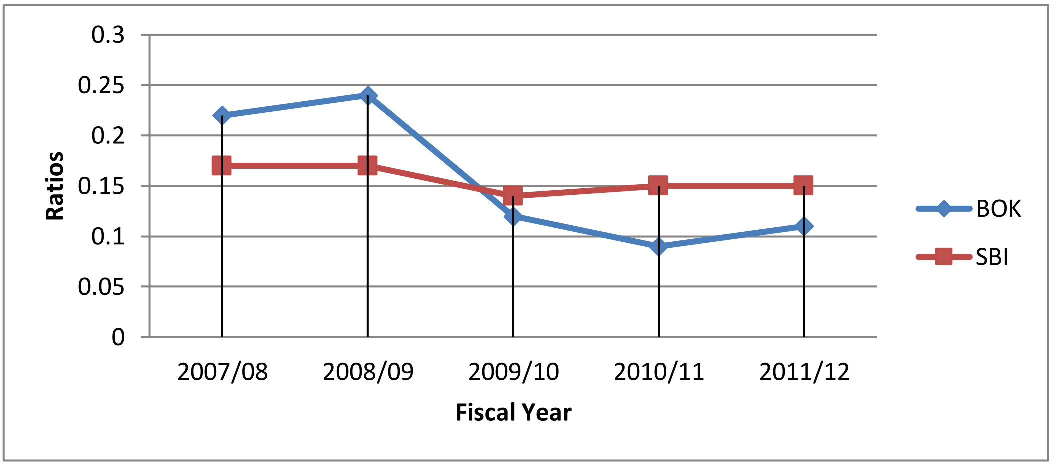
Investment on Government Securities to Current Assets

Banks / F/Y	BOK	SBI
2007/08	0.22	0.17
2008/09	0.24	0.17
2009/10	0.12	0.14
2010/11	0.09	0.15
2011/12	0.11	0.15
Total	0.79	0.77
Mean	0.16	0.15
S.D	0.07	0.010
C.V	0.44	0.067

Source: Appendix 4

Figure: 4.4

Investment on Government Securities to Current Assets



Above table and figure shows investment on government securities to current assets ratio of sample banks. These Banks has fluctuating type ratios. The table shows the highest ratio of BOK is 0.24 times in FY 2008/09 and lowest is 0.09 times in FY 2010/11. In the same way, the ratio of SBI is 0.17 times in FY 2007/08 & 2008/09 and lowest is 0.14 times in FY 2009/10.

The mean ratio of BOK is 0.16 i.e. 16 percent which is higher than the mean ratio of SBI 0.15 i.e. 15 percent. It means BOK has invested more money in risk free assets than that of SBI bank. In another words in other word less mean ratio means it has emphases on more loan and advances and other short term investment than investment in govt. securities. For minimization of investment risk, SBI should divert its investment in govt. securities. Similarly, S.D. is of BOK and SBI ie 0.07 and 0.010 and C.V is 0.44 for BOK and 0.067 of SBI.

(e) Loan and Advances to Current Assets Ratio

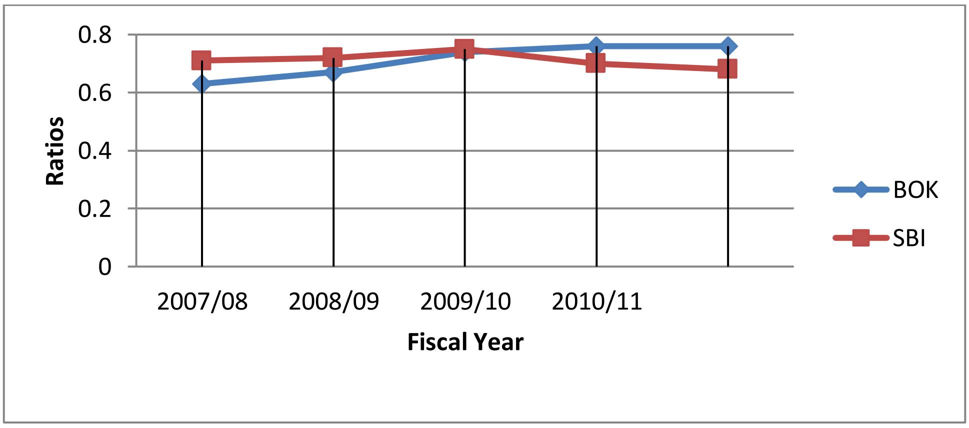
To make a high profit mobilizing its fund in the best way, a commercial bank should not keep its all collected funds as cash and bank balance but they should be invested as loan and advances to the customers. In the present study loan & advances represent to local and foreign bills discounted and purchased and loans, cash credit and overdraft in local currency as well as inconvertible foreign currency.

Table: 4.5
Loan and Advances to Current Assets

Banks / F/Y	BOK	SBI
2007/08	0.63	0.71
2008/09	0.67	0.72
2009/10	0.74	0.75
2010/11	0.76	0.70
2011/12	0.76	0.68
Total	3.55	3.55
Mean	0.71	0.71
S.D	0.062	0.025
C.V	0.09	0.04

Source: Appendix 5

Figure: 4.5
Loan and Advances to Current Assets



Above Table and Figure shows the total mean, standard deviation and coefficient of variation of loan & advances to current assets ratio of sample commercial banks. Through this table loan & advances to current assets ratios of the sample CBS are analyzed. In case SBI loans and advances to current asset ratios are in fluctuating trend. The highest ratio of BOK is 0.76 in f/y 2010/11 & 2011/12 and the lowest ratio is 0.63 in f/y 2007/08. Similarly, the highest ratio of SBI is 0.75 in 2009/10 and the lowest is o.68 in 2011/12.

Mean value of this ratio of BOK is 71%, which is equal to SBI ie 71%. But SD and CV of BOK is greater then SBI i.e. 0.062>0.022 and 0.09>0.04 respectively.

4.1.1.2 Assets Management Ratio

A commercial bank must be able to manage it's assets very well to earn high profit, so to satisfy it's customers and for own existence. Assets management ratio measures how efficiently the bank manages the resources at its commands. Through following ratios, assets management ability of banks has been measured.

A) Loan and Advance to Total Deposit Ratio

This ratio actually measures the extent to which the banks are successful to mobilize the total deposit on loan and advances for the purpose of profit generation. A higher ratio of loan and advances indicates better mobilization of collection deposit and vice-versa. But it should be noted that too high ratio might not be better from its liquidity point of view. Following Table shows the loan and advances to total deposit ratio of related banks.

Table: 4.6

Loan and Advance to Total Deposit

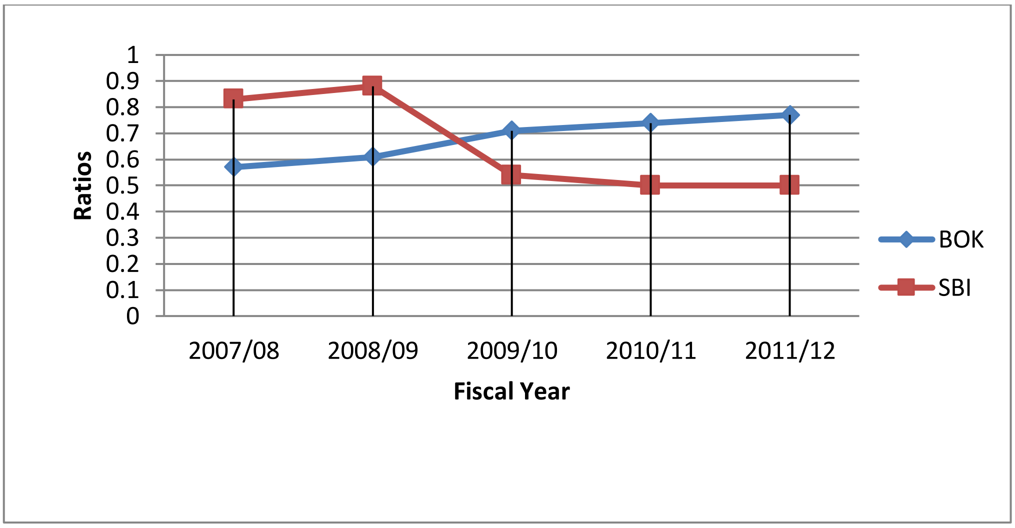
Banks / F/Y	BOK	SBI
2007/08	0.57	0.83
2008/09	0.61	0.88
2009/10	0.71	0.54
2010/11	0.74	0.50
2011/12	0.77	0.50
Total	3.41	3.26

Mean	0.68	0.65
S.D	0.09	0.19
C.V	0.13	0.29

Source: Appendix 6

Figure: 4.6

Loan and Advance to Total Deposit



Above table and figure shows that the loan and advances to total deposit ratio of BOK is in increasing and SBI is in fluctuating trends. The ratio of SBI is more fluctuating. BOK has higher average ratio than SBI in study period ie 0.68>0.65. So BOK has higher ratio than that of SBI. It reveals that the deposit of BOK is quickly converted in to loan and advances to earn income. According to NRB directives above 70% to 90% of loan and advances to total deposit ratio is able to better mobilization of collected deposit. So all of the year the BOK and SBI both hasn't meet the NRB requirement or it hasn't utilized its deposit to provide loan. The mean, S.D. and C.V of BOK has 0.68, 0.09 and 0.13. So as SBI has 0.65, 0.19 and 0.29.

B) Total Investment to Total Deposit Ratio

Commercial banks and financial companies invest their collected funds in various government securities and other financial or non-financial companies. This ratio measures how successfully and efficiently the banks are mobilizing their funds on investment in various securities. This ratio of sample banks are calculated and presentation below.

