

# **CHAPTER - ONE**

## **INTRODUCTION**

### **1.1. Background of the Study**

The bank is an institution established by law, which deals with money and credit is called banking. In other words, it is obvious that an institution which deals with money, receiving it on deposits from customers, honoring customers drawings against such deposits and demand, collecting cheques from customers, and lending or investing surplus deposits until they are required for repayment. In common sense, financial institution which deals with monetary transaction by accepting various types of deposits, distributing various types' loans and rendering other financial services.

Banking plays a significant role for the development of national economy. It provides an effective payment credit system, which facilitates the channeling of funds from the surplus spending units to the deficit spending units in the economy. The basic task of the financial institution is to mobilize the saving 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 of the country. This process of financial institutions give rise to money and other financial assets, which therefore have a central place in the development process of the economy. Banking intuitions are inevitable for the resources mobilization and all round development of the country. It is resource for economic development; it maintains economic confidence of various segments and extends credit to people.

Mobilization of the savings of the general public in the form of deposits and its channelization to various productive sectors of economy is the primary function of any commercial bank. In order to collect the scattered saving and

put those into productive channels, financial institutions like; Banks are necessity. In the absence of such institutions, the saving will not be utilized properly within the economy and will either divert abroad or used for unproductive consumptions or susceptible activities. The national savings is attracted by the commercial banks into deposits which are then mobilized into investments into the productive sectors of the economy. Investment in the productive sectors like agriculture, commerce, service, industry as well as the deprived sectors of the economy helps in the economic growth of the country. The higher the economic growth, higher will be the national savings of the country.

Commercial banks occupies quite an important place in the framework of every economy because it provides capital for the development of trade, industry and business, investing the collected saving as deposits. Besides these, commercial bank renders numerous services to their customers, shareholders and society in view of facilitating their economic and social life. All the economic activities of each and every country are greatly influenced by the commercial banking business of that country. Commercial banks are playing active role and have changed the economic structure of the world. Being a developing country, Nepal is directing its effort to uplift her economy rapidly. But still it has been an agricultural dominated economy, considering economic and social development as the primary objectives. Nepal has adopted the "Mixed Economy Model" with the implicit assumption that the state and private sectors can complement each other in the development process of the country via issuing shares and accepting deposits from them. Then the bank can mobilize and invest such accumulated resources into field of agriculture, trade, commerce, industry, tourism, and hydroelectricity project etc.

A sound banking system is important because of the key role it plays in the economy intermediation, facilitating payment flows, credit allocation and maintaining financial discipline among the borrowers. Banks can encourage thrift and allocate savings and by enabling savings to be used outside the sector in which they originate. In any economy whether highly developed financial markets or less well developed financial markets, banks remain at the center of economic and financial activity and stand apart from other institutions as primary providers of payment services and a fulcrum for the monetary policy implementation.

## **1.2. Origin of Banking**

The term “bank” was originated from the Latin word “BANCUS”, and the Italian word “BANCO”, the German word “BACK” and French word “BANKE”. Regarding the origin & banking institution in the world, the first bank established was “Bank of Venice” of Italy. The second bank established in Spain in 1401 A.D. as “the bank of Barcelona”. Then after, Bank of Geneva & Bank of England as a joint venture bank in 1604 & 1694 A.D. respectively. Several national and foreign banks were established in India & other countries subsequently.

## **1.3. Profile of Nepal SBI Bank Ltd.**

Nepal SBI Bank is the first Indo-Nepal joint venture in the financial sector sponsored by three institutional promoters, namely State Bank of India (SBI), Employees Provident Fund (EPF) and Agricultural Development Bank Ltd (ADBL) through a Memorandum of Understanding signed on 17th July 1992.

NSBL was incorporated as a public limited company at the Office of the Company Registrar with an Authorized Capital of Rs.12 Cores and was licensed by Nepal Rastra Bank on July 6, 1993. NSBL commenced operation with effect from July 7,

1993 with one full-fledged office at Durbar Marg, Kathmandu with 18 staff members. The Authorized, Issued and Paid-Up Capitals have been increased to Rs. 200 Crores, Rs. 186.93 Crores and Rs. 186.93 Crores, respectively. In terms of the Technical Services Agreement concluded between SBI and the Bank, SBI provides management support to the bank through its 3 expatriate officers including Managing Director who is also the CEO of the Bank. ADBL divested its stake in the Bank by selling its entire 5% promoter shares to SBI on 14th June, 2009. Consequently, the Bank's corporate status has undergone change from its previous status as a Joint-venture Bank to a Foreign Subsidiary Bank of SBI. Presently fifty five percent of the total share capital of the Bank is held by the SBI, fifteen percent is held by the EPF and thirty percent is held by the general public.

A team of nearly 465 full times employees, move, lend, invest and protect money of over 200000 customers and clients nationally and worldwide. The bank has been continuously upgrading the quality of its service delivery by using start of the art technology to enhance their customer's satisfaction. By providing open and honest organizational culture, it is the major national financial service provided engaged in various retail and commercial banking services. Nepal SBI Bank Ltd. is a subsidiary of State Bank of India which has 55 percent of ownership and rest is held by a local partner viz. Employee Provident Fund (15%) and general public (30%). In terms of the Technical Services Agreement between SBI and the NSBL, the former provides management support to the bank through its expatriate officers including Managing Director who is also the CEO of the Bank. Central Management Committee (CENMAC) consisting of the Managing Director, Chief Operating Officer, Chief Financial Officer and Chief Credit Officer oversee the overall banking operations in the Bank. The Bank was established in July 1993 & is now having 538 Nepalese employees working in 50 branches, 6 extension counters, and 2 Regional Offices & the Corporate Office. State Bank of India (SBI), with a 200 year history, is the largest commercial bank in India in terms of

assets, deposits, profits, branches, customers and employees. The Government of India is the single largest shareholder of this Fortune 500 entity with 61.58% ownership. SBI is ranked 60th in the list of Top 1000 Banks in the world by “The Banker” in July 2012. The origins of State Bank of India date back to 1806 when the Bank of Calcutta (later called the Bank of Bengal) was established. In 1921, the Bank of Bengal and two other banks (Bank of Madras and Bank of Bombay) were amalgamated to form the Imperial Bank of India. In 1955, the Reserve Bank of India acquired the controlling interests of the Imperial Bank of India and SBI was created by an act of Parliament to succeed the Imperial Bank of India.

The SBI group consists of SBI and five associate banks. The group has an extensive network, with over 20000 plus branches in India and another 173 offices in 34 countries across the world. As of 31st March 2012, the group had assets worth USD 359 billion, deposits of USD 278 billion and capital & reserves in excess of USD 20.88 billion. The group commands over 22% share of the domestic Indian banking market. SBI's non- banking subsidiaries / Joint ventures are market leaders in their respective areas and provide wide ranging services, which include life insurance, merchant banking, mutual funds, credit cards, factoring services, security trading and primary dealership, making the SBI Group a truly large financial supermarket and India's financial icon. SBI has arrangements with over 1500 various international / local banks to exchange financial messages through SWIFT in all business centres of the world to facilitate trade related banking business, reinforced by dedicated and highly skilled teams of professionals. Over the years, Nepal SBI Bank Ltd. has grown larger and stronger - in terms of business, geography and resources. This was achieved by relying on the fundamentals. Its achievements are founded on basic banking norms - quality, consistency and transparency of capital base, sound liquidity, a robust risk management framework coupled with the practice of good corporate governance and above all the tireless focus on customer satisfaction.

Overall strategic goal of Nepal State Bank of India Ltd is to build an open and honest corporate culture and to develop mutually beneficial relationship with all its stakeholders and create value for them. NSBL aim to reach its strategic goal by:

- i. NSBL is to provide a wide range of banking services and products in the emerging socio-economic environment within and outside the country maintaining high standards of integrity and efficiency with excellence.
- ii. Practicing exemplary governance and accountability.
- iii. Working harmoniously and in mutual co-operation with its business partners.
- iv. Ensuring reasonable returns on investment for its shareholders.

#### **1.4. Statement of Problem**

Emphasizing the role of commercial banks, various financial institutions have been established to assist the process of economic development of Nepal. The major problem in almost all underdeveloped countries and Nepal is no exception, is that of capital formulation and proper utilization. To avoid problems and thereby contribute to the national economy, various commercial banks have played vital role by accepting deposits and providing various types of loan. Loan affects overall development of the country. The development of the country directly related to the volume of loan, which is also obtained from commercial banks. The problem of lending has become very serious for developing country like Nepal. This is due to lack of sound policy of commercial banks.

Commercial banks are found to be making loan only in short term basis against movable merchandise. There is hesitation to investment on long term project as they are much more safety, they do not consider the profit potential of the project. There is raised criticism that commercial bank have served only richer communities and not the poor. This has directly had negative impact in

economic growth. Nowadays commercial bank does not seem to be capable to invest their funds in more profitable sector i.e. treasury bills, development bonds and other securities. They keep high liquidity and flow lower funds to the productive sectors, this result in lower profitability to commercial banks and ignorance to the national economies growth process. This is the main reason of crisis in the commercial banks and in the whole national economy as well. In order to help realize the goal of the poverty alleviation, access to increased flow of credit and investment in the economic activities of direct benefit to the maximum number of low income people through micro and medium size loan needs serious attention in the days to come. It is also necessary to identify the activities that ensure quick return of the investment.

The mushrooming of banking and finance companies and about a dozens of rural banks and co-operative societies in short span of time has brewed new comparative scenario, and has posed a challenge to the previously monopolistic bank like NSBL which are making attractive profits. In the changed scenario these banks need to explore their strength and weakness to improve their performance because their successes depend upon their ability to boost their productivity and financial performance.

Thus the present study seeks to explore the efficiency and weakness of Nepal SBI Bank. Attempts are also being made to explore the following questions.

- ) How far have Nepal SBI Bank Limited been able to convert the mobilized resources into investment, collected from public.
- ) To what extent this bank has been able to raise their profitability,
- ) How efficiency this bank is managing their liquidity, activity, assets, capital structure, capital adequacy, etc.
- ) What is the lending pattern of loan and advances and other investment?
- ) What are the components which affect the operating income of Nepal SBI bank?

### **1.5. Objective of the Study**

Each and every activity should be motivated to achieve specific goals. It is desired outcomes. It defines path and courses of action to the human being. So the primary objective of study is to indicate the financial position of Nepal SBI Bank Limited. And the secondary objective is to analyze & judge the financial stability of Nepal SBI Bank Limited, and make suggestion to improve its financial efficiency. The specific objectives of the study are;

- ) To analyze the financial analysis of Nepal SBI Bank Limited.
- ) To examine the relationship between dividend per share and earnings per share of Nepal SBI Bank Limited.
- ) To determine the level of profitability of bank.
- ) To explore the income and expenditure statement of Nepal SBI Bank Limited.

### **1.6. Importance of the Study**

Commercial banks in developing countries like Nepal have the greatest responsibility towards the economic development of the country. The main objective of the bank as a commercial organization is to maximize the surplus by the efficient use of its fund and resources. Being a commercial bank, it also has a responsibility towards the socio economic up-liftmen of the country by providing specially considered loans and advances towards less privileged sectors. The study has various significant.

- ) The financial agencies, stock exchange and stock traders are also interested in the performance of the bank as well as the customers, depositors and debtors, who can objectively identify the better bank to deal with in terms of profitability, safety and liquidity.
- ) Policy makers at the macro level that is government and Nepal Rastra Bank will also benefit regarding the formulation of further policies in regard to economic development through banking institutions.



- ) The study also compels the management of respective banks for self assessment of what they have done in the past and guides them in their future plans and programs.

### **1.7. Limitation of the Study**

Every study defines some boundaries. They have to study within this framework. So there are some limitations due to lack of data time and information. They are as follows:

- ) This research the collection of data through primary sources requires on the spot visit, consuming lots of time fund and, not affordable by a student, all the relevant data and information are collected and consolidated from the published financial documents like balance sheet, profit and loss account and other related journals and websites.
- ) The study deals with certain financial tools such as ratio analysis and statistical tools.
- ) Only secondary data is used here.
- ) The whole study will be limited to the past five years (From 2008/09 to 2012/13) period.

### **1.8. Organization of the Study**

The study has been organized into five chapters each devoted to some aspects of the study of Financial analysis The chapters one to five consists of introduction, review of literature, research and methodology, presentation and analysis and summary, conclusion and recommendation. The rationale behind this kind of organization is to follow a simple research methodology approach. The contents of each of the chapter of this study are briefly mentioned here.

#### **Chapter 1: Introduction**

Chapter one contains the introduction to the study. It deals with introduction of the main topic of the study like background of the study, profile of Nepal SBI Bank

Ltd, and importance of study, statement of the problem, objective of the study, focus of the study, limitation of the study and organization of the study.

### **Chapter 2: Review of Literature**

Second chapter deals with review of literature relating to financial performance of Nepal SBI Bank Limited. It contained conceptual review of study and review of related studies.

### **Chapter 3: Research methodology**

Chapter three describes the research methodology employed in the study. This chapter deals with research design, nature and sources of the data, method of data collection and analysis.

### **Chapter 4: Data Presentation and analysis**

Chapter four consists of presentation and analysis of data, which describes with the empirical analysis of the study. In this chapter all collected relevant data are analyzed and interpreted and will explain the major findings of the study.

### **Chapter 5: Summary, Conclusion and recommendation**

Chapter five consists of summary of the study, conclusion and recommendation and on the basis of the study. In the front part of the study recommendation, viva-voce sheet, declaration, table of contents are presented and bibliography and appendix are included at the end of the study.

## **CHAPTER - TWO**

### **REVIEW OF LITERATURE**

Review of literature is a decisive part of all studies. It helps to find out already discovered things. Past studies are also the basis for the research so it cannot be ignored. They provide foundation to the present study. Literature Review is needed to develop a new research frame work which is based on past knowledge and experience. The primary purpose of literature review is to identify: What research has been done in the subject? What others have written about the topic? What theories have been advanced? The approach taken by other researchers: Thus the purpose for reviewing literature is to learn, analyze, and find out what research studies have been done in the same subject, and finding what they had left in that subject. For the purpose researcher uses different books, reports, journals and research studies published by various institutions, unpublished dissertations submitted by master level students have been reviewed. For the purpose of the study, this chapter is categorized under two major headings, which are discussed as below:

- J Conceptual Frame Work
- J Review of Related Articles & Thesis
- J Issues and Gaps

#### **2.1. Conceptual Framework**

As this study is related to financial analysis of Nepal SBI Bank Ltd. following aspects of analysis are reviewed in sequential manner.

- J Concept of commercial bank
- J Concept of joint venture bank
- J Concept of financial performance
- J Concept of financial analysis
- J Objectives of financial analysis

### **2.1.1. Concept of Commercial Bank**

Specially, commercial bank deals with the activities of trade, commerce industry and agriculture. The main objective of commercial bank is to mobilize ideal resources in productive area after collecting them from scattered sources for profit maximization.

Banking is an institution, which deals with money credit. It accepts deposits from publics, makes fund available to those who need them and helps in remittance of fund from one place to another. They perform several financial monetary and economic activities to accelerate the economic growth of the country. With these resources and bank's own capital, bank disburse loan or extend credit and also invest in securities.

According to the "Ordinary Banking business consists of changing cash for bank deposits and bank deposits for cash; transferring bank deposits from one person or corporation to another; giving bank deposits in exchange for bill of exchange, bonds the secured or unsecured" *Sayers (1970:30)*.

The Commercial Bank Act 2031 defines a commercial bank as a, "*Bank which deals in exchanging currency, accepting deposits, giving loans and doing commercial transaction.*"

A commercial bank is a bank which exchanges money, deposits money, accept deposits, grants loan and performs commercial bank functions and which is not a bank meant for cooperative agriculture, industries as per such specific functions.

A Commercial bank performs four major functions like, "*Receiving and handling deposits, handling payment for its clients, granting loan and investment and creating money by extension credit.*"

According to US Law, *"Any institution offering deposits subject to withdrawal on demand and making loans of a commercial banks or business nature is a bank."*

So, the importance of banking as the nerve center of economic development can't be over emphasized and it is said that bank which are the need of and great wealth of the country have got to be kept very scared.

#### **2.1.1.1. 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 are as follows –

- A) Issuing letters of credit, travellers cheques, circular notes etc.
- B) Undertaking safe custody of valuables, important documents, and securities by providing safe deposit vaults or lockers;
- C) Providing customers with facilities of foreign exchange.
- D) Transferring money from one place to another; and from one branch to another branch of the bank.
- E) Standing guarantee on behalf of its customers, for making payments for purchase of goods, machinery, vehicles etc.

- F) Collecting and supplying business information;
- G) Issuing demand drafts and pay orders.

### **2.1.2. Concept of Joint Venture Bank**

A joint venture is an association of two or more persons or enterprises to make the operation highly effective with their collective effort. Joint Venture Banks are the commercial banks formed by joining the two or more enterprises for the purpose of carrying out specific operation such as investment in trade, business and industry as well as in the form of negotiation between various groups of industries or traders to achieve mutual exchange of goods & services. "A business contract of management effort between two person, companies or organizations involving risk and benefit sharing" ( Anuja, 1994:174).

Joint Venture Banks is an innovation in finance and it is growing stage, mostly in developing country, foreign investment plays a significant role for economic development by flowing capital, technology, skills, managerial efficiency and others. When two or more than two independent firms mutually decide to participate in a business venture, contribute to the total equity more or less capital and establish a new organization, it is known as Joint Venture. Joint venture banks have been contributing a lot towards the promotion and expansion of both export and import trade. They provide both pre-shipment and post-shipment finance to exporters. In this way, JVBs are successful to bring healthy competition among banks, increase in foreign investment, promote and expand import export trade, introduce new techniques and technologies. A joint venture is an association of two or more persons or parties having exceptional advantages in specific operation is undertaken to make the operation highly remunerative with their collective efforts. In 1980's government introduced "Financial Sector Reforms" which facilitated the establishment of Joint Venture Banks (JVBs), which gave a new horizon to

the Nepalese Banking Sector. Joint Venture Bank, especially with foreign banks, was expected to bring technology; modern management as well as foreign capital in banking industry besides export and import trades. Since these banks being new, urban based and run by foreign management, they started their operations with the accumulated system which could attract the elite group of business community due to their prompt service, modern management.

### **2.1.3. Concept of Financial Performance**

Financial performance analysis means the analysis of financial activities of the company directed towards achieving its value maximizing objective. For the better financial activities, effective, effective and efficient decisions are necessary and those better financial activities contribute excellent financial performance which in turn results to growth of the organization.

Financial performance analysis can be defined as the heart of financial decision. The growth and development of an enterprise is fully affected by financial performance and financial performance of an enterprise is correct when true facts and figures are sort out. Business organizations are inspired to generate profit. The value of profit earned is also one of the major indications of a good financial performance of a firm.

According to the Robinson, (1951:21-22) "*Profit earned by the firm is the main financial performance indicators of business enterprises.*" Financial performance analysis is an analysis of better understanding of firms positions i.e. its strength and weakness. Thus, it involves the use of various financial statements. First, the balance sheet which represents the firm's financial position at the moment and then comes income statement which represents the summary of firms profitability over a time.

Financial performance analysis as a part of financial management is the main indicator of success and failure of the firm. Its decision plays a vital role to increase the profitability by analyzing past performance and efficiency of the firm from accounting data and financial statements. Profit is essential for a firm to survive, grow in long run as well as to maintain capital adequacy through retained earnings. However, profit can't solely predict the financial performance of the firm. Financial condition of the business firm should be sound from the point of view of shareholders and stakeholders and financial institution and nation as a whole. However, financial aspects are one of the most neglected aspects of the public enterprises in Nepal. However, joint venture banks have been analyzing their financial performance in order to take corrective actions in timely manner, but which has also been limited within the banks themselves. In Nepalese context, commercial banks are playing vital role in economic growth of the country and Himalayan Bank is one of the leading banks in this aspect. This bank has achieved a great success in terms of market share and profitability compared to other joint venture banks because of its professional and reliable services to the customers. Therefore, it would be clear and transparent to analyze the financial performance of this leading foreign joint venture bank of Nepal by using various measuring financial tools to know about their earning and the utilization of the earnings to boost up the economic expansion of the country.

Financial performance analysis can be considered as a spirit of the financial decisions. The growth and development of any business firm is directly influenced by the financial policies. Rational evaluation of the financial performance 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 a 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 action. But their analysis is limited with the bank themselves. Financial performance as a part of financial management, there are different institutions that affect or are affected by the decision of the firm.

Management of the firm is interested in all aspects of financial analysis to adopt food financial management system for the internal control of the enterprise. Similarly, trade creditors are primarily interested in the liquidity positions of the firm. Long term creditors are more interested in the cash flow ability of the enterprise to service debt over a long run. 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, balance sheet, profit and loss account and other statements do not provide a meaningful understanding of the performance and financial position of the firm. Thus financial analysis is the main qualitative judgment process of identifying the financial strength and weakness of the firm by properly establishing the relationship between the items of the balance sheet and profit & Loss Account.

Joint venture bank of Nepal is 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 cannot exclusively forecast the performance of the bank by analyzing the profitability status only. Every aspects of the financial analysis are to be considered for financial performance of the bank.

#### **2.1.4. 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, 1991:487).

*"Financial Analysis is a process of 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"* ( Pandey, 2010:91).

