CHAPTER I

INTRODUCTION

1.1. Background

Nepal is one of the land locked and developing countries in the world with increasing tendency of the economic stipulations. Most of the people in Nepal are still living below the poverty line with lowest rate of per capita income. The economic growth of any underdeveloped countries widely depends upon the proper utilization of available resources. The Nepalese economic condition is not so sound due to improper utilization of available resources not because of lack of resources. Most of the people are unemployed and they are involved in farming.

Rapid pace of onward movement of the country solely depends upon its economic condition. As financial institutions for an instance "Commercial Banks" play vital role in the economic development of the country. Commercial Banks deal in the process of channeling the available resources in the needed sectors. These institutions accept deposits from public and in turn provide credit to trade, business and industry that directly makes a remarkable impact on the economic development of a country. They are the intermediary between the deficit and surplus of financial resources. All the economic activities are directly or indirectly channeled through the banks. People keep their surplus money as deposits in the banks and hence banks can provide such funds to finance the industrial activities in the form of loans and advances. These institutions make the flow of investment easier. So, we can not deny the role of banks in developing an economy.

The key factor in the development of any country is the mobilization of available domestic resources and their investment in the various productive sectors. The banking sector has to play a developmental role to boost up the economy by adapting the growth oriented investment policy. As it is impossible to handle and develop the entire sector by the government alone & again it is not possible to undertake large business by the private sector because of low per capita income. Hence, formulation of sound investment policies by Commercial Bank eventually contributes to the economic growth of the country. The balanced and speedy development of the country is not impossible but proper banking activities is very important for such developments. Commercial banks have played a vital role for such developments having an important place in the framework of every economy as those banks provides capital raised from different sources for various investments with a primary objective of profit generation.

Investment simply means sacrificing the current funds for the future returns. The sacrifice of current consumption takes place at present with certainty and the investor expects desired level of return at the end of the investment horizon. Sharp, Alexander and Bailey (2003) state that "*investment, in broad sense, means the sacrifice of current dollars for future dollars*". Likewise Clarke, 1989: 10 stated that "*Investment policy involves determining the investors' objectives and the amount of his or her invest able wealth. It is not appropriate for an investor to say that his objective is to make a lot of money*."

Some investments may produce more value than invested value, some may produce only equal to invested value, and some may not produce even lesser than invested value.

For effective management of investment portfolio, every bank must have a written policy, Board of Directors formulates such policies & it may differ from bank to bank in terms of complexity and comprehensiveness. Investment Policy is one fact of the overall economic development because it ensures efficient allocation of funds to achieve the material and economic well being of the society as a whole. In this regard, commercial bank's investment policy is also a push drive to achieve priority of industries in the context of Nepalese economic development.

The real talent of an investor primarily relies upon selecting proper or suitable area for investment with low or moderate risk. Investment policy should ensure the minimization of risk and maximization of profit while doing business.

1.1.1. Evolution of Banking Industry

The evolution of banking industry had started a long time back. Some sort of banking activities had been carried out since the time immemorial. In fact, banking is nearly as old as civilization. Traditional forms of banking were traced during the civilization of Greek, Rome and Mesopotamia. According to Geoffrey Crowther, merchants, goldsmith and moneylenders are the ancestors of modern banking.

"The first banks were in the great centers of international trade in the Middle Ages. These centers were in Italy, on the western shores of the Mediterranean and in the coastal areas of northern and western Europe. General banking practice developed most rapidly in Italy" (World Book Encyclopedia: 64). As a public enterprise, banking made its first beginning in Italy as the Bank of Venice, founded in 1157 A.D., to finance the monarch in the wars. Following it were the establishments of Bank of Barcelona and the Bank of Genoa in 1401 A.D. and 1407 A.D. respectively. With the expansion of commercial activities in Northern

Europe there sprang up a number of private banking houses in Europe and slowly it spread throughout the world.

The spread of banking through Europe was rapid from the late 1600s onwards. During that time, Bank of Amsterdam was founded in 1609, Bank of Hamburg was founded in 1619, and Bank of Nuremberg was founded in 1621. The first successful American bank was Bank of North America, which opened in Philadelphia in 1782.

Since the 1960s, banking has become much more international because of the increase in the number of multinational companies and the spread of their operations worldwide.

1.1.2. Development of Banking Industry in Nepal

In Nepal, the development of banking is relatively recent. As in other countries goldsmiths and landlords were the ancient bankers of Nepal. Banking in true sense of term started with the inception of Nepal Bank Limited in the year 1994 BS, which was established as a joint venture of government and private individuals. Nepal Rastra Bank was set up in 2013 BS as the central bank to help the government formulate monetary policies and to develop the financial sector. Rastriya Banijya Bank, the second commercial bank, was established in 2022 BS, which was fully government owned. To develop agricultural sector and support it financially, Agricultural Development Bank was established in 2024 BS.

Despite all these efforts of the government, financial sector was found slow-moving. The inception of Nepal Arab Bank Ltd, (now known as Nabil Bank Ltd) in the year 2041 BS a first joint venture bank proved to be a milestone in the history of banking. Then Nepal Indosuez Bank Ltd, (now known as Nepal Investment Bank Ltd.) was established in 2042 BS and Nepal Grindlays Bank Ltd. (now known as Standard Chartered Bank Ltd.) was established in 2043 BS. After restoration of democracy in 2046, Himalayan Bank Ltd. was established in 2049 BS. Many other commercial banks have been established after that date. Today, there are 31 commercial banks existing in Nepal so far.

This thesis report analysis will be based on commercial Banks where specifically three banks are taken under consideration. All the banks to be taken are of "A" Class institutions licensed by NRB. Let's have an overview on the banks:

1.1.3. Brief Introduction of NIBL, SCB and NSBI:

Nepal Investment Bank Ltd. (NIBL), previously Nepal Indosuez Bank Ltd, was established in 1986 AD as a joint venture between Nepalese and French partners. The French partner (holding 50% of the capital of NIBL was Credit Agricole Indosuez, a subsidiary of one the largest banking group in the world.

With the decision of Credit Agricole Indosuez to divest, a group of companies comprising of bankers, professionals, industrialists and businessmen, had acquired on April 2002 the 50% shareholding of Credit Agricole Indosuez in Nepal Indosuez Bank   Ltd.

The name of the bank has been changed to Nepal Investment Bank Ltd. upon approval of bank's Annual General Meeting, Nepal Rastra Bank and Company Registrar's office with the following shareholding structure.

- A group of companies holding 50% of the capital
- Rastriya Banijya Bank holding 15% of the Capital.
- Rastriya Beema Sansthan holding the same percentage.
- The remaining 20% being held by the General Public (which means that NIBL is a Company listed on the Nepal Stock Exchange).

Standard Chartered Bank Nepal Limited (SCB) has been in operation in Nepal since 1987 when it was initially registered as a joint-venture operation. Today the Bank is an integral part of Standard Chartered Group having an ownership of 75% in the company with 25% shares owned by the Nepalese public. The Bank enjoys the status of the largest international bank currently operating in Nepal.

Nepal SBI Bank Limited (NSBI) was established in July 1993. It 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.

1.2. Investment Policies of Commercial Banks

Investment operation of commercial banks is very risky one. A sound investment policy of a bank is such that its funds are distributed in different types of assets with good possibility on the one hand and provides maximum safety and security to the depositors and banks on the other hand. Moreover, risk in banking sector tends to be concentrated in the loan portfolio. The type of loan a bank makes, the amount of money invested as a loan and the sectors where the bank provides loan are the most important factors which affect the investment policies of a bank.

The income and profit of the bank rely upon its lending procedure and investment of funds on different securities. The greater the credit created by a bank, the greater will be the profitability. A sound lending policy is not only prerequisite for a bank's profitability, but also crucially significant for the promotion of commercial saving of a backward country like Nepal.

Investment policy is one facet of the overall spectrum of policies that guide its investment operations. A sound and viable investment policy can be effective one for the economy to attain the economic objectives directed towards the acceleration of the pace of development. A good investment policy attracts both borrowers and lenders, which helps to increase the volume and quality of deposits, loan and investment. Sound investment policy can minimize interest rate spread and NPAs, which cause the bank failure. Good investment policy ensures maximum amount of investment to all sectors with proper utilization.

1.3. Statement of the Problem

Economic condition of any country mainly based on the different financial sectors established in the country. Commercial banks and financial institutions are the backbone of the Nepalese economy at present. The establishment of joint venture banks and new commercial banks has added more bricks in the construction of Nepalese economy that has provided financial assistance from small cottage industries to large industries.

At the present context, political and economic condition of the country is not satisfactory. The unstable political and economic condition has limited the investment opportunities. Due to which, there is ample amount of idle money in the country, which flow into banks as deposits. At the same time, there are very few profitable sectors where a bank can invest. This has forced the banks to lower down their interest rates to discourage deposit and, at the same time, to encourage loan and advances. This has decelerated the pace of economic development.

Another problem facing by the banking industry is the lack of sound investment policy formulation and absence of strong commitment towards its proper implementation has created many problems to bank. They don't have their clear view towards investment policy and highly relies upon the instructions and

guidelines of NRB. Further more policies formulated are not implemented in an effective way. The success and prosperity of a bank relies heavily upon the successful utilization of the collected resources that is deposit. Successful formulation and effective implementation of investment policy is the prime requisite for the successful performance of a commercial bank.

Actually, commercial banks are not properly utilizing their resources that is making loan and advances and lending for a profitable project. This is due to the lack of knowledge on financial risk, interest rate risk, business risk, liquidity risk etc. Granting loan against insufficient deposit, overvaluation of goods pledged, high percentage of non-performing loan, risk averting decision regarding loan recovery and negligence in recovery of overdue loan are some of the basic lapses and the result of unsound investment policy sighted in the banks. That condition will lead the commercial banks to the position of liquidation. Government owned banks are the perfect examples for this. This has created the perfect environment for mushrooming of private commercial banks. Still, only a handful of commercial banks have satisfactory investments that are good performing loans. This study will make attempt to analyze the investment policy of commercial banks taken into consideration and shall answer the following questions.