Table: 4.7

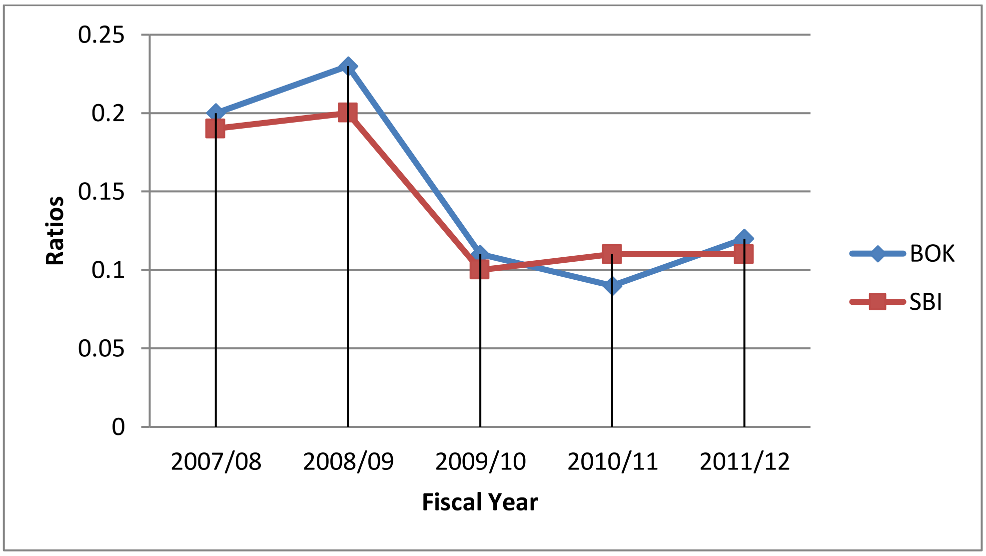
Total Investment to Total Deposit

Banks F/Y	BOK	SBI
2007/08	0.20	0.19
2008/09	0.23	0.20
2009/10	0.11	0.10
2010/11	0.09	0.11
2011/12	0.12	0.11
Total	0.75	0.72
Mean	0.15	0.14
S.D	0.06	0.05
C.V	0.40	0.35

Source: Appendix 7

Figure: 4.7

Total Investment to Total Deposit



Above table and figure shows that total investment to total deposit ratio of BOK and SBI. These banks have decreasing and fluctuating trend of total investment to total deposit ratio. Higher ratio of BOK is 23 percent in FY 2008/09 and lowest ratio is 9 percent in FY 2010/11 and in the same way the highest ratio of SBI is 20% in 2008/09 and lower is 11% in 2010/11 and 2011/12. Investment volume of SBI is lower than BOK.

The mean, SD and CV of BOK is 0.15, 0.06 and 0.40 and SBI is 0.14, 0.05 and 0.35 respectively.

C) Loan and Advances to Total Assets Ratio

A commercial bank's working fund plays very active role in profit generation through fund mobilization. This ratio reflects the extent to which the banks are successful in mobilizing their total assets on loan and advances for the purpose of income generation. A high ratio indicates better mobilization of funds as loan and advance and vice-versa. The following table shows loan and advances to total assets of sample banks as follows.

Table: 4.8

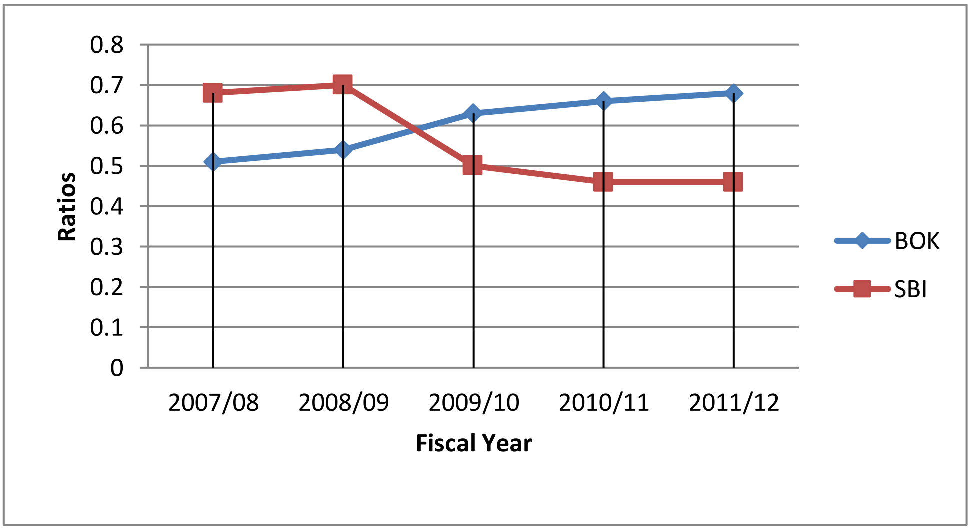
Loan and Advances to Total Assets

Banks / F/Y	BOK	SBI
2007/08	0.51	0.68
2008/09	0.54	0.70
2009/10	0.63	0.50
2010/11	0.66	0.46
2011/12	0.68	0.46
Total	3.01	2.81
Mean	0.60	0.56
S.D	0.074	0.1207
C.V	0.1233	0.2148

Source: Appendix 8

Figure: 4.8

Loan and Advances to Total Assets



Above table and figure shows the loan and advances to total assets ratio of sample banks during the study period. Loan and advances to total assets of BOK, is increasing and SBI is in fluctuating trend. While observing the ratios of BOK are better mobilizing of fund as loan and advances and it seems quite successful in generating higher ratio in each year. The mean of BOK, and SBI is 0.60%, and 0.56% respectively. So BOK has higher ratio than SBI. It reveals that in total assets, BOK has high proportion of loan and advances. BOK has utilized its total assets more efficiently in the form of loan and advances. The higher C.V. of SBI states that it has less uniformity in these ratios throughout the study period. S.D. and C.V. of SBI has high than the BOK.

D) Investment on Government Securities to Total Assets ratio

It is not possible to apply all collection, deposit and other resources in to loan and advances for the banks. Therefore, they arrange their total assets in various sectors. Among all possible sectors, investment on government securities is one, which is very less risky. Invest on government securities to total assets ratio measures how successfully selected banks have applied their total assets on various forms of government securities in profit maximization and risk minimization point of view. The higher ratio represents the better position of fund mobilization into investment on government securities and vice-versa.

Table: 4.9

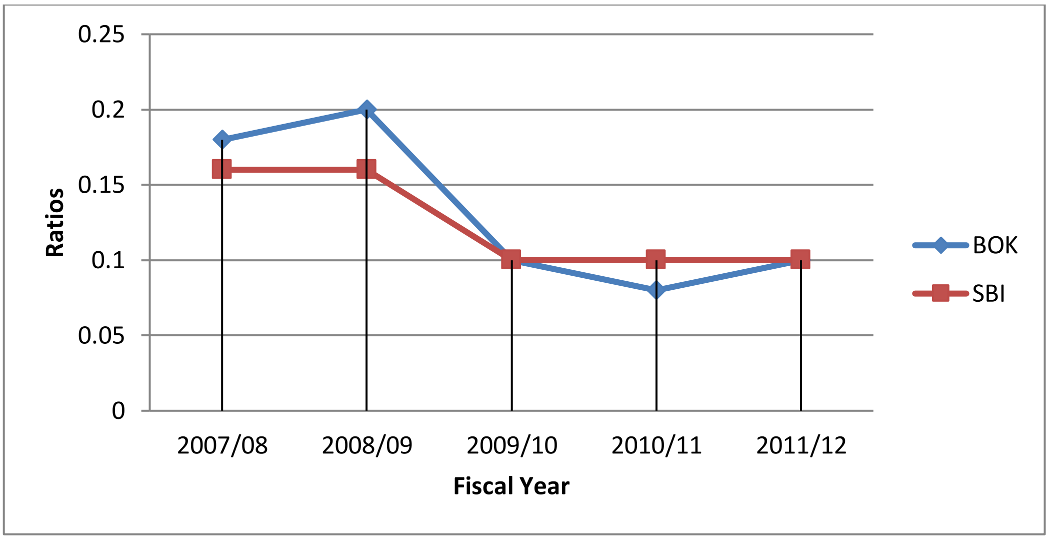
Investment on Government Securities to Total Assets

Banks / F/Y	BOK	SBI
2007/08	0.18	0.16
2008/09	0.20	0.16
2009/10	0.10	0.10
2010/11	0.08	0.10
2011/12	0.10	0.10
Total	0.66	0.62
Mean	0.13	0.12
S.D	0.05	0.034
C.V	0.4047	0.2736

Source: Appendix 9

Figure: 4.9

Investment on Government Securities to Total Assets



Above table and figure shows that the investment on government treasury bills to Total assets of BOK and SBI are in fluctuating trend. The highest ratio of BOK and SBI are 20% in 2008/09 and 16% in 2007/08 and 2008/09 respectively. The lowest ratio BOK and SBI are 8% in 2010/11 and 10 respectively.

From the table we notice that mean ratio of BOK and SBI are 13% and 12% respectively. The mean of BOK is higher than SBI. It means BOK has invested more money in risk free assets than that of SBI. In another words SBI has emphases on more loan and advances and other short-term investment than investment in govt. securities. For minimization of investment risk, SBI should divert its investment in govt. securities.

4.1.1.3 Profitability Ratio

The major performance indicator of any firm is profit. The objective of investment policy is to make good return. Any organization has to desire of earning high profited which helps to survive the firm and indicates the efficient operation of the firm. Profit is the essential part of business activities to meet internal obligation, overcome the future contingencies, make a good investment policy, expand the banking transaction etc. Profitability ratios are the best indicators of overall efficiently. Here, those ratios are presented and analyzed which are related with profit as well as fund mobilization. Through the following ratios, effort has been made to measure the profit earning capacity of BOK and SBI.

A) Return on Loan and advances

Every financial institution tries to mobilize their deposits on loan and advances properly. So this ratio helps to measure the earning capacity selected banks. Returns on loan and advances ratio of selected banks are presented as follows

Table: 4.10

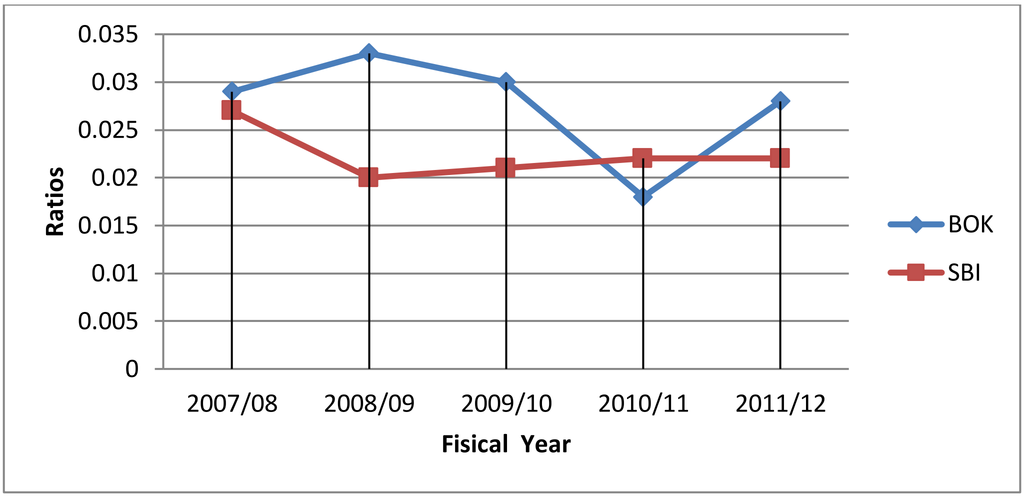
Return on Loan and advances

Banks / F/Y	BOK	SBI
2007/08	0.029	0.027
2008/09	0.033	0.020
2009/10	0.030	0.021
2010/11	0.018	0.022
2011/12	0.028	0.022
Total	0.138	0.112
Mean	0.028	0.022
S.D	0.006	0.003
C.V	0.2009	0.1156

Source: & Appendix 10

Figure: 4.10

Return on Loan and advances



Above table and figure shows that return on loan and advances ratio of BOK and SBI is in fluctuating trend. The highest ratio of BOK is 3.3% in the year 2008/09 and and lowest ratio is 1.8% in year 2010/11. The mean ratio is 2.8%.Whereas highest ratio of SBI is 2.7% in year 2007/08 and lower ratio is 2% in FY 2008/09. The mean ratio is 2.2%. These both banks show the normal earning capacity in loan and advances and same earning capacity in form of loan and advances.