Financial Analysis of a firm consists different of 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."*

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.

#### **2.1.4.1. 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. Review of Related Study**

Here, in this part, the reviews of related studies conducted for the preparation of the study are presented. Various review of journals, articles and master's degree theses have been presented below:-

### **2.2.1. Review of Journals and Articles**

Relevant related articles and journals relating to the different aspects of commercial bank will help to conduct this study smoothly. So some of the articles relating to banking sectors are given below;

The number of commercial banks increased dramatically after the democratically elected government adopted the liberal and market oriented economic policy (*Thapa, 2051:17*).

After liberalization and globalization of the world economy the economic transaction such as trading and commerce, industrial and banking activities have grown up tremendously. Likewise, an international trade of the developing country has also boosted up. But on the other hand, the increasing competitiveness has also increased various type of risk in every business, including banking sector. To manage with their risk, the banks in favor of their clients have adopted strategies relating to treasury management (*Shrestha, 2055, P-20*).

An article Joint Venture Banks in Nepal published in 1999 Vol. XI P-36. 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.

Tamrakar, (2011), "The government has called up on foreign investors to explore the unique business opportunities lying in the Himalayan Country. While addressing at business meeting at Hanover, Germany on October 9<sup>th</sup> 2011, author states that government is committed to encourage every type of investment, which can ultimately contribute for the industrial development of the country. Informing the gathering that various 67 investors of nations have invested 872 projects during last ten years industrial production, tourism and service sectors have been prime attraction of foreign investors.

Bhagat highlights in this article entitle "*Issue in Banking Reforms*", that the commercial banks generally registered under the company act but operated under the commercial bank act does not provide for the registration of the bank. Here commercial bank act should be a made independent from the provision of the company act. Further author mentions that banks capital adequacy guidelines prescribed under certain basic criteria or parameter. However, there should not be any discrimination between new and old commercial banks in

meeting capital adequacy guidelines such as a minimum paid up capital and increasing paid up capital over the time period.

According to the *Banking Supervision report 2012* of NRB concludes that, the capital of the Nepalese banking industry has depicted a favorable trend during 2011/12. There are various reasons for this improvement. The banks, during the period, on an average have performed well and some of them have raised capital from the market, which improved the overall capital position of the industry. All banks, except for three private banks were able to post handsome profits. Some banks were able to distribute cash dividends and bonus shares to its shareholders. At the same time, some banks raised finance from the market through issue of right shares while Nepal SBI Bank raised equity capital through initial public offering during the year.

An Article published in 2012 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 2011/12 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 (*Banking Supervision Annual Report-2012:7*).

Shrestha, (2013), has analyzed the financial performance of the commercial banks using descriptive and diagnostic approach. In this study author has concluded the points as below;

- ) 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 than 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 than the government owned banks.
- ) In case of the analysis of management achievement, foreign banks were found to have comparatively higher risk than local banks.

### **2.2.2. Review of Previous Thesis**

In addition to financial performance analysis, there are various studies on financial aspects, which deal with the context on Nepalese commercial joint ventures banks. Previous studies relating to Nepalese banking sector have been the most relevant sources and assistants for this study. The major findings of the approach used in these important studies are reviewed briefly.

Niraula, (2009) had conducted a research on topic "*An Evaluation of Financial Performance of Finance Companies in Nepal.*" The main objective of this research is to examining the technique of financial analysis such as liquidity, activity, profitability ratios of Finance Companies in Nepal. In this research author had pointed out various findings.



- J The liquidity position of Finance Companies is below the normal standard and also inconsistency in liquidity policy.
- J The Finance Companies should utilize their risky assets and shareholders fund to gain profit margins. Similarly they should reduce their expenses and should try collect cheaper fund being more profitable.
- J Asset Management Ratio indicates that Finance Companies are utilizing fund properly to get fair return.

Author had following recommendations:

Financial Companies need to manage their investment portfolio efficiently. It should be managed under the dynamic implication of financial market. Finance Companies should carefully examine safety principle as well as sources for repayment, capital structure, requirement and credit worthwhile of a borrower for providing credits. In other words, credit manager should evaluate credit risk by considering well known form C's of credit i.e. character, capacity, capital and collateral. There are various services provided by Finance Companies for the customer. Among them the use of funds towards higher purchase and housing finance must be shifted towards the business and industrial financing. These activities must be taken by finance companies to shift their investment and credit strategy to the productive sectors such as industrial and business sectors of the economy.

Raghbansi, (2010), conducted a research work " A Financial Analysis of Radisson Hotel Kathmandu". The primary objectives of the study is to find out facts & figure of Radisson Hotel Kathmandu, so as to understand or figure out financial position of the Hotel. Further, the quantities relation can be used to diagnose strength & weakness in a hotel's performance. Rather, the principle objectives of the study are:

- ) The computation of various selected financial ratio (viz. leverage, liquidity, solvency)
- ) Evaluation of the financial performance of Radisson Hotel Kathmandu.
- ) Ascertain the time-series analysis of the hotel.
- ) Offers a package of suggestion on the basis of findings.

major findings under the study are as follows:

- ) The quick ratio is also below 1:1 mark except in the years 2063/64 & 2064/65. However, with an average of 0.68:1, quick assets are more or less able to meet their obligations though not sufficient.
- ) Financial leverage of the hotel is increasing year by year despite the decline in the initial years.
- ) Most of the firm's assets are financed by debt capital & less than 50% of the firm's assets have been financed by equity capital.
- ) There is high financial risk due to presence of high debt to total ratio.

Soud, (2011) conducted a study " *A comparative Analysis on Financial performance of Banks in Nepal, Kumari Bank & Nepal Development Bank*" in the year 2011. The primary objectives of the study is to make comparative analysis of the financial performance of two banks kumara Bank & Nepal Development Bank. To attain the mentioned objective, following specific objective has been set:

- ) To evaluate the liquidity, activity, leverage, capital adequacy, turnover and profitability position of two banks.
- ) To analyze the overall financial performance i.e. the strength and weakness of two banks.
- ) To analyze the relationship and contribution of various variable to the performance of the companies.

- ) To recommend suggestion & possible guideline for future improvements.

The findings of performance of two banks Kimari Bank Limited (KBL) & Nepal Development Bank Limited (NDBL) under this study is as follows:

- ) In this study it was clearly found that liquidity position of NDBL has stronger than that of KBL. Which shows NDBL has readiness to serve its customers more efficiently in comparison with KBL for the purpose of meeting current liabilities. However, holding higher level of cash and bank balance is also not good from the viewpoint of profit making organization. NDBL was also found taking higher risk strategy as it has employed higher proportion of outsiders fund in its capital structure.
- ) KBL is more efficient to utilize its resource in profitable sector than that of NDBL. Similarly KBL was found good in matter of creating credit to earn fixed rate of return. The asset utilization ratio of KBL is seen more efficient to utilize its assets in profit generating areas as compared with NDBL.
- ) The financial indicator like EPS & TPS of KBL were found better in comparison to NDBL. NDBL had managed more loan loss provision as compared with NDBL. This indicates that KBL was following riskier strategy in advertising its loans to the different sector.

Dahal, (2012) had conducted a research "comparative study on financial performance of Nepal Bangladesh bank Limited(NBBL) & Himalayan Bank Limited (HBL)". The main objectives of the study are to evaluate & analyze the financial performance of these two joint venture bank (i.e. HBL & NBBL) and to recommend suitable suggestion for improvement. Besides this, main objectives of this study are as follows:

- ) To analyze the financial performance through the use of appropriate financial & statistical tools.

- ) To identify various aspect relating to financial performance of NBBL & HBL for the period of last 5 years.
- ) To provide decisive & suitable suggestion to improve the financial performance of two joint venture bank.

Major findings under the study are as follows:

- ) the liquidity ratio measures the ability of a firm to meet its short-term obligations and select the short-term financial solvency of a firm. The liquidity position of the banks in term of current ratio shows that the ratios of NBBL are always below than normal standard. It shows that the liquidity position in term of current assets to current liability of NBBL is better than HBL.
- ) The activity turnover ratio is used to examine the efficiency with the firm manage and utilize its assets. The activity turnover of NBBL in term of loan and advances to total deposit ratio is better than that of HBL. From the analusis, it is concluded that the NBBL has been successfully utilize their deposit in terms of loan and advance for profit generating purpose as compared to HBL.
- ) The capital structure position in term of total debt to shareholder's equity ratio of HBL is higher than that of NBBL. The average of total debt to shareholder's equity ratio implies that the proportion of outsiders claim, in the total capitalization, is higher in HBL. It seems relatively more leverage.

Khatiwada, (2013) had conducted a research on topic "*Financial Performance Analysis of Butwal Power House Company Limited.*" The main objective of this research is comparative examining the overall performance like to analyze the liquidity, capital structure, leverage , soundness of profitability and ownership ratio of Butwal Power House Company Limited, through financial Analysis.

Main objective of this study is to provide recommendation and suggestions to Butwal Power House Company Limited on the basis of findings. Katiwada had collected necessary data and other information from the secondary sources of data. Author had pointed out various findings of the research were;

- ) Liquidity analysis indicates better liquidity position of Butwal Power House Company Limited or it is in strong credibility position.
- ) Leverage/Capital Structure analysis indicated that it is not enough to access a good profit, higher profitability in the company.
- ) Activity/Turnover ratio indicated increment in ration but not satisfactory.

In this study had following recommendations:

The company is in strong credibility position. It should enjoy capital of less cost by borrowing fund. The company has kept very high liquidity ratio. The investment in current assets is excessive which should be controlled. Capital employed turnover ratio is not found good in the study period. To achieve higher profit, the utilization and good management of capital employed is necessary. The company does not use debt capital so leverage ratios are not calculated and decision regarding capital structure cannot be given.

### **2.3. Research Gaps**

The previous thesis reviewed for the preparation of the study have been based on previous years' data. At the time of preparation of this study, the time and scene has changed. New data has been used for analysis; and contemporary among commercial banks Nepal SBI Bank Limited has been selected for analysis. The scene in the commercial banks' working ground has changed in many ways. There is growing competition; on the other hand, the country's risk has been increasing due to recent volatility in the present political and social situations. The study is also unique because it has tried to show the circumstances and effects of positive and negative profits of the selected bank.

## **CHAPTER - THREE**

### **RESEARCH METHODOLOGY**

#### **3.1. Research design:**

Research design refers to the frameworks or outlines of the planning and structure of the research assignment. The first step in this research is to design the framework of the research. The task begins with the collection of necessary data and information concerning the study. The data and information collected must be studied carefully and presented them systematically and get them analyzed so as to meet the objectives of this assignment. The research's main focus is to give new dimension in planned profit and define the effects of various upon the profitability.

#### **3.2. Sources and Types of Data**

To conduct this study, secondary data are taken from annual reports of related office and their websites. So the major sources and types of data include these published sources,

- ) Financial statement of Nepal SBI Bank Limited
- ) Annual report of the bank
- ) Different previous studies
- ) Related bulletins, reports, periodically published by various government bodies.

#### **3.3. Population and Sample**

At present, there are 31 commercial banks are operating in Nepal. They constitute the population sample. Among of them, Nepal SBI Bank Limited is selected for the study of Financial Analysis. Five years data are taken to conduct the study from 2008/09 to 2012/13.

### **3.4. Data Procedure**

Various data obtained through different sources can't be used directly for the analysis in their original form. So, they have been rechecked, re-evaluated, edited and tabulated to bring them into appropriate form for the analysis purpose. The researcher made the collected data trust worthier getting them from authorized sources.

Moreover, different graph charts are presented according to necessity to interpret visually. The data are tabulated according to subject matter and they are shown in table in sequential way. Similarly, the financial ratios are also used for the analysis and interpretation of the financial performance of selected sample.

### **3.5. Method of Data Analysis**

In order to ascertain actual financial position of any firm, various analytical tools can be used. It is true that suitable or appropriate tools, according to the nature of statement and data make the analysis more effective and significant for achieving these objective basically two sorts of tools can be used, financial and statistical the researcher has therefore, applied these tools extensively.

#### **3.5.1. Financial Tools**

As this study is related to financial performance analysis financial tools are more useful they help to identify the financial strength and weakness of the firm in spite of various financial tools available the research has primarily stressed on ration analysis assuming it the most suitable tools.

Lawrence J, (P-199), *"A Ratio is simply a number expressed in terms of other number and it expressed the quantitative relation between any two Variables."*

Moreover, it is used as a technique to quantify the relationship between two sets of financial data taken from either profit and loss account or balance sheet. It provides information relation to strength and weaknesses of financial data in relation to others. However, the researcher has employed his utmost effort to use as many ratios as possible to reach the point of true financial position of the banks. These ratios include the following.

Liquidity Ratios

Activity Ratios

Capital adequacy Ratios

Capital Structure Ratios

Profitability Ratios

Invisibility Ratios

Income and Expenditure Analysis

#### **A) Liquidity Ratios**

Liquidity Ratio measures the firm's ability to fulfill its short-term commitments. These ratios focus on current assets and current liabilities and are used to ascertain the short-term solvency. A very high degree of liquidity of liquidity is also bad, idle cash earn nothing. So, it is necessary to a firm to maintain optimum level of liquidity. A bank is subject to a minimum cash reserve requirements (CRR) imposed by central bank to ensure minimum amount of total assets to meet unexpected withdrawals. The following ratio has been applied to find out liquidity position of the banks.

- i) Current ratio
- ii) Cash and bank balance to total deposit ratio.
- iii) NRB balance to current and saving deposit ratio
- iv) Fixed deposit to total deposit ratio



**i) Current Ratio**

The current ratio is the ratio of total current assets to total current liabilities and measures the short-term solvency of a firm. It is calculated by dividing current assets by current liabilities.

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

Current assets include normally those assets of a firm, which are converted into cash within one year. These assets of a firm includes cash , bank balance, investment in treasury bills, discounts, overdrafts, short-term advance loans, foreign currency loan, bills for collection, customer acceptance, outstanding expenses, divided payable, provision for taxation. Although there is no hard and fast rule for measuring this ratio, conventionally a CR ratio of 2:1 is the considered satisfactory.

**ii) Cash and bank balance to total deposit ratio (CBBTDR)**

This ratio is calculated by dividing cash bank balance by total deposits.

$$\text{CBBTDR} = \frac{\text{cash and Bank Balance}}{\text{Total Deposits}}$$

Total deposits consist of current deposits, saving deposit, fixed deposit money at call and short notice and other deposits. This ratio shows the proportion of total deposits held as compared to the most liquid assets. High ratio shows the strong liquidity position of the bank but very high ratio is not favorable the bank because doesn't produce appropriate profit to bear the high interest.

**iii) NRB balance to current and saving deposit ratio (NRB-CSDR)**

This ratio is computed by using this formula.

$$\text{NRB – CSDR} = \frac{\text{NRB Balance}}{\text{Current and Saving Deposits}}$$

Commercial Banks are required to hold certain proportion of current and saving deposits in NRB's account. It is to ensure the smooth functioning and

sound liquidity position of the Bank. As per the directive of Nepal Rastra Bank, the required ratio of 8 percent must be kept as NRB balance. This means the ratio measures whether the bank is following the direction of NRB or not.

**iv) Fixed deposit to Total Deposit Ratio (FDTDR)**

This ratio determined by dividing fixed deposits by total deposits.

$$\text{FDTDR} = \frac{\text{Fixed Deposit}}{\text{Total Deposits}}$$

It indicates the percentage between total deposits. High ratio shows better opportunity available to the bank to invest in sufficient profit generating long-term loans but low ratio indicates vice versa.

**B) Activity Ratios**

Activity ratios are also known as assets management ratios. These ratios look at the amount of various types of assets and attempt to determine if they are too high or too low with regard to current operating levels. Mostly, activity ratio is used to evaluate managerial efficiency and proper utilization of assets.

- i) Investment to total deposit ratio
- ii) Loans and advances to total deposit ratio.
- iii) Loan advances total assets ratio
- iv) Total income generating assets to total assets ratio

**i) Investment to Total Deposit Ratio (ITDR)**

This ratio is computed by dividing investment by total deposits. This can be stated as:

$$\text{ITDR} = \frac{\text{Investment}}{\text{Total Deposits}}$$

The numerator includes government's treasury bills, development bonds, company shares and other investments. This ratio presents how efficiently the resources the banks have been utilized. High ratio shows managerial efficiency regarding the utilization of deposits and vice-versa.

**ii) Loans and Advances to Total Deposits Ratios (LATDR)**

This ratio is calculated by using following formula.

$$\text{LATDR} = \frac{\text{Loan and Advance}}{\text{Total Deposits}}$$

Loans and advances consists of loans, advances cash credit overdrafts local and foreign bills purchased and discount. It indicates the proportion of total deposits invested in loan and advances. High ratio indicates greater use of deposits in loans and advances but low ratio may be the cause of ideal cash or use of fund in less productive sector. Very high ratio shows the poor liquidity position.

**iii) Loans and Advances to Total Assets Ratio (LATAR)**

This ratio is obtained by dividing loans and advances by total assets.

$$\text{LATAR} = \frac{\text{Loans and Advances}}{\text{Total Assets}}$$

Total Assets include total assets of balance sheet items.

This ratio indicates what proportion of total assets has been used in loans and advances. Higher ratio means effective of total assets in loans and advances.

**iv) Total Income Generating Assets to Total Assets Ratio (IGATAR)**

This ratio is calculated by dividing Total income generating assets by total assets.

$$\text{IGATAR} = \frac{\text{Total Income Generating Assets}}{\text{Total Assets}}$$

Income generating assets are those assets, which are invested for generally income. This includes loans, advances; bills purchased and discounted investment and money at call or short notice. This ratio shows what percentage of the total assets has been invested for income generation. High ratio indicates sound profitability position and greater utilization of assets.

### **C) Capital Adequacy Ratios**

The ratio is important to every business firm. Similarly commercial banks must evaluate this ratio. Capital is important for an organization to maintain every facility. Holding excess capital that required may have higher holding cost and low return from investment, similarly holding too little capital may have inefficiency in paying liabilities of a firm.

So a firm should maintain an optimum level of cash. For maintaining optimum cash by the CBS NRB directs the commercial banks to increase or decrease or fix a certain percentage of capital funds out of total deposits.

- i) Total net worth to total assets ratio
- ii) Net worth to total deposit ratio

#### **i) Net Worth to Total Assets Ratio (NWTAR)**

This ratio is computed by dividing net worth by total assets.

$$\text{NWTAR} = \frac{\text{Net Worth}}{\text{Total Assets}}$$

This ratio measures the percentage of shareholder fund in relation total assets owned by banks. High ratio shows greater contribution of investors' fund and strong capital position.

#### **ii) Net Worth to Total Deposit Ratio (NWTDR)**

This ratio is calculated by using the following formula.

$$\text{NWTDR} = \frac{\text{Net Worth}}{\text{Total Deposits}}$$

It indicates the percentage of net worth in relations to the total deposits collected in the bank. The direction of the central bank has maintained or not by the bank, is the yardstick to measure the position.

#### **D) Capital Structure Ratios**

Capital structure ratios also known as leverage ratios are the measures of long-term solvency of a bank. Capital structure generally refers to the composition of debt and equity component of overall capital of a firm. These ratios are calculated to measure the long-term financial position of the bank.

Specially, structure ratio and coverage ratio have been calculated and interpreted under capital structure ratio. The first ratio deals with the composition of debt and equity capital where as to second show the relationship between shareholders' fund and total assets of the banks. These two categories of ratio, particularly, include the following.

- i) Debt to equity Ratio
- ii) Total debt to total assets ratio
- iii) Interest coverage ratio.

#### **i) Debt to Equity Ratio (DER)**

This ratio can be calculated in this way.

$$\text{DER} = \frac{\text{Total Debt}}{\text{Shareholders Equity}}$$

This ratio shows the relationship between debt capital and equity capital. High debt equity ratio indicates greater financing by debt holders than those of equity holders. From the creditor's view-point, high debt-equity ratio of the banks is more risky to them. It means the bank may fail to satisfy creditors.

## **ii) Total Debt to Total Assets Ratio (TDTAR)**

This ratio can be calculated in this way.

$$\text{TDTAR} = \frac{\text{Total Debt}}{\text{Total Assets}}$$

This ratio can be denotes the relationship between total debt and total assets of the banks. The higher ratio indicates the greater portion of the outsiders' and investment in term of the bank's assets.

## **iii) Interest Coverage Ratio (ICR)**

This ratio is computed by dividing earnings before income and tax by interest.

This ratio evaluates the debt serving capacity of the banks.

$$\text{ICR} = \frac{\text{EBIT}}{\text{Interest}}$$

The higher ratio shows that the bank can pay the interest easily.

## **E) Profitability Ratios**

Profitability ratio is one of the main indicators to analyzing the financial performance of a firm. It calculates to measure the earning performance and operational efficiency of the bank. A bank should be able to produce adequate profit on each rupee of investment, if investments do not generate sufficient profits, it would be very difficult for the bank to cover operating expenses and interest charges. The profitability of the bank should also be evaluated in term of its investment in assets and in term of capital contributed by creditors. If the bank is unable to earn satisfactory return of investment, its survival is threatened.

Under this category the researcher has calculated the following ratios to obtain the stated objectives of the study.