- Are they maintaining the sufficient liquidity position?
- Does the total amount of each type of assets as regarded on the balance sheet seem reasonable, how high, too low, in view of current assets and operating levels?
- Are the fund mobilization and investment policies are effective?
- What is the relationship of investment and loan and advances with total deposits and total net profits?
- Is the degree of success in investment strategy successful to utilize its available fund?
- Are the risk undertakings for generation high profit is reasonable?

1.4.   Objectives of the Study

The basic objective of this study is to know about the investment policy and activities of the commercial banks. The specific objectives are given below:

1. To analyze the trend of deposits, investments, net profit, and loan and advances
2. To examine the asset utilization system, profitability and risk position of commercial banks under study.
3. To assess the deposit utilization trends and its projection for the future.

4. To evaluate the growth ratios of loan and advances and total investment with respective growth rate of total deposit and net profit.
5. To appraise the suggestion on the basis of findings for further growth of the banks under study.

1.5. Scope of the Study

In the context of Nepal, there is less availability of research works, journals and articles in the field of investment policy and activities of commercial banks as well as other financial institutions. As it is a well known fact that the commercial banks can affect the economic condition of the whole country, the effort is made to highlight the investment policy of commercial banks expecting that the study can bridge gap between deposits and investment activities. On the other hand, the study would provide information to the management of the bank that would help them to take corrective action. This study can provide information to the shareholders and the public to give decisions while making investments on shares of various banks. Further, this study can also be used as reference material by the shareholders, investors, researchers, government organizations and non-government organizations.

1.6. Significance of the Study

Since, only accumulating deposits has no meaning, investment activity is the life-blood of any financial institution. Better return can be ensured only when deposits are properly mobilized through sound investment policy.

This study of Investment Policy Analysis on Joint Venture Commercial Banks of Nepal in reference to major JVB's will provide a useful feedback to academic institutions, bank employees, trainees, investors, policy making bodies, and those concerned with banks in the formulation of appropriate strategies for improving the performance of banks.

1.7. Limitation of the Study

This study is simply a study for the partial fulfillment of MBS degree, which has to be finished within a short span of time. This is not far from several limitations, which weaken the objective of the study. In order to make study more specific, the study has been conducted with few limitations while conducting it can be disclosed as below

1. The secondary data of the latest 5 years are only taken into consideration and hence conclusion drawn confines to the limited period only
2. Since the study is based upon the secondary data provided by the concerned bank the findings are more or less the approximate due to unavailability of primary data
3. Out of the numerous affecting factors only those factors related with investment activities are considered.
4. Out of 31 commercial banks, only 3 banks are taken into account to do the comparative study. Hence, the findings cannot be generalized to all commercial bank

1.8.   Organization of the Study

This study is divided into 5 chapters which are:

Chapter I: Introduction

The first chapter is the introductory chapter which contains the following topics:

1. General Background
2. Statement of the Problem
3. Objectives of the Study
4. Scope of the Study
5. Significance of Study
6. Limitations of the Study
7. Organization of the Study

Chapter II: Review of Literature

The second chapter is Review of Literature which deals with the study of related articles, journals, reports, and past thesis writing. This chapter includes following topics:

1. Conceptual/Theoretical Review
2. Review of Reports
3. Review of Books
4. Review of Articles
5. Review of Thesis

Chapter III: Research Methodology

This chapter deals with the research methodology used in this study. The third chapter concentrates on Research Methodology i.e. techniques that are applied to collect and analyze the data. It consists of the following topics:

1. Introduction
2. Research Design
3. Data Collection Procedure
4. Tools for Analysis: This includes financial tools and statistical tools.

Chapter IV: Data Presentation and Analysis

The fourth chapter is Presentation and Analysis of Data, which consists of financial tools and statistical tools used in the analysis of data. Financial tool mainly consists of ratio analysis, which involves liquidity ratio, asset management ratio, profitability ratio, risk ratio, and growth ratio. Statistical tools used in the analysis of data involve co-relation analysis, trend analysis, and test of hypothesis. This chapter also provides major findings of the study.

1. Analysis of Financial Ratio
2. Analysis of Statistical Tools
3. Major findings of the study

Chapter V: Summary, Conclusions and Recommendations

The fifth chapter, which is also the concluding chapter covers Summary, Conclusion and Recommendation, and provide some valuable suggestions to the selected banks. This chapter sum ups the study deals with the outcome of the study. This chapter highlights the major findings of the study work and recommends some suggestions.

CHAPTER II

REVIEW OF LITERATURE

The review of literature is a crucial aspect of planning of the study. This chapter is basically concerned with review of literature relevant to the investment policy of commercial banks. Every study is very much based on past knowledge as it provides foundation to the present study. Apart from these, this chapter highlights the literature that are available in the concerned subject to my knowledge, review of reports related to commercial banks, review of research works, review of books, review of articles and relevant study on this topic. Therefore, this chapter has its own significance in this study

This chapter is basically divided into 2 parts.
1) Conceptual/Theoretical Review
2) Research Review

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2.1. Conceptual/Theoretical Review

Theoretical review will present the theoretical aspect of the study which will define the concept & meanings of different related terminology whereas research review will focus on the review of relevant past studies. It includes the concept of commercial banks, functions of commercial banks. Concept and characteristics on investment policy and few other terminologies related to this research study.

2.1.1. Concept of Commercial Bank

Banks play an important role in the economic growth of any country. Banking, when properly organized, aids and facilitates the growth of trade and industry and hence of national economy. In the modern economy, banks are to be considered not as dealers but as the leaders of development. Banks are not just the storehouses of country's wealth but are the reservoirs of resources necessary for the economic development. Commercial banks are those financial institutions which play the role of financial intermediary in collection and disbursement of funds from surplus unit to deficit unit.

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

"Commercial Bank is a corporation which accepts demand deposits subject to check and makes short-term loans to business enterprises, regardless of the scope of its other services". (American Institute of Banking; 1972:325)

"The Commercial bank has its own role and contributions in the economic development. It is a resource for the economic development; it maintains economic confidence of various segments and extends credit to people." (Grywinshki; 1991:87)

The function of commercial bank could be defined as to mobilize its deposits and other funds to profitable, secured and marketable sector so that it can earn good profit as well as it should be secured and can be converted into cash whenever needed. The main function of commercial bank is concerned with the accumulation of the temporarily idle money of the general public to advance it to deficit sections i.e. trade and commerce for expenditure. Its main functions are:

- ➢ Accepting various types of deposits
- ➢ Lending money in various productive sectors
- ➢ Advancing Credits
- ➢ Agency Services
- ➢ Financing of Foreign Trade
- ➢ Exchange foreign currency
- ➢ Letter of credit (LC)
- ➢ Guarantee
- ➢ Remittance
- ➢ Bills
- ➢ Others

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

2.1.2. Meaning of Investment

The term investment refers to the sacrifice of certain present value for (possible uncertain) future value. According to F.J. Clark (1998), "Investing involves making a current commitment of funds in order to obtain an uncertain future return."

Gitman and Jachnk(1990)Stressed that the "Investment is any vehicle into funds can be placed with the expectation that will preserve or increase in value and generate position returns.

According to Sharpe & Billey, "Investment is the current commitment of funds for a period of time to derive a future flow of funds that will compensate that investing unit for the time the funds are committed for the expected rate of inflation and also for the uncertainty involved in the future flow of the funds. The success of any banks heavily depends upon the proper management of its invested funds. Investment can be categorizes as Real Investments and Financial Investments. Real Investments generally involve some kinds of tangible asset such as land, machineries or factories. Financial investments involve contracts written on pieces of paper, such as common stocks and bonds."

For our purpose, in the study of financial instructions the investment problem revolves around the concept of managing the surplus financial asset in such way, which leads to wealth maximization and providing a significant future source of income. Thus, the investment for various purposes is the management of surplus resources in such way to make it for providing benefits to the suppliers of the funds by letting third party to use such resources. However, the investments need to be a procedural task. It must follow a define investment process, which definitely begins form the formulation of proper investment policy.

2.1.3. Characteristics of Sound Lending and Investment Policy:

The income and profit of the bank rely upon its lending procedure and investment of funds on different securities. The greater the credit created by a bank, the greater will be the profitability. A sound lending policy is not only prerequisite for banks profitability but also crucially significant for the promotion of commercial saving of a backward country like Nepal.

The factors that banks must consider for sound lending and investment policies are explained as under:

1. Liquidity:

People deposit money at bank in different account with confidence that the bank will repay their money when they are in need. To maintain such confidence of the depositors, the bank must keep this point in mind while investing its excess funds in different securities or at the same time of lending so that it can meet current or short-term obligations when they become due for payment.

2. Profitability:

Commercial banks invest on those sectors that derive the maximum income. Hence, the investment or granting of loan and advances by them are highly influenced by profit margin. Basically, the profit of commercial bank depends upon the interest rate of the bank, volume of loan provided, time period of loan and nature of investment on different securities. A good bank is one who invests most of its funds in different earning assets standing safely from the problem of liquidity i.e. keeping cash reserves to meet day-to-day requirements of the depositors.

3. Purpose of Loan:

It is very important to be reminded that most of the banks' failures in the world are due to shrinkage in the value of loan and advances. The first substantive question a banker must examine is how loan proceeds will be used. If the loan purpose conflicts with commercial policy, such as loan for some speculative purpose not acceptable to the banker such loans should not be processed. If customers misuse their borrowings, there is risk involved in repayment and the bank will incur heavy bad debts. Detailed information about the plan and scheme of project should be collected and examined before lending.