From the table we notice that BOK has higher ratio of average in the study period. It can be concluded that SBI have utilized the loan and advance for the profit generation in same earning capacity than SBI. However both seem to have poor performance in order to have returns from loan and advances because of heavy less than five percents of return on loan and advances as five percent is benchmarking ratio in this case.

B) Return on Total Assets

This ratio measures the overall profitability of all working fund i.e. Total assets. A firm has to earn satisfactory return on working funds for its survival. The following table shows return on total assets ratio of selected banks.

Table: 4.11

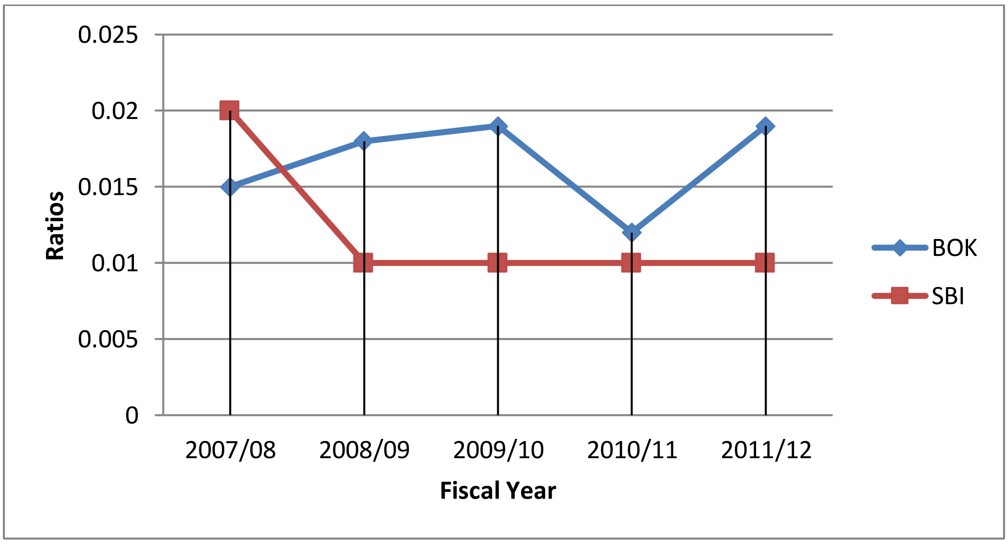
Return on Total Assets Ratio

Banks / F/Y	BOK	SBI
2007/08	0.015	0.02
2008/09	0.018	0.01
2009/10	0.019	0.01
2010/11	0.012	0.01
2011/12	0.019	0.01
Total	0.082	0.06
Mean	0.016	0.01
S.D	0.003	0.004
C.V	0.1903	0.2841

Source: Appendix 11

Figure: 4.11

Return on Total Assets Ratio



Above table and figure shows the Return on Total Assets of BOK and SBI. This table states the net profit to total assets of selected banks during the study period. BOK has constantly increasing trend of return on its total assets except 2010/11 however, SBI seems same in every year ie 0.02 except 2007/08. Where as S.D.

and C.V of BOK is 0.003 and 0.1903 respectively, SBI has 0.004 and 0.2441 relatively.

C) Total interest Earned to Total Operating Income Ratio

Total interest earned to total operating income ratio reveals that portion of interest income on total operating income of the firms. The major sources of income for the bank are interest income so the banks should mobilize their funds in more interest generating sectors considering the risk and return. This ratio measures how successfully the selected banks have been mobilizing their fund uninterested generating assets during last from FY 2007/08 to 2011/12 are presented to analyze in the following table. The major sources of income for the bank are interest income. So the banks should mobilize their funds in more interest generating sectors considering the risk and return.

Table: 4.12

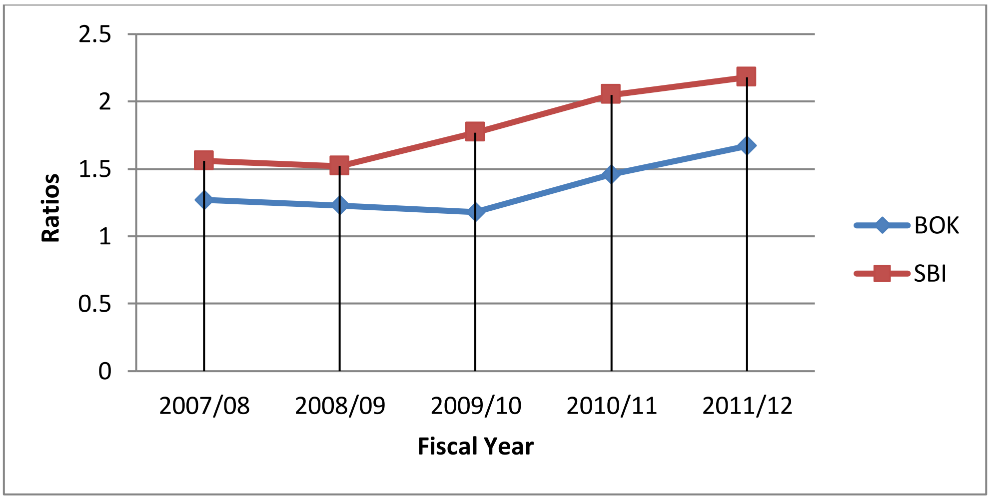
Total Interest Earned to Total Operating Income Ratio

Banks / F/Y	BOK	SBI
2007/08	1.27	1.56
2008/09	1.23	1.52
2009/10	1.18	1.77
2010/11	1.46	2.05
2011/12	1.67	2.18
Total	6.81	9.08
Mean	1.36	1.82
S.D	0.20	0.294
C.V	0.1490	0.1622

Source: Appendix 12

Figure: 4.12

Total Interest Earned to Total Operating Income Ratio



Above table and figure shows Interest Earned to Operating Income Ratio of BOK and SBI. SBI has increasing ratio of study period except 2008/09 and BOK in fluctuating trend. SBI has greater share of total interest earn in its total operating income in each year. The mean ratio of BOK and SBI is 1.36 times and 1.82 times respectively. SBI and BOK both has higher ratio, it indicates the high contribution in operating income made by lending and investing activities (core banking activity). Thus, from short term view, BOK and SBI is in good condition but from long term view it is not so good condition. In overall and has managed sound interest earned to operating income ratio.

The S.D. and C.V of BOK is 20 and 14.90, similarly SBI has 29.4 and 16.22 times respectively.

D) Total Interest Paid to Total Assets Ratio

Total interest paid to total assets ratio help to show and measure the percentage of interest paid by the firm in comparison with total assets. If interest paid to total assets ratio is higher, there will be higher interest expenditure on total assets. The following table shows that total interest paid to total assets of selected banks.

Table: 4.13

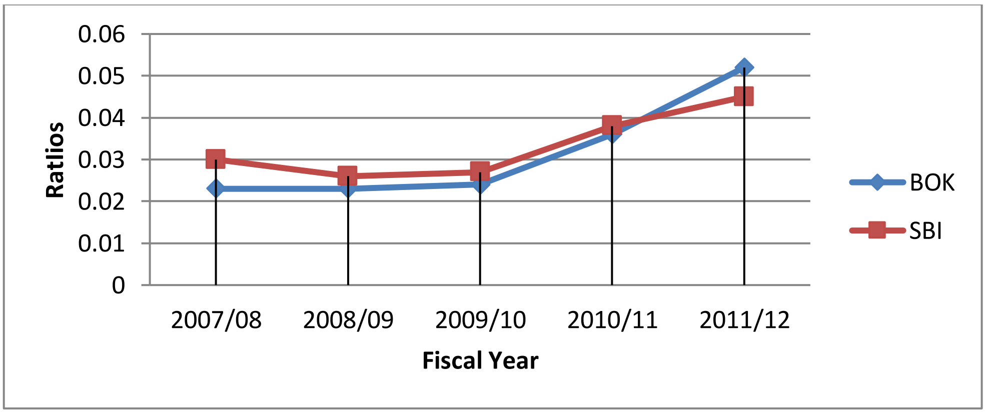
Total Interest Paid to Total Assets Ratio

Banks F/Y	BOK	SBI
2007/08	0.023	0.030
2008/09	0.023	0.026
2009/10	0.024	0.027
2010/11	0.036	0.038
2011/12	0.052	0.045
Total	0.157	0.167
Mean	0.031	0.033
S.D	0.013	0.0081
C.V	0.4018	0.2440

Source: Appendix 13

Figure: 4.13

Total Interest Paid to Total Assets Ratio



Due to the little bit higher ratio in each year of SBI, it seems less conscious about borrowing cheaper fund. SBI shows the fluctuating trend of the interest paid to total asset ratio, its average ratio is 3.3% whereas BOK shows increasing trend and it has maintained average ratio of 3.1%. In comparison, SBI seems ineffective in getting cheaper fund from the mean point of view. The S.D. and C.V of BOK is 1.3% and 40.18%, likewise SBI is 0.81% and 24.40% respectively.

4.1.1.4 Activity Risk Ratio

Risk and uncertainty is a part of business loss. All the business activities are influenced by risk, so business organization cannot achieve a good return as per their desires. The profitability of risk makes banks investment a challenging task. Bank has to take risk to get return on its investment. The risk taken is compensated by the increase in profit. So the banks options for high profit have to accept the risk and manage it efficiently. A bank has to have idea of the level of risk of risk that one has to bear while investing its funds. Through following ratios, effort has been made to measure the level of risk inherent in the BOK and SBI.