- i) Return on total assets ratio
- ii) Return on equity ratio

iii) Interest earned to total assets ratio

iv) Total interest expenses to total interest income ratio

**i) Return on Total Assets Ratio (ROTA)**

This ratio is related to net profit after tax (NPAT) and total assets. How efficiently is the assets of a firm able to generate more profit are measured by this ratio is calculated by dividing NPAT by Total Assets. This ratio provides the foundation necessary for a company to deliver a good return on equity.

$$\text{ROTA} = \frac{\text{Net Profit}}{\text{Total Assets}}$$

The increasing Ratio shows favorable situation for the banks. The higher ratio is also shows that the bank could manage their overall operations, but the lower ratio shows vice-versa.

**ii) Return on Equity Ratio (ROE)**

This ratio measures, how much profit is earned by utilizing funds of total equity by the firm. As the commercial bank, the objectives of joint venture bank are to earn profit so as to provide a reasonable return to the owners. Total shareholders' equity consists of preference share capital, ordinary share capital, share premium and reserve and surplus less accumulated losses. This ratio can be computed as Net profit after tax (NPAT) divided by average total shareholders' equity.

$$\text{ROE} = \frac{\text{Net Profit After tax}}{\text{Total Equity}}$$

**iii) Interest Earned to Total Assets Ratio (IETAR)**

The ratio indicates how much interest mobilizing the assets in the bank has generated. Interest is the main source of income of banks' interest received

from generally loan and advances overdraft and investment in securities. This ratio can be computed as interest earned divided by total assets.

$$\text{IETAR} = \frac{\text{Interest Earned}}{\text{Total Assets}}$$

Higher ratio indicates higher efficiency in the mobilization of resources and ability of interest earning and vice-versa.

#### **iv) Total Interest Expenses to Total Interest Income Ratio (TIETIIR)**

This ratio can be computed by using the following formula.

$$\text{TIETIIR} = \frac{\text{Interest Earned}}{\text{Total Interest Income}}$$

The numerators consist of total interest paid on deposits liabilities, loan and advances and other deposits. The denominator comprises total interest earned or retained from loan and advances, cash credit and overdraft, government securities, interbank and other investment. This ratio indicates how much interest expenses have been made in relation to interest income received. The higher ratio shows unfavorable profitability situation of the bank.

#### **F) Invisibility Ratios**

An analysis of invisibility ratio helps the investors to know about the performance of the banks. Therefore, following ratio have been calculated to test earning capacity of the banks to last earning capacity of the bank.

- i) Earnings per share (EPS)
- ii) Dividend per share (DPS)
- iii) Tax per share (TPS)
- iv) Dividend payout ratio (DPR)



**i) Earnings per Share (EPS)**

This ratio is calculated by dividing earning available to common stockholders by number of outstanding share of common stock.

$$\text{EPS} = \frac{\text{Earning Available to Common Stockholders}}{\text{No.of outstanding share of Common Stock}}$$

High ratio shows the sound profitability position of the bank. It is favorable for the investor too.

**ii) Dividend per Share (DPS)**

This ratio can be obtained by using following formula.

$$\text{DPS} = \frac{\text{Earning paid to the Shareholders}}{\text{No. of outstanding share of Common Stock}}$$

This ratio shows per rupee earning actually distributed to common stock holders per share held by them. High ratio is favorable for the shareholders.

**iii) Tax per Share (TPS)**

Tax per Share is obtained by dividing tax paid to government by number of common share outstanding.

$$\text{TPS} = \frac{\text{Tax Paid to Government}}{\text{No. of outstanding share of Common Stock}}$$

This ratio shows the contribution of shareholders for the economic development. Higher TPS indicates the better profitability position of the bank.

**iv) Dividend Pay Out Ratio (DPR)**

It measures the relationship between the earning belonging to the ordinary shareholders and the dividend paid to them. This ratio can be calculated by dividing the total dividend paid to the owners by the total profit/earning available to them.

$$\text{DPR} = \frac{\text{Dividend per Share}}{\text{Earning per Share}} \times 100\%$$

### **G) Income and Expenditure Analysis**

There are so many items in debit and credit side in income and expenditure or profit and loss account. This tool has been used to separate the income and expenditure in to main sub headings. So this helps to compare nature of income and expenditure. Different proportions of the income and expenses have been separated according to their homogenous nature. Under the income analysis there will four headings, interest incomes, commission & discount, foreign exchange income & other income. In expenses analysis it is divided into major four sub-headings, i.e. interest expenses, staff expenses, office operation expenses and bonus facilities.

### **3.5.2. Statistical Tools**

Although various statistical tools are available to analyze the obtained data, the researcher has selected the most suitable and commonly usable tools to extract trustworthy financial decision.

- a. Arithmetic Mean
- b. Karl Pearson's co-efficient of correlation
- c. Probable error
- d. Least square linear trend
- e. T - Test

#### **i) Arithmetic Mean**

Arithmetic mean of a given set of observation is their sum divided by the number of observation. Average is the typical values around which other items of distribution congregate. In general, if  $x_1, x_2, x_3, \dots, x_n$  are the given number of observation, their arithmetic mean can be obtained by:

$$\bar{x} = \frac{\sum x}{n}$$

Where,  $\bar{x}$  denotes arithmetic mean,  $n$  denotes the no. of periods and  $x_1, x_2$  and  $x_3$  are the individual observations.

**(ii) Karl Pearson's Correlation Coefficient.**

Out of several mathematical method of measuring correlation, the Karl Pearson's coefficient of Correlation is most widely used in practice to measure the degree of relationship between two variables. So, is measured by following formula using two variables or series  $x$  and  $y$ .

$$r = \frac{n\sum xy - \sum x \sum y}{\sqrt{n\sum x^2 - (\sum x)^2} \sqrt{n\sum y^2 - (\sum y)^2}}$$

Where,  $r$  = Correlation Coefficient

$\sum xy$  = sum of product of observations in two series,  $x$  and  $y$

$\sum x$  = sum of observation in  $x$  series

$\sum y$  = sum of observation in  $y$  series

$\sum x^2$  = sum of square of observations in  $x$  series

$\sum y^2$  = sum of square of observations in  $y$  series

The value of this coefficient ( $r$ ) can never be more than 1 or less than -1. Thus +1 and -1 are limits of the coefficient. Here,  $r = +1$  implies that there is perfect positive correlation between the two variables. But  $r = -1$  implies that there is perfect negative correlation between the variables. If it has a Zero Value ( $r = 0$ ), it denotes no correlation between the variables. If the obtained value lies outside the limit  $\pm 1$ , this implies that there is some mistake in calculation.

**(iii) Probable Error of Correlation**

Probable error of correlation is an old testing the reliability of an observed value of correlation coefficient. It is calculated to find the extent to which

correlation coefficient is dependable as it depends upon the condition of random sampling probable error of correlation coefficient denoted by P.E (r) is obtained as

$$P.E.(r) = 0.6745 \left| \frac{1 - r^2}{\sqrt{n}} \right|$$

Where, r = Correlation Coefficient

n = no. of pairs of observation

Standard error reason for taking 0.6745 is that in a normal distribution  $\sqrt{n}$  5 % of observation lie in range  $\mu \pm 10.675 \sigma$  Where  $\mu$  denotes the population mean and standard deviation.

P.E. (r) is used to test if an observed value of sample correlation coefficient is significant of any correlation in population.

If r is less than its P.E (r < P.E) it is not all significant correlation. If r is more than its P.E (r > 6 P.E) there is correlation.

If r is more than 6 times its P.E and greater than  $\pm 0.5$ , then it is considered correlation.

#### (iv) Least Square Linear Trend

The straight line trend implies that irrespective of the seasonal and cyclical swings and irregular functions, the values increase or decrease by absolute amount per unit of time. The linear trend values form a series in arithmetic progression. It combines by following notations.

$$y = a + bx$$

Where, y = the value of dependent variable

a = intercept of trend line

b = slope of trend line

x = value of the independent variable i.e. time where they put in normal equation, these equations can be developed

$$\sum y = na + b\sum x$$

$$\phi_{xy} = a\phi_x + b\phi_x^2$$

since  $\phi_x = 0$ ,

$$a = \frac{\phi_y}{n} \text{ and } b = \frac{\phi_{xy}}{\phi_x^2}$$

The constant **a** is simply equal to the mean of **y** value and constant **b** given the rate of change. This is a mathematical method, which is widely used in practice. It is applied for finding out a trend line for those series, which change periodically in absolute amount.

#### v) T – Test

The branch of statistics that helps in arriving at the criterion for avoiding the risk of taking wrong decisions is known as testing of hypothesis (Gupta, 1999:1116-1117). The t-distribution, commonly called the student's t-distribution, is used when sample size is equal to or less than 30, the parent population from which the sample is drawn is normal, the population standard deviation is unknown, and the given sample is drawn by normal sampling method..

Null hypothesis:  $H_0=0$ , i.e. there is no significance difference between sample mean and population mean.

Alternate hypothesis:  $H_1 \neq 0$ , i. e. there is significance difference between sample mean and population mean.

The following formula is used to test an observed sample correlation coefficient.

$$t = \frac{\bar{X} - \uparrow}{\sqrt{\frac{S}{n-1}}}$$

where,  $\bar{X}$  = sample mean

$\uparrow$  = population mean

n = no of sample

s = standard deviation

## **CHAPTER - FOUR**

### **PRESENTATION AND ANALYSIS OF DATA**

In this chapter, the data have been analyzed and interpreted using financial and statistical tools following the research methodology dealt in the third chapter. In the part of analysis, various tables have been used to present the data collected from various sources have been inserted in the required tables according to their homogenous nature. The outcomes of the analysis have been compared with conventional standard with respect to ratio analysis, directives of NRB and other factors. Furthermore, many suitable graphs, and diagrams have also been used to clarify the actual position and performance of the bank.

#### **4.1. Financial Tools**

Ratio analysis involves the methods of calculating and interpreting financial ratios in order to assess the firm's performance and status. The basic input to ratio analysis is the firm's income and expenditure statement and balance sheet for the periods to be examined. The study consists of the following ratios to analyze the financial performance of the Nepal SBI Bank Limited.

##### **4.1.1. Liquidity Ratios**

Liquidity Ratio measures the firm's ability to fulfill its short-term commitments. These ratios focus on current assets and current liabilities and are used to ascertain the short-term solvency. The following ratio has been applied to find out liquidity position of the banks.

- ) Current ratio
- ) Cash and bank balance to total deposit ratio.
- ) NRB balance to current and saving deposit ratio
- ) Fixed deposit to total deposit ratio

#### 4.1.1.1. Current Ratio

Current assets include normally those assets of a firm, which are converted into cash within one year. These assets of a firm includes cash , bank balance, investment in treasury bills, discounts, overdrafts, short-term advance loans, foreign currency loan, bills for collection, customer acceptance, outstanding expenses, divided payable, provision for taxation. Although there is no hard and fast rule for measuring this ratio, conventionally a CR ratio of 2:1 is the considered satisfactory. It is calculated by dividing current assets by current liabilities.

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

**Table: 4.1**

#### **Current Ratio of Nepal SBI Bank Limited**

(Rs. In millions)

<b>Year</b>	<b>Current Assets (Rs.)</b>	<b>Current Liabilities (Rs.)</b>	<b>Current Ratio (in terms of times)</b>
2008/09	29,912	28,253	1.05
2009/10	37,629	35,397	1.06
2010/11	45,671	43,008	1.06
2011/12	56,396	54,258	1.03
2012/13	64,134	61,034	1.05
<b>Average</b>	<b>46,749</b>	<b>44,390</b>	<b>1.05</b>

(Source: - Appendix I )

Analysis of table 4.1 shows that the current assets of Nepal SBI Bank Ltd. have always exceeded the current liabilities for the study period of five Years from 2008/09 to 2012/13. The bank has the highest current ratio of 1.06 in 2009/10 and 2010/11 and the lowest current of 1.03 in 2011/12 with an average current ratio of 1.05 during the study period. In general terms, the bank has

been able to meet its short-term obligations. The above analysis indicates that the bank is in sound liquidity position.

#### **4.1.1.2. Cash and Bank Balance to Total Deposit Ratio (CBBTDR)**

Total deposits consist of current deposits, saving deposit, fixed deposit money at call and short notice and other deposits. This ratio shows the proportion of total deposits held as compared to the most liquid assets. High ratio shows the strong liquidity position of the bank but very high ratio is not favorable the bank because doesn't produce appropriate profit to bear the high interest. This ratio is calculated by dividing cash bank balance by total deposits.

$$\text{CBBTDR} = \frac{\text{cash and Bank Balance}}{\text{Total Deposits}}$$

**Table: 4.2**

#### **Cash and Bank Balance to Total Deposit Ratio**

(Rs. In millions)

<b>Year</b>	<b>Cash and Bank Balance (Rs.)</b>	<b>Total Deposits (Rs.)</b>	<b>Ratio %</b>
2008/09	1,903	25,957	7.33
2009/10	3,441	34,896	9.86
2010/11	4,877	42,415	11.50
2011/12	5,508	53,337	10.33
2012/13	7,713	58,920	13.09
<b>Average</b>	<b>4,688</b>	<b>43,105</b>	<b>10.88</b>

(Source: - Appendix I)

The analysis of table 4.2 shows that cash reserve ratio of the Nepal SBI bank differs from maximum of 13.09% in the year 2012/13 to the minimum of 7.33% in the year 2008/09 with an average of 10.88% during the study period. The analysis specifies that the bank is volatile to maintain cash reserve ratio as per NRB directives.



#### 4.1.1.3. NRB Balance to Current and Saving Deposit Ratio (NRB-BCSDR)

Commercial Banks are required to hold certain proportion of current and saving deposits in NRB's account. It is to ensure the smooth functioning and sound liquidity position of the Bank. As per the directive of Nepal Rastra Bank, the required ratio of 8 percent must be kept as NRB balance. This means the ratio measures whether the bank is following the direction of NRB or not. This ratio determined by dividing NRB Balance by Current & Saving deposit.

$$\text{NRB - CSDR} = \frac{\text{NRB Balance}}{\text{Current and Saving Deposits}}$$

**Table: 4.3**

#### **NRB Balance to Current and Saving Deposit Ratio**

(Rs. In millions)

<b>Year</b>	<b>Nepal Rastra Bank Balance (Rs)</b>	<b>Current &amp; Savings Deposits (Rs.)</b>	<b>Ratio %</b>
2008/09	444	8,687	5.11
2009/10	1,842	10,210	18.04
2010/11	2,330	12,338	18.89
2011/12	3,269	14,122	23.15
2012/13	4,957	17,924	27.66
<b>Average</b>	<b>2,568</b>	<b>12,656</b>	<b>23.30</b>

(Source: - Appendix I)

Table 4.3 exposed that the ratios of Nepal SBI bank were 5.11%, 18.04%, 18.89%, 23.15% and 27.66% with mean ratio of 23.30%. Commercial Banks are required to hold certain proportion of current and saving deposits in NRB's account. It is to ensure the smooth functioning and sound liquidity position of the Bank. Nepal SBI Bank is failed to maintain minimum deposit liabilities of 8% as cash reserve with Nepal Rastra Bank except in the fiscal year 2008/09.

#### 4.1.1.4. Fixed Deposit to Total Deposit Ratio (FDTDR)

It indicates the percentage between total deposits. High ratio shows better opportunity available to the bank to invest in sufficient profit generating long-term loans but low ratio indicates vice versa. This ratio determined by dividing fixed deposits by total deposits.

$$\text{FDTDR} = \frac{\text{Fixed Deposit}}{\text{Total Deposits}}$$

**Table: 4.4**

#### **Fixed Deposit to Total Deposit Ratio**

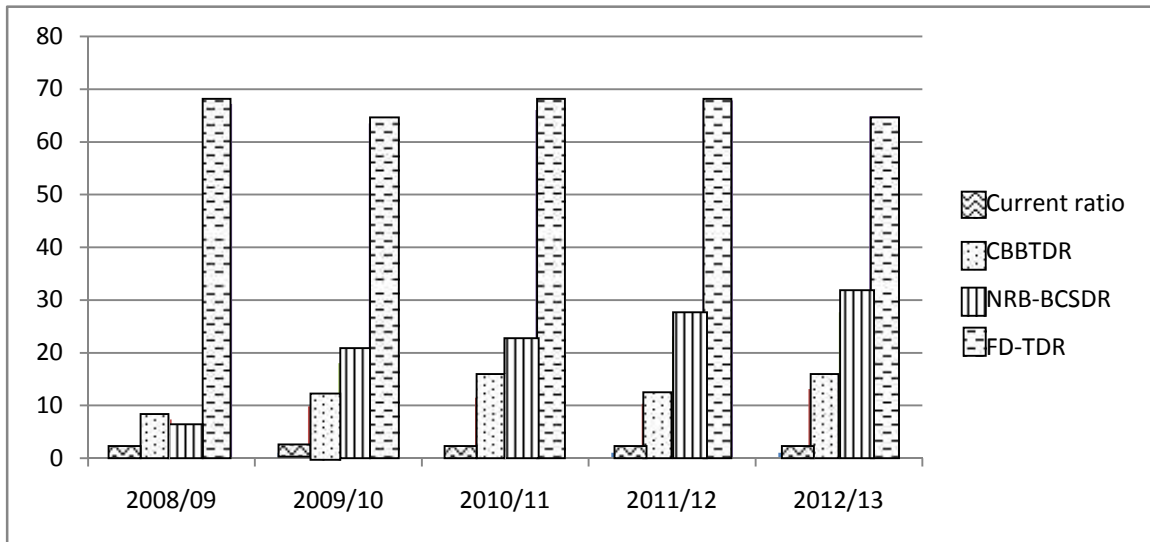
(Rs. In millions)

<b>Year</b>	<b>Fixed Deposits (Rs.)</b>	<b>Total Deposits (Rs.)</b>	<b>Ratio %</b>
2008/09	17,438	25,957	67.19
2009/10	22,148	34,896	63.47
2010/11	28,013	42,415	66.05
2011/12	36,208	53,337	67.89
2012/13	38,179	58,920	64.80
<b>Average</b>	<b>28,397</b>	<b>43,105</b>	<b>65.88</b>

(Source:- Appendix I)

The above calculation done in table 4.5 shows that fixed deposit is the high interest bearing deposit which can be withdrawn only after its maturity. The above table shows that the fixed deposit to total deposit ratio of the Nepal SBI Bank differ from maximum of 67.89 % in the year 2011/12 to the minimum of 63.47% in the year 2009/10 with an average of 65.88% during the study period of five years. The analysis indicates that the portion of fixed deposit in the total deposit is fluctuating.

**Figure: 4.1**  
**Liquidity Ratio of Nepal SBI Bank Ltd.**



*(Source annual report of SBI Bank Ltd.)*

#### **4.1.2. Activity Ratios**

Activity ratio has been used to evaluate managerial efficiency and proper utilization of assets. This includes investment to total deposit ratio, loans and advances to total deposit ratio, loans and advances to saving deposit ratio and total income generating assets to total deposit ratio.

##### **4.1.2.1. Investment to total deposit ratio (ITDR)**

The numerator includes government's treasury bills, development bonds, company shares and other investments. This ratio presents how efficiently the resources the banks have been utilized. High ratio shows managerial efficiency regarding the utilization of deposits and vice-versa. This ratio is computed by dividing investment by total deposits.

$$ITDR = \frac{\text{Investment}}{\text{Total Deposits}}$$

**Table: 4.5**

**Investment to Total Deposit Ratio**

(Rs. In millions)

<b>Year</b>	<b>Investment (Rs.)</b>	<b>Total Deposits(Rs.)</b>	<b>Ratio %</b>
2008/09	13,286	25,957	51.18
2009/10	16,305	34,896	46.72
2010/11	18,991	42,415	44.77
2011/12	24,463	53,337	45.86
2012/13	25,906	58,920	43.97
<b>Average</b>	<b>19,790</b>	<b>43,105</b>	<b>45.91</b>

(Source:- Appendix I)

Table 4.6 shows that investment to total deposit ratios of Nepal SBI Bank Limited remained 51.18%, 46.72%, 44.77%, 45.86% and 43.97% in the respective years with the average of 45.91% in the study period. The higher average shows that Nepal SBI Bank Limited is successful in managerial efficiency regarding the utilization of deposits.

**4.1.2.2. Loans and Advances to Total Deposits Ratios (LATDR)**

Loans and advances consists of loans, advances cash credit overdrafts local and foreign bills purchased and discount. It indicates the proportion of total deposits invested in loan and advances. High ratio indicates greater use of deposits in loans and advances but low ratio may be the cause of ideal cash or use of fund in less productive sector. Very high ratio shows the poor liquidity position. This ratio is computed by dividing Loan and Advance by total deposits.

$$\text{LATDR} = \frac{\text{Loan and Advance}}{\text{Total Deposits}}$$

**Table: 4.6**

**Loans and Advances to Total Deposits Ratios**

(Rs. In millions)

<b>Year</b>	<b>Loan &amp; Advances(Rs.)</b>	<b>Total Deposits(Rs.)</b>	<b>Ratio %</b>
2008/09	15,161	25,957	58.41
2009/10	17,480	34,896	50.09
2010/11	21,365	42,415	50.37
2011/12	26,142	53,337	49.01
2012/13	28,788	58,920	49.00
<b>Average</b>	<b>21,787</b>	<b>43,105</b>	<b>50.55</b>

(Source: - Appendix I)

The above calculated shows that loans and advances to total deposits of the Nepal SBI Bank Limited fluctuates from maximum of 58.41 percent in the fiscal year 2008/09 to the minimum of 49 percentage in the year 2012/13 with an average of 50.55 percent. The analysis shows that the bank is mobilizing its total deposits in loan and advances adequately and it has efficiently utilized its total deposits for loan and advances. Higher ratio reveals that it is efficient to utilize the financial resources in productive sectors.