4. Diversification:

Diversification of loans helps to sustain loss as if securities of some company deprived then there may be appreciation in the securities of other companies. Dispersion reduces the risk of recovery. Investment and credit concentrated on same geographical region, same sector of business and few customers increase the risk. Hence the policy should fix a cap on all these aspect. As the saying goes "A bank should not put all its eggs in the same basket". Therefore, in order to

minimize the risk, a bank should diversify its investment in different securities. This diversification or portfolio investment helps to earn good return and at the same time minimize the risks and uncertainty.

5. Safety and Security:

Banks should buy investment rated securities only. It should abstain from investing its fund in those securities, which are subject to greater depreciation and fluctuation for example common stock, since a little difference may result in a great loss. It must not advance its funds to speculative business, which may earn millions in a minute or may become bankrupt the next minute. Since risk is overpriced during recession and under priced during boom banks should invest in medium grade and high-grade securities during recession and boom respectively. Banks should buy securities, which are commercially durable, marketable and have high market price. In this regard, "MAST" should be followed while investing,

Where, M = Marketability

A = Ascertain-ability

S = Stability

T = Transferability

6. Legality:

A commercial bank must follow the rules and regulations and statuary directives issued by Nepal Rastra Bank, Ministry of Finance and others while issuing securities and mobilizing their funds. In Nepal, NRB restricts financial institution licensed by it to invest in securities of each other.

2.1.4. Meaning of Some Important Terminology:

1. Deposits:

Deposits are the main source of fund of the financial institution. It is the sum totals of money collected form the depositors in various accounts Deposits denote the amounts deposited in current, saving, or fixed account of a bank or financial institution. Deposit is the main resource of fund that a bank uses for the generation

of profit. Hence, the competence of the bank depends on its ability to attract deposits. Deposit being the borrowed amount from the depositors or from general public, it constitutes the liability of bank. The deposits of the bank are influenced by the following factors:

- Types of customer
- Interest rate paid on the deposits
- Types and ranges of services delivered by bank
- Management accessibility of customers
- Physical facilities of bank

In addition to the above, the existing economic conditions put forth a decisive influence on the amount of deposit the bank receives.

2. Loan & Advances:

Loan & advance is the primary basis of income and most profitable asset to a bank. A bank comes one step ahead to lend as they constitute the larger part of revenue. At the same time, bank has to be more cautious in granting loans and advances as they may not be realized at a short period of time and they bear the chance of turning into bad debt. Hence a bank is keener on lending money for a short time. Loan and advance is provided against the personal security of the burrower or against the security of the immovable and movable properties. Bank grants loans in various forms such as overdraft, cash credit, direct loans and discounting bills of exchange. Advances are amount of money, which are paid or lent before any actual benefit has been derived. It could be expenses of future period paid in advance, advance for current supplies or advances against acquisition of capital assets earnings from loan and advances occupy a major space in income statement of the bank. Loans from commercial banks are secured against the assets of the borrower.

3.   Assets:

Assets, representing economic resources are the valuable possessions owned by the firm. These possessions should be capable of being measured in monetary terms. Assets are the future benefits. They represent: (a) stored purchasing power (e.g. cash), b) money claims (e.g. receivables stock) and (c) tangible and intangible assets that can be sold or used in business to generate earnings. Tangible items include land and building, plant and equipment or stocks of

materials and finished goods and all such other items, which have physical value. Intangible items do not have physical existence, but they have value to the firm. They include patents, copyrights, trade name or goodwill. Assets may be current asset or long-term assets. Current assets are those assets that are expected to be converted into cash within the accounting period. Long-term assets normally include fixed assets, long-term investment and other non-current assets that are held for longer periods for use in business.

4. Balance Sheet:

Balance sheet is one of the most significant financial statements, which is prepared at the end of each accounting period that indicates the financial condition or the state of affairs of a business at a given moment of time. More specifically, balance sheet contains information about the assets, liabilities and ownership equity capital.

5. Investment on Government Securities, Share and Debentures:

Commercial banks invest on government securities, shares, and debentures and earn interest and dividend. This is the secondary source of income of the bank.

6. Investment on Other Company' Shares and Debentures:

Commercial banks invest their excess funds to the shares and debentures of other company. This is done usually when there is an excess of funds than required and there is lack of investment opportunities in the profitable sector. The commercial banks purchase share and debentures of regional development bank, NIDC, other development banks, etc.

7. Other Uses of Fund

Commercial banks must maintain the bank balance with Nepal Rastra Bank as prescribed by the government. At the same time, they need to maintain cash balance in local currency in the vault of the bank and some part of the fund is used for the bank balance in foreign bank.

2.2. Research Review

Here, annual reports of concerned banks are reviewed in order to highlight the brief profile of the banks.

2.2.1. Reports Relating to NIBL:

Nepal Investment Bank Limited (NIBL), previously known as Nepal Indosuez Bank Limited, was established in the year 1986 as a joint venture between Nepalese and French partners. The French partner (holding 50% of the capital of NIBL) was Credit Agricole Indosuez, a subsidiary of one of the largest banking group in the globe. With the decision of the Credit Agricole Indosuez, a group of companies consisting of bankers, professionals, industrialists and businessman has acquired the 50% shareholding of Credit Agricole Indosuez in Nepal Indosuez Bank Limited in April of 2002.

The bank got its new name of Nepal Investment Bank Limited upon the approval of bank's annual general meeting, Nepal Rastra Bank and company registar's office with the following shareholding structures: A group of companies holding 50% of the capital, Rastriya Banijya Bank holding 15% of the capital, Rastriya Beema Sansthan holding 15% and the remaining 20% being held by the General Public (which does mean NIBL is the company listed on the Nepal Stock Exchange).

2.2.2. Reports Relating to SCB:

Standard Chartered Bank Nepal Limited (SCB) has been in operation in Nepal since 1987 when it was initially registered as a joint-venture operation. Today the Bank is an integral part of Standard Chartered Group having an ownership of 75% in the company with 25% shares owned by the Nepalese public. The Bank enjoys the status of the largest international bank currently operating in Nepal

With 19 points of representation, 23 ATMs across the country and with more than 450 local staff, Standard Chartered Bank Nepal Ltd. is in a position to serve its customers through an extensive domestic network. In addition, the global network of Standard Chartered Group gives the Bank a unique opportunity to provide truly international banking services in Nepal.

The Bank has been the pioneer in introducing 'customer focused' products and services in the country and aspires to continue to be a leader in introducing new products in delivering superior services. It is the first Bank in Nepal that has implemented the Anti-Money Laundering policy and applied the 'Know Your Customer' procedure on all the customer accounts.

2.2.3. Reports Relating NSBI:

Nepal SBI Bank Limited (NSBI) 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 56 branches, 6 extension counters and 3 Regional Offices & the Corporate Office.

a. Review of Books

Bank is a financial institution which deals with money and substitute for money (deposit, credit, credit instruments, etc.). Trembling and inconsistent flow of credit harms the economy and the profitability of the bank. So, the prime objective of a bank should be collection of fund and its utilization in good investments such as diverse and safe investment. Here, opinions of different authors from their books are summarized.

Emphasizing the importance of investment policy, H.D. Crosse (1963) has stated that lending is the essence of commercial banking and consequently, the formulation and implementation of sound policies are among the most important responsibilities of bank directors and management. Well conceived lending policies and careful lending practice are essential in a bank to perform its credit creating function effectively and minimize the risk inherent in any extension of credit. He further adds, the formulation of sound lending policies for all banks should have adequate and careful consideration over community needs, size of loan portfolio, character of loan, credit worthiness of borrower and asset pledged to security borrowing, interest rate policy.

S.P. Singh and Singh (1983) have concluded that investment (credit) policies of banks are conditioned to a great extent by the national policy framework. Every banker has to apply its own judgment for arriving at credit decision keeping of course its credit policy also in mind. As per them, government and central banks have to make a sound policy about the investment policies of commercial banks. They further state that the field of investment is more challenging as it offers relatively greater scope to banker for judgment and discretion in selecting their loan portfolio, but this higher degree of freedom in the field of credit management is also accompanied by greater risk. During the recent years, the credit function has become more complex.

James B. Bexley (1987) has concluded that investment policy fixes responsibilities for the investment of disposition of the banks' assets in terms of allocating funds for investment and loan and establishing responsibility for day to day management of those assets. It is assumed the management should be responsible for the investment decision of banks.

Bishowambhar Pyakuryal (1987) in his article "Workshop on Banking and National Development" writes the present changing context calls for a substantial revitalization of the resource. How much they have gained over the years depends chiefly on how far they have been able to utilize their resources in an efficient manner. Therefore, the task of utilization of resources is as much crucial as the mobilization. The under utilization of resources not only results in loss of income but also goes further to discourage the collection of deposits. Thus in his paper, he has emphasized on proper utilization of mobilized resources and profitability increment.

William F. Sharpe, Alexander J. Gorden and Jeffery V. Bailey (1988) in their book they have presented with the objective to make an analysis of investment. They state that it is the sacrifice of certain present value for (possible uncertain) future value. Two different attributes are generally involved, time and risk. The sacrifice takes place in the present and is certain. The reward comes later, if at all and the magnitude is generally uncertain. In some cases, the element of time predominates such as government bond. In other cases, risk is the risk dominant attribute such as call option on common stock. So, they have presented their views in the books that bank should look for the safe and less risky investment.

John M. Cheney and Edward A. Moses (1988) have stated that investment objective is to increase systematically in the individual wealth and defined as asset minus liabilities. The higher the level of desired wealth the higher must be received. An investor seeking higher return must be willing to face higher level of risk..

Ramesh Lal Shrestha (1988) in his article "A Study on Deposits and Credits of CBs in Nepal" concluded the credit deposit ration would be 51.30%, other things remaining the same in 2004 A.D., which was the lowest under the period of reviews. So, he had strongly recommended that the CBs should try to give more credit entering new field as far as possible. Otherwise, they might not be able to absorb even its total expenses.