A) Liquidity Risk Ratio

The liquidity risk of the bank defines its liquidity need for deposit. The cash and bank balance are the most liquid assets and they are considered as banks liquidity sources and deposit as the liquidity needs. The ratio of cash and bank balance to total deposit is an indicator of bank's liquidity of need. This ratio is low if funds are kept idle as cash balance but this reduces profitability, when the banks makes loan, its profitability increase and also the risk. Thus, higher liquidity ratio indicates less profitable return and vice-versa. This ratio is calculated as below:

Table: 4.14

Liquidity Risk Ratio

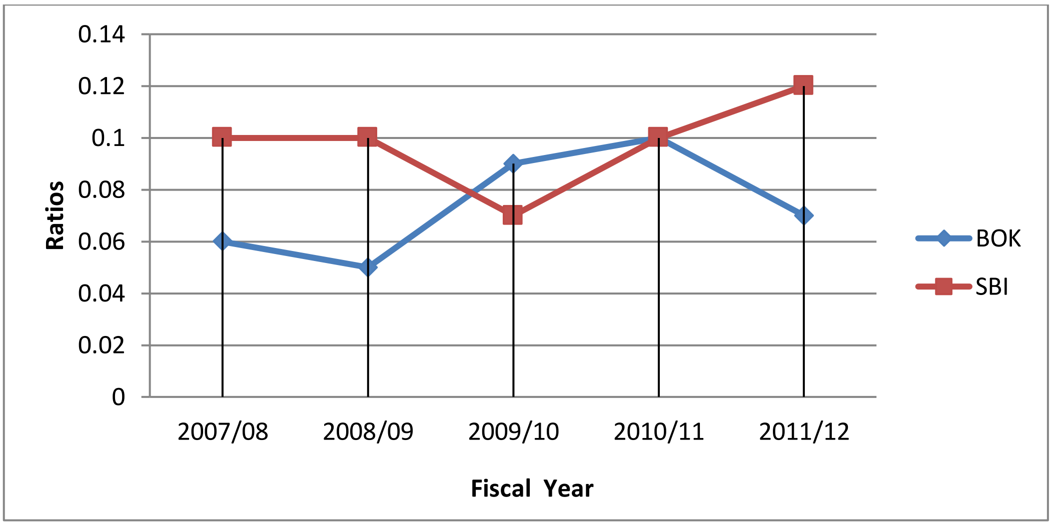
Banks / F/Y	BOK	SBI
2007/08	0.06	0.10
2008/09	0.05	0.10
2009/10	0.09	0.07
2010/11	0.10	0.10

2011/12	0.07	0.12
Total	0.37	0.49
Mean	0.07	0.10
S.D	0.02	0.02
C.V	0.31	0.18

Source: Appendix 14

Figure: 4.14

Liquidity Risk Ratio



Above table shows liquidity risk ratio of the selected banks. Ratio of BOK and SBI is in fluctuating trend. The higher average ratio of them is 0.10 of SBI. likewise BOK get 7% average mean. The S.D and C.V of BOK is 2% and 31%, and SBI is 2% and 18% .

The average mean ratio of SBI is greater than that of BOK. It signifies that SBI has sound liquid fund to make immediate payment to the depositors.

B) Credit Risk Ratio

Credit risk ratio measures the possibility that loan will not be repaid or that investment will deteriorate in quality or go into default with consequent loss to the bank. Actually credit risk ratio shows the proportion of non-performing assets in total loan and advances of a bank.

Table: 4.15

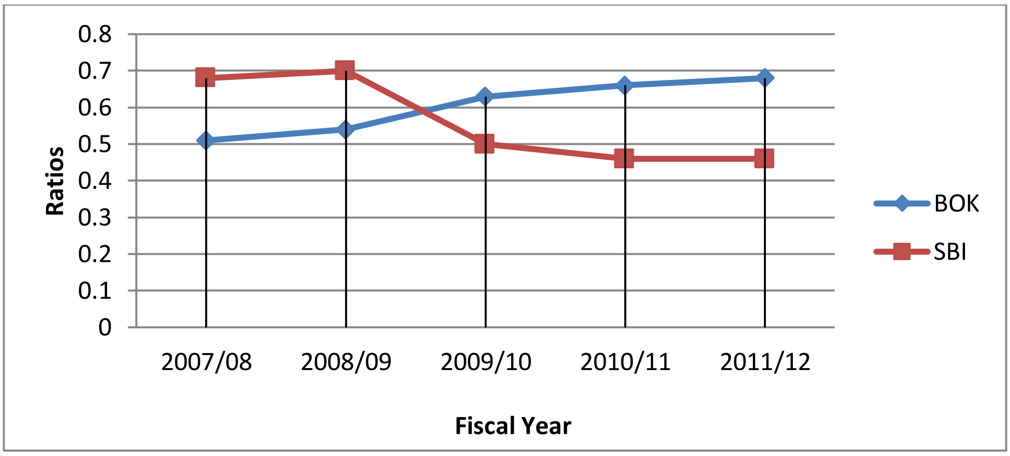
Credit Risk Ratio (%)

Banks / F/Y	BOK	SBI
2007/08	0.51	0.68
2008/09	0.54	0.70
2009/10	0.63	0.50
2010/11	0.66	0.46
2011/12	0.68	0.46
Total	3.01	2.81
Mean	0.60	0.56
S.D	0.074	0.1207
C.V	0.1233	0.2148

Source: Appendix 15

Figure: 4.15

Credit Risk Ratio (%)



The table 4.15 and figure 4.15 shows that the total mean, standard deviation & coefficient of variation of credit risk ratio of sample commercial banks. The credit risk ratios of BOK is in increasing trend and SBI is in fluctuating trend. The higher ratio of BOK is 68% and lower is 51% whereas, the higher ratio of SBI is 70% and lower is 46%.

4.2 Statistical Tools

Some important statistical tools are used to achieve the objective of this study. In this study, statistical tools such as, trend analysis, co-efficient of correlation analysis between different variables, test of hypothesis are used.

4.2.1 Coefficient of Correlation Analysis & Test of Hypothesis

Under this topic, Karl person's coefficient of correlation & test of hypothesis are used to find out the relationship between deposit and loan & advances, deposit and total investment, total asset and net profit.

(i) Co-efficient of correlation & test of hypothesis between deposits and loan & advances

Coefficient of correlation (r) between deposits and loans and advances measures the degree of relationship between these two variables. The purpose of correlation analysis between deposit and loan and advances is to find out whether deposit is significantly used as loan and advances. In this analysis deposit is independent variables (x) and loan & advances are dependent variables (y).

Table: 4.16

Coefficient of correlation between deposit and loan & advances and test of hypothesis

Evaluation criteria	R	r^2	t-cal	t-tab	Result
BOK	0.993	0.986	6.53	2.306	Significant
SBI	0.981	0.9623	0.0505	2.306	Insignificant

Source: Appendix 16

From the table shows that r, r^2, & test of hypothesis between deposit and loan and advances of BOK and SBI for the period of 2007/08 to 2011/12.

It is found that the co-efficient of correlation (r) between deposit and loan and advances of BOK is 0.993 and SBI is 0.981. It shows the highly positive relationship between these two variables. However co- efficient of determination i.e. r^2 it indicates that in the case of BOK 0.986 and in case of SBI 0.9623. The variation in the dependent variable i.e. loan & advances has been explained by the independent variables i.e. deposit. More over considering the hypothesis in case of BOK there is significant relationship between deposit and loan & advance and in case of SBI there is no significant relationship between deposit and loan & advance. The value of r^2 is insignificant that means there is no significant relationship between deposit and loan & advances of SBI bank. Due to small sample size a bank become insignificant.

(ii) Coefficient of correlation between deposit and total investment and test of hypothesis

Coefficient of correlation between deposit and total investment measures the degree of relationship between these two variables. The purpose of calculating this analysis is to find out whether deposit is significantly used as investment or not. In this analysis deposit is independent variable (x) and total investment is independent variable (y).

Table: 4.17

Coefficient of correlation between deposit and total investment and test of hypothesis

Evaluation Criteria	R	r^2	t-cal	t-tab	Result
BOK	-0.6497	0.4221	0.00026	2.306	Insignificant
SBI	0.9377	0.8792	3.81	2.306	Significant

Source: Appendix 17

The table shows that, the value of r, r^2 , & test of hypothesis between total deposit and total investment of BOK and SBI Bank Limited for the study period 2007/08 to 2011/12.

In case of BOK it is found that coefficient of correlation between deposit and total investment is -0.6497 which is negative correlation and SBI has 0.9377. It shows that positive relationship between deposit & total investment of SBI. Moreover, when we consider the value of BOK and SBI coefficient of determination (r^2) is 0.4221 and 0.8792 respectively. When analyze the value of r and comparing with test of hypothesis we can find that there is significant relationship between deposit and investment of SBI and there is no significant relationship between deposit and investment of BOK.

The relationship is insignificant and the value of r shows high percent in the dependent variables, which has been explained by the independent variable. Here due to small sample size it becomes insignificant.

(iii) Coefficient of correlation between total assets and net profit and test of hypothesis

Coefficient of correlation between Total assets and net profit measures the degree of relationship between these two variables. The purpose of computing these analysis is to find out whether net profit is significantly correlated with respect to total assets or not. In this analysis outside asset is independent variable (x) and net profit is independent variable (y).

Table: 4.18

Coefficient of correlation between outside assets and net profit and test of hypothesis

Evaluation criteria	r	r^2	t-cal	t-tab	Result
BOK	0.6422	0.4124	16.83	2.306	Insignificant
SBI	0.9794	0.9592	0.00255	2.306	Insignificant

Source: Appendix 18

The table 4.18 shows the value of r, r^2 , and t-test between total assets and net profit of BOK and SBI Bank Limited for the study period 2007/08 to 2011/12.

From the table in case of BOK it is found that coefficient of correlation between total assets and net profit is 0.6422. It shows the positive relationship between these two variables. Moreover, when we consider the value of coefficient of determination (r^2) it 0.4124 and it means 41.24% of the variation in the dependent variable is explained by the independent variable. Where analyze the value of r and comparing with hypothesis we can find that there is significant relationship between total assets and net profit.

In case of SBI there is highly positive correlation between total asset and net profit. There is no significant relationship between mobilization of funds and returns of SBI, which reveals that due to small sample size.

4.2.2 Trend Analysis

Under this topic, analysis trend of loan & advances to total deposit ratio as well as trend of total investment to total deposit ratios of BOK and NSBI bank are calculated and forecasted for next five years. The forecast is based on the following assumptions.

- ❖ The first assumption is that other things will remain unchanged.
- ❖ The bank will run in present potion.
- ❖ The economy will remain in the present stage.
- ❖ The forecast will be true only when the limitation of least square method is carried out.
- ❖ Nepal Rastra Bank will not change its guidelines to commercial banks.

(i) Trend analysis of loan and advances to total deposits ratio of BOK and SBI Bank Ltd.

Calculate the trend values of loan and advances to total deposits ratio of BOK and SBI for five years from 2007/08 to 2011/12 and forecast for next five years from 2011/12 to 2015/16. The following table no 4.19 shows the trend value of deposit for ten years for the sample banks.