**4.1.2.3. Loan and Advances to Total Assets Ratio (LATAR)**

Total Assets include total assets of balance sheet items. This ratio indicates what proportion of total assets has been used in loans and advances. Higher ratio means effective of total assets in loans and advances. This ratio determined by dividing Loan and Advance by total Assets.

$$\text{LATAR} = \frac{\text{Loans and Advances}}{\text{Total Assets}}$$

**Table: 4.7**

**Loans and Advances to Total Assets Ratios**

(Rs. In millions)

<b>Year</b>	<b>Loan &amp; Advances(Rs.)</b>	<b>Total Assets(Rs.)</b>	<b>Ratio %</b>
2008/09	15,161	30,166	50.26
2009/10	17,480	38,047	45.94
2010/11	21,365	46,088	46.36
2011/12	26,142	58,059	45.03
2012/13	28,788	64,796	44.43
<b>Average</b>	<b>21,787</b>	<b>47,431</b>	<b>45.93</b>

(Source:- Appendix I)

Table 4.8 shows that the ratios of Nepal SBI bank Limited were 50.26%, 45.94%, 46.36%, 45.03%, and 44.43% with an average of 45.93% in the respective years of study period. The higher average ratio indicates that Nepal SBI Bank Limited is efficient in utilization of total assets in profitable sector. It can be determined that ratios of Nepal SBI Bank Limited fluctuate to a greater extent in the study period.

**4.1.2.4. Total Income Generating Assets to Total Assets Ratio (TIGATAR)\**

Income generating assets are those assets, which are invested for generally income. This includes loans, advances; bills purchased and discounted investment and money at call or short notice. This ratio shows what percentage of the total assets has been invested for income generation. High ratio indicates sound profitability position and greater utilization of assets. This ratio is computed by dividing Income generating assets by total Assets.

$$\text{IGATAR} = \frac{\text{Total Income Generating Assets}}{\text{Total Assets}}$$

**Table: 4.8**

**Total Income Generating Assets to Total Assets Ratio**

(Rs. In millions)

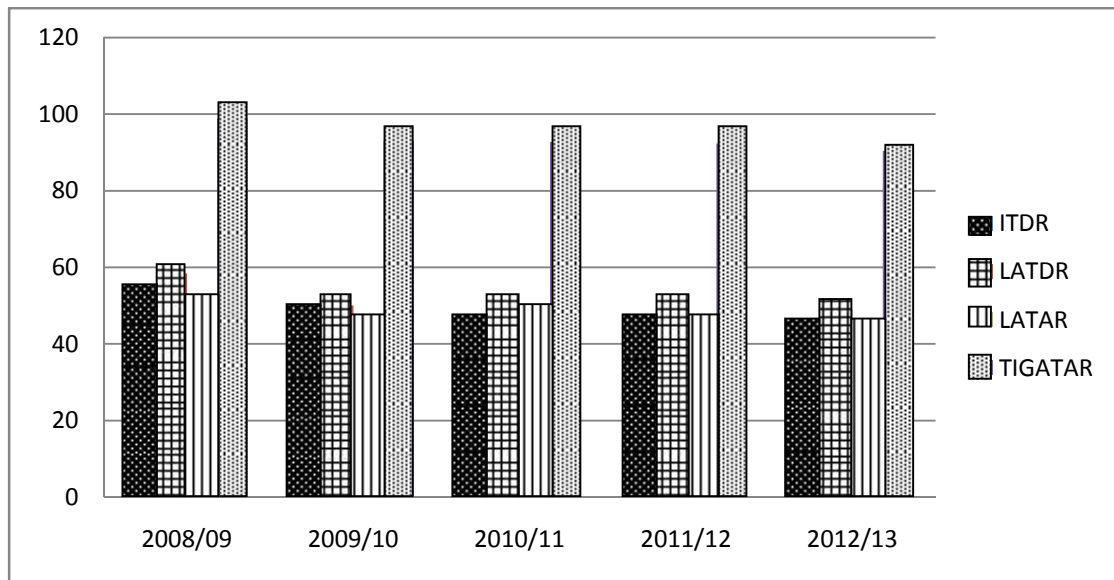
Year	Income Generating Assets (Rs.)	Total Assets (Rs.)	Ratio %
2008/09	29,820	30,166	98.80
2009/10	35,389	38,047	93.01
2010/11	42,749	46,088	92.76
2011/12	53,603	58,059	92.32
2012/13	58,599	64,796	90.44
<b>Average</b>	<b>44,032</b>	<b>47,431</b>	<b>92.83</b>

(Source:- Appendix I)

Table 4.9 depicts that the ratios of Nepal SBI bank Limited were 98.80%, 93.01%, 92.76%, 92.32% and 90.44%, in the respective years of study period with the mean of 92.83%. This higher ratio shows that Nepal SBI Bank Limited has sound profitability position and greater utilization of its assets.

**Figure: 4.2**

**Activity Ratio of Nepal SBI Bank Ltd.**



(Source annual report of SBI Bank Ltd.)

The ratio is important to every business firm. Similarly commercial banks must evaluate this ratio. Capital is important for an organization to maintain every facility. Holding excess capital that required may have higher holding cost and low return from investment, similarly holding too little capital may have inefficiency in paying liabilities of a firm.

#### 4.1.3. Capital Adequacy Ratios

Capital Adequacy Ratio is calculated to know whether an organization is utilizing its capital in correct order or not.

##### 4.1.3.1. Net Worth to Total Assets Ratio (NWTAR)

This ratio measures the percentage of shareholder fund in relation total assets owned by banks. High ratio shows greater contribution of investors' fund and strong capital position. This ratio is computed by dividing net worth by total assets.

$$\text{NWTAR} = \frac{\text{Net Worth}}{\text{Total Assets}}$$

**Table: 4.9**  
**Net Worth to Total Assets Ratio**

(Rs. In millions)

Year	Net worth (Rs.)	Total Assets (Rs.)	Ratio (Percentage)
2008/09	1,712	30,166	5.68
2009/10	2,450	38,047	6.44
2010/11	2,879	46,088	6.25
2011/12	3,197	58,059	5.51
2012/13	3,798	64,796	5.86
<b>Average</b>	<b>2,807</b>	<b>47,431</b>	<b>5.92</b>

(Source:- Appendix I)

The table 4.10 displays that the ratios of Nepal SBI Bank Limited remained 5.68%, 6.44%, 6.25%, 5.51%, and 5.86% in the respective years of study



period with the average of 5.92%. The greater ratio indicates that Nepal SBI bank Limited has greater contribution to investors fund and strong capital adequacy position.

#### 4.1.3.2. Net Worth to Total Deposit Ratio (NWTDR)

It indicates the percentage of net worth in relations to the total deposits collected in the bank. The direction of the central bank has maintained or not by the bank, is the yardstick to measure the position.

This ratio is computed by dividing net worth by total deposits.

$$\text{NWTDR} = \frac{\text{Net Worth}}{\text{Total Deposits}}$$

**Table: 4.10**  
**Net Worth to Total Deposit Ratio**

(Rs. In millions)

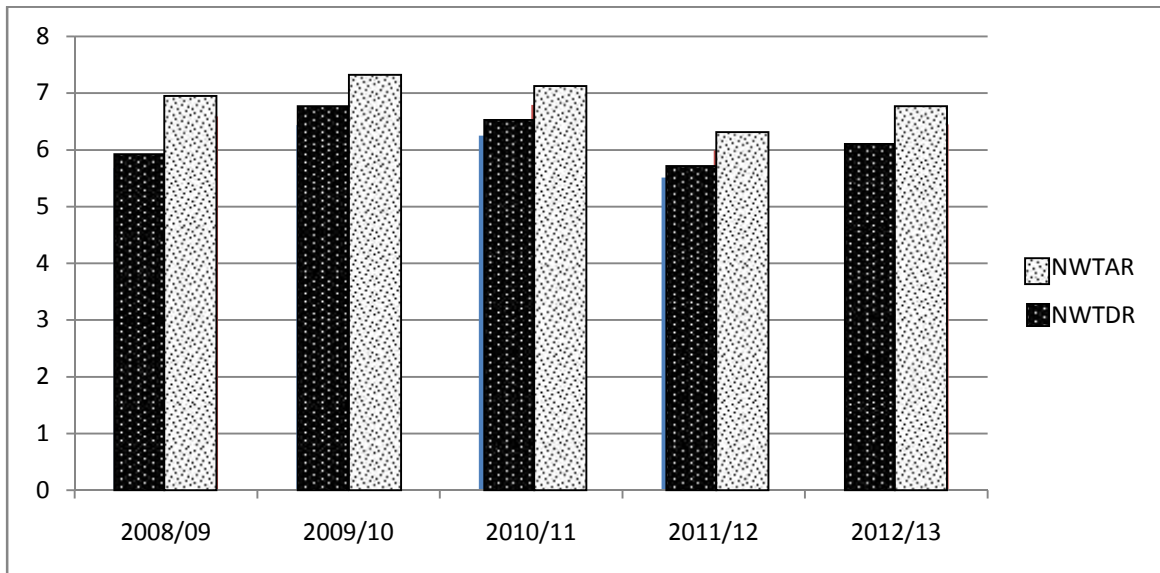
Year	Net worth (Rs.)	Total Deposits (Rs.)	Ratio (Percentage)
2008/09	1,712	25,957	6.59
2009/10	2,450	34,896	7.02
2010/11	2,879	42,415	6.79
2011/12	3,197	53,337	5.99
2012/13	3,798	58,920	6.45
<b>Average</b>	<b>2,807</b>	<b>43,105</b>	<b>6.51</b>

(Source:- Appendix I)

The above calculated shows that Net Worth to Total Deposits ratio Nepal SBI bank Limited fluctuating from maximum of 7.02 percentage in the fiscal year 2009/10 to the minimum of 5.99 percentage in the year 2011/12 with an average of 6.51 percentage. According to the NRB directives to the capital adequacy ratio 11 percent Nepal SBI Bank Limited fails to be maintained the ratio as prescribed by the Central Bank.

**Figure: 4.3**

**Capital Adequacy Ratio of Nepal SBI Bank Ltd.**



*(Source annual report of SBI Bank Ltd.)*

#### **4.1.4. Capital Structure Ratios**

Capital structure ratio also known as leverage ratios are the measures of long-term solvency of a bank. Capital structure generally refers to the composition of debt and equity component of overall capital of a firm.

##### **4.1.4.1. Debt to Equity Ratio (DER)**

This ratio shows the relationship between debt capital and equity capital. High debt equity ratio indicates greater financing by debt holders than those of equity holders. From the creditor's view-point, high debt-equity ratio of the banks is more risky to them. It means the bank may fail to satisfy creditors.

This ratio is computed by dividing Debt by Equity.

$$DER = \frac{\text{Total Debt}}{\text{Shareholders Equity}}$$

**Table: 4.11**  
**Debt to Equity Ratio**

(Rs. In millions)

Year	Total Debt (Rs.)	Shareholders' Equity (Rs.)	Ratio (Times)
2008/09	29,204	1,712	17.05
2009/10	37,802	2,450	15.43
2010/11	43,208	2,879	15.00
2011/12	54,862	3,197	17.16
2012/13	60,997	3,798	16.07
<b>Average</b>	<b>45,215</b>	<b>2,807</b>	<b>16.10</b>

(Source:- Annual report of Nepal SBI Bank Ltd.)

The above calculated table shows that debt to equity ratio of the Nepal SBI bank Limited differ from maximum 17.16 times in the year 2011/12 to the minimum of 15.00 times in the year 2010/11 with an average of 16.10 times during the study period. The analysis indicates that the bank has the high debt ratio, which indicates that the creditors have invested more in the bank than the owners.

#### **4.1.4.2. Total Debt to Total Assets Ratio (TDTAR)**

This ratio can be denotes the relationship between total debt and total assets of the banks. The higher ratio indicates the greater portion of the outsiders' and investment in term of the bank's assets. This ratio is determined by dividing total debt by total assets.

$$\text{TDTAR} = \frac{\text{Total Debt}}{\text{Total Assets}}$$

**Table: 4.12**

**Total Debt to Total Assets Ratio**

(Rs. In millions)

<b>Year</b>	<b>Total Debt (Rs.)</b>	<b>Total Assets (Rs.)</b>	<b>Ratio (Percentage)</b>
2008/09	29,204	30,166	96.81
2009/10	37,802	38,047	99.35
2010/11	43,208	46,088	93.75
2011/12	54,862	58,059	94.49
2012/13	60,997	64,796	94.14
<b>Average</b>	<b>45,215</b>	<b>47,431</b>	<b>95.33</b>

(Source:- Annual report of Nepal SBI Bank Ltd.)

The above calculated table shows that Debt to Total Assets of the Nepal SBI Bank Limited differs from maximum of 99.35% in the year 2009/10 to the minimum of 93.75% in the year 2010/11 with an average of 95.33% during the study period. This analysis indicates that the bank has the high debt equity ratio, which means creditors have invested more in the bank than the owners. So this shows role of creditors in the bank is high than the owners in investing sector of Bank.

**4.1.4.3. Interest Coverage Ratio (ICR)**

This ratio is computed by dividing earnings before income and tax by interest. This ratio evaluates the debt serving capacity of the banks. The higher ratio shows that the bank can pay the interest easily.

$$ICR = \frac{EBIT}{Interest}$$

**Table: 4.13**  
**Interest Coverage Ratio**

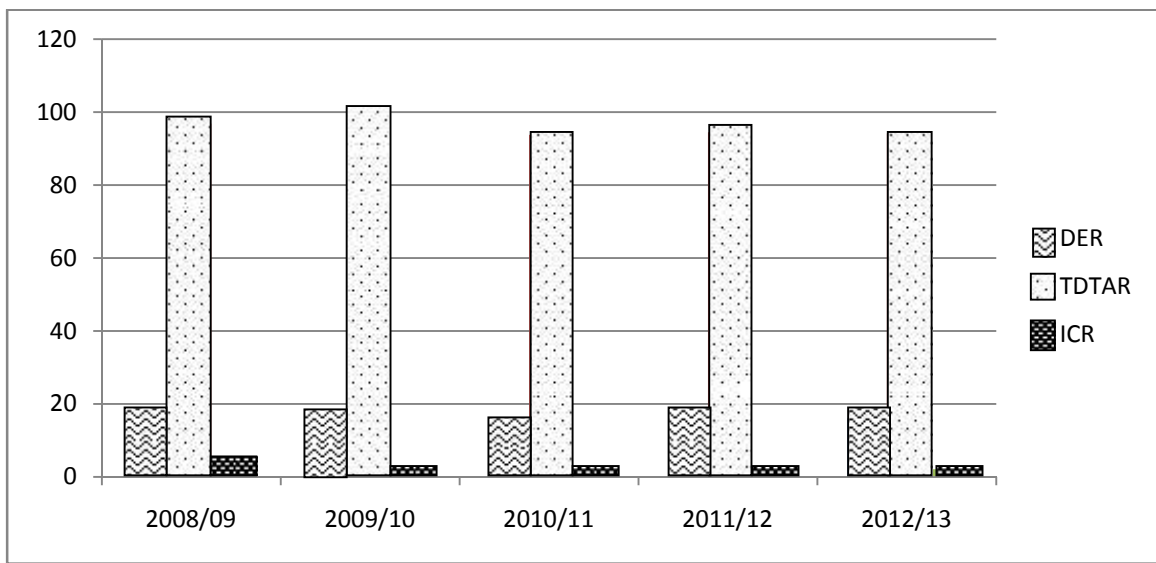
(Rs. In millions)

<b>Year</b>	<b>EBIT (Rs.)</b>	<b>Interest Expenses (Rs.)</b>	<b>Ratio (times)</b>
2008/09	1,903	824	2.31
2009/10	2,808	1,443	1.94
2010/11	3,100	2,096	1.48
2011/12	4,456	2,770	1.61
2012/13	5,220	2,486	2.09
<b>Average</b>	<b>3,497</b>	<b>1,924</b>	<b>1.82</b>

(Source:- Annual report of Nepal SBI Bank Ltd.)

The above calculated table shows that the ratios of Nepal SBI Bank Limited remained 2.31, 1.94, 1.48, 1.61 and 2.09 times respectively during the study period. The ratio differs from maximum of 2.31 times in the year 2008/09 to the minimum of 1.48 times in the year 2010/11 with an average of 1.82 times during the study period. This analysis indicates that the bank has sufficient operation of debt and can pay interest easily.

**Figure: 4.4**  
**Capital Structure Ratio of Nepal SBI Bank Ltd.**



(Source:- Annual report of Nepal SBI Bank Ltd.)

#### 4.1.5. Profitability Ratios

Profitability ratio is one of the main indicators to analyzing the financial performance of a firm. It calculates to measure the earning performance and operational efficiency of the bank. A bank should be able to produce adequate profit on each rupee of investment, if investments do not generate sufficient profits, it would be very difficult for the bank to cover operating expenses and interest charges. The profitability of the bank should also be evaluated in term of its investment in assets and in term of capital contributed by creditors. If the bank is unable to earn satisfactory return of investment, its survival is threatened.

##### 4.1.5.1. Return on Total Assets Ratio (ROTA)

This ratio is related to net profit after tax (NPAT) and total assets. How efficiently is the assets of a firm able to generate more profit are measured by this ratio is calculated by dividing NPAT by Total Assets. This ratio provides the foundation necessary for a company to deliver a good return on equity. Return on total assets ratio of Nepal SBI Bank Ltd. for the period of 2008/09 to 2012/13 is presented in the Table-4.15 below.

$$\text{ROTA} = \frac{\text{Net Profit}}{\text{Total Assets}}$$

**Table: 4.14**

#### **Return on Total Assets Ratio**

(Rs. In millions)

<b>Year</b>	<b>Net Profit</b>	<b>Total Assets</b>	<b>Ratio (Percentage)</b>
2008/09	316	30,166	1.05
2009/10	391	38,047	1.03
2010/11	464	46,088	1.00
2011/12	480	58,059	0.83
2012/13	771	64,796	1.19
<b>Average</b>	<b>484</b>	<b>47,431</b>	<b>1.02</b>

(Source:- Appendix I and II )

The above table shows that the Return on Total Assets of the Nepal SBI Bank differ from maximum of 1.19% in the year 2012/13 to the minimum of 0.83% in the year 2011/12 with an average of 1.02% during the study period of five years from 2008/09 to 2012/13. This analysis indicates that the net profit earned in comparison to the total assets is in fluctuating trend which means the ratio is decreasing and increasing trend during the study period.

#### 4.1.5.2. Return on Equity Ratio (ROE)

Total shareholders' equity consists of preference share capital, ordinary share capital, share premium and reserve and surplus less accumulated losses. This ratio can be computed as Net profit after tax (NPAT) divided by average total shareholders' equity.

$$\text{ROE} = \frac{\text{Net Profit After tax}}{\text{Total Equity}}$$

**Table: 4.15**  
**Return on Equity Ratio**

(Rs. In millions)

<b>Year</b>	<b>Net Profit</b>	<b>Total Equity</b>	<b>Ratio (Percentage)</b>
2008/09	316	1,712	18.47
2009/10	391	2,450	15.98
2010/11	464	2,879	16.13
2011/12	480	3,197	15.01
2012/13	771	3,798	20.31
<b>Average</b>	<b>484</b>	<b>2,807</b>	<b>17.26</b>

(Source:- Annual report of Nepal SBI Bank Ltd.)

The above table shows that the Return on Total Equity of the Nepal SBI Bank differ from maximum of 20.31% in the year 2012/13 to the minimum of 15.01% in the year 2011/12 with an average of 17.26% during the study period of five years from 2008/09 to 2012/13. This analysis indicates that the net profit earned in comparison to the total Equity is in fluctuating trend

which means the ratio is decreasing and increasing trend during the study period. Nepal SBI Bank is earning reasonable profit by utilizing its funds of total equity.

#### **4.1.5.3. Interest Income to Total Assets Ratio (IETAR)**

The ratio indicates how much interest mobilizing the assets in the bank has generated. Interest is the main source of income of banks' interest received from generally loan and advances overdraft and investment in securities. Higher ratio indicates higher efficiency in the mobilization of resources and ability of interest earning and vice-versa. This ratio is computed by dividing Interest Income by total assets.

$$\text{IETAR} = \frac{\text{Interest Earned}}{\text{Total Assets}}$$

**Table: 4.16**

#### **Interest Income to Total Assets Ratio**

(Rs. In millions)

<b>Year</b>	<b>Interest Income</b>	<b>Total Assets</b>	<b>Ratio (Percentage)</b>
2008/09	1,460	30,166	4.84
2009/10	2,269	38,047	5.96
2010/11	3,099	46,088	6.73
2011/12	3,769	58,059	6.49
2012/13	4,110	64,796	6.34
<b>Average</b>	<b>2,679</b>	<b>47,431</b>	<b>5.65</b>

(Source:- Appendix I and II )

The above table shows that interest earned to Total Assets of the bank varies from maximum of 6.73% in the year 2010/11 to the minimum of 4.84% in the year 2008/09 with an average of 5.65% during the study period of five years. The analysis indicates that the interest earned in comparison to total assets is fluctuating during the study period.