Bodhi B. Bajracharya (1990) has mentioned in his article "Monetary Policy and Deposit Mobilization in Nepal" the mobilization of domestic savings is one of the prime objectives of the monetary policy in Nepal. For this purpose, CBs stood as the active and vital financial intermediary for generating resources in form of deposit of the private sector. So far, providing credit to the investors is a different aspect of the economy.

F. Morris (1990) in his discussion paper "Latin America's Banking System in the 1980s" has concluded that most of the banks concentrated on compliance with central bank rules on reserve requirement, credit allocation and interest rate. While analyzing loan portfolio quality, operating efficiency and soundness of bank investment management has largely been overlooked. The huge losses now found in the bank's portfolio in many developing countries are testimony to the poor quality of this oversight investment function. He further adds that mismanagement in financial institutions has involved inadequate and overoptimistic loan appraisal, lax loan recovery, high risk diversification of lending and investments, high risk concentration, connected and insider lending, loan mismatching. This has led many banks of developing countries the failure of 1980s.

Gitman and Joehank (1990) in their book have expressed that investment is any vehicle in which funds can be placed with the expectation that will preserve or increase in value and generate positive returns. It means that investment is the instrument which is essential for the banks to increase profitability.

2.3. Review of Articles:

Bhagat Singh (1991) in his research paper "Nepalma Adhunik Banking Byabastha" has made an attempt to highlight some of important indicators which have contributed to the efficiency and performance of other CBs in the field of CBs. At the end of the paper, he has concluded that the establishment of CBs a decade ago, marks beginning of modern banking era in Nepal. The joint venture banks have brought many new banking techniques such as computerization, hypothecation, consortium finance and modern fee base activities into the economy. There are indeed significant milestones in the financial development process to the economy.

Shekhar Bahadur Pradhan (1995) has presented short glimpses on investment in different sectors, its problem and prospects through his article "Deposit Mobilization, Its problem and Prospects. Mr. Pradhan has pointed out following problems of deposit mobilization in Nepalese context:

- Due to lack of education most of the Nepalese people do not go for saving in institutional manner. However, they are very much used of saving be it in a form of cash or ornaments. Their reluctance to deal with institutional system is governed by the lower level of understanding about financial organization, withdrawal system and availability of depositing facilities and so on.
- Due to lesser office hours of banking system, people prefer holding cash in personal possession.
- Unavailability of the institutional services in rural areas.
- No more mobilization and improvement of the employment of deposits in the loan sectors.

Mr. Pradhan has also suggested for the prosperity of deposit mobilization which are as follows:

- By cultivating the habit of using rural banking units.
- By adding service hour to bank.
- By providing sufficient institutional service to the rural areas.
- NRB could also organize training program to develop skilled manpower.
- By spreading cooperatives to the rural areas to develop mini banking service.

Dr. Sunity Shrestha (1997) in her article, "Lending operation of commercial banks of Nepal and its impact on GDP" has presented with the objectives to make an analysis of contribution of commercial banks' lending to the Gross Domestic Product (GDP) of Nepal. She has set hypothesis that there has been positive impact of lending of commercial banks to the GDP. In research methodology, she has considered GDP as the dependent variable and various sectors of lending viz

agriculture, industrial, commercial service and social sectors as independent variables. A multiple regression technique has been applied to analyze the contribution.

The multiple analyses have shown that all the variables except service sector lending have positive impact on GDP. Thus, in conclusion, she has accepted the hypothesis i.e. there has been positive impact on GDP by lending of CBs in various sectors of economy, except service sector investment.

K. Pradhan (1999) has pointed out some major issues in local CBs in comparison of recently established joint venture banks through his article "Nepalma Banijya Bank: Upalabdhi tatha Chunauti." The study deals with the whole CBs system of Nepal in respect of their performance and profitability. Some of his findings relevant to his study are summarized below:

- The deposit collection rate of local banks is very poor in comparison to joint venture banks.
- The patterns of deposit are also different between these banks. The rate of current deposit in local banks is 9.34% only where as in the same joint venture banks is 52.6% but the fixed deposit is very high in local banks.

Pravakar Ghimire (1999) has published his article in which he has mention the most of the CBs of Nepal are ready to pay penalty in spite of rural poverty sector, poverty stricken and deprived areas. In the directives of NRB, it is clearly mentioned that all CBs (under NRB) should invest 12% of its total investment to the priority sectors. Out of this 12%, they should invest 3% to the lower level class of countryman powers. These CBs are unable to meet the requirement of NRB.

Rewat Bahadur Karki (2000) has summarizes some of the challenges through his article "Nepalese Financial Sector: Challenges and Some Solution" which are as follows:

According to the article, the financial sector is facing the major challenges of high NPL of the banking sector which comes around 18% of the total loan but if the loan classification is made according to least international practice, it is assumed to exceed 30%. Credit demand is being met largely by non-institutional source i.e. private money lender, merchant, trader, individual and landlord at very high rate of interest which is two to three times higher than that of institutional source, this shows that the unorganized financial sector is playing a major role in the Nepalese economy. The liquidity position of the banking sector is rated as high as 24%, but

the productive sector of the economy is starved by credit crunch. This has created a paradoxical situation in the banking sector.

He has given some suggestion to improve the Nepalese financial sector such as:

The financial institutions especially CBs have to identify new areas of investment to increase loan and advances in reducing the liquidity position.

With the rapid growth in the number of banks and financial institutions, deposit insurance scheme is a must. The principle reason for introducing such deposit insurance should be one of the social justice rather than economic justification in order to protect the interest of the small depositors. In this condition, this scheme should be expedited to implement.

2.4. Review of Thesis

Mr. Lenora Ranjitkar (2006) has conducted his study entitled "Investment Policy of Commercial Banks (with especial reference to Nabil. NIBL and NSBL)" The main objectives of the study were to evaluate the liquidity, asset management, efficiency, profitability and risk position of Nabil in comparison to NIBL and NSBL and to study the fund mobilization and investment policy with respect to fee based off balance sheet transaction and fund based on balance sheet transaction.

The researcher has found that liquidity position of NABIL is worse than that of other Banks. NABIL has more portions of current assets as loan and advances but less portion as investment on government securities. NABIL is comparatively less successful in on-balance sheet operations as well as off-balance sheet operations than that of other Banks. Profitability position of NABIL is comparatively not better than that of other Banks. NABIL is more successful in deposit mobilization but failure to maintain high growth rate of profit in compared to NIBL and NSBL.

The researcher has suggested the JVBs to be careful in increasing profit in real sense to maintain the confidence of share holders, depositors and customers. The researcher has strongly recommended NABIL to utilize its risks assets and shareholders' fund to gain highest profit margin and reduce its fund in different sectors of investment and administering various deposits schemes to collect fund such as cumulative deposit scheme, price bonds scheme, gift scheme, house building deposit scheme, etc. He has recommended following liberal lending policy and investment more percentage of total deposit as loan and advances.

The researcher has not explained his idea of liberal lending policy though has recommended NABIL to adopt liberal lending policy. The researcher has explained how to reduce cost as well.

Miss. Bijeta Shrestha (2007) in her thesis entitled "A study on investment policy of Nepal Bangladesh Bank Ltd. in comparison to Himalayan Bank Ltd" has found the liquidity position of NBB is comparatively higher than that of Nepal HBL. It has adopted aggressive lending investment and borrowing policy to general profit than HBL. The researcher has recommended acting according to the government plans and policies on mobilizing their deposit in the productive sectors. The researcher has further suggested stabilizing the cash and bank balance to total deposit ratio of both banks after proper diagnosis of the root of the cause.

The researcher's study is based on the overall financing performance of the banks. It is not particular on investment policy of the banks though the study has covered the deposit mobilization of these banks. In this study, the researcher has not used sufficient financial tools in concern with the deposit portion. The researcher also failed to use the statistical tools like coefficient of correlation analysis and probability error.

Miss. Sarinsa Shrestha (2008) has conducted her study entitled "Investment policy of the Nepalese Joint Venture Commercial Banks". The researcher has found that the investment in government securities of the financial companies is decreasing. Major source of financial companies is utilized as loan and advances. Use of fund towards the hire purchase loan is decreasing in the financial companies and investment on housing loan is more.

The researcher has recommended that the overall investment policy of the financial companies should be concentrated on productive sector such as business and industry loan rather than consumer goods such as higher purchase and housing plan. This would contribute on the capital formulation for overall national development. The researcher further has said that the credit monitoring wind should be made strong enough to ensure timely cash inflow from credit granted.

Mr. Niraj Man Baniya (2009) in his study "Investment Policy analysis on Joint Venture Commercial Banks of Nepal (with reference to Nabil Bank and HBL)" has concluded that joint venture banks are discouraging lower level depositors and

interested in the higher level clients as paramount customers. The researcher found the probability position of Nabil is higher than HBL and Nabil maintain successful liquidity position than HBL and also found that because of uncertain return depositors may withdraw high portion of deposits and may invest in newly opened organization. The researcher has recommended following liberal lending policy so that more percentage of deposits can be invested into different profitable sectors as well as loan and advances.

As analysis showed that investment on loan and advances as significant factors which affect the profit of the bank, The researcher further suggested to invest the fund of the bank in the purchase of shares and debentures of other reputed organizations.

The researcher compared Nabil with HBL and focused to invest more percentage of deposits, but it is sometimes harmful because they give much importance to the liquidity position in bank operations. When depositors demand money, bank must return them to maintain creditability. Bank needs to maximize its wealth and goodwill and expand branches to collect deposit and invest in the sectors which will give high return and is more potential for investment.

Mr. Sudip Adhikari (2010) has conducted his study entitled "A Comparative Analysis on Investment Policy of Leading Commercial Bank (with special reference of Nabil, SCB and HBL" The main objective of the study was to analyze the relationship between total investment, deposit and loan and advance and net profit and outside asset and their comparative study in between the respective banks. Other objective includes studying the asset management system, profitability and risk position of the respective banks. The researcher concluded that the investment policy of Nepal Investment Bank was not good with comparison to other CBs in every respect. The researcher found that at times, bank focused much of its attention to one sector leaving other sectors untouched. So, the researcher recommended touching all the sectors and balancing effectively so as to have the optimal performance of the bank.