Table: 4.19

Trend analysis of loan and advances to total deposits ratio of BOK & SBI (%)

F/Y \ Banks	BOK	SBI
2007/08	0.574	0.858
2008/09	0.627	0.754
2009/10	0.68	0.65
2010/11	0.733	0.546
2011/12	0.786	0.442

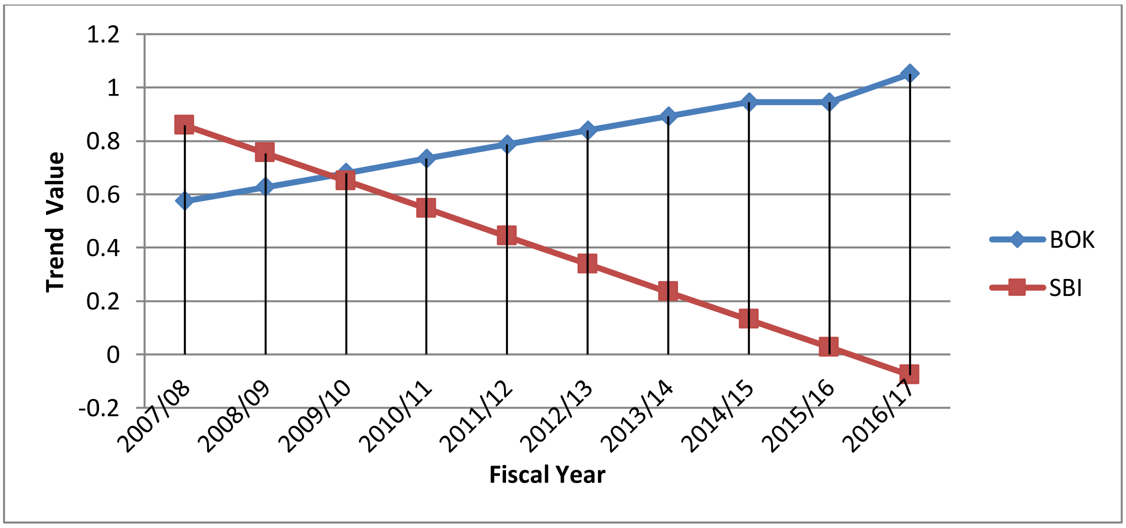
2012/13	0.839	0.338
2013/14	0.892	0.234
2014/15	0.945	0.13
2015/16	0.945	0.026
2016/17	1.051	-0.078

Source: Source: Appendix 19

From the table 4.19 it has been shows that the ratio of loan & advances to total deposits of BOK is in increasing trend and SBI is in decreasing trend. If our assumption are applied the ratio of loan & advances to total deposits of BOK is greater than SBI in every forecasting year. The highest ratio of BOK and SBI is 1.051 in 2016/17 and 0.858 in 2007/08 and lowest are 0.574 in 2007/08 and -0.078 in 2016/17 respectively. It indicates that BOK have increasing the loan and advances to total deposit ratio and SBI is in decreasing trend. If our assumption are applied the ratio of loan & advances to total deposits of SBI in 2015/16 will be in negative value. If other things remaining the same it shows that the value of ratio decreasing by negatively. The negative trend value means the banks ratio is less than par value.

Figure: 4.16

Trend analysis of loan and advances to total deposits ratio of Sample Banks



From figure 4.16 trend analysis it is quite obvious that deposit utilization position in relation to loan & advances to total deposit ratio is increasing trend of BOK. These increasing trend means BOK may use relatively large portion of their deposit by providing loan. It is also found that the loan and advances position of SBI is decreasing trend that means it will be negative in future and Nepal Rastra Bank recovered the negative proportion.

(ii) Trend analysis of total investment to total deposit ratio of BOK and SBI Bank Ltd.

Calculate the trend values of total investment to total deposits ratio of BOK and SBI for five years from 2007/08 to 2011/12 and forecast for next five years from 2012/13 to 2016/2017. The following table shows the trend value of total investments to total deposits ratio of BOK and SBI bank.

Table: 4.20

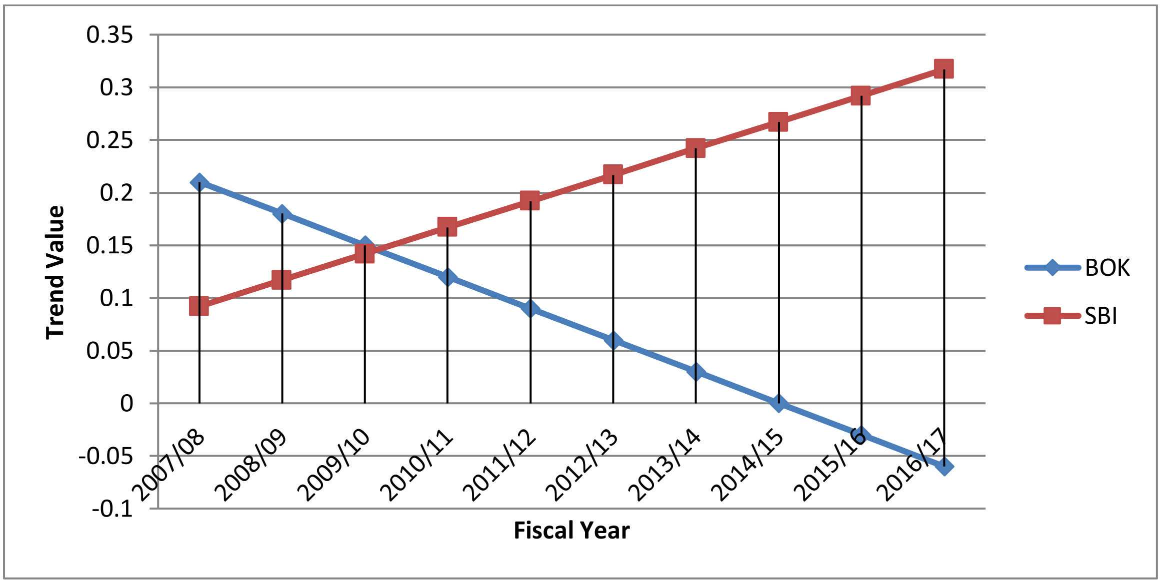
Trend analysis of total investment to total deposit ratio of Sample Bank (%)

Banks / F/Y	BOK	SBI
2007/08	0.21	0.092
2008/09	0.18	0.117
2009/10	0.15	0.142
2010/11	0.12	0.167
2011/12	0.09	0.192
2012/13	0.06	0.217
2013/14	0.03	0.242
2014/15	0	0.267
2015/16	-0.03	0.292
2016/17	-0.06	0.317

Source: Source: Appendix 20

Figure: 4.17

Trend analysis of total investment to total deposit ratio of sample banks



From the table 4.20 and figure 4.17 shows that the ratio of total investment to total deposit ratio of BOK and SBI. BOK is in decreasing trend and it will be negative value at end of the study period i,e 2015/16 and 2016/17. If other things remaining the same it shows that the value of ratio decreasing by negatively. The negative trend value means the banks ratio is less than par value. But the trend value of SBI is in increasing trend which is shown in above table and figure. Nepal Rastra Bank recovered the negative proportion.

Above analysis only mention when it meet the above assumption and if other things remaining same but in real life it is different.

4.3 Major Findings of the Study

- ❖ It is found from the study that the amount of total deposit collected by SBI in each year during 5 years of the study period is higher than that of BOK.
- ❖ The study has found that total deposit and loan and advances and investment of the selected bank will be in increasing trend if other things remain constant.

- There is positive relationship between deposit and loan & advances and deposit and investment of the selected bank.
- NRB has directed all the commercial banks to keep minimum 5.5% of total deposit in the NRB balance so as to maintain the liquidity position. BOK has an average mean ratio of 7% and SBI has an average mean ratio of 10%.
- Loan & advances to total deposit ratio of BOK is higher than SBI i.e 68%>65%. It shows that SBI is more successful in advancing loans.
- Investment to total deposit ratio of both sample banks is in fluctuating and decreasing trend. An average mean ratio of BOK is little bit higher than that of SBI i.e 15%>14% of an average mean.
- SBI Bank has higher interest rate risk than that of BOK and also has higher variability ratio.
- Credit risk ratio measures the risk behind making investment or granting loan. BOK seems risk seeker since its credit risk ratio is higher than that of SBI.
- Correlation of coefficient between deposit and loan & advances found that there is positive relationship between deposit and the loan & advances of both sample bank. It indicates that the increase in deposit tends to increase in loan and advances. The study also suggests that the dependent variable i.e. loan & advances of sample bank is highly dependent upon the total deposit.
- Correlation coefficient between deposit and investment of BOK has negative correlation and SBI has positive correlation. It is found from the study that the dependent variable i.e. investment and independent variable i.e. deposit. In the case of SBI it shows that increase in net profit depends upon increase in total assets and vice versa.

- The trend analysis of loan and advance to total deposit ratio of BOK is in increasing trend and SBI is in decreasing trend.
- It is forecasted that BOK will have decreasing trend of investment to total deposit ratio. The total investment to total deposit ratio of BOK is forecasted negatively it means that the banks ratio is less than par value or it doesn’t maintain the standard of ratio.

CHAPTER-V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

In the last chapter of this study is summary, conclusion and recommendation have discussed and explored the facts and matters required for various parts of the study. Through the analytical chapter by using some important financial as well as statistical tools, makes a comparative analysis of various aspects of the financial performance concern commercial banks.

Having completed the basic analysis required for the study, the researcher must point out the mistakes and error and also correct them by giving suitable suggestions for further improvement. Therefore, this summarized and recommended tasks of the researcher of the study would be meaningful to the top management of the bank to initiate the action and achieve the desired result.

5.1 Summary

The economic development of a country depends upon the development of commerce and industry. And, there is no any doubt; banking promotes the development of commerce because banking itself is the part of commerce. The process of economic development depends upon various factors, however economists are now convinced that capital formation and its proper utilization plays a paramount role for rapid economic development.

The economic growth was very slow in earlier year; it has caught its full selling with the restoration democracy in the country. At present, overall economic growth rate still decline year by year. Reasons behind this decline are insecure situation faced by industry, decrease in the tourist arrival, drop in the production and export of carpet, garment and pashmina industry and political situation. The evolution of the organized financial system in Nepal has more recent history than in other countries of the world. In Nepalese context, the history of banking is not more than six decade. After the announcement of liberal and free market economic based policy Nepalese banks and financial sectors having greater network and access to national and international markets. Commercial banks plays a vital role which deals with other people's money and stimulate saving by mobilized idle resources to those sectors where have investment opportunities. Modern bank provides various services to their customer in view of facilitating their economic and social life.