#### 4.1.5.4. Total Interest Expenses to Total Interest Income Ratio (TIETIIR)

The numerators consist of total interest paid on deposits liabilities, loan and advances and other deposits. The denominator comprises total interest earned or retained from loan and advances, cash credit and overdraft, government securities, interbank and other investment. This ratio indicates how much interest expenses have been made in relation to interest income received. The higher ratio shows unfavorable profitability situation of the bank.

This ratio is calculated by dividing Interest Expenses by Interest Income.

$$\text{TIETIIR} = \frac{\text{Interest Expenses}}{\text{Total Interest Income}}$$

**Table: 4.17**

#### **Total Interest Expenses to Total Interest Income Ratio**

(Rs. In millions)

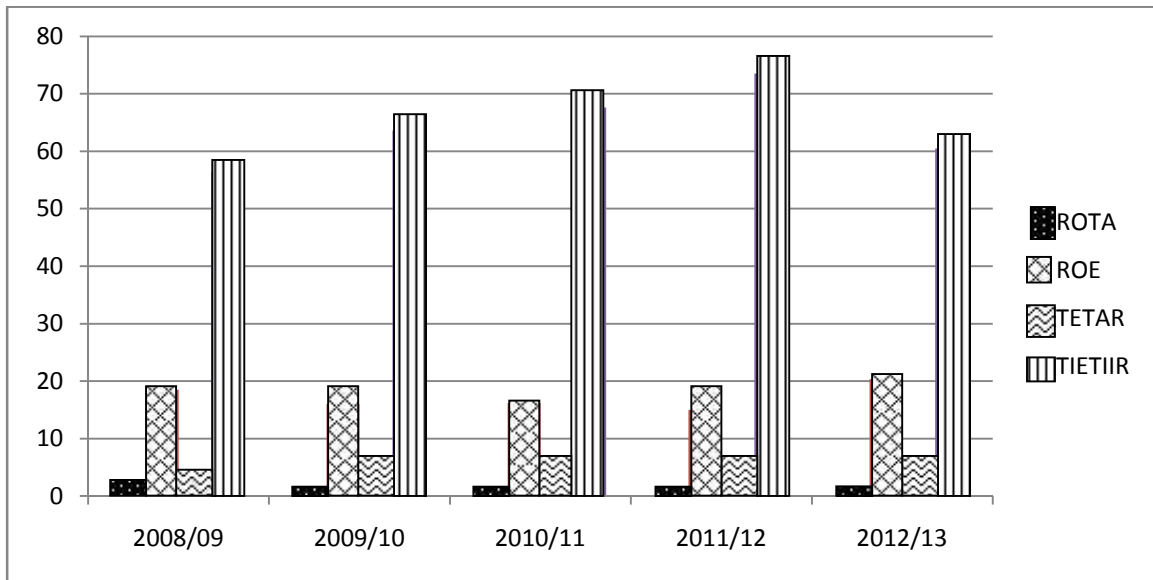
<b>Year</b>	<b>Interest Expenses</b>	<b>Interest Income</b>	<b>Ratio (Percentage)</b>
2008/09	824	1,460	56.46
2009/10	1,443	2,269	63.61
2010/11	2,096	3,099	67.61
2011/12	2,770	3,769	73.51
2012/13	2,486	4,110	60.50
<b>Average</b>	<b>1,924</b>	<b>2,679</b>	<b>71.83</b>

(Source:- Appendix II )

The above table shows that interest expenses to interest expenses ratio of the Nepal SBI Bank varies from maximum 73.51% in the fiscal year 2011/12 to the minimum of 56.46% in the year 2008/09 with an average of 71.83% during the study period. The analysis indicates that the interest expense in comparison to interest income is fluctuating during the study period. The higher ratio shows unfavorable profitability situation of the bank.

**Figure: 4.5**

**Profitability Ratio of Nepal SBI Bank Ltd.**



*(Source annual report of SBI Bank Ltd.)*

#### **4.1.6. Invisibility Ratio**

An analysis of ratio helps the investors to know about the performance of the banks. Therefore, following ratio have been calculated to test earning capacity of the banks to last earning capacity of the bank.

##### **4.1.6.1. Earnings per Share (EPS)**

This ratio is calculated by dividing earning available to common stockholders by number of outstanding share of common stock. High ratio shows the sound profitability position of the bank. It is favorable for the investor too. This ratio is calculated by dividing earning available to common stockholders by number of outstanding share of common stock.

$$\text{EPS} = \frac{\text{Earning Available to Common Stockholders}}{\text{No.of outstanding share of Common Stock}}$$

**Table: 4.18**  
**Earnings per Share**

(Rs. In millions)

<b>Year</b>	<b>EAC</b>	<b>No. of Common Stock</b>	<b>Ratio (Rs)</b>
2008/09	442	12	36.18
2009/10	391	16	23.69
2010/11	464	18	24.85
2011/12	480	20	22.93
2012/13	771	23	32.75
<b>Average</b>	<b>510</b>	<b>18</b>	<b>28.08</b>

*(Source:- Annual report of Nepal SBI Bank Ltd.)*

The above table shows that the earning available to the common shareholders is in increasing trend during the study period of five fiscal years. Earning per Share of the Nepal SBI Bank Limited varies from maximum of Rs. 36.18 per share in the year 2008/09 from Rs. 22.93 per share in the year 2011/12 with an average of Rs. 28.08 per share. The above analysis indicates that the EPS of Nepal SBI Bank Ltd. is good in overall years.

#### **4.1.6.2. Dividend Per Share (DPS)**

This ratio shows per rupee earning actually distributed to common stock holders per share held by them. High ratio is favorable for the shareholders. This ratio can be obtained by dividing earning paid to shareholders by number of common stock outstanding.

$$DPS = \frac{\text{Earning paid to the Shareholders}}{\text{No. of outstanding share of Comon Stock}}$$

**Table: 4.19**  
**Dividend per Share**

(Rs. In millions)

<b>Year</b>	<b>Earning Paid to Shareholders</b>	<b>No. of Common Stock</b>	<b>Ratio (Rs)</b>
2008/09	515	12	42.11
2009/10	290	16	17.58
2010/11	327	18	17.50
2011/12	366	20	17.50
2012/13	471	23	20.00
<b>Average</b>	<b>394</b>	<b>18</b>	<b>22.94</b>

(Source:- Annual report of Nepal SBI Bank Ltd.)

The above table shows that dividend per Share of the Nepal SBI Bank Limited varies from maximum of Rs. 42.11 per share in the year 2008/09 from Rs.17.50 per share in the year 2010/11 and 2011/12 with an average of Rs.22.94 per share. The above analysis indicates that the DPS of Nepal SBI Bank Ltd. is good in overall years.

#### **4.1.6.3. Tax Per Share (TPS)**

This ratio shows the contribution of shareholders for the economic development. Higher TPS indicates the better profitability position of the bank. Tax per Share is obtained by dividing tax paid to government by number of common share outstanding.

$$\text{TPS} = \frac{\text{Tax Paid to Government}}{\text{No. of outstanding share of Common Stock}}$$

**Table: 4.20**  
**Tax per Share**

(Rs. In millions)

<b>Year</b>	<b>Tax Paid to Government</b>	<b>No. of Common Stock</b>	<b>Ratio (Rs)</b>
2008/09	126	12	10.34
2009/10	146	16	8.87
2010/11	188	18	10.11
2011/12	206	20	9.86
2012/13	338	23	14.37
<b>Average</b>	<b>201</b>	<b>18</b>	<b>10.95</b>

*(Source:- Annual report of Nepal SBI Bank Ltd.)*

The above table shows that the Tax per share paid to the government by common shareholders is in fluctuating trend during the study period of five fiscal years. Tax per Share of the Nepal SBI Bank varies from maximum of Rs. 10.54 Per share in the year 2008/09 from Rs.8.87 per share in the year 2009/10 with an average of Rs. 10.95 per share. The above analysis indicates that the TPS of Nepal SBI Bank Ltd. is good in overall years.

#### **4.1.6.4. Dividend Payout Ratio (DPR)**

It measures the relationship between the earning belonging to the ordinary shareholders and the dividend paid to them. This ratio can be calculated by dividing the total dividend paid to the owners by the total profit/earning available to them.

**Table: 4.21**  
**Dividend Payout Ratio**

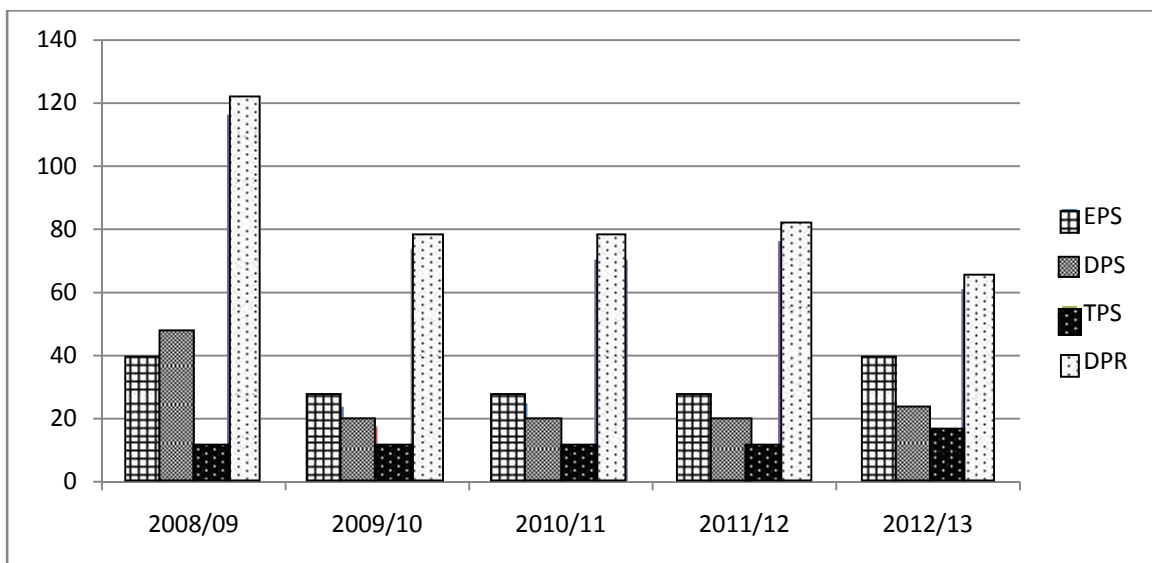
(Rs. In millions)

<b>Year</b>	<b>DPS</b>	<b>EPS</b>	<b>Ratio (Percentage)</b>
2008/09	42.11	36.18	116.39
2009/10	17.50	23.69	73.87
2010/11	17.50	24.85	70.42
2011/12	17.50	22.93	76.32
2012/13	20.00	32.75	61.07
<b>Average</b>	<b>22.92</b>	<b>28.08</b>	<b>81.62</b>

(Source:- Annual report of Nepal SBI Bank Ltd.)

The above calculated table shows that dividend payout ratio of the Nepal SBI Bank Ltd. varies from maximum of 116.39 in the year 2008/09 to the minimum of 61.07 in the year 2012/13 with an average of 81.62 during the study period. From above analysis Nepal SBI Bank Limited was successfully and consistently providing higher percentage of dividend to investors except in the fiscal year 2012/13.

**Figure: 4.6**  
**Invisibility Ratio of Nepal SBI Bank Ltd.**



(Source annual report of SBI Bank Ltd.)

#### **4.1.7. Income and Expenditure Analysis**

There are so many items in debit and credit side in income and expenditure or profit and loss account. This tool has been used to separate the income and expenditure in to main sub headings. So this helps to compare nature of income and expenditure. Different proportions of the income and expenses have been separated according to their homogenous nature. Under the income analysis there will four headings, interest incomes, commission & discount, foreign exchange income & other income. In expenses analysis it is divided into major four sub-headings, i.e. interest expenses, staff expenses, office operation expenses and bonus facilities.

Income and expenses analysis shows the trend of income and expenditure. So this analysis has been evaluated investment and their return and different expenditure of sample bank. This analysis includes;

- ) Income analysis
- ) Expenditure analysis

##### **4.1.7.1. Income Analysis**

Especially, the main work of the commercial banks is the transaction of money. They provide interest and dividend to the debtors and depositors in term of their cash deposits and investment. Therefore, the banks generate income through investment in returnable sectors as well as loan and advances. Among various sources of income, the main heading have been divided as,

- ) Interest income
- ) Commission & discount
- ) Foreign exchange income
- ) Other income

Different incomes of Nepal SBI Bank Ltd. for different sampled years have been presented in the table 4.22.

**Table: 4.22**  
**Income Analysis of Nepal SBI Bank Ltd.**

(Rs. In millions)

Year	Interest Income		Commission & Discount		Exchange Income		Other Income	
	Rs.	%	Rs.	%	Rs.	%	Rs.	%
2008/09	1,460	88.33	78	4.77	61	3.70	52	3.20
2009/10	2,269	88.99	131	5.16	70	2.76	78	3.09
2010/11	3,099	88.52	236	6.75	70	2.01	95	2.72
2011/12	3,769	88.33	255	5.98	101	2.37	141	3.32
2012/13	4,110	87.75	313	6.70	101	2.18	157	3.38
<b>Average</b>	<b>2,679</b>	<b>88.38</b>	<b>203</b>	<b>5.87</b>	<b>81</b>	<b>2.68</b>	<b>105</b>	<b>3.14</b>

(source: Appendix II)

#### ✦ Interest Income

Commercial bank generates income through their investment i.e. loans and advances, government securities, debenture etc. Interest is the main source of the income for the commercial banks by which the bank operates their operation regularly.

Table 4.23 shows that the interest incomes in Nepal SBI bank Limited were 88.33%, 88.99%, 88.52%, 88.33% and 87.75% in the respective years of the review period with an average of 88.38%. As compared to the previous year's interest income values and percentage Nepal SBI Bank Limited was not succeeded in decreasing its interest income throughout the study period of five years.



#### ✦ **Commission & Discount**

Commission and discount is also one of the major sources of income for the commercial banks. The above calculated table shows that the income from commission and discount of the Nepal SBI Bank Ltd varies from maximum of 6.75% in the year 2010/11 to the minimum of 4.77% the year 2008/09 with an average of 5.87% during the study period. From above analysis, it is cleared that income from commission and discount Nepal SBI Bank Limited is in decreasing trend throughout the study period.

#### ✦ **Foreign Exchange Income**

Generally, commercial banks purchase and sell foreign currency from the customers under laws, rules and regulations of NRB because of its fluctuation of exchange rate. This kind of income has been included in this heading.

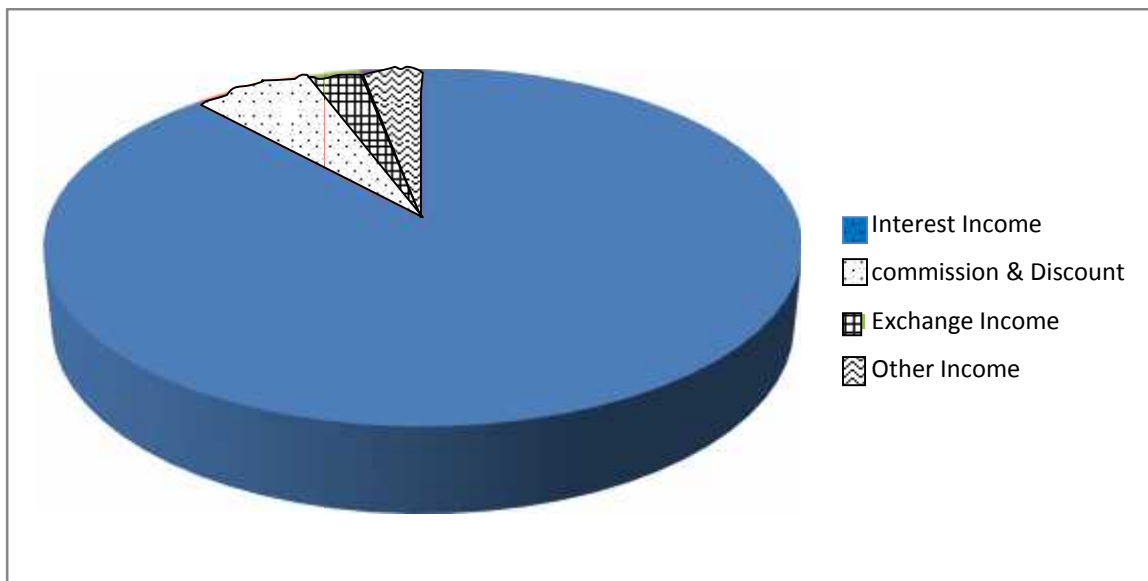
Table 4.23 exposes that the foreign exchange income Nepal SBI Bank Ltd varies from maximum of 3.70% in the year 2008/09 to the minimum of 2.01% the year 2010/11 with an average of 2.68% during the study period. From above analysis, it is cleared that income from Foreign Exchange Income of Nepal Bank is in decreasing trend throughout the study period

#### ✦ **Other Income**

Besides above incomes, non-operating i.e. sale of investment and assets, subsidies from NRB etc. have been included in this heading. Commission and discount is also one of the major sources of income for the commercial banks. The above calculated table shows that the income from commission and discount of the Nepal SBI Bank Ltd varies from maximum of 3.38% in the year 2012/13 to the minimum of 2.72% the year 2010/11 with an average of 3.14% during the study period. From above analysis, it is cleared that income

from commission and discount Nepal SBI Bank is in decreasing trend throughout the study period.

**Figure: 4.7**  
**Income Analysis of Nepal SBI Bank Ltd.**



*(Source annual report of SBI Bank Ltd.)*

#### **4.1.7.2. Expenditure Analysis**

Basically, commercial banks extend money in daily office operation, salary and other facilities. They also pay interest and dividend to depositors and investors. Among these various sources of expenses, following headings have been analyzed for this study purposes;

- ) Interest expenses
- ) Staff expenses
- ) Office operation expenses
- ) Bonus expenses

Expenditure analysis of Nepal SBI Bank for different sampled years has been presented in table 4.23.

**Table: 4.23****Expenditure Analysis of Nepal SBI Bank Ltd.**

(Rs. In millions)

Year	Interest Expense		Staff Expenses		Office Operating		Bonus Facility	
	Rs.	%	Rs.	%	Rs.	%	Rs.	%
2008/09	824	67.88	121	10.04	223	18.43	44	3.65
2009/10	1,443	73.22	130	6.61	343	17.44	53	2.73
2010/11	2,096	73.63	255	8.98	429	15.00	65	2.30
2011/12	2,770	77.29	289	8.07	456	12.72	68	1.91
2012/13	2,486	71.22	416	11.93	477	13.67	110	3.18
<b>Average</b>	<b>1,924</b>	<b>72.65</b>	<b>242</b>	<b>9.12</b>	<b>386</b>	<b>15.45</b>	<b>68</b>	<b>2.75</b>

*(source: Appendix II)***✦ Interest Expense**

An interest expense is one of the main expenses among various expenses made by the commercial banks. Especially, commercial bank pays interest in various deposits and loan advances. These all have been included in this expense. Table no. 4.25 reveals that the interest expense ratios of Nepal SBI bank were 67.88%, 73.22%, 73.63%, 77.29% and 71.22% percentage in the respective years of study period with the mean ratio of 72.65 percent.

**✦ Staff Expenses**

Banks need sufficient personnel to continue office and other operation. They pay salaries and other different forms of allowance to their staff in terms of services. Moreover, the banks expend uniform, libraries and other various related field. These all have been included in staff expenses.

Table 4.24 exposes that the staff expenses of Nepal SBI Bank Ltd varies from maximum of 11.93% in the year 2012/13 to the minimum of 6.61% the year

2009/10 with an average of 9.12% during the study period. From above analysis, it is cleared that income from Foreign Exchange Income of Nepal SBI Bank is in decreasing trend throughout the study period

✦ **Office Operating Expenses**

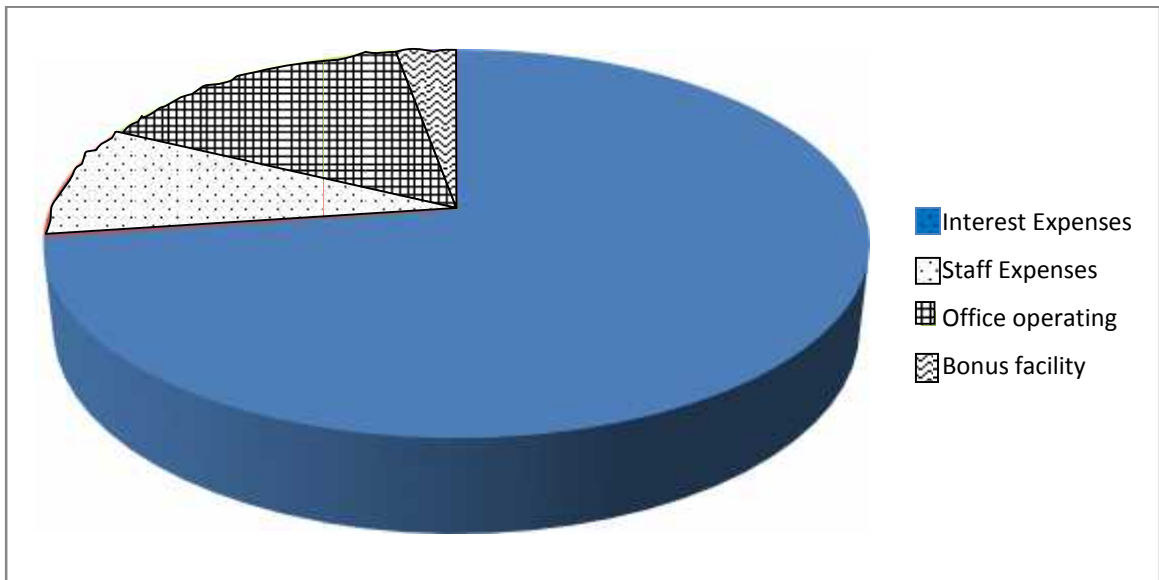
These are various expenses made by commercial banks in terms of office operation. These expenses consist of rent, electricity and telephone charges, administrative expenses promotion expense etc. Table 4.24 exposes that the office operating expenses of Nepal SBI Bank Ltd varies from maximum of 18.43% in the year 2008/09 to the minimum of 12.72% the year 2011/12 with an average of 15.45% during the study period.