The researcher further found in the study that NIB's loan and advances to total deposit ratio is higher than that of SCB and Nabil but its stability is not consistent than that of other two banks. To overcome this situation, NIB was strongly recommended to follow liberal lending policy and invest more and more percentage of total deposit in loan and advances and similarly maintain more stability on the investment policy.

2.5. Research Gap:

In this way, researchers have studied about the Investment policy of Banks from different angles. Obviously the conclusion that they present also varied according to focus, size of the sample and the methodology they fallowed, but none of the researchers have studied about the "Technical analysis of investment policy in Nepalese context. It is therefore pioneering study, Hence this study tries to fill that shortcoming by trying to give certain professional opinion in order to contribution in practical side of Investment policy and side by side carrying its academic purpose by revalidating the tools and techniques available in the field of analysis of Investment policy . Thus this study enables to view current condition of Investment.

CHAPTER III

RESEARCH METHODOLOGY

3.1. Introduction

Research methodology states the systematic procedure and process applied in entire study. It sequentially refers to the various steps to be taken into consideration by a researcher in studying a problem with a certain objective.

3.2. Research Design

Research design is the plan; structure and strategy of investigations conceived so as to obtain answers to research questions and to control variances. To achieve the objective of this study, descriptive and analytical research design has been used. This study is the comparative study research of leading commercial banks of Nepal, Nepal Investment Bank, Standard Chartered Bank Nepal Limited and Nepal SBI Bank Limited. Some financial and statistical tools have been applied to examine facts and descriptive techniques have been adopted to evaluate investment performance of the above mentioned three commercial banks.

3.3. Data Collection Procedure

Most of the data and information used in the study is collected from secondary source. Some of other related data are borrowed form related dissertations, articles, magazines, and newspapers. Since this is the age of information technology. Different tools of information like Magazine Newspaper, Radio, Television, Encyclopedias, and websites are used as main sources of information and data. For this study, maximum secondary data are downloaded from official websites of Nepal Investment Bank Ltd, Standard Chartered Bank Nepal Limited and Nepal SBI Bank Limited.

3.4. Nature and Sources of Data

Mainly, the study is conducted on the basis of secondary data. The required data are extracted from balance sheets, P/L accounts and different financial schedules of concerned banks' annual reports. Other supplementary data are collected from a

number of institutions and regulating authorities like Nepal Rastra Bank, Nepal Stock Exchange Ltd, security exchange board, Ministry of Finance, Economic Survey and National Planning Commission, Economic Journals, Periodicals, Bulletins, Magazines etc. and from different related websites. This study is based on the historical data of 5-years period. Usage of data from more than 5 years will depend upon their availability. If it becomes possible to collect primary data within the available limited time frame, primary data will be collected to support the research.

3.5. The Population and Sample

There are all together 31 commercial banks functioning in Nepal, which is the size of the population. Out of them, 3 leading private commercial banks, NIBL, SCB, NSBI are considered as samples to carry out this thesis. If it becomes possible to collect required data form other banks also and if they become available within the limited time frame, other commercial banks will also be taken into consideration as samples.

The total numbers of commercial banks existing in Nepal so far are:

1. Nepal Bank Limited.

2. Rastriya Banijya Bank.

3. Nabil Bank Limited.

4. Nepal Investment Bank Limited.

5. Standard Chartered Bank Nepal Ltd.

6. Himalayan Bank Limited.

7. Nepal SBI Bank Limited.

8. Nepal Bangladesh Bank Limited.

9. Everest Bank Limited

10. Bank of Kathmandu Limited.

11. Nepal Credit and Commerce Bank Limited.

12. NIC ASIA Bank Limited.

13. Lumbini Bank Limited.

14. Machhapuchhre Bank Ltd.

15. Kumari Bank Ltd.

16. Laxmi Bank Ltd.

17. Siddhartha Bank Ltd.

18. Agriculture Development Bank Ltd.

19. Global IME Bank Ltd.

20. Citizens Bank International Ltd.

21. Prime Commercial Bank Ltd.

22. Sunrise Bank Ltd.

23. Grand Bank Nepal Ltd.

24. NMB Bank Ltd.

25. KIST Bank Ltd.

26. Janata Bank Nepal Limited.

27. Mega Bank Nepal Limited.

28. Commerz and Trust Bank Nepal Ltd.

29. Civil Bank Limited.

30. Century Commercial Bank Limited.

31. Sanima Bank Limited.

3.6. Tools for Analysis

For the sole purpose of data analysis, various financial and statistical tools are used to achieve the objective of the study. The evaluation of data is carried out according to the pattern of data available.

The various tools applied in this study are presented below:

3.6.1. Financial Tools

Financial analysis is the process of identifying the financial strength and weakness of the firm by properly establishing relationship between the items of the balance sheet. In this study ratio analysis are used as the financial tools for the data analysis.

3.6.1.1. Ratio Analysis

Ratio analysis is a powerful tool of financial analysis. A ration is defined as "the indicated quotient of two mathematical expressions" and as "the relationship between two or more things." Ratio analysis is a technique of analyzing and interpreting financial statements to evaluate the performance of an organization by creating the ratios from the figures of different accounts consisting in balance sheet and income statement. The qualitative judgment concerning financial performance of a firm can be carried out with the help of ratio analysis. Even though there are many ratios, only those ratios have been covered in this study which is related to investment operation of the bank.

This study contains following ratios:

3.6.1.1. (a) Liquidity Ratio

The capacity of a business to meet its obligation in the short term or short-run solvency is known as liquidity. Its validity shows the short-term financial strength of the business. It is also a process of measuring speed with which a bank asset can be converted into cash to meet deposit withdrawal and other current obligations.

The following ratios are evaluated under liquidity ratio:

i. Current Ratio

It is none other than the ratio of current assets and current liabilities. Current assets are those assets, which can be converted into cash within short span of time, usually no exceeding one year. Current liabilities are those obligations which are payable within a short period. The ratio is calculated as:

Mathematically,

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

Current assets of a bank usually include cash balance, balance with banks, money at call and short notice, investments, loan and advance, bills purchased, interest receivable and other miscellaneous current assets. Similarly current liabilities include borrowings, deposit accounts, bills payable, short-term loans, tax provision, dividend payables and other miscellaneous current liabilities.

ii. Cash and Bank Balance to Total Deposit Ratio

They are the most liquid of current assets to pay off depositors immediately. This ratio is calculated by dividing cash and bank balance by total deposits.

Mathematically,

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

Cash and bank balance includes cash in local currency & foreign currency on hand or with banks. The total deposits consists of deposits in current account, savings account, fixed deposit account, money at call deposits, margin deposits etc. A higher ratio indicates greater ability of banks to meet their deposits and vice-versa.

iii. Cash and Bank Balance to Current Asset Ratio

This ratio measures the proportion of most liquid assets, i.e. cash and bank among the total current assets of the bank. Higher ratio shows the bank's ability to meet the demand for cash.

Mathematically,

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

iv. Investment on Government Securities to Current Asset Ratio

This ratio is used to find the percentage of current assets invested in government securities, i.e. treasury bills, development bonds etc. Commercial banks are interested to invest some portion of their collected fund in government securities as they are risk-free and can easily sold in the market.

Mathematically,

$$Investment \ in \ Government \ Securities \ to \ current \ Asset \ Ratio = \frac{Total \ Investment \ in \ Government \ Securities}{Current \ Assets}$$

v. Loans and Advances to Current Asset Ratio

The major portion of a bank's asset side of the balance sheet includes loan and advances. Loan and advance comprise of loan and advance, credit overdraft, bills purchased and discounted. In this research study, total loan and advances have been taken into consideration. It shows the percentage of total loan and advances to current assets.

Mathematically,

$$\text{Loan and Advances to Current Asset Ratio} = \frac{\text{Total Loan and Advances}}{\text{Current Assets}}$$

3.6.1.1. (B) Assets Management Ratio

Asset management ratio measures how carefully a firm is managing its assets. These ratios are designed to answer this question: Does the total amount of each type of assets as regarded on the balance sheet seem reasonable, how high, too low, in view of current assets and operating levels? Either a company or a bank must borrow or obtain funds from other sources to acquire assets. If it has too many assets its interest expenses will be too high and hence its profits will be low; on the other hand, if assets are too low, profitability sales may be lost.

The following ratios are used under this asset management ratio:

i. Loans and Advances to Total Deposit Ratio

This ratio is calculated to find out how successfully the selected banks are utilizing their total deposits on loan and advances to generate profits. A higher ratio is indicative of better utilization of total deposits, but the same might not hold true from liquidity point of view. It is computed by dividing total loan and advances by total deposits.

Mathematically,

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

ii. Total Investment to Total Deposit Ratio

This ratio shows the utilization of firm's deposits on investment in government securities and purchasing shares and debentures of other companies. A high ratio is indicative of high success in mobilization of deposits in investments and vice-versa. This ratio can be calculated by dividing total investment by total deposits.

Mathematically,

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

iii. Loans and Advances to Total Working Fund Ratio

The major portion of a banks asset side of the sheet includes loan and advances. It is also the major component of the total working fund. This ratio shows the ability of a bank to canalize its assets in the form of loan and advances to earn higher profits. A high ratio indicates better mobilization of fund as loan and advances and vice-versa.

Mathematically,

$$Loan\ and\ Advance\ to\ Total\ Working\ Fund\ Ratio \quad = \frac{Total\ Loan\ and\ Advance}{Total\ Working\ Fund}$$

Where total working fund includes all assets of balance sheet items i.e. current assets, net fixed assets and other miscellaneous assets

iv. Investment on Govt. Securities to Total Working Fund Ratio

This ratio shows the percentage of total working fund invested in government securities. In other words, this ratio measures the extent to which the banks have been successful in mobilizing their total working fund on different type of government securities. The logic behind Investment on government securities by banks is to diversify the risk by not putting all the eggs in the same basket. This is also beneficial in the sense that banks are assured of adequate liquidity. A high ratio indicates better mobilization of funds as Investment on government securities and vice-versa. This ratio can be calculated by dividing total amount of investment in government securities by the total working fund.