The objective of the commercial banks is always to earn more profit by investing or granting loan and advances into profitable, secured and marketable sector. But commercial bank should be careful while performing the credit creation function; the banks should never invest its funds in those securities, which are too many fluctuations. And commercial banks must follow the rules and regulations as well as different directions issued by central banks and ministry of finance while mobilization the funds or the commercial banks should invest its funds only those securities, which are legal.

In the study, the word overall performance covers a wide range of activities i.e. the investment of income, savings or other collected fund, deposit and loan & Advance. If there is no savings, there is no existence of investment therefore, savings and investment are interrelated. Financial performance is a one facet of the overall spectrum of policies that guide banks investment operations and it ensures efficient allocation of funds to achieve the well being economic development of the nation. A sound and viable financial policy attracts both borrowers and lenders, which help to increase the volumes and quality of deposits, loan and investment. Therefore, the financial policy should be carefully analyzed. Some sources of funds for the investment of the bank are capital, general reserves, accumulated profit, deposits and external & internal borrowings. Similarly, some important banking terms, which are frequently used in this study, are loan and advances, investment on government securities, shares and debentures, deposits and other use of funds.

In this study, for the analysis and interpretation of the data different financial & statistical tools are used. In the financial tools liquidity ratios, assets management ratios, profitability ratios and risk ratios have been used. Where, as in statistical tools mean, standard deviation, coefficient of variation, trend analysis, coefficient of correlation and test of hypothesis have been used. Only the secondary data have been used for the analysis in this research. The data are obtained from annual reports of concerned banks, likewise, the financial statement of five years i.e. 2007/08 to 2011/12 was selected for the purpose evaluation.

5.2 Conclusions

Under This research study, different financial and statistical tools are used to measure the Investment policy of the selected banks. It is found that all sample banks have strong financial performance but comparatively SBI Bank has better position than BOK. The main conclusions are as follows.

- It is found from the study that the amount of total deposit collected by SBI in each year during 5 years of the study period is higher than that of BOK.

- SBI gives more priority on loan and advances. SBI Bank has accepted higher level of interest rate risk rather than credit risk. Overall profitability ratio of SBI Bank shows that it has earned higher profit than BOK.

- The study has found that total deposit and loan and advances and investment of the selected bank will be in increasing trend if other things remain constant.

- There is positive relationship between deposit and loan & advances and deposit and investment of the selected bank.

- NRB has directed all the commercial banks to keep minimum 5.5% of total deposit in the NRB balance so as to maintain the liquidity position. BOK has an average mean ratio of 7% and SBI has an average mean ratio of 10%.

- Loan & advances to total deposit ratio of BOK is higher than SBI i.e 68%>65%. It shows that SBI is more successful in advancing loans.
- Investment to total deposit ratio of both sample banks is in fluctuating and decreasing trend. An average mean ratio of BOK is little bit higher than that of SBI i.e 15%>14% of an average mean.
- SBI Bank has higher interest rate risk than that of BOK and also has higher variability ratio.
- Credit risk ratio measures the risk behind making investment or granting loan. BOK seems risk seeker since its credit risk ratio is higher than that of SBI.
- Correlation of coefficient between deposit and loan & advances found that there is positive relationship between deposit and the loan & advances of both sample bank. It indicates that the increase in deposit tends to increase in loan and advances. The study also suggests that the dependent variable i.e. loan & advances of sample bank is highly dependent upon the total deposit.
- Correlation coefficient between deposit and investment of BOK has negative correlation and SBI has positive correlation. It is found from the study that the dependent variable i.e. investment and independent variable i.e. deposit. In the case of SBI it shows that increase in net profit depends upon increase in total assets and vice versa.
- The trend analysis of loan and advance to total deposit ratio of BOK is in increasing trend and SBI is in decreasing trend.
- It is forecasted that BOK will have decreasing trend of investment to total deposit ratio. The total investment to total deposit ratio of BOK is

forecasted negatively it means that the banks ratio is less than par value or it doesn’t maintain the standard of ratio.

5.3 Recommendations

On the basis of analysis and findings of two banks in previous section BOK and SBI Bank are recommended to go through following suggestion, which may overcome the weakness and less effectiveness of the existing fund mobilization and investment policy.

- A commercial bank must maintain its satisfactory liquidity position to meet the credit need of the community; however, external as well as internal factors affect the liquidity position of banks. As BOK and SBI both has maintained the all kinds of Liquidity Ratio. SBI have to increase the investment in government securities.

- To get success in competitive banking environment, depositor’s money must be utilized as loan and advances. The largest item of the bank in the asset side is loan and advances. If it is neglected, then it could be the main cause of liquidity crisis in the bank. SBI’s loan & advances to total deposit ratio is lower than BOK. To overcome this situation SBI is strongly recommended to follow liberal lending policy and invest more and more percentage of total deposit and total working fund in loan & advances.

- Besides giving priority of investing on government securities, SBI is recommended to invest its fund in purchase of shares and debentures of other financial and non-financial companies. Government securities such as treasury bills are gives very lowest interest rate rather than other’s company’s securities. This also helps to maintain the sound portfolio of the banks.

- Profitability is the main indicator of the financial performance of cash and every business organization. In this study, profitability ratio is good from of both sample banks.

- Diversification of investment is highly suggested to the selected bank as they have given priority to invest in government securities only. Both sample banks seem risk avoider as they have invested highest amount in risk free securities. Higher the risk higher will be the profit. Hence, BOK, and SBI are recommended to diversify their investment in NRB bond, govt. non financial institution, other non-financial institution etc.

- Liquidity and profitability are like two wheels of the same cart and both are very inter-related and have converse relation; one can be achieved only at the cost of the others. Highly liquid bank may have less profitability as it has to hold more assets in the form of cash. However, the bank has to maintain sufficient fund in the form of cash and liquid assets to meet various commitments like depositors claim, personnel expenses, interest payments, to exploit unforeseen opportunities etc. Since, BOK has held more liquidity its profitability ratios are also grater than SBI. So. SBI, is highly recommended to maintain reasonable liquidity so as to increase profitability of the bank.

- To get success in this competitive banking environment, deposit money must be utilized as loan and advances. Loan and advances is the largest item of the bank in assets side. While granting the loan it should be borne in mind that large number of borrowing customers may benefit from the banker's fund. Negligence in administering these assets could be the main cause of liquidity crisis in the bank and one of the main reasons of the bank's failure. It has been found from the study that SBI is strongly recommended to follow liberal lending policy and invest more and more percentage of total deposit in loan and advances and similarly maintain more stability on the investment policy. Project oriented approach has to be encouraged in lending business of bank. Although there is high risk in such project, the important things regarding project is that project itself should be capable of generating their own funds and to repay the loan on a timely basis. So, the chance of loan loss in the project oriented approach can be minimized there of.

- Similarly, recovery of loan is another important factor of finacial policy. Although effort has been made for collection of repayment, but still there is some increment in sub-standard and doubtful loan. It should be controlled timely, if not sub-standard loan might be converted to doubtful loan and doubtful to bad loan. Both sample banks are suggested to implement a sound collection policy, which should ensure rapid identification of fake loans, immediate contact with borrower and continual follow up until a loan is recovered in full. The recovery of loan loss is the must be very careful in formulating credit collection policy, which should be associated with some legal procedure.

- The commercial banks have been established gradually after the commercial banks act 2031 B.S. With the passage of time so many commercial banks, as a joint venture, have been established gradually because of the liberal and market friendly economic policy of government of Nepal. But banks should provide some social response by expanding their operation in rural areas rather than urban areas. And banks can give response to poor and disadvantage groups. By establishing the branches in rural areas, minimum amount for opening accounts and interest rate should be reduced for creditors.

- In the light of growth competition in the banking sectors, the business of the banks should be customer oriented. It should focus not only towards big clients but also towards small clients. They should treat every client equally. They should bring different schemes to focus the customers like, increase interest rate, bank credit policies, bank loan insurance policies, evening counters, social responsibilities etc.

- Majority of commercial banks have been found to be profit oriented ignoring their social responsibility, which is not a proper strategy to sustain in long run. So all the banks are suggested to render their serves even in the rural areas providing special loans to the deprived and priority sectors, which might further intensify the goodwill of the banks in future.

- The Economic Liberalization policy adopted by Nepal government has created and environment of strict competition even in the banking sectors. In the context, all the banks are suggested to formulate and implement some sound and attractive financial; and non- financial strategies to meet required level of profitability such as risk analysis diversification, social responsibility, bank credit policy, compensation policy etc.

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APPENDICES

Appendix: 1

Computation of Current Ratio of BOK & SBI (Rs in Million)

Year	BOK		SBI		Current Ratio of BOK (CR = CA/CL)	Current Ratio of SBI(CR = CA/CL)
	Current Assets(CA)	Current Liabilities(CL)	Current Assets(CA)	Current Liabilities(CL)		
2007/08	27188.68	30776.64	13368.42	11722.52	0.88	1.14
2008/09	29265.49	32719.33	16741.14	13945.3	0.98	1.20
2009/10	33542.06	35710.22	20310.74	28276.59	0.94	0.72
2010/11	36665.36	38777.9	25044.38	35397.11	0.95	0.71
2011/12	41504.34	41478.58	31442.31	43008.92	1	0.73

Source: Annual Report of BOK & SBI (2007/08 to 2011/12)

Appendix: 2

Computation of Cash & bank balance to Total deposit Ratio of BOK & SBI (Rs in Million)

Year	BOK		SBI		Cash & bank balance to Total deposit Ratio of BOK =CBL/TD	Cash & bank balance to Total deposit Ratio of SBI=CBL/TD
	Total deposit	Cash and bank balance	Total deposit	Cash and bank balance		
2007/08	30048.41	1757.34	11445.28	1122.69	0.06	0.10
2008/09	31842.78	1448.14	13715.39	1342.96	0.05	0.10
2009/10	34682.3	3048.52	27957.22	1903.9	0.09	0.07
2010/11	37611.2	3866.49	34896.42	3441.26	0.10	0.10
2011/12	40920.62	2964.65	42415.44	4877.82	0.07	0.12

Source: Annual Report of BOK & SBI (2007/08 to 2011/12)

Appendix: 3

Computation of Cash & bank balance to Current Assets Ratio of BOK & SBI

(Rs in Million)

Year	BOK		SBI		Cash & bank balance to Current Assets Ratio of BOK =CBL/CA	Cash & bank balance to Current Assets Ratio of SBI =CBL/CA
	Current Assets(CA)	Cash and bank balance	Current Assets(CA)	Cash and bank balance		
2007/08	27188.68	1757.34	13368.42	1122.69	0.06	0.08
2008/09	29265.49	1448.14	16741.14	1342.96	0.05	0.08
2009/10	33542.06	3048.52	20310.74	1903.9	0.09	0.09
2010/11	36665.36	3866.49	25044.38	3441.26	0.11	0.14
2011/12	41504.34	2964.65	31442.31	4877.82	0.07	0.16