✦ **Bonus Facility**

When banks are capable to earn appropriate profit, they provide dividend to the shareholders and pay extra bonus to their staffs to motivate them. Those all expense have been included in under this heading. Table 4.24 exposes that the bonus facility expenses of Nepal SBI Bank Ltd varies from maximum of 3.65% in the year 2008/09 to the minimum of 1.91% the year 2011/12 with an average of 2.75% during the study period.

**Figure: 4.8**

**Expenditure Analysis of Nepal SBI Bank Ltd.**



*(Source annual report of SBI Bank Ltd.)*

**4.2. Statistical Tools**

In this part of data analysis, the statistical tools such as coefficient of correlation analysis between various variables, Trend analysis of different variables have been used. They are as follows:

**4.2.1. Coefficient of Correlation**

Karl Pearson's coefficient of correlation is most widely used in practice to measure the degree of relationship between two variables of the banks. So, it is measured by understanding the following formula.

$$r = \frac{n\phi xy - \phi x\phi y}{\sqrt{n\phi x^2 - (\phi x)^2} \sqrt{n\phi y^2 - (\phi y)^2}}$$

Where,

r = the coefficient of correlation

n = no. of observations

$\phi_{xy}$  = Sum of the product of observations in two series

$\phi_x$  = Sum of observation in the series x

$\phi_y$  = Sum of observation in the series y

$\phi_x^2$  = Sum of squared observation in x-series

$\phi_y^2$  = Sum of squared observation in y-series

The relationship between these two categories of variables has been developed for study purpose.

) Total deposit (x) and investment (y)

) Total deposit (x) and loan and advance (y)

) Loan and advance (x) and net profit (y)

) Dividend per share (x) and earnings per share (y)

#### 4.2.1.1. Correlation between Total Deposit and Investment

Total deposit and investment variables of Nepal SBI Bank for different sampled years have been presented below.

**Table: 4.24**

#### **Correlation between Total Deposit and Investment**

r	P. E(r)	6P.E(r)
0.9954	0.00277	0.0166

*Source: Annex - iv*

The table 4.24 shows the value of r is positive 0.9954 which is highly positive in case of NSBL. And again P.E is equal to 0.00277 and 6P.E. is 0.0166. The positive value of r means that there is highly positive correlation between total deposit and investment. when total deposit and investment also increases. So one has influence upon another in the positive form.

The value of 6P.E. is less than r, i.e. the value of coefficient of correlation is higher than 6P.E. this implies that there is significant relationship between deposit collected and investment disbursed.

#### 4.2.1.2. Correlation between Total Deposit & Loan and Advances

Total Deposit and loan and advances for different sampled years have been presented below.

**Table: 4.25**  
**correlation between total deposit & loan & advance**

r	P. E(r)	6P.E (r)
0.9954	0.00277	0.0166

*Source: Annex - v*

The table 4.25 shows the value of r is positive 0.9954 which is highly positive in case of NSBL. And again P.E is equal to 0.00277 and 6P.E. is 0.0166. The positive value of r means that when deposit increases loan and advance also increases. The value of 6P.E. is less than r, i.e. the value of coefficient of correlation is higher than 6P.E. this implies that there is significant relationship between deposit collected and loan and advance disbursed.

#### 4.2.1.3. Correlation between Loan & Advances & Net Profit

Loan and advances and net profit for different sampled years have been presented below.

**Table: 4.26**  
**Correlation between Loan & Advances and Net Profit**

r	P. E(r)	6P.E(r)
0.8894	0.0630	0.3782

*Source: Annex - vi*

The table 4.26 shows the value of  $r$  is positive 0.8894 which is highly positive in case of NSBL. And again P.E is equal to 0.0630 and  $6P.E.$  is 0.3782 The positive value of  $r$  means that there is highly positive correlation between loan and advance and net profit. If loan and advance increases net profit also increases. So one has influence upon another in the positive form.

The value of  $6P.E.$  is less than  $r$ , i.e. the value of coefficient of correlation is higher than  $6P.E.$  this implies that there is significant relationship between loan and advance collected and net profit disbursed.

#### 4.2.1.4. Correlation between DPS & EPS

DPS and EPS for different sampled years have been presented below.

**Table: 4.27**  
**Correlation between DPS and EPS**

$r$	P. E( $r$ )	$6P.E(r)$
0.82	0.099	0.5929

*Source: Annex - vii*

The table 4.27 shows the value of  $r$  is positive 0.82 which is highly positive in case of NSBL. And again P.E ( $r$ ) is equal to 0.099 and  $6P.E.(r)$  is 0.5929 The positive value of  $r$  means that there is highly positive correlation between dividend per share and earnings per share . If dividend per share increases earnings per share also increases. So one has influence upon another in the positive form.

The value of  $6P.E.$  is less than  $r$ , i.e. the value of coefficient of correlation is higher than  $6P.E.$  this implies that there is significant relationship between dividend per share collected and earnings per share disbursed.

#### 4.2.2. Least Square Linear Trend Analysis

Trend analysis has been a very useful and commonly applied statistical tool to forecast the future events in quantitative items. On the basis of



tendencies in the dependent variables in the past periods, the future trend is predicted. This analysis takes the historical data as the basis of forecasting. This method of forecasting the future trend is based on the assumptions that the past tendencies of the variables are repeated in the future or past events the future events significantly.

The future trend is forecasted by using the following formula,

$$Y = a + bx$$

Where,

Y = the dependent Variable

a = the origin i.e. arithmetic mean

b = the slope coefficient i.e. rate of change

x = value of the independent variable i.e. time

Hence, future value of coming years have been analyzed and forecasted with the help of trend analysis. They are;

) Total deposits

) Loan & advances

) Investment

) Net profit

#### **4.2.2.1. Least Square of Linear Trend of Total Deposits**

In the calculation time is taken as independent variable (x) and total deposits is taken as dependent variables (y). The calculation is made to estimate trend of loan and advance from 2008/09 to 2013/14. The trend of loan and advances is forecasted from the year 2009 to 2013/14 based upon the past data of 2008 to 2012..

**Table: 4.28**  
**Least Square of Linear Trend of Total Deposits**

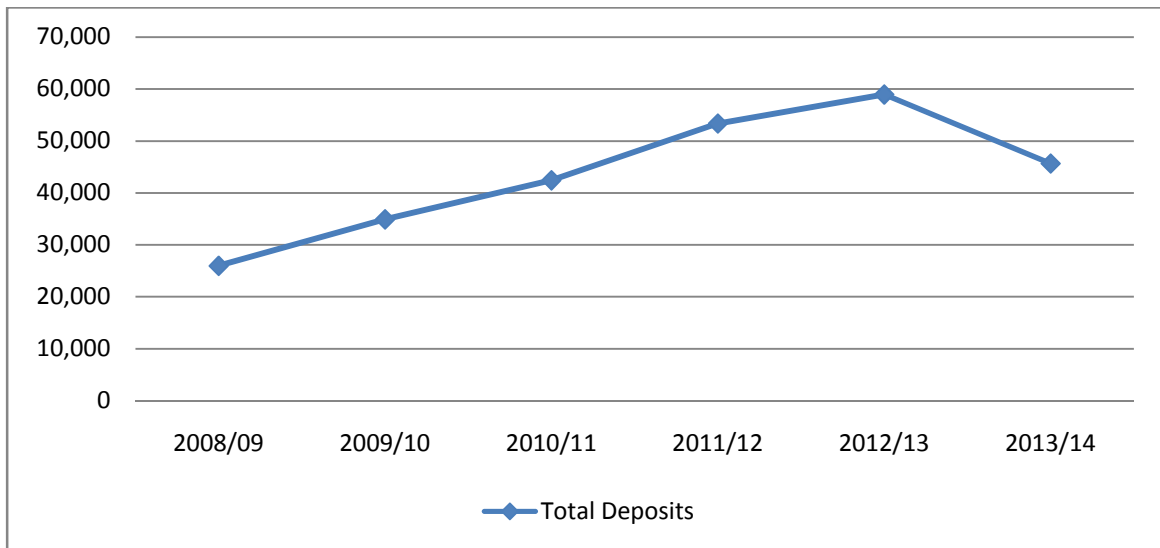
(Rs. In millions)

Year	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
Actual & Estimated Total Deposits	25,957	34,896	42,415	53,337	58,920	45,636

*Source: Annex - viii*

**Figure: 4.9**  
**Total Deposit Trend of Nepal SBI Bank Ltd.**

(Rs. In millions)



*Source: Annex - viii*

In the above table 4.28 and figure 4.9 trend of total deposit is increasing. It is Rs 25,957 million in year 2008 and it will increase to Rs 45,636 million in the year 2013, if the business environment remains constant. From the year 2008 to 2013 the prediction has been made based upon the historical data from the year 2008/09 to 2012/13.

#### 4.2.2.2. Least Square of Linear Trend of Loan & Advances

In the calculation time is taken as independent variable (x) and loan and advance is taken as dependent variables (y). The calculation is made to estimate trend of loan and advance from 2008/09 to 2013/14. The trend of loan and advances is forecasted from the year 2009 to 2013/14 based upon the past data of 2008 to 2012.

**Table: 4.29**

#### Least Square of Linear Trend of Loan & Advances

(Rs. In millions)

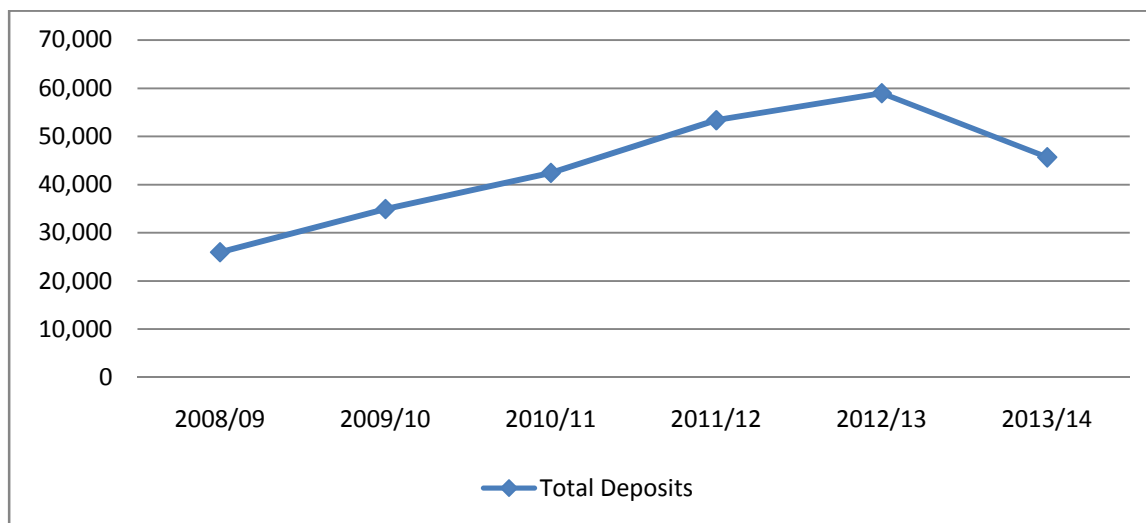
Year	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
Actual & Estimated Loan and advance	15,161	17,480	21,365	26,142	28,788	32,561

Source: Annex -ix

**Figure: 4.10**

#### Loan & Advances Trend of Nepal SBI Bank Ltd.

(Rs. In millions)



Source: Annex - ix

In the above table 4.29 and figure 4.10 trend of loan and advance is increasing. It is Rs 15,161 million in year 2008 and it will increase to Rs 32,561 million in the year 2013, if the business environment remains constant. From the year 2008 to 2013 the prediction has been made based upon the historical data from the year 2008/09 to 2012/13.

#### 4.2.2.3. Least Square of Linear Trend of Investment

In the calculation time is taken as independent variable (x) and investment is taken as dependent variables (y). The calculation is made to estimate trend of loan and advance from 2008/09 to 2013/14. The trend of loan and advances is forecasted from the year 2009 to 2013/14 based upon the past data of 2008 to 2012.

**Table: 4.30**

#### **Least Square of Linear Trend of Investment**

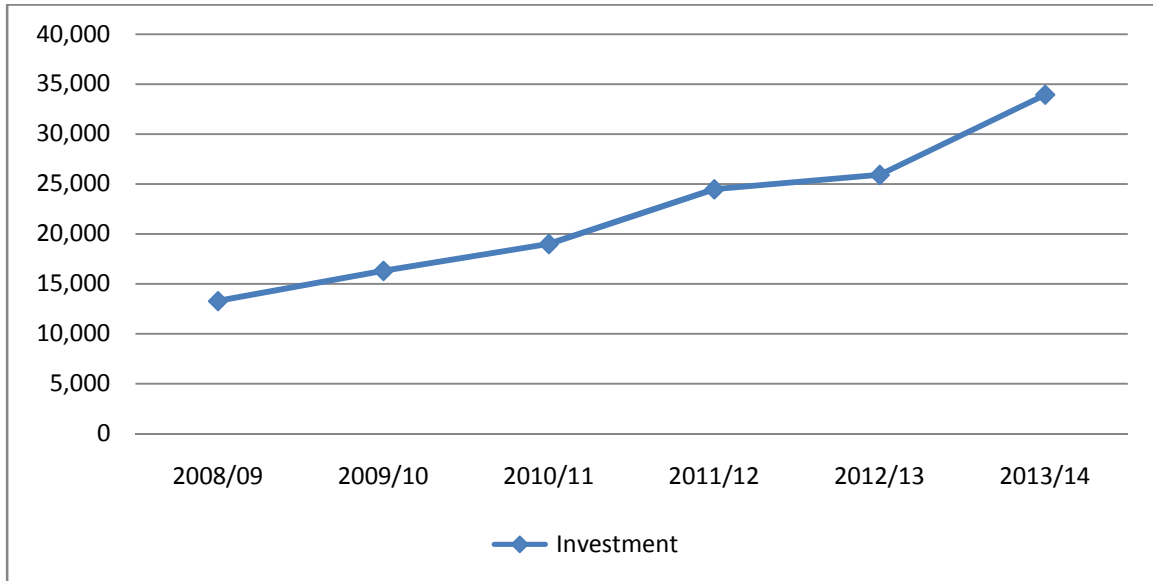
(Rs. In millions)

Year	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
Actual & Estimated Investment	13,286	16,305	18,991	24,463	25,906	33,928

*Source: Annex - x*

**Figure: 4.11**  
**Investment Trend of Nepal SBI Bank Ltd.**

(Rs. In millions)



*Source: Annex - x*

In the above table 4.30 and figure 4.11 trend of investment is increasing. It is Rs 13,286 million in year 2008 and it will increase to Rs 33,928 million in the year 2013, if the business environment remains constant. From the year 2008 to 2013 the prediction has been made based upon the historical data from the year 2008/09 to 2012/13.

#### **4.2.2.4. Least Square of Linear Trend of Net Profit**

In the calculation time is taken as independent variable (x) and net profit is taken as dependent variables (y). The calculation is made to estimate trend of loan and advance from 2008/09 to 2013/14. The trend of loan and advances is forecasted from the year 2009 to 2013/14 based upon the past data of 2008 to 2012.

**Table: 4.31**

**Least Square of Linear Trend of Net profit**

(Rs. In millions)

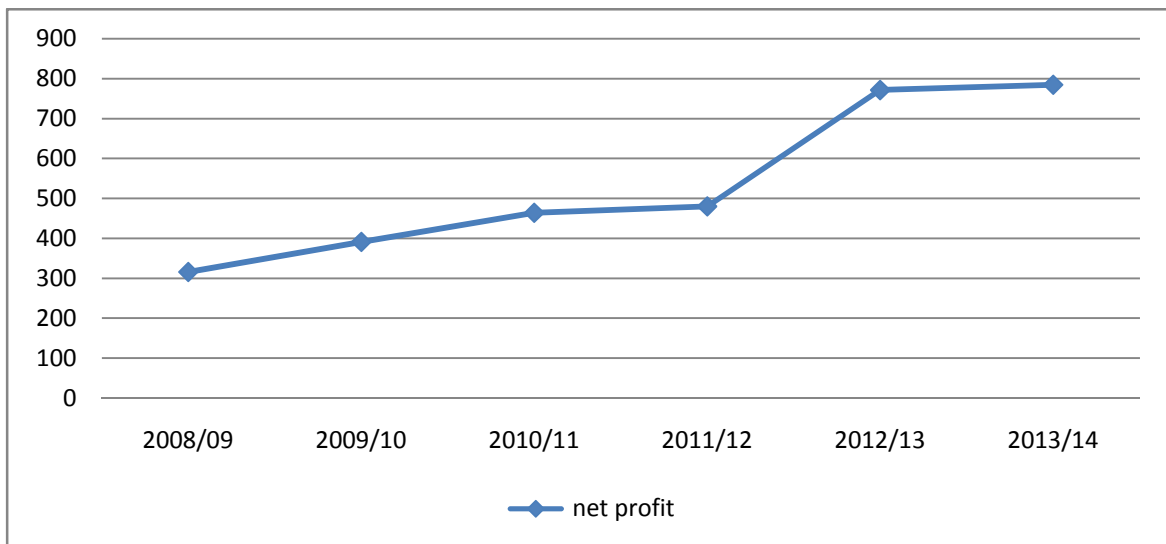
Year	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
Actual & Estimated net profit	316	391	464	480	771	784

*Source: Annex - xi*

**Figure: 4.12**

**Net Profit Trend of Nepal SBI Bank Ltd.**

(Rs. In millions)



*Source: Annex - xi*

In the above table 4.31 and figure 4.12 trend of net profit is increasing. It is Rs 316 million in year 2008 and it will increase to Rs 784 million in the year 2013, if the business environment remains constant. From the year 2008 to 2013 the prediction has been made based upon the historical data from the year 2008/09 to 2012/13.

### 4.2.3. Hypothesis Test

A hypothesis is a conjectural statement of the relation between two or more variables. Hypothesis is always in declarative sentence form and they relate either generally or specifically, variables to variables. In this study, test of significance of difference specifically, variables to variables. In this study, test of significance of difference between two mean is used to analysis. In case of testing the significance of difference between two means of small sample, t – values are used to the t – distribution.

In this study, following sets of hypothesis have been formulated and tasted.

$H_0: \hat{\mu} = 45,000$  There is no significance difference between sample mean and population mean.

$H_1: \hat{\mu} \neq 45,000$  There is significance difference between sample mean and population mean..

$H_0: \hat{\mu} = 20,000$  There is no significance difference between sample mean and population mean.

$H_1: \hat{\mu} \neq 20,000$  There is significance difference between sample mean and population mean.

$H_0: \hat{\mu} = 400$  There is no significance difference between sample mean and population mean.

$H_1: \hat{\mu} \neq 400$  There is significance difference between sample mean and population mean..

**Table: 4.32**

**Testing of Hypothesis (T – Distribution)**

<b>Tested variable</b>	<b>Degree of freedom</b>	<b>Level of freedom</b>	<b>Calculated t-value</b>	<b>Tabulated t- value</b>	<b>Result</b>
Total deposits	n = 5	5 %	0.464	2.571	H <sub>0</sub> , Accepted
Loan and advanced	n = 5	5%	0.628	2.571	H <sub>0</sub> , Accepted
Net profit	n = 5	5%	0.991	2.571	H <sub>0</sub> , Accepted

*Source: Appendix xii, xiii, xiv*

From the table 4:32 it is found that the tabulated value of t – distribution is greater than calculated value in each case by considering the test statistic. So, null hypothesis H<sub>0</sub> is accepted and alternative hypothesis H<sub>1</sub> is rejected, it means there is no significance of sample mean and population mean of NSBL. In other words, there is significance all above t – tested variables topic.

### **4.3. Findings of the Study**

The following findings have been derived from the analysis and interpretation of the data, during the study period.

#### **4.3.1. Liquidity Ratio**

The liquidity ratios of Nepal SBI Bank have been calculated over the period of 2008/09 to 2012/13 . The following are the findings from the liquidity ratio.

) Nepal SBI bank Ltd. has the highest current ratio of 1.06 in 2009/10 and 2010/11 and the lowest current of 1.03 in 2011/12 with an average current ratio of 1.05 during the study period. In general terms, the bank has been able to meet its short-term obligations. The above analysis indicates that the bank is in sound liquidity position.