Mathematically,

$$Investment\ on\ Government\ Securities\ Ratio \quad = \frac{Investment\ on\ Govt.\ Securities}{Total\ Working\ Fund}$$

v. Investment on Shares & Debentures to Total Working Fund Ratio

This ratio shows the percentage of total working fund invested in purchasing shares and bonds & debentures of other companies. Investment on shares and debentures to total working fund measures the extent to which the banks have been successful in mobilizing their total assets on shares and debenture of other companies to generate income. A high ratio indicates high portion of

investment on shares and debentures out of total working fund and vice-versa. This ratio is calculated by dividing the total amount of Investment is shares & debenture of other companies by total working fund.

Mathematically,

$$\text{Investment on Shares \& Debentures to Total Working Fund Ratio} = \frac{\text{Investment on Shares \& Debentures}}{\text{Total Working Fund}}$$

3.6.1.1. (c) Profitability Ratio

Profitability ratios are calculated to measure the effectiveness and smooth operation of an organization in terms of profit. It is the device to indicate the financial performance of any institution. This proves that higher the profitability ratio, better the financial performance of bank or vice versa. The profitability ratios are calculated to measure the overall efficiency of a firm in terms of profit earning and performance. Profit is one of the major indicators of efficient performance of banks. One of the major objectives of banks is to earn profit, so profit is very crucial for the survival of banks. To meet various objectives like, maintaining good liquidity position, meet internal obligations, expansion of banking services, finance short- term government needs, commercial banks need to earn sufficient profit. A higher profit ratio shows higher efficiency of a bank. Profitability ratio can be evaluated through following different ratios

i. Return on Loans and Advances Ratio

Return on loan and advances ratio indicates how efficiently the bank has utilized its resources in the form of loan and advances to generate good return. It measures the earning capacity of a commercial bank. This ratio is calculated by dividing net profit by loan and advances.

Mathematically, $\text{Re} turn\ on\ Loan\ \&\ Advances\ Ratio = \dfrac{Net\ profit\,/\,Loss}{Total\ Loan\ and\ Advances}$

ii. Return on Total Working Fund Ratio

It is also known as return on asset. The ratio measures the overall profitability of all working funds, i.e. total assets. A firm or a financial institution has to earn satisfactory return on assets or working fund for its survival. The ratio can be computed as:

Mathematically,

$$\text{Re}\,turn\ on\ Total\ WorkingFundRatio\ =\ \frac{Net\ profit\,/\,Loss}{Total\ Working\ Fund}$$

iii. Return on Equity Ratio

This ratio measures how efficiently the banks have used the funds of owners.

Mathematically,

$$\text{Re}\,turn\ on\ Total\ EquityRatio\ =\ \frac{Net\ profit\,/\,Loss}{Total\ EquityCapital}$$

iv. Total Interest Earned to Total Working Fund Ratio

This ratio is calculated to find the percentage of interest earned to total assets. This ratio reflects the extent to which banks are successful in mobilizing their assets to generate high income. This ratio presents the earning capacity of a bank on its total working fund. Higher ratio indicates better performance or proper utilization of total assets in the form of interest earned on its working fund. This ratio is calculated by dividing total interest earned by total working fund.

Mathematically,

$$Total\ Interest\ Earned\ to\ Total\ Working\ Fund\ Ratio = \frac{Total\ Interest\ Earned}{Total\ Working\ Fund}$$

v. Total Interest Paid to Total Working Fund Ratio

This ratio measures the percentage of total interest expenses against total working fund. A high ratio is indicative of higher interest expenses on total working fund. This ratio is calculated by dividing by total interest paid by total working fund.

Mathematically,

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

vi. Total Interest Earned to Total Operating Income Ratio

This ratio is measured to find out the ratio of interest income with operating income of the bank. It shows how efficiently the banks have mobilized their

resources in interest bearing assets i.e., loan and advances investment in government securities. Total operating income includes interest income, commission fees & discount, dividend income, foreign exchange income etc. This ratio shows the magnitude of interest income in total income. It is calculated by dividing total interest earned by net operating income.

Mathematically,

$$Total\ Interest\ Earned\ to\ Total\ Operating\ Income\ Ratio = \frac{Total\ Interest\ Earned}{Total\ Operating\ Income}$$

3.6.1.1. (d) Risk Ratio

Risk means uncertainty, variability of return, which is inherent in any investment portfolio of a business enterprise. Risk is an important element since investment with greater risk requires higher return than investments with lower risk. Risk ratios measures the degree of risk involved in various financial operations. The possibility of risk involved in bank's financial operations makes the bank investment a challenging task. As the notion goes, "no risk no gain", therefore, if a bank expects high return on its investment it must be prepared to accept the risk and manage it efficiently.

The following risk ratios are used to analyze and interpret the financial data and investment policy.

i.   **Credit Risk Ratio**

Normally, every credit is good at the time it is sanctioned. Most of the bank failures are due to shrinkage in the value of loan and advances. Loan is a risky asset and risk of non-repayment of loan in known as credit risk or default risk. Credit risk ratio measures the possibility of loan going into default. While sanctioning loans banks measure credit risk involved in the project. Credit risk is calculated by dividing total loan and advances by total assets.

Mathematically,

$$Credit\ Risk\ Ratio = \frac{Total\ Loan\ and\ Advances}{Total\ Assets}$$

ii.   **Liquidity Risk Ratio**

Liquidity risk of the bank defines its liquidity needs for deposit. Cash and bank balance are the most liquid of all the assets and are considered bank's liquidity sources. Deposits on the other hand refer to the liquidity needs of banks.

This ratio measures the risk associated with the liquid assets i.e. cash and bank balance that are kept to satisfy the cash demand of customers. A higher ratio shows that the banks has sufficient cash to meet its current obligations i.e. lower liquidity risk, but that may have an adverse impact on the profitability position of the bank. A trade off between liquidity and profitability must be maintained. This ratio is calculated by dividing cash and bank balance by total deposit.

Mathematically,

$$\text{Liquidity Risk Ratio} = \frac{\text{Total Cash \& Bank Balance}}{\text{Total Deposits}}$$

iii. Growth Ratio

The growth ratios represent how the commercial banks are maintaining their economic and financial condition. As a conventional rule, a higher ratio is preferable. A high ratio indicates better performance of the banks and vice-versa. The following growth ratios directly related to the fund-mobilization and investment of the banks are calculated:

a) Growth ratio of total deposit
b) Growth ratio of loan and advances
c) Growth ratio of total investment
d) Growth ratio of net profit

3.6.2. Statistical Tools

Some important statistical tools have been used to present and analyze the data for achieving the objectives of this study. Co-efficient of variance, Co-efficient of correlation, standard deviation, least square, linear trend analysis etc. have been used for the purpose of investment policy analysis.

1. Karl Pearson's Coefficient of Correlation

Correlation is the measure of relationship between two or more characteristics of a population or sample. For the purpose of comparison and further analysis, "Karl Pearson's coefficient of correlation" is applied in this study. This measures the degree of association between the two variables say X and Y for a given set of N observations. The formula for calculation is:

Karl Pearson's correlation coefficient (r) can be obtained by using the following formula.

$$r = \frac{\sum xy}{\sqrt{\sum x^2 \sum y^2}} \qquad \text{Where } x = (x - \bar{x}), \quad y = (y - \bar{y})$$

Here,

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

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

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

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

$\sum xy$ = Sum of the product of observation in series x & y

The co-efficient of correlation (r) lies between –1 to +1, If r = +1 there exists a perfectly positive relationship between the two variables. If r = -1, then the two variables are

perfectly negatively correlated or there is no significant relationship between the two variables.

2. Coefficient of Determination

This is the measure of the degree if linear association or correlation between variables, one of which happens to be independent and other being dependent variable. It is denoted by r^2.

3. Probable Error

Probable error is the measure to analyze the reliability of computed value of correlation coefficient.

Mathematically,

$$PEr = 0.64745 \times (1 - r^2) / \sqrt{n}$$

Conclusion drawn:

If r < PEr, the value of r is not significant

If r > 6 PEr, the value of r is significant

Other wise nothing can be calculated.

4. Trend Analysis

Trend analysis is an analysis of a firm's financial ratios over time. This measures the change of data over a period of time. This reveals whether the firm's ratios are improving or deteriorating over time. Under segment, current and projected trend values of loan & advance to total deposit ratio and investment to total deposit ratio are calculated.

Trend equation:

$$Y = a + bx$$

Where,   y = dependent variable

x = independent variables

If $\sum x = 0$, $a = \sum y/n$ & $b = \sum xy / \sum x^2$

Under this topic we analyze

i)   Trend Analysis of total deposits.

ii)   Trend Analysis of loan and advances.

iii)   Trend Analysis of total investment.

iv)   Trend analysis of net profit.

Of NIBL, HBL & NIC Bank from F/Y 2006-2007 to F/Y 2010-2011. It also aids in making forecasting for the next five years up to 2015-2016. The following trend value analysis has been used in this study:

5. Standard Deviation

The measurement of the scatter-ness of the mass of figures in a series about an average is known as dispersion. Standard deviation measures dispersion correct. The standard deviation measures the absolute dispersion lower the percentage of dispersion - lower the standard deviation. The lower percentage of dispersion also projects a high degree of uniformity of the observations as well as homogeneity of the series. The greater the amount of dispersion, greater is the standard deviation. A small standard deviation means a high degree of uniformity of the observation as well as homogeneity of a series. In this study, standard deviations of different ratios are calculated.