Source: Annual Report of BOK & SBI (2007/08 to 2011/12)

Appendix: 4

Computation of Investment on Govement Securites to Current Assets Ratio of BOK & SBI (Rs in Million)

Year	BOK		SBI		Investment on Govement Securites to current Assets Ratio of BOK = IGS/CA	Investment on Govement Securites to current Assets Ratio of SBI = IGS/CA
	Current Assets (CA)	Investment on Govement Securites	Current Assets (CA)	Investment on Govement Securites		
2007/08	27188.68	6079.37	13368.42	2227.74	0.22	0.17
2008/09	29265.49	7166.53	16741.14	2762.82	0.24	0.17
2009/10	33542.06	3907.34	20310.74	2933.84	0.12	0.14
2010/11	36665.36	3455.03	25044.38	3720.59	0.09	0.15
2011/12	41504.34	4725.58	31442.31	4682.11	0.11	0.15

Source: Annual Report of BOK & SBI (2007/08 to 2011/12)

Appendix: 5

Computation of Loan & Advance to Current Assets Ratio of BOK & SBI

(Rs in Million)

Year	BOK		SBI		Loan & Advance to Current Assets Ratio of BOK = L&A/CA	Loan & Advance to Current Assets Ratio of SBI = L&A/CA
	Loan & Advance	Current Assets	Loan & Advance	Current Assets		
2007/08	16997.99	27188.68	9460.45	13368.42	0.63	0.71
2008/09	19497.52	29265.49	12113.69	16741.14	0.67	0.72
2009/10	24793.15	33542.06	15131.74	20310.74	0.74	0.75
2010/11	27980.62	36665.36	17480.54	25044.38	0.76	0.70
2011/12	31566.97	41504.34	21365.77	31442.31	0.76	0.68

Source: Annual Report of BOK & SBI (2007/08 to 2011/12)

Appendix: 6

Computation of Loan & Advance to Total deposit Ratio of BOK & SBI

(Rs in Million)

Year	BOK		SBI		Loan & Advance to Total deposit Ratio of BOK = L&A/TD	Loan & Advance to Total deposit Ratio of SBI = L&A/TD
	Loan & Advance	Total deposit	Loan & Advance	Total deposit		
2007/08	16997.99	30048.41	9460.45	11445.28	0.57	0.83
2008/09	19497.52	31842.78	12113.69	13715.39	0.61	0.88
2009/10	24793.15	34682.3	15131.74	27957.22	0.71	0.54
2010/11	27980.62	37611.2	17480.54	34896.42	0.74	0.50
2011/12	31566.97	40920.62	21365.77	42415.44	0.77	0.50

Source: Annual Report of BOK & SBI (2007/08 to 2011/12)

Appendix: 7

Computation of Total Investment to Total Deposit Ratio of BOK & SBI

(Rs in Million)

Year	BOK		SBI		Total Investment to Total deposit Ratio of BOK = TI/TD	Total Investment to Total deposit Ratio of SBI = TI/TD
	Total Investment	Total Deposit	Total Investment	Total Deposit		
2007/08	6079.37	30048.41	2227.74	11445.28	0.20	0.19
2008/09	7166.53	31842.78	2762.82	13715.39	0.23	0.20
2009/10	3907.34	34682.3	2933.84	27957.22	0.11	0.10
2010/11	3455.03	37611.2	3720.59	34896.42	0.09	0.11
2011/12	4725.58	40920.62	4682.11	42415.44	0.12	0.11

Source: Annual Report of BOK & SBI (2007/08 to 2011/12)

Appendix: 8

Computation of Loan & Advance to Total Assets Ratio of BOK & SBI

(Rs in Million)

Year	BOK		SBI		Loan & Advance to Total Assets Ratio of BOK = L&A/TA	Loan & Advance to Total Assets Ratio of SBI = L&A/TA
	Loan & Advance	Total Assets	Loan & Advance	Total Assets		
2007/08	16997.99	33519.14	9460.45	13901.2	0.51	0.68
2008/09	19497.52	36175.53	12113.69	17187.44	0.54	0.70
2009/10	24793.15	39330.13	15131.74	30166.43	0.63	0.50
2010/11	27980.62	42717.12	17480.54	38047.67	0.66	0.46
2011/12	31566.97	46736.2	21365.77	46088.23	0.68	0.46

Source: Annual Report of BOK & SBI (2007/08 to 2011/12)

Appendix: 9

Computation of Investment on Government Securities to Total Assets Ratio of BOK & SBI (Rs in Million)

Year	BOK		SBI		Investment on Government Securities to Total Assets Ratio of BOK = IGS/TA	Investment on Government Securities to Total Assets Ratio of SBI = IGS/TA
	Investment on Govement Securites	Total Assets	Investment on Govement Securites	Total Assets		
2007/08	6079.37	33519.14	2227.74	13901.2	0.18	0.16
2008/09	7166.53	36175.53	2762.82	17187.44	0.20	0.16
2009/10	3907.34	39330.13	2933.84	30166.43	0.10	0.10
2010/11	3455.03	42717.12	3720.59	38047.67	0.08	0.10
2011/12	4725.58	46736.2	4682.11	46088.23	0.10	0.10

Source: Annual Report of BOK & SBI (2007/08 to 2011/12)

Appendix: 10

Computation of Return on Loan & Advance Ratio of BOK & SBI (Rs in Million)

Year	BOK		SBI		Return on Loan & Advance Ratio of BOK = NP/L&D	Return on Loan & Advance Ratio of SBI = NP/L&D
	Net profit	Loan & Advance	Net profit	Loan & Advance		
2007/08	491.86	16997.99	254.9	9460.45	0.029	0.027
2008/09	635.86	19497.52	247.77	12113.69	0.033	0.020
2009/10	752.83	24793.15	316.37	15131.74	0.030	0.021
2010/11	508.79	27980.62	391.74	17480.54	0.018	0.022
2011/12	893.11	31566.97	464.56	21365.77	0.028	0.022

Source: Annual Report of BOK & SBI (2007/08 to 2011/12)

Appendix: 11

Computation of Return on Total Assets Ratio of BOK & SBI

(Rs in Million)

Year	BOK		SBI		Return on Total Assets Ratio of BOK = NP/L&D	Return on Total Assets Ratio of SBI = NP/L&D
	Net profit	Total Assets	Net profit	Total Assets		
2007/08	491.86	33519.14	254.9	13901.2	0.015	0.02
2008/09	635.86	36175.53	247.77	17187.44	0.018	0.01
2009/10	752.83	39330.13	316.37	30166.43	0.019	0.01
2010/11	508.79	42717.12	391.74	38047.67	0.012	0.01
2011/12	893.11	46736.2	464.56	46088.23	0.019	0.01

Source: Annual Report of BOK & SBI (2007/08 to 2011/12)

Appendix: 12

Computation of Total Interest Earned to Total Operating Income Ratio of BOK & SBI (Rs in Million)

Year	BOK		SBI		Total Interest Earned to Total Operating Income Ratio of BOK = TII/TOI	Total Interest Earned to Total Operating Income Ratio of SBI = TII/TOI
	Total Interest Income	Total Operating Income	Total Interest Income	Total Operating Income		
2007/08	1775.58	1393.36	831.11	533.51	1.27	1.56
2008/09	1963.64	1597.49	970.51	638.05	1.23	1.52
2009/10	2342.19	1988.04	1460.44	826.66	1.18	1.77
2010/11	3148.6	2157.95	2269.7	1106.82	1.46	2.05
2011/12	4326.14	2586.74	3104.23	1421.06	1.67	2.18

Source: Annual Report of BOK & SBI (2007/08 to 2011/12)

Appendix: 13

Computation of Total Interest Paid to Total Assets Ratio of BOK & SBI (Rs in Million)

Year	BOK		SBI		Total Interest Paid to Total Assets Ratio of BOK = TIP/TA	Total Interest Paid to Total Assets Ratio of SBI = TIP/TA
	Total Interest paid	Total Assets	Total Interest Paid	Total Assets		
2007/08	767.41	33519.14	412.26	13901.2	0.023	0.030
2008/09	823.74	36175.53	454.91	17187.44	0.023	0.026
2009/10	934.77	39330.13	824.7	30166.43	0.024	0.027
2010/11	1553.53	42717.12	1443.69	38047.67	0.036	0.038
2011/12	2414.8	46736.2	2096.03	46088.23	0.052	0.045

Source: Annual Report of BOK & SBI (2007/08 to 2011/12)

Appendix: 14

Computation of Liquidity Risk Ratio of BOK & SBI (Rs in Million)

Year	BOK		SBI		Liquidity Risk Ratio of BOK =CBL/TD	Liquidity Risk Ratio of SBI=CBL/TD
	Total deposit	Cash and bank balance	Total deposit	Cash and bank balance		
2007/08	30048.41	1757.34	11445.28	1122.69	0.06	0.10
2008/09	31842.78	1448.14	13715.39	1342.96	0.05	0.10
2009/10	34682.3	3048.52	27957.22	1903.9	0.09	0.07
2010/11	37611.2	3866.49	34896.42	3441.26	0.10	0.10
2011/12	40920.62	2964.65	42415.44	4877.82	0.07	0.12

Source: Annual Report of BOK & SBI (2007/08 to 2011/12)

Appendix: 15

Computation of Credit Risk Ratio of BOK & SBI

(Rs in Million)

Year	BOK		SBI		Credit Risk Ratio of BOK = L&A/TA	Credit Risk Ratio of SBI = L&A/TA
	Loan & Advance	Total Assets	Loan & Advance	Total Assets		
2007/08	16997.99	33519.14	9460.45	13901.2	0.51	0.68
2008/09	19497.52	36175.53	12113.69	17187.44	0.54	0.70
2009/10	24793.15	39330.13	15131.74	30166.43	0.63	0.50
2010/11	27980.62	42717.12	17480.54	38047.67	0.66	0.46
2011/12	31566.97	46736.2	21365.77	46088.23	0.68	0.46

Source: Annual Report of BOK & SBI (2007/08 to 2011/12)

Appendix: 16

Calculation for Mean value, Standard Deviation & Correlation between Total deposit and Loan & Advance of BOK (Rs in Million)

Year	Total Deposit (X_1)	Loan & Advance (X_2)	$x_1=X_1-\bar{x}_1$	$x_2=X_2-\bar{x}_2$	$x_1 \cdot x_2$	x_1^2	x_2^2
2007/08	30048.41	16997.99	-4972.65	-7169.26	35650235	24727268	51398289
2008/09	31842.78	19497.52	-3178.28	-4669.73	14841719	10101476	21806378
2009/10	34682.3	24793.15	-338.76	625.9	-212031.1	114759.7	391750.81
2010/11	37611.2	27980.62	2590.14	3813.37	9877154.5	6708815	14541791
2011/12	49696	380341	11953.54	110733.5	1323657369	142887118.5	12261908908
$N_1 = 5$ $N_2 = 5$	$\sum X_1 =$ 175105.3	$\sum X_2$ =120836.3			$\sum x_1.x_2 =$ 103812155	$\sum x_1^2 =$ 76457104	$\sum x_2^2 =$ 142894065