- ) The cash and bank balance to total deposit of the Nepal SBI bank differs from maximum of 13.09% in the year 2012/13 to the minimum of 7.33% in the year 2008/09 with an average of 10.88% during the study period. The analysis specifies that the bank is volatile to maintain cash reserve ratio as per NRB directives. The analysis indicates the decreasing trend of the ratios.
- ) NRB balance to current and saving deposit ratios of Nepal SBI bank were 5.11%, 18.04%, 18.89%, 23.15% and 27.66% with mean ratio of 23.30%. Commercial Banks are required to hold certain proportion of current and saving deposits in NRB's account. It is to ensure the smooth functioning and sound liquidity position of the Bank. Nepal SBI Bank is failed to maintain minimum deposit liabilities of 8% as cash reserve with Nepal Rastra Bank except in the fiscal year 2008/09.
- ) Cash and Bank Balance to current & saving deposits of Nepal SBI Bank Ltd. have always is in good condition. The bank has the highest ratio of 43% in 2012/13 and the lowest ratio of 21.92% in the fiscal year 2008/09 with an average ratio of 37.05% during the study period. In general terms, the bank has been able to meet its short-term obligations. The above analysis indicates that the bank is in sound liquidity position. High ratio normally indicates sound liquidity position of the bank but too high ratio is not good as it reveals the under utilization of fund.
- ) Fixed deposit is the high interest bearing deposit which can be withdrawn only after its maturity. The above table shows that the fixed deposit to total deposit ratio of the Nepal SBI Bank differ from maximum of 67.89 % in the year 2011/12 to the minimum of 63.47% in the year 2009/10 with an average of 65.88% during the study period of five years. The analysis indicates that the portion of fixed deposit in the total deposit is fluctuating trend.

### 4.3.2. Activity Ratio

The findings from Activity Ratio are as follows:

- J Investment to total deposit ratios of Nepal SBI Bank Limited remained 51.18%, 46.72%, 44.77%, 45.86% and 43.97% in the respective years with the average of 45.91% in the study period. The higher average shows that Nepal SBI Bank Limited is successful in managerial efficiency regarding the utilization of deposits.
- J Loans and advances to total deposits ratio measures the extent to which the bank is successful to utilize the outsiders fund (Total Deposit). Loans and advances to total deposits of the of the Nepal SBI Bank Limited fluctuates from maximum of 58.41 percent in the fiscal year 2008/09 to the minimum of 49 percentage in the year 2012/13 with an average of 50.55 percent. The analysis shows that the bank is mobilizing its total deposits in loan and advances adequately and it has efficiently utilized its total deposits for loan and advances. Higher ratio reveals that it is efficient to utilize the financial resources in productive sectors.
- J Loan and advance to total assets ratios of Nepal SBI bank Limited were 50.26%, 45.94%, 46.36%, 45.03%, and 44.43% with an average of 45.93% in the respective years of study period. The higher average ratio indicates that Nepal SBI Bank Limited is efficient in utilization of total assets in profitable sector. It can be determined that ratios of Nepal SBI Bank Limited fluctuate to a greater extent in the study period.
- J Total income generating assets to total assets ratio was higher in Nepal SBI bank ltd. which indicates the sound profitability position i.e. the utilization of assets returnable sector. Ratios of Nepal SBI bank Limited were 98.80%, 93.01%, 92.76%, 92.32% and 90.44%, in the respective years of study period with the mean of 92.83%.

- J Net worth or Shareholders equity ratios refers to the owners claim on the assets of the bank. Net worth to total assets ratio of Nepal SBI Bank Limited remained 5.68%, 6.44%, 6.25%, 5.51%, and 5.86% in the respective years of study period with the average of 5.92%. The greater ratio indicates that Nepal SBI bank Limited has greater contribution to investors fund and strong capital adequacy position. This ratio measures the percentage of shareholder fund in relation total assets owned by banks. High ratio shows greater contribution of investor fund and strong capital position.
- J Net Worth to Total Deposits ratio Nepal SBI bank Limited fluctuating from maximum of 7.02 percentage in the fiscal year 2009/10 to the minimum of 5.99 percentage in the year 2011/12 with an average of 6.51 percentage. According to the NRB directives to the capital adequacy ratio 11 percent Nepal SBI Bank Limited fails to be maintained the ratio as prescribed by the Central Bank.

#### **4.3.3. Capital Structure Ratio**

The Capital Structure Ratios calculated in the study have the following findings:

- J Debt to equity ratio indicates the relationship between the long-term funds provided by creditors and those provided by the firm's owners. Debt to equity ratio of the Nepal SBI bank Limited differ from maximum 17.16 times in the year 2011/12 to the minimum of 15.00 times in the year 2010/11 with an average of 16.10 times during the study period. The analysis indicates that the bank has the high debt ratio, which indicates that the creditors have invested more in the bank than the owners.
- J Total debt to Total assets ratio exhibits the relationship between creditor's funds and owner's capital. This ratio shows the proportion of outsider's fund used in financing total assets. The Debt to Total

Assets of the Nepal SBI Bank Limited differs from maximum of 99.35% in the year 2009/10 to the minimum of 93.75% in the year 2010/11 with an average of 95.33% during the study period. This analysis indicates that the bank has the high debt equity ratio, which means creditors have invested more in the bank than the owners. So this shows role of creditors in the bank is high than the owners in investing sector of Bank.

- ) The interest coverage ratios of Nepal SBI Bank Limited remained 2.31, 1.94, 1.48, 1.61 and 2.09 times respectively during the study period. The ratio differs from maximum of 2.31 times in the year 2008/09 to the minimum of 1.48 times in the year 2010/11 with an average of 1.82 times during the study period. This analysis indicates that the bank has sufficient operation of debt and can pay interest easily.

#### **4.3.4. Profitability Ratios**

The Profitability Ratios calculated in the study have the following findings:

- ) The Return on Total Assets or Net profit to Total Assets ratio is a useful measurement of the profitability of all financial resources invested in the assets. The analysis reveals the Return on Total Assets of the Nepal SBI Bank differ from maximum of 1.19% in the year 2012/13 to the minimum of 0.83% in the year 2011/12 with an average of 1.02% during the study period of five years from 2008/09 to 2012/13. This analysis indicates that the net profit earned in comparison to the total assets is in fluctuating trend which means the ratio is decreasing and increasing trend during the study period.
- ) The Net profit to Net Worth or Return on Total Equity (ROE) measures the income on the owner's investment. This ratio indicates how well the bank has used the resources of the owners. The return on equity of the bank varies from maximum of 20.31% in the year

2012/13 to the minimum of 15.01% in the year 2011/12 with an average of 17.26% during the study period of five years from 2008/09 to 2012/13. This analysis indicates that the net profit earned in comparison to the total Equity is in fluctuating trend which means the ratio is decreasing and increasing trend during the study period. Nepal SBI Bank is earning reasonable profit by utilizing its funds of total equity.

- ) Interest earning is the major source of income of a commercial bank. Interest earned to total assets ratio reflects the proportion of interest earned by the bank from total deposit. The interest earned to Total Assets of the bank varies from maximum of 6.73% in the year 2010/11 to the minimum of 4.84% in the year 2008/09 with an average of 5.65% during the study period of five years. The analysis indicates that the interest earned in comparison to total assets is fluctuating during the study period.
- ) The interest expenses to interest expenses ratio of the Nepal SBI Bank varies from maximum 73.51% in the fiscal year 2011/12 to the minimum of 56.46% in the year 2008/09 with an average of 71.83% during the study period. The analysis indicates that the interest expense in comparison to interest income is fluctuating during the study period. The higher ratio shows unfavorable profitability situation of the bank.
- ) Net profit to total deposits ratio indicates the percentage of profit earned by using the total deposit. The net profit to Total Deposit of the Nepal SBI Bank varies from maximum of 1.31% in the year 2012/13 to the minimum of 0.90% in the fiscal year 2011/12 with an average of 1.12% during the study period. The analysis indicates that the net profit earned in comparison with the total deposits are in decreasing trend during the fiscal year 2011/12 but it also start to

increased in fiscal year 2012/13. In general, the average return ratio shows that Nepal SBI bank is successful to earn constant profit over the study period.

#### **4.3.5. Invisibility Ratios**

The findings from invisibility ratios are as below:

- ) The Eps represents the amount earned on behalf of each outstanding share of common stock. The EPS of Nepal SBI Bank Limited varies from maximum of Rs. 36.18 per share in the year 2008/09 from Rs. 22.93 per share in the year 2011/12 with an average of Rs. 28.08 per share. The above analysis indicates that the EPS of Nepal SBI Bank Ltd. is good in overall years.
- ) Dividend per share is calculated to know proportion of the earnings distributed to the shareholders per share. The DPS of Nepal SBI Bank Limited varies from maximum of Rs. 42.11 per share in the year 2008/09 from Rs. 17.50 per share in the year 2010/11 and 2011/12 with an average of Rs. 22.94 per share. The above analysis indicates that the DPS of Nepal SBI Bank Ltd. is good in overall years.
- ) The dividend payout ratio of the Nepal SBI Bank Ltd. varies from maximum of 116.39 in the year 2008/09 to the minimum of 61.07 in the year 2012/13 with an average of 81.62 during the study period. From above analysis Nepal SBI Bank Limited was successfully and consistently providing higher percentage of dividend to investors except in the fiscal year 2012/13.
- ) The above table shows that the Tax per share paid to the government by common shareholders is in fluctuating trend during the study period of five fiscal years. Tax per Share of the Nepal SBI Bank varies from maximum of Rs. 10.54 Per share in the year 2008/09 from Rs.8.87 per share in the year 2009/10 with an average of Rs.

10.95 per share. The average TPS in Nepal SBI Bank Ltd. appeared sharply high which shows that it succeeded to contribute more in the government revenue.

#### **4.3.6. Income & Expenditure Analysis**

In the study, the findings from Income and Expenditure analysis are:

- ) Income and expenditure are the main indicators of the financial performance of the business firm. The income and expenditure statement provides a financial summary of the firm's operating result during the period specified. The interest earning is the main source of income of the bank. The average of 88.38 % of the total operating income is covered by the interest earned. The high rate of income from the interest received indicates the better operation efficiency of the bank. The second main income source is from foreign exchange income earnings. The average of 2.68% of the total operating income comes from the exchange earnings. The incomes from commission earnings represent the third highest income source of the bank. The average earnings from commission and discount are 5.87% of the total operating income. The income from other sources constitutes an average of 3.14 % of the total operating income of the bank. This concludes that bank is providing efficient and effective services to its clients.
- ) The expenditure head of the bank are interest expenses, personnel expense and other expenses. The interest expense is the main major source of expense of the bank. The interest expense is 72.65 % of the total operating expenditure on an average. The high rate of expenditure in interest indicates that the bank has collected more deposits. The second main expenditure heading of the bank is staff expenses. The office personnel expense constitutes 9.12% of the total

Operating Expenses. The third important heading of the operating expenditure is office operating expenses. The office operating expenses remains 15.45% in an average during the study period. Bonus facility remains 2.75 % in an average during the study period.

#### **4.3.7 Findings from Correlation, Regression and hypothesis Analysis**

- ) Correlation coefficient came higher than six times than the probable error  $0.9964 > 6 \times 0.002165$ . It shows high degree of positive correlation. According to the above calculation, it is cleared that there is a significant correlation between deposit and investment in NSBL. It is successful to raise the volume of investment with rise in the volume of total deposit.
- ) The value of r (0.9954) shows the high degree of positive correlation between total deposit and loan and advances. Therefore we can say that the change in total deposit highly effects loan and advances policy of NSBL.
- ) On the basis of calculation of correlation coefficient the value of r (0.82) shows the high degree of positive correlation between dividend per share and earnings per share. Therefore we can say that the change in dividend per share highly affects earnings per share by NSBL.
- ) Trend analysis of Total Deposits, Loan & Advances, Investment and Net Profit gives the conclusion that total deposit, investment, loan and advances and net profit were in increasing trend.
- ) In t - distribution, it is found that the tabulated value of t – distribution is greater than calculated value in each case by considering the test statistic. So, null hypothesis  $H_0$  is accepted and alternative hypothesis  $H_1$  is rejected, it means there is no significance of sample mean and population of NSBL. In other words, there is significance all above t – tested variables topic.



## **CHAPTER - FIVE**

### **SUMMARY, CONCLUSIONS & RECOMMENDATIONS**

In this chapter, the summary has been presented along with conclusions and actionable recommendations. This is brief introduction to all the chapters of the study as well as the overall summary from the analysis of the relevant data. Since a study would not be complete without any suggestive findings, the study has also tried to point out errors in the financial activities of Nepal SBI Bank Limited as well as the corrective suggestions for the elimination of the same, with the hope of giving directions for further growth and improvement in the bank's operation.

#### **5.1. Summary of the Study**

In the last two decades, the financial scenario of Nepal has dramatically changed. The vast development industrial sector or due to the presence of different kinds of risk in the economy brings so many banking institutions from private as well as public sector in Nepal. The present study is a conclusion oriented study of financial analysis Nepal SBI Bank Ltd. The study had been undertaken to examine and evaluate the performance of Nepal SBI Bank Ltd. The researcher had used the financial tools to make this study more effective and informative. This study has covered five years data from 2008/09 to 2012/13 of Nepal SBI Bank Ltd. In this section, the researcher has tried to summarize the financial analysis of Nepal SBI Bank Limited.

Financial analysis is the key tools for financial decision and starting for making plan before using sophisticated forecasting and budgeting. The study has used different financial ratios namely liquidity ratio, activity ratio, profitability ratio, capital adequacy ratio, invisibility ratio capital structure ratio, income and expenditure analysis, and statistical tools namely trend

analysis, correlation of coefficient, probable error, hypothesis t –test for the study of the bank.

The bank has been able to maintain its position in the country as one of the leading joint venture commercial banks in the country. Moreover, competition in the financial sector is getting tougher day by day. However, in line with the current market trend, the bank is making all possible efforts to consolidate its business portfolio and cut down the cost in all operating areas to the extent possible, to maintain the profitability. The principal activities of the bank in the past seven years continued to be consumer and corporate banking, trade and finance, credit card services and foreign exchange counters. The bank has successfully installed Automated Teller Machines (ATM). The number of different cards issued by the bank and the bank now has the critical mass in its account base.

The bank continues to strive in order to maintain its position in the country as the market leader in the credit card arena. There are ongoing efforts and commitments in enhancing its products and services both, the issuance and acquiring business. A very high debt to net worth ratio is unfavorable because debts are considered to be more risky than equity funds in the sense that the bank has a compulsory legal obligation to pay interest to the debt holders irrespective of the profit made or losses incurred. Therefore appropriate mix of debt and owners' fund is desired by the bank.

## **5.2. Conclusions**

While going through the study, it is found that the bank has sound performance. All the debt management ratio and profitability ratio of Nepal SBI bank has better. Liquidity ratio of the bank is not so good. At last, from the study of Nepal SBI Bank NB bank, we can conclude that the bank is performing

their business with the fast success in Nepal. However liquidity ratio and debt ratio of Nepal SBI bank is higher. But when we take in to consideration EPS and DPS, the Nepal SBI bank has higher EPS but lower DPS. So, Nepal SBI bank is better in terms of EPS.

In conclusion, financial condition of Nepal SBI Bank Limited is good enough which means it has good command in the market. Overall, the financial position of Nepal SBI Bank Limited is able to provide the general public and firm their amounts that have deposited their amount for security with full confidence of receiving back on demand.

### **5.3. Recommendations**

Based on the analysis conducted on previous chapters, some shorts are found. Thus, following recommendations could be possibly helpful to improve their future financial performance. In period of operation of 20 years, it has been successful to form a network of 62 branches up to fiscal year 2069/70 the bank is further planning to expand its network in the current fiscal year too. Effective and comparative banking activities have not been reached to different corners of country. In such a situation the banks network expansion plan is worth appreciation. The following further recommendations are made from the study made about the bank in this chapter.

- ) The fluctuation of ratio must be stabilized after proper diagnosis of the quality. Nepal SBI Bank Limited should focus in investing short-term marketable securities which yield more return than merely maintaining cash and bank balance.
- ) The ratio of investment to total deposit indicates the fluctuation trend that Nepal SBI Bank Limited has not been able to mobilize its available funds properly therefore, it is suggested to mobilize the funds properly in productive and profitable sectors.

- ) The bank should keep up the act of wealth maximization of the shareholders as they are true owners of the bank. The bank should always abide the directives given by NRB.
- ) The bank is advised to introduce new product lines and services to further attract the customers. It should keep in mind that it is competing with 30 other banks, so the management should be alert to either comprehend customer philosophy or to manipulate them through introduction of new, efficient and convenient services.
- ) The bank should never forget that customer is a king of the market so its objectives should be to conduct more training, seminars, workshops and managerial development schemes to help the local bank compete with the foreign bank.
- ) Being the part of the society, it has a great responsibility in the social development, therefore it is recommended to Nepal SBI Bank Limited to participate in social events such as in education, health program, environment protection etc, so that more customers are attracted towards it.
- ) All imperfect practices inherent from the past mistakes should be avoided to re-orient the bank to new discuss of change and other further improvement.

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**APPENDIX - I**

**BALANCE SHEET OF FIVE YEARS**

(Rs. In Thousands)

<b>LIABILITIES</b>	<b>2008/09</b>	<b>2009/10</b>	<b>2010/11</b>	<b>2011/12</b>	<b>2012/13</b>
Share Capital	874,527	1,861,324	2,102,966	2,355,738	2,650,205
Reserves and funds	838,079	589,229	776,326	841,720	1,148,751
Debenture & Bonds	200,000	200,000	200,000	600,000	800,000
Borrowings	727,466	-	-	-	-
Deposits	27,957,220	34,896,424	42,415,443	53,337,264	58,920,455
Bills payable	62,947	72,368	80,685	78,616	165,354
Proposed dividend	24,904	83,080	93,465	104,699	176,680
Income tax liabilities	-	-		3,468	-
Other liabilities	231,535	345,252	419,347	738,200	934,704
<b>Total liabilities</b>	<b>30,916,681</b>	<b>38,047,679</b>	<b>46,088,233</b>	<b>58,059,707</b>	<b>64,796,152</b>
<b>ASSETS</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Cash balance	652,027	815,679	1,007,688	1,186,755	1,239,453
Balance with NRB	444,138	1,842,802	2,330,927	3,269,609	4,957,064
Balance with bank and other financial institution	807,740	782,779	1,539,210	1,052,017	1,516,885
Money at call and short notice	-	782,779	-	178,250	138,925
Investment	13,286,181	16,305,632	18,911,021	24,463,451	25,906,119
Loans, Advances & B.P	15,131,747	17,480,548	21,365,771	26,142,094	28,788,146
Fixed assets	253,580	418,244	417,002	715,920	661,589
Non banking assets	-	-	-	-	-
Other assets	341,265	401,992	516,612	1,051,608	1,587,968
<b>Total assets</b>	<b>30,916,681</b>	<b>38,047,679</b>	<b>46,088,233</b>	<b>58,059,707</b>	<b>64,796,152</b>

## APPENDIX - II

### PROFIT AND LOSS ACCOUNT OF FIVE YEARS.

(Rs. In Thousands)

Particulars	2008/09	2009/10	2010/11	2011/12	2012/13
Interest Income	1,460,445	2,269,704	3,099,907	3,769,483	4,110,514
Interest Expenses	824,700	1,443,693	2,096,038	2,770,798	2,486,978
<b>Net Interest Income</b>	<b>635,745</b>	<b>826,010</b>	<b>1,003,869</b>	<b>998,684</b>	<b>1,623,535</b>
commission and Discount	78,836	131,692	236,159	255,351	313,696
Other Operating Income	52,790	78,796	95,172	141,761	157,755
Exchange Fluctuation Income	61,294	70,328	70,532	101,138	101,915
<b>Total operating Income</b>	<b>828,666</b>	<b>1,106,827</b>	<b>1,405,734</b>	<b>1,496,936</b>	<b>2,196,902</b>
Staff Expenses	121,989	130,336	255,430	289,153	416,560
Other Operating Expenses	223,965	343,850	429,743	456,126	477,246
Exchange Fluctuation Loss	-	-	-	-	-
<b>Operating profit before Provision for Possible Loss</b>	<b>482,711</b>	<b>632,649</b>	<b>729,560</b>	<b>751,656</b>	<b>1,303,095</b>
Provision for Possible Losses	40,345	62,350	55,308	78,011	128,040
<b>Operating Profit</b>	<b>442,366</b>	<b>570,290</b>	<b>674,252</b>	<b>673,644</b>	<b>1,175,054</b>
Non-operating Income/loss	2,516	2,552	3,113	2,182	(287)
Provision for Possible loss written back	198,672	56,621	179,122	91,695	43,861
<b>Profit from Regular Operation</b>	<b>643,555</b>	<b>629,464</b>	<b>856,488</b>	<b>767,522</b>	<b>1,218,628</b>
Profit/loss from extra-ordinary Activities	(156,220)	(37,266)	(137,672)	(12,203)	2,326
<b>Net profit after All</b>	<b>487,334</b>	<b>592,198</b>	<b>718,815</b>	<b>755,318</b>	<b>1,220,954</b>