Mathematically,

$$S.D = \sqrt{\frac{\sum (x - \bar{x})^2}{n}}$$

6. Co-efficient of Variation (C.V)

The coefficient of variation is the corresponding relative measure of dispersion, comparable across distribution. C.V. is the proportion of standard deviation with mean multiplied by 100.

Mathematically,

$$C.V. = \frac{S.D. \times 100\%}{Mean}$$

In this study, CV is calculated on ratios.

CHAPTER IV

DATA PRESENTATION AND ANALYSIS

This is the most important chapter of the study since all the collected data are processed, presented and analyzed here. This is an analytical chapter, where an attempt has been made to analyze and evaluate major financial items, which have an impact on investment management and fund mobilization of NIBL, SCB and NSBI. The outcome of the study solely depends upon this chapter. Financial and statistical tools mentioned in the previous chapter are used here for interpretation. For the sole purpose, interpretations are categorized into two headings:

1. Analysis of Financial Ratio
2. Analysis of Statistical Ratio

4.1. Analysis of Financial Ratio

Financial analysis involves identifying the financial strength and weakness of the organization by presenting the relationship between items of the balance sheet. For the purpose of this study, ratio analysis has been mainly used for the analysis of data. The ratios are designed and calculated to highlight the relationship between financial items and figures. It is notable that all types of financial ratios are not studied here. Only those rations are calculated and analyzed which are very much important in the point of view of fund mobilization of a commercial bank. The important ratios that are studied for this purpose are:

    A : Liquidity ratio

    B : Asset Management ratio

    C : Profitability ratio

    D : Risk ratio

    E : Growth ratio

4.1.1. Liquidity Ratio

Liquidity ratio shows a bank's obligation in the short term or short-run solvency. It also measures the speed with which a bank asset can be converted into cash to meet deposit withdrawal and other current obligations. The following ratios which measure the liquidity position of banks are calculated:

1. Current Ratio

Current ratio shows the relationship between current assets and current liabilities.

Current assets are those assets which can be converted into cash within the short period

of time, normally not exceeding one year.

Current liabilities are those obligations which are payable within a short span of time.

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

Table 1
Current Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2008-09	2009-10	2010-11	2011-12	2012-13			
NIBL	1.08	1.09	1.09	1.10	1.10	1.09	0.008	0.71
SCB	1.08	1.09	1.09	1.11	1.11	1.10	0.013	1.15
NSBI	1.06	1.06	1.06	1.06	1.07	1.06	0.004	0.42

(As per annexure A1 and schedule 1)

Here current ratios of commercial banks are analyzed. The above table indicates that the current assets of all three commercial banks have met the current liabilities during the five-year period.

The result shows that current ratios of all three commercial bank have the fluctuation trend of current ratios.

In average, NSBI has maintained the lower current ratio than NIBL and SCB. SCB has the highest coefficient of variation of 1.15 among three banks which proves its inconsistency.

2. Cash and Bank Balance to Total Deposit Ratio

This ratio measures the proportion of the most liquid assets i.e. cash and bank balance among the total asset of the bank. Higher ratio proves the bank's ability to meet the demand for cash.

$$\text{Cash and Bank Balance to Total Deposit Ratio} = \frac{\text{Cash and bank balance}}{\text{Total deposit}}$$

Table 2

Cash and Bank Balance to Total Deposit Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2008-09	2009-10	2010-11	2011-12	2012-13			
NIBL	16.96	13.61	16.24	20.70	21.66	17.83	2.97	16.63
SCB	14.69	7.19	19.10	23.61	23.61	17.69	6.23	35.24
NSBI	4.21	9.86	11.50	10.66	13.33	9.91	3.08	31.02

(As per annexure A2 and schedule 1)

The same figure in the table shows the percentage of cash and bank balance to total

deposit ratio position of three banks and they all have the fluctuating trend in this regard.

During the five-year period, SCB has maintained the highest ratio than NIBL and NSBI

Bank. Hence, NIBL has the highest average.

In average, NIBL has the highest cash and bank balance to total deposit ratio than SCB

and NSBI Bank. It proves the liquidity position of NIBL is better in this regard. On the

other hand, NSBI has lowest mean ratio and its coefficient of variation is 31.02% which

is higher compare to NIBL. Hence, it can be explained that NSBI has the poor

maintenance of its liquidity which indicates the poor performance of the bank.

3. Cash and Bank Balance to Current Asset Ratio

This ratio measures the proportion of most liquid assets i.e. cash and bank balance among

the total current asset of bank. Higher ratio shows the bank's ability to meet the demand

for cash.

$$\text{Cash and Bank Balance to Current Asset Ratio} = \frac{\text{Cash and bank balance}}{\text{Current asset}}$$

Table 3

Cash and Bank Balance to Current Asset Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2008-09	2009-10	2010-11	2011-12	2012-13			
NIBL	15.24	12.13	14.22	18.24	18.75	15.72	2.49	15.82
SCB	13	6.31	16.6	20.42	20.67	15.40	5.34	34.70
NSBI	3.93	9.14	10.68	9.91	12.24	9.18	2.82	30.70

(As per annexure A3 and schedule 1)

Contents of the table show that cash and bank balance to current asset ratios are in fluctuating trend during the five-year period. NIBL has maintained a highest ratio of 18.75 % in the FY 2012-13. Similarly, SCB and NSBI Bank have maintained the highest ratio of 20.67% and 12.24% in the FY 2012-13 respectively.

In average, NIBL has higher ratio than that of the other two banks and states NIBL is better in this regard. NSBI has lower average ratio and its coefficient of variation between ratios is 30.70%, which is comparatively higher than of NIBL but lower than SCB Bank. It shows that NSBI is unstable and inconsistent than

the other two. Hence, it shows its inability to manage the withdrawal from the customers.

4. Investment on Government Securities to Current Asset Ratio

This ratio is calculated to find out the percentage current asset invested in government securities such as treasury bills and government bonds. The ratio is computed as:

$$\text{IGSCA ratio} = \frac{\text{Investment on government securities}}{\text{Current asset}}$$

Table 4

Investment on Government Securities to Current Asset Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2008-09	2009-10	2010-11	2011-12	2012-13			
NIBL	4.87	6.96	6.23	8.17	7.07	6.66	1.09	16.35
SCB	22.67	19.65	21.30	17.42	9.44	18.10	4.67	25.80
NSBI	9.81	9.89	10.25	5.96	4.28	8.04	2.45	30.42

(As per annexure A4 and schedule 1)

The above table reveals that almost all the banks have a fluctuating trend.
In average, SCB has the higher ratio than NSBI and NIBL, which means that SCB has invested as much of its current assets in government securities than the other two. SCB has invested its current assets in the government securities throughout the study period. NIBL has the lowest coefficient of variation which indicates its stability.

At the same time, NSBI has the lowest ratio in the whole five years' period. It has ratio of only 4.28 in the FY 2012-13.

5. Loan and Advance to Current Asset Ratio

Loan and Advances include short and long term, overdraft, revolving overdraft, stand by credit, line of credit and other lending.

$$\text{Loan and Advance to Current Asset Ratio} = \frac{\text{Loan and advance}}{\text{Current ratio}}$$

Table 5

Loans and Advance to Current Asset Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2008-09	2009-10	2010-11	2011-12	2012-13			
NIBL	69.76	71.78	71.78	64.35	64.37	68.41	3.39	4.95
SCB	34.26	39.80	42.16	47.07	50.12	42.68	5.55	13.01
NSBI	50.59	46.45	46.78	45.59	44.89	46.86	1.98	4.22

(As per annexure A5 and schedule 1)

The table shows that loan and advance to current asset ratios of NIBL and NSBI banks are in fluctuating trend but SCB has increasing trend in the last five years. NIBL has maintained the highest ratio of 71.78% in the FY 2009-10. Likewise, SCB and NSBI have the highest ratio 50.12 % and 50.59 % in the FY 2012-13 and 2008-09 respectively.

Comparing the mean ratios, NIBL Bank has the highest ratio of 68.41% among the three banks whereas coefficient of variation is in middle that of other two indicating uniformity in comparison to SCB and NSBI.

4.1.2 Asset Management Ratio

Assets management ratio shows how a bank is managing its assets. It shows how successfully the bank is mobilizing its deposits. It also shows how and in which sectors the deposit is utilized or invested. These are shown with the help of following ratios:

1. Loan and Advance to Total Deposit Ratio

This ratio assists to find out how successfully the banks are utilizing their total deposits on loans and advances for profit generating purpose. Greater the ratio implies the better utilization of total deposits. The ratio is computed as:

$$\text{Loan and Advance to Total Deposit Ratio} = \frac{\text{Loan and advance}}{\text{Total deposit}}$$

Table 6

Loan & Advance to Total Deposit Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2008-09	2009-10	2010-11	2011-12	2012-13			
NIBL	77.61	80.48	81.96	73.03	74.32	77.48	3.43	4.43
SCB	38.70	45.35	48.49	54.43	57.84	48.96	6.74	13.77
NSBI	54.12	50.09	50.37	49.01	48.86	50.49	1.91	3.78

(As per annexure A6 and schedule 1)

Looking at the all three banks' performance, loan and advance to total deposit ratios are

in fluctuating trend of NIBL and NSBI Bank where as SCB have the increasing trend in

the last five years.

In average, NIBL Bank has the higher ratio of 77.48% in comparison to 48.96% and 50.49% of SCB and NSBI respectively. In this regard, NIBL Bank is better indicating its strong position regarding the mobilization of total deposit on loan and advance and acquiring high profit in compared to the other two banks but higher ratio does not necessary mean it is better in terms of liquidity as loan and advance is not as liquid as cash and bank balance and SCB and NSBI may have utilized high portion of their deposit in various investment and cash and bank balance.