Source: Annual Report of BOK & SBI (2007/08 to 2011/12)

For Total Deposit,

$$\text{Mean }(\bar{X}) = \frac{\sum X_1}{N_1} = \frac{175105.3}{5} = 35021.06$$

$$\text{S.D }(\boldsymbol{\sigma}) = \sqrt{\frac{\sum(X_1-\bar{x}_1)^2}{N_1}} = \sqrt{\frac{76457104}{5}} = 1748.80$$

For Loan & Advance,

$$\text{Mean }(\bar{X}) = \frac{\sum X_2}{N_2} = \frac{120836.3}{5} = 24167.25$$

$$\text{S.D }(\boldsymbol{\sigma}) = \sqrt{\frac{\sum(X_2-\bar{x}_2)^2}{N_2}} = \sqrt{\frac{142894065}{5}} = 2390.77$$

Correlation between Total deposit and Loan & Advance of BOK

$$(r_{12}) = \frac{\sum x_1 x_2}{\sqrt{\sum x_1^2 \sum x_2^2}}$$

$$= \frac{103812155}{\sqrt{76457104 * 142894065}} = 0.993$$

For Hypothesis,

Test statistic under H_0,

$$t = \frac{(\bar{X}_1-\bar{X}_2)}{\sqrt{S^2\left(\frac{1}{n_1}+\frac{1}{n_2}\right)}} = \frac{(35021.06-24167.25)}{\sqrt{6912746.95\left(\frac{1}{5}+\frac{1}{5}\right)}} = 6.53$$

$$S^2 = \frac{n_1 s_1^2 + n_2 s_2^2}{n_1+n_2-2} = \frac{5\times1748.80^2+5\times2390.77^2}{5+5-2} = 6912746.95$$

Appendix: 17

Calculation for Mean value, Standard Deviation & Correlation between Total Deposit and Investment of SBI (Rs in Million)

Year	Total Deposit (X_1)	Total Investment (X_2)	$x_1=X_1-\bar{x}_1$	$x_2=X_2-\bar{x}_2$	$x_1 . x_2$	x_1^2	x_2^2
2007/08	11445.28	2227.74	-14640.7	-1037.68	15192330.45	214349218	1076779.78
2008/09	13715.39	2762.82	-12370.6	-502.60	6217443.456	153030754.7	252606.76
2009/10	27957.22	2933.84	1871.27	-331.58	-620475.707	3501651.413	109945.296
2010/11	34896.42	3720.59	8810.47	455.17	4010261.63	77624381.62	207179.729
2011/12	42415.44	4682.11	16329.49	1416.69	23133825.19	266652243.7	2007010.56
$N_1 = 5$ $N_2 = 5$	$\sum X_1 =$ 130429.8	$\sum X_2$ =16327.1			$\sum x_1.x_2 =$ 47933385.01	$\sum x_1^2 =$ 715158249.5	$\sum x_2^2 =$ 3653522.12

Source: Annual Report of BOK & SBI (2007/08 to 2011/12)

For Total Deposit,

$$\text{Mean } (\overline{X}) = \frac{\sum X_1}{N_1} \qquad = \frac{130429.8}{5} = 26085.95$$

$$\text{S.D } (\boldsymbol{\sigma}) = \sqrt{\frac{\sum(X_1 - \bar{x}_1)^2}{N_1}} = \sqrt{\frac{715158249.5}{5}} = 11959.58$$

For Investment,

$$\text{Mean } (\overline{X}) = \frac{\sum X_2}{N_2} \qquad = \frac{16327.1}{5} = 3265.42$$

$$\text{S.D } (\boldsymbol{\sigma}) = \sqrt{\frac{\sum(X_2 - \bar{x}_2)^2}{N_2}} = \sqrt{\frac{3653522.12}{5}} = 854.82$$

Correlation between Total Deposit and Investment of SBI

$$(r_{12}) = \frac{\sum x_1 x_2}{\sqrt{\sum x_1^2 \sum x_2^2}}$$

$$= \frac{47933385.01}{\sqrt{715158249.5 * 3653522.12}} = 0.9377$$

For Hypothesis,

Test statistic under H_o,

$$t = \frac{(\bar{X}_1 - \bar{X}_2)}{\sqrt{s^2\left(\frac{1}{n_1}+\frac{1}{n_2}\right)}} \quad = \frac{(26085.95-3265.42)}{\sqrt{89851419.38\left(\frac{1}{5}+\frac{1}{5}\right)}} = 3.81$$

$$S^2 = \frac{n_1 s_1^2 + n_2 s_2^2}{n_1+n_2-2} = \frac{5\times11959.58^2+5\times854.82^2}{5+5-2} = 89851419.38$$

Appendix: 18

Calculation for Mean value, Standard Deviation & Correlation between Total Assets and Net Profit of BOK (Rs in Million)

Year	Total Assets (X_1)	Net Profit (X_2)	$x_1 = X_1 - \bar{x}_1$	$x_2 = X_2 - \bar{x}_2$	$x_1 . x_2$	x_1^2	x_2^2
2007/08	33519.14	491.86	-6176.48	-164.63	1016834.56	38148954.60	27103.04
2008/09	36175.53	635.86	-3520.09	-20.63	72619.54	12391061.77	425.60
2009/10	39330.13	752.83	-365.49	96.34	-35211.69	133585.86	9281.40
2010/11	42717.12	508.79	3021.50	-147.7	-446274.96	9129438.08	21815.29
2011/12	46736.2	893.11	7040.58	236.62	1665941.09	49569710.41	55989.02
$N_1 = 5$ $N_2 = 5$	$\sum X_1 =$ 198478.1	$\sum X_2 =$ 3282.45			$\sum x_1.x_2 =$ 2273908.54	$\sum x_1^2 =$ 109372750.72	$\sum x_2^2 =$ 114614.34

Source: Annual Report of BOK & SBI (2007/08 to 2011/12)

For Total Assets,

$$\text{Mean } (\bar{X}) = \frac{\sum X_1}{N_1} \quad = \frac{198478.1}{5} = 39695.92$$

$$\text{S.D } (\boldsymbol{\sigma}) = \sqrt{\frac{\sum(\mathbf{X}_1 - \bar{\mathbf{x}}_1)^2}{N_1}} = \sqrt{\frac{109372750.72}{5}} = 4634.07$$

For Net Profit,

$$\text{Mean } (\bar{X}) = \frac{\sum X_2}{N_2} \quad = \frac{3282.45}{5} = 656.49$$

$$\text{S.D}\ (\boldsymbol{\sigma}) = \sqrt{\frac{\sum(\mathbf{X}_2-\bar{\mathbf{x}}_2)^2}{\mathrm{N}_2}} = \sqrt{\frac{114614.34}{5}} = 151.41$$

Correlation between Total Assets and Net Profit of SBI

$$(r_{12}) = \frac{\sum x_1 x_2}{\sqrt{\sum x_1^2 \sum x_2^2}}$$

$$= \frac{2273908.54}{\sqrt{109372750.72 * 114614.34}} = 0.6422$$

For Hypothesis,

Test statistic under H_o,

$$t = \frac{(\bar{X}_1-\bar{X}_2)}{\sqrt{s^2\left(\frac{1}{n_1}+\frac{1}{n_2}\right)}} \quad = \frac{(39695.92-656.49)}{\sqrt{13435956.09\left(\frac{1}{5}+\frac{1}{5}\right)}} = 16.83$$

$$S^2 = \frac{n_1 s_1^2 + n_2 s_2^2}{n_1+n_2-2} = \frac{5\times 4634.07^2 + 5\times 151.41^2}{5+5-2} = 13435956.09$$

Appendix - 19

Trend Analysis of Loan & Advance to Total Deposit Ratio of BOK

Year	x=p-3	x^2	Y (Loan & Adv to Total deposit Ratio)	xy	Trend value BOK Yc= a + bx
2007/08	-2	4	0.57	-1.14	0.68+0.053*(2)=0.574
2008/09	-1	1	0.61	-0.61	0.68+0.053*(1)=0.627
2009/10	0	0	0.71	0	0.68+0.053*0=0.68
2010/11	1	1	0.74	0.74	0.68+0.053*1=0.733
2011/12	2	4	0.77	1.54	0.68+0.053*2=0.786
Excepted year 2012/13	-	--	-	-	0.68+0.053*3=0.839
Excepted year 2013/14	-	-	-	-	0.68+0.053*4=0.892
Excepted year 2014/15	-	-	-	-	0.68+0.053*5=0.945
Excepted year 2015/16					0.68+0.053*6=0.998
Excepted year 2016/17					0.68+0.053*7=1.105
$\sum n = 5$	-	$\sum x^2 = 10$	$\sum y = 3.4$	$\sum xy = 0.53$	

Source: Annual Report of BOK & SBI (2007/08 to 2011/12)

$$a = \frac{\sum y}{n} = \frac{3.4}{5} = 0.68 \qquad b = \frac{\sum xy}{\sum x^2} = \frac{0.53}{10} = 0.053$$

Appendix - 20

Trend Analysis of Total Investment to Total Deposit Ratio of SBI

Year	x=p-3	x^2	Y (Total Investment to Total Deposit Ratio)	xy	Trend value SBI Yc= a + bx
2007/08	-2	4	0.19	-0.38	0.142+0.025*(2)=0.092
2008/09	-1	1	0.20	-0.20	0.142+0.025*(1)=0.117
2009/10	0	0	0.10	0	0.142+0.025*0=0.142
2010/11	1	1	0.11	0.11	0.142+0.025*1=0.167
2011/12	2	4	0.11	0.22	0.142+0.025*2=0.192
Excepted year 2012/13	-	--	-	-	0.142+0.025*3=0.217
Excepted year 2013/14	-	-	-	-	0.142+0.025*4=0.242
Excepted year 2014/15	-	-	-	-	0.142+0.025*5=0.267
Excepted year 2015/16					0.142+0.025*6=0.292
Excepted year 2016/17					0.142+0.025*7=0.317
$\sum n = 5$	-	$\sum x^2 = 10$	$\sum y = 0.71$	$\sum xy = -0.25$	

Source: Annual Report of BOK & SBI (2007/08 to 2011/12)

$$a = \frac{\sum y}{n} = \frac{0.71}{5} = 0.142 \qquad b = \frac{\sum xy}{\sum x^2} = \frac{-0.25}{10} = 0.025$$