<b>Activities</b>					
Provision for staff Bonus	44,303	53,836	65,346	68,665	110,995
Provision for Income Tax	126,658	146,620	188,903	206,548	338,487
B Current year's					
B Previous	133,123	183,015	206,531	229,051	363,530
Deferred tax	2,582	(28,395)	(4,928)	729	565
	(9,048)	(7,999)	(12,699)	(23,233)	(25,608)
<b>Net Profit/Loss</b>	<b>316,373</b>	<b>391,742</b>	<b>464,564</b>	<b>480,105</b>	<b>771,471</b>

## APPENDIX - III

**Table 1.1: List of Commercial Banks Operating in Nepal**

S.N	Bank Name	Operation Date	Head Office	(Rs in Million) Paid up Capital
1	Nepal Bank Ltd.	11/15/1937	Dharmapath, Kathmandu	1772.83
2	Rastriya Banijya Bank Ltd.	1/23/1966	Singhadurbarplaza, Kathmandu	1172.3
3	Agriculture Development Bank Ltd.	1/21/1968	Ramshahpath, Kathmandu	9474.3
4	Nabil Bank Ltd.	7/12/1984	Kantipath, Kathmandu	2435.72
5	Nepal Investment Bank Ltd.	3/9/1986	Durbarmarg, Kathmandu	3012.92
6	Standard Chartered Bank Nepal Ltd..	2/28/1987	Nayabaneshwor, Kathmandu	1610.17
7	Himalayan Bank Ltd.	1/18/1993	Thamel, Kathmandu	2400
8	Nepal SBI Bank Ltd.	7/7/1993	Hattisar, Kathmandu	2093.99
9	Nepal Bangladesh Bank Ltd.	6/6/1994	Nayananeshwor, Kathmandu	2009.4
10	Everest Bank Ltd.	10/18/1994	Lazimpat , Kathmandu	1391.64
11	Bank of Kathmandu Ltd.	3/12/1995	Kamaladi, mKathmandu	1604.19
12	Nepal Credit and Commerce Bank Ltd.	10/14/1996	Siddharthanagar, Rupandehi	1400
13	Lumbini Bank Ltd.	7/17/1998	Narayangadh, Chitawan	1430
14	Machhapuchhre Bank Ltd.	10/3/2000	Prithwichowk, Pokhara, Kaski	2478.79
15	Kumari Bank Ltd.	4/3/2001	Durbarmarg, Kathmandu	1603.8
16	Laxmi Bank Ltd.	4/3/2002	Adarsanagar, Birgunj, Parsa	1694.08
17	Siddhartha Bank Ltd.	12/24/2002	Kamaladi, Kathmandu	1619.24
18	Global IME Bank Ltd.	1/2/2007	Birgunj, Parsa	2184.86
19	Citizens Bank International Ltd.	4/20/2007	Kamaladi, Kathmandu	2101.84
20	Prime Commercial Bank Ltd	9/24/2007	Newroad, Kathmandu	2245.75

21	Sunrise Bank Ltd.	10/12/2007	Gairidhara, Kathmandu	2015
22	Grand Bank Nepal Ltd.	5/25/2008	Kamaladi, Kathmandu	2000
23	NMB Bank Ltd.	6/2/2008	Babarmahal, Kathmandu	2000
24	Kist Bank Ltd.	5/7/2009	Anamnagar, Kathmandu	2000
25	Janata Bank Nepal Ltd.	4/5/2010	Naya Baneshwor, Kathmandu	2000
26	Mega Bank Nepal Ltd.	7/23/2010	Kantipath, Kathmandu	1631
27	Commerz & Trust Bank Nepal Ltd.	9/20/2010	Kamaladi, Kathmandu	1400
28	Civil Bank Ltd.	11/26/2010	Kamaladi, Kathmandu	1200
29	Century Commercial Bank Ltd.	3/10/2011	Putalisadak , Kathmandu	1080
30	Sanima Bank Ltd.	2/15/2012	Nagpokhari, Kathmandu	2016
31	Nic Asia Bank Nepal Ltd.	30/06/2013	Trade Tower, Thapathali, Kathmandu	5000

## APPENDIX-IV

**Table 4.24: Correlation between Total Deposit and Investment**

(Rs. In Millions)

Year	Total Deposit (x)	Investment (y)	xy	x <sup>2</sup>	y <sup>2</sup>
2008/09	25,957	13,286	344864702	673765849	176517796
2009/10	34,896	16,305	568979280	1217730816	265853025
2010/11	42,415	18,991	805503265	1799032225	360658081
2011/12	53,337	24,463	1304783031	2844835569	598438369
2012/13	58,920	25,906	1526381520	3471566400	671120836
<b>sum(d)</b>	<b>dx = 215525</b>	<b>dy = 98951</b>	<b>dxy = 4550511798</b>	<b>dx<sup>2</sup> = 10006930859</b>	<b>dy<sup>2</sup> = 2072588107</b>

Calculation of coefficient of correlation (r)

We have,

$$r = \frac{n\phi xy - \phi x\phi y}{\sqrt{n\phi x^2 - (\phi x)^2} \sqrt{n\phi y^2 - (\phi y)^2}}$$

$$= \frac{22752558990 - 21326414275}{59863 \mid 23909}$$

$$= \frac{1426144715}{1431264467}$$

$$= 0.9964$$

$$r = 0.9964$$

We have,

$$P.E. (r) = 0.6745 \mid \frac{1-r^2}{\sqrt{n}}$$

$$= 0.6745 \mid 0.00321$$

$$= 0.002165$$

Significant of r = 6  $\mid$  0.002165

$$= 0.01299$$

## APPENDIX - V

**Table 4.25: Correlation between Total Deposit & Loan & Advances**

(Rs. In Millions)

Year	Total Deposit (x)	Loan and Advance (y)	xy	x <sup>2</sup>	y <sup>2</sup>
2008/09	25,957	15,161	393534077	673765849	229855921
2009/10	34,896	17,480	609982080	1217730816	305550400
2010/11	42,415	21,365	906196475	1799032225	456463225
2011/12	53,337	26,142	1394335854	2844835569	683404164
2012/13	58,920	28,788	1696188960	3471566400	828748944
<b>sum(d)</b>	<b>dx = 215525</b>	<b>dy = 108936</b>	<b>dxy = 5000237446</b>	<b>dx<sup>2</sup> = 10006930859</b>	<b>dy<sup>2</sup> = 2504022654</b>

Calculation of coefficient of correlation (r)

We have,

$$\begin{aligned}
 r &= \frac{n\phi xy - \phi x\phi y}{\sqrt{n\phi x^2 - (\phi x)^2} \sqrt{n\phi y^2 - (\phi y)^2}} \\
 &= \frac{25001187230 - 23478431400}{59863 \mid 25555} \\
 &= \frac{1522755830}{1529798965} \\
 &= 0.9954
 \end{aligned}$$

$$r = 0.9954$$

We have,

$$\begin{aligned}
 P.E. (r) &= 0.6745 \mid \frac{1-r^2}{\sqrt{n}} \\
 &= 0.6745 \mid 0.004105 \\
 &= 0.00277
 \end{aligned}$$

Significant of r = 6  $\mid$  0.00277

$$= 0.0166$$

## APPENDIX - VI

**Table 4.26: Correlation between Loan & Advances and Net Profit**

(Rs. in millions)

Year	Loan and Advance (x)	Net Profit (y)	xy	x <sup>2</sup>	y <sup>2</sup>
2008/09	15,161	316	4790876	229855921	99856
2009/10	17,480	391	6834680	305550400	152881
2010/11	21,365	464	9913360	456463225	215296
2011/12	26,142	480	12548160	683404164	230400
2012/13	28,788	771	22195548	828748944	594441
<b>sum(d)</b>	<b>dx = 108936</b>	<b>dy = 2422</b>	<b>dxy = 56282624</b>	<b>dx<sup>2</sup> = 2504022654</b>	<b>dy<sup>2</sup> = 1292874</b>

Calculation of coefficient of correlation (r)

We have,

$$\begin{aligned}
 r &= \frac{n\phi xy - \phi x\phi y}{\sqrt{n\phi x^2 - (\phi x)^2} \sqrt{n\phi y^2 - (\phi y)^2}} \\
 &= \frac{281413120 - 263842992}{25555 \mid 773} \\
 &= \frac{17570128}{19754015} \\
 &= 0.8894 \\
 r &= 0.8894
 \end{aligned}$$

We have,

$$\begin{aligned}
 P.E. (r) &= 0.6745 \mid \frac{1 - r^2}{\sqrt{n}} \\
 &= 0.6745 \mid 0.0934 \\
 &= 0.0630
 \end{aligned}$$

$$\begin{aligned}
 \text{Significant of } r &= 6 \mid 0.0630 \\
 &= 0.3782
 \end{aligned}$$

## APPENDIX – VII

**Table 4.26: Correlation between DPS and EPS**

(RS.)

Year	DPS (x)	EPS (y)	xy	x <sup>2</sup>	y <sup>2</sup>
2008/09	42.11	36.18	1523.54	1773.2521	1308.99
2009/10	17.50	23.69	414.575	306.25	561.22
2010/11	17.50	24.85	434.875	306.25	617.52
2011/12	17.50	22.93	401.275	306.25	525.78
2012/13	20.00	32.75	655	400	1072.56
<b>sum(d)</b>	<b>dx = 114.61</b>	<b>dy = 140.4</b>	<b>dxy = 3429</b>	<b>dx<sup>2</sup> = 3092</b>	<b>dy<sup>2</sup> = 4086</b>

Calculation of coefficient of correlation (r)

We have,

$$\begin{aligned}
 r &= \frac{n\phi xy - \phi x\phi y}{\sqrt{n\phi x^2 - (\phi x)^2} \sqrt{n\phi y^2 - (\phi y)^2}} \\
 &= \frac{17145 - 16091}{48.21 \mid 26.79} \\
 &= \frac{1054}{1291.55} \\
 &= 0.8200 \\
 r &= 0.8200
 \end{aligned}$$

We have,

$$\begin{aligned}
 P.E. (r) &= 0.6745 \mid \frac{1 - r^2}{\sqrt{n}} \\
 &= 0.6745 \mid 0.1465 \\
 &= 0.099
 \end{aligned}$$

$$\begin{aligned}
 \text{Significant of } r &= 6 \mid 0.0630 \\
 &= 0.5929
 \end{aligned}$$

## APPENDIX - VIII

**Table 4.27: Least Square of Linear Trend of Total Deposits**

(Rs. In Thousands)

Fiscal Year (t)	Total Deposits(Y)	X = t- 2010/11	X <sup>2</sup>	XY
2008/09	25,957,220	-2	4	(51914440)
2009/10	34,896,424	-1	1	(34896424)
2010/11	42,415,000	0	0	0
2011/12	53,337,000	1	1	53337000
2012/13	58,920,455	2	4	117840910
<b>Sum(φ)</b>	<b>dy = 215526099</b>	<b>0</b>	<b>dx<sup>2</sup> = 10</b>	<b>dxy = 84367046</b>

Since,

$$\phi x = 0,$$

$$\begin{aligned} a &= \frac{\phi y}{n} \\ &= \frac{215526099}{5} \\ &= \text{Rs. } 43105220 \end{aligned}$$

$$\begin{aligned} b &= \frac{\phi xy}{\phi x^2} \\ &= \frac{84367046}{10} \\ &= \text{Rs } 8436704.6 \end{aligned}$$

Now, the best fit of straight line trend is obtained by substituting the value of 'a' and 'b' in equation  $y = a + bx$ , we get,

$$y = 43105220 + 843670.6 x$$



This trend line equation shows the positive relationship between time (years) and Total Deposit achievements. The actual sales will be increased by 8436704.6 thousands every year if the sales trends of past years continue in the future.

By using this trend line equation, we can estimate the total deposit for fiscal year 2013/14.

The value of deviation (x) for fiscal year 2013/14 is 3.

We have,

$$\begin{aligned} Y &= 43105220 + 843670.6 \mid 3 \\ &= 43105220 + 2531011.8 \\ &= \text{Rs. } 45636231.8 \text{ thousands.} \end{aligned}$$

If the past Total deposit trend does not change, then the future total deposit will be Rs, 45636231.8 thousands in fiscal year 2013/14. By the help of least square method we can say that the trend of total deposit will have an increasing pattern.

## APPENDIX - IX

**Table 4.28: Least Square of Linear Trend of Loan & Advances**

(Rs. In millions)

Fiscal Year (X)	Loan & Advance (Y)	X = t- 2010/11	X <sup>2</sup>	XY
2008/09	15,161,747	-2	4	(30323494)
2009/10	17,480,548	-1	1	(17480548)
2010/11	21,365,771	0	0	0
2011/12	26,142,094	1	1	26142094
2012/13	28,788,146	2	4	57576292
<b>Sum(φ)</b>	<b>dy = 108938306</b>	<b>0</b>	<b>10</b>	<b>dxy = 35914344</b>

(Source: Appendix I)

Since,

$$\phi_x = 0,$$

$$\begin{aligned} a &= \frac{\phi_y}{n} \\ &= \frac{108938306}{5} \\ &= \text{Rs. } 21787661 \end{aligned}$$

$$\begin{aligned} b &= \frac{\phi_{xy}}{\phi_x^2} \\ &= \frac{35914344}{10} \\ &= \text{Rs } 3591434.4 \end{aligned}$$

Now, the best fit of straight line trend is obtained by substituting the value of 'a' and 'b' in equation  $y = a + bx$ , we get,

$$y = 21787661 + 3591434.4 x$$

This trend line equation shows the positive relationship between time (years) and loan and advance achievements. The total deposit will be increased by 3591434.4 thousands every year if the sales trends of past years continue in the future.

By using this trend line equation, we can estimate the loan and advance for fiscal year 2013/14.

The value of deviation (x) for fiscal year 2013/14 is 3.

We have,

$$\begin{aligned} Y &= 21787661 + 3591434.4 \mid 3 \\ &= 21787661 + 10774303.2 \\ &= \text{Rs. } 32561964.2 \text{ thousands.} \end{aligned}$$

If the past loan and advance trend does not change, then the future loan and advance will be Rs. 32561964.2 thousands in fiscal year 2013/14. By the help of least square method we can say that the trend of loan and advance will have an increasing pattern.

## APPENDIX - X

**Table 4.29: Least Square of Linear Trend of Investment**

(Rs. In Thousands)

Fiscal Year (t)	Investment (Y)	X = t- 2010/11	X <sup>2</sup>	XY
2008/09	13,286,181	-2	4	(13286181)
2009/10	16,305,632	-1	1	(16305632)
2010/11	18,991,021	0	0	0
2011/12	24,463,451	1	1	24906119
2012/13	25,906,119	2	4	51812238
<b>Sum(φ)</b>	<b>dy = 98952404</b>	<b>0</b>	<b>10</b>	<b>dxy = 47126544</b>

(Source: Appendix I)

Since,

$$\phi_x = 0,$$

$$\begin{aligned} a &= \frac{\phi_y}{n} \\ &= \frac{98952404}{5} \\ &= \text{Rs. } 19790481 \end{aligned}$$

$$\begin{aligned} b &= \frac{\phi_{xy}}{\phi_x^2} \\ &= \frac{47126544}{10} \\ &= \text{Rs } 4712654.4 \end{aligned}$$

Now, the best fit of straight line trend is obtained by substituting the value of 'a' and 'b' in equation  $y = a + bx$ , we get,

$$y = 19790481 + 4712654.4 x$$

This trend line equation shows the positive relationship between time (years) and investment achievements. The investment will be increased by 4712654.4 thousands every year if the sales trends of past years continue in the future.

By using this trend line equation, we can estimate the investment for fiscal year 2013/14.

The value of deviation (x) for fiscal year 2013/14 is 3.

We have,

$$\begin{aligned} Y &= 19790481 + 4712654.4 \mid 3 \\ &= 19790481 + 14137963.2 \\ &= \text{Rs. } 33928444.2 \text{ thousands.} \end{aligned}$$

If the past investment trend does not change, then the future investment will be Rs. 33928444.2 thousands in fiscal year 2013/14. By the help of least square method we can say that the trend of investment will have an increasing pattern.

## APPENDIX - XI

**Table 4.30: Least Square of Linear Trend of Net Profit**

(Rs. In Thousands)

Fiscal Year (t)	Net Profit (Y)	X = t- 2010/11	X <sup>2</sup>	XY
2008/09	316,373	-2	4	(632746)
2009/10	391,742	-1	1	(391742)
2010/11	464,564	0	0	0
2011/12	480,105	1	1	480105
2012/13	771,471	2	4	1542942
<b>Sum(φ)</b>	<b>dy = 2424255</b>	<b>0</b>	<b>10</b>	<b>998559</b>

(Source: Appendix I)

Since,

$$\phi_x = 0,$$

$$\begin{aligned} a &= \frac{\phi_y}{n} \\ &= \frac{2424255}{5} \\ &= \text{Rs. } 484851 \end{aligned}$$

$$\begin{aligned} b &= \frac{\phi_{xy}}{\phi_x^2} \\ &= \frac{998559}{10} \\ &= \text{Rs } 99855.9 \end{aligned}$$

Now, the best fit of straight line trend is obtained by substituting the value of 'a' and 'b' in equation  $y = a + bx$ , we get,

$$y = 484851 + 99855.9 x$$

This trend line equation shows the positive relationship between time (years) and Net profit achievements. The net profit will be increased by 99855.9 thousands every year if the sales trends of past years continue in the future.

By using this trend line equation, we can estimate the net profit for fiscal year 2013/14.

The value of deviation (x) for fiscal year 2013/14 is 3.

We have,

$$\begin{aligned} Y &= 484851 + 99855.9 | 3 \\ &= 484851 + 299567.7 \\ &= \text{Rs. } 784418.7 \text{ thousands.} \end{aligned}$$

If the past net profit trend does not change, then the future net profit will be Rs. 784418.7 thousands in fiscal year 2013/14. By the help of least square method we can say that the trend of net profit will have an increasing pattern.

## APPENDIX - XII

Year	Total deposit (x)	X <sup>2</sup>
2008/09	25,957	673,765,849
2009/10	34,896	1,217,730,816
2010/11	42,415	1,799,032,225
2011/12	53,337	2,844,835,569
2012/13	58,920	3,471,566,400
n = 5	<b>dx = 215,526</b>	<b>∑X<sup>2</sup> = 10,006,930,860</b>

Since,

$$\bar{X} = \frac{\sum X}{n} = \frac{215526}{5}$$

$$= \text{Rs. } 43105.20$$

Again,

$$S = \frac{1}{n-1} \sum X^2 - \frac{(\sum X)^2}{n}$$

$$S = \frac{1}{5-1} \sum X^2 - \frac{(215526)^2}{5}$$

$$= \text{Rs. } 179,159,881$$

Then,

$$\text{Pop}^n \text{ mean } (\hat{\mu}) = 40,000 \quad (\text{assume} = 40,000)$$

$$t = \frac{\bar{X} - \hat{\mu}}{\sqrt{\frac{S}{n-1}}}$$

$$t = \frac{43105 - 40000}{\sqrt{\frac{179159881}{5-1}}}$$

$$= 0.464$$



**APPENDIX -XIII**

<b>Fiscal Year (X)</b>	<b>Loan &amp; Advance (X)</b>	<b>X<sup>2</sup></b>
2008/09	15,161	229,855,921
2009/10	17,480	305,550,400
2010/11	21,365	456,463,225
2011/12	26,142	683,404,164
2012/13	28,788	828,748,944
<b>Sum(φ)</b>	<b>dX = 108,938</b>	<b>dX<sup>2</sup> = 2,503,022,654</b>

Since,

$$\bar{X} = \frac{\phi X}{n} = \frac{108938}{5}$$

$$= \text{Rs. } 21,788$$

Again,

$$S = \frac{1}{n-1} \phi X^2 - \frac{(\phi X)^2}{n}$$

$$S = \frac{\sum X^2 - \frac{(\sum X)^2}{n}}{n-1}$$

$$= \text{Rs. } 32,381,271$$

Then,

Pop<sup>n</sup> mean ( $\hat{\mu}$ ) = 20,000 (assume = 20,000)

$$t = \frac{\bar{X} - \hat{\mu}}{\sqrt{\frac{S}{n-1}}}$$

$$t = \frac{21788 - 20000}{\sqrt{\frac{32381271}{5-1}}}$$

$$= 0.628$$

**APPENDIX -XIV**

<b>Year</b>	<b>Net Profit (X)</b>	<b>X<sup>2</sup></b>
2008/09	316	99,856
2009/10	391	152,881
2010/11	464	215,296
2011/12	480	230,400
2012/13	771	594,441
<b>Sum(φ)</b>	<b>dX = 2,424</b>	<b>dX<sup>2</sup> = 1292874</b>

Since,

$$\bar{X} = \frac{\phi X}{n} = \frac{2424}{5}$$

$$= 485$$

Again,

$$S = \frac{1}{n-1} \phi X^2 - \frac{(\phi X)^2}{n}$$

$$S = \frac{1292874}{5} - \frac{(2424)^2}{5}$$

$$= \text{Rs. } 29,429$$

Then,

Pop<sup>n</sup> mean ( $\hat{\mu}$ ) = 400 (assume = 400)

$$t = \frac{\bar{X} - \hat{\mu}}{\sqrt{\frac{S}{n-1}}}$$

$$t = \frac{485 - 400}{\sqrt{\frac{29429}{5-1}}}$$

$$= 0.991$$