2. Total Investment to Total Deposit Ratio

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Investment is one of the major credits created to earn profit. This implies the utilization of a bank's deposit on investment in government securities, shares and debenture of other companies and banks. A high ratio is the indicator of high success to mobilize the banking fund as investment and vise versa. The ratio is computed as:

$$\text{Total Investment to Total Deposit Ratio} = \frac{\text{Total investment}}{\text{Total deposit}}$$

Table 7

Total Investment to Total Deposit Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2008-09	2009-10	2010-11	2011-12	2012-13			
NIBL	15.85	17.24	14.81	18.31	18.32	16.91	1.38	8.19
SCB	57.24	56.41	45.42	36.05	32.31	45.49	10.20	22.42
NSBI	47.52	46.73	44.59	45.87	43.97	45.74	1.31	2.87

(As per annexure A7 and schedule 1)

It is clear from the above table that the total investment to total deposit ratios of all three banks are in fluctuation trend during the 5 year period of study.

The mean value of NSBI is higher than that of NIBL and SCB Bank however, coefficient of variation between the ratios is higher at 22.42% clearly indicating instability of investment policy of SCB Bank than that of NIBL and NSBI. NIBL has its higher ratio during the FY 2012-13 that is 18.32%. Where as SCB and NSBI Bank has its higher ratio of 57.24% and 47.52% during the year 2008-09. In the same way NIBL has lower ratio during the FY 2010-11 of 14.81 % and SCB and NSBI Bank has its lower ratio of 32.31% and 43.97% in the FY 2012-13.

3. Loan and Advance to Total Working Fund Ratio

Loan and advance is the major element in the total working fund (total asset) which indicates the ability of a bank to channelize its deposit in the form of loan and advance to earn the utmost return. This ratio is computed by

dividing loan and advances by total working fund. The following table exhibits the ratio of loan and advances to total working fund of NIBL, HBL and NIC Bank during the study period has been shown

$$\text{Loan and Advance to Total Working Fund} = \frac{\text{Loan and advance}}{\text{Total working fund}}$$

Table 8

Loans and Advance to Total Working Fund Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2008-09	2009-10	2010-11	2011-12	2012-13			
NIBL	68.37	70.36	70.42	63.32	63.43	67.18	3.19	4.75
SCB	34.14	39.68	42.06	46.97	50.03	42.58	5.56	13.06
NSBI	50.16	45.94	46.36	45.03	44.43	46.38	2.01	4.32

(As per annexure A8 and schedule 1)

In the above table, loan and advance to total working fund ratios are computed as per

Annexure A8 and mean, standard deviation and coefficient of variation as per schedule 1.

The table shows that loan and advance to total working fund ratios are in fluctuating trend during the five-year period. NIBL has the highest ratio of 70.42% in the FY 2010-11 and the lowest of 63.32% in the FY 2011-12. SCB and NSBI Bank have maintained their highest ratio of 50.03% and 50.16% in 2012-13 and 2008-09 respectively. Similarly, their lowest ratios are 34.14% and 44.43 % in the FY 2008-09 and 2012-13 respectively.

In average, NIBL Bank has maintained higher loan and advance to total working fund ratio than that of SCB and NSBI indicating betterment in this regard. SCB has higher coefficient of variation suggesting of less uniformity and resulting higher risk.

4. Investment on Government Securities to Total Working Fund Ratio

This ratio indicates the relationship between the banks' investment on securities in comparison to total working fund. This ratio is calculated as below

$$\text{IGSTWF Ratio} = \frac{\text{Investment on government securities}}{\text{Total working fund}}$$

Table 9

Investment on Government Securities to Total Working Fund Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2008-09	2009-10	2010-11	2011-12	2012-13			
NIBL	4.78	6.83	6.11	8.03	6.97	6.54	1.07	16.42
SCB	22.59	19.59	21.25	17.38	9.42	18.05	4.65	25.77
NSBI	9.73	9.78	10.16	5.89	4.23	7.96	2.43	30.51

(As per annexure A9 and schedule 1)

The table proves the inconsistency of all three banks in terms of investment on government securities in comparison to total working fund i.e. the ratios are fluctuant. NIBL has maintained the highest ratio of 8.03% in 2011-12 with the lowest of 4.78% in 2008-09. Similarly, SCB has highest ratio of 22.59% in 2008-09 with lowest of 9.42% in FY 2012-13. NSBI Bank has maintained highest in FY 2010-11 of 10.16% and lowest in 2012/13 of 4.23%.

NIBL has the lower ratio considering the average value than the other two banks indicating its poor performance in this regard. The coefficient of variation of NIBL is lower indicating its variability than SCB and NSBI Bank.

5. Investment on Shares and Debentures to Total Working Fund Ratio

Though the investment on government securities is relatively safe than investment on shares and debentures of other company, Commercial banks are investing on shares and debentures of other companies for the purpose of income generation. This ratio shows to extent the bank has successfully invested it's assets on other company's share and debentures to generate income. A high ratio indicated more portion of investment on shares and debentures. We have,

$$\text{ISDTWF} = \frac{\text{Investment on shares and debentures}}{\text{Total working fund}}$$

Table 10

Investment on Shares and Debentures to Total Working Fund Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2008-09	2009-10	2010-11	2011-12	2012-13			
NIBL	0.12	0.12	0.12	0.27	0.42	0.21	0.12	57.14
SCB	0.29	0.29	0.27	0.28	0.24	0.27	0.02	6.77
NSBI	0.11	0.10	0.09	0.05	0.05	0.08	0.03	31.62

(As per annexure A10 and schedule 1)

The table shows that shares and debentures to total working fund ratios are in fluctuating trend during the five-year period.

SCB has the highest ratio in terms of average than NIBL and NSBI Bank with 0.27% in comparison to 0.21% and 0.08% of the other two. Considering the coefficient of variation, NIBL is inconsistent and unstable in terms of investment on shares and debentures than SCB and NSBI.

4.1.3 Profitability Ratios

These ratios measure the efficiency of the banks' activities and its ability to generate

profits. This is directly related to the income generated by the banks.

1. Return on Loan and Advance Ratio

This ratio specifies how efficiently the bank has used its resources in the form of Loan and Advance, and the ratio is computed as:

$$\text{Return on Loan and Advance Ratio} = \frac{\text{Net profit (loss)}}{\text{Loans \& advances}}$$

Table 11

Return on Loans and Advances Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2008-09	2009-10	2010-11	2011-12	2012-13			
NIBL	2.49	3.14	2.86	2.50	4.13	3.02	0.60	19.97
SCB	7.49	6.81	6.07	5.97	5.34	6.34	0.74	11.71
NSBI	2.31	2.45	2.52	2.45	3.38	2.62	0.39	14.69

(As per annexure A11 and schedule 1)

The table illustrates that NIBL and SCB have the fluctuating trend and NSBI has increasing trend in the last five years. NSBI has the highest return of 3.38% in the FY 2012-13.

In average, SCB has the higher return ratio than that of NIBL and NSBI Bank with 6.34% in comparison to 3.02% and 2.62% respectively of the other two. The coefficient of variation of NIBL Bank is higher than of SCB and NSBI. So, it can be concluded that NIBL is in highest position in earnings from loans and advances in relation to the other two banks.

2. Return on Total Working Fund Ratio

This is also known as return on assets and this ratio assists in calculating the overall profitability of total working funds which should be satisfactory for its

survival. If the bank's working fund is well managed and efficiently utilized, return on such assets will be higher and vice versa. We have,

$$\text{Return on Total Working Fund Ratio} = \frac{\text{Net profit (loss)}}{\text{Total working fund}}$$

Table 12

Return on Total Working Fund Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2008-09	2009-10	2010-11	2011-12	2012-13			
NIBL	1.70	2.21	2.02	1.58	2.62	2.03	0.37	18.36
SCB	2.56	2.70	2.55	2.80	2.67	2.66	0.09	3.50
NSBI	1.05	1.03	1.01	0.83	1.19	1.02	0.11	11.25

(As per annexure A12 and schedule 1)

It is clear from the above table that all the three banks are inconsistent in earning the net profit. NIBL has earned the highest of 2.62% in 2012-13 whereas SCB's highest return ratio is 2.80% and NSBI Bank's is 1.19% 2011-12 and 2012-13 respectively.

Considering the mean ratios, SCB has the higher of 2.66% than of NIBL's 2.03% and NSBI Bank's 1.02%. NIBL Bank's coefficient of variation is higher than that of SCB and NSBI which concludes its inconsistency. From the prospect of analysis, the conclusion would be SCB is more efficient in terms of profitability with respect to its financial resources.

3. Return on Equity Ratio

This ratio measures how efficiently the banks have used the funds of owners. It is calculated as:

$$\text{Return on Equity Ratio} = \frac{\text{Net profit (loss)}}{\text{Total equity capital}}$$

Table 13

Return on Equity Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2008-09	2009-10	2010-11	2011-12	2012-13			
NIBL	23.05	27.61	22.8	17.18	27.29	23.59	3.79	16.07
SCB	33.58	32.22	30.43	28.36	26.38	30.19	2.59	8.58
NSBI	18.47	15.99	16.13	15.02	20.31	17.18	1.93	11.24

(As per annexure A13 and schedule 1)

The table states that all three banks have maintained the fluctuating tendency in the five-year period of study. NIBL has maintained the lowest ratio of 17.18% in FY 2011-12 and similarly, SCB and NSBI Bank have maintained their lowest ratio of 26.38% and 15.02% in FY 2012-13 and 2011-12 respectively.

From the prospect of mean, SCB has the higher ratio of 30.19% than of NIBL and NSBI Bank. It does specify SCB has used the funds more efficiently than the other two during the study period. The coefficient of variation of SCB is also the lowest at 8.58% which does reflect SCB's consistency.

4. Total Interest Earned to Total Working Fund Ratio

This ratio depicts the extent on which the banks are successful in mobilizing their total assets to generate high income as interest. This ratio actually reveals the earning capacity of a commercial bank by mobilizing its working fund. Higher ratio implies better performance of the bank in terms of interest earning on its total working fund. This ratio is computed to proportion of total interest earned to total working fund or total asset and is computed as:

$$\text{Total Interest Earned to Total Working Fund Ratio} = \frac{\text{Total interest earned}}{\text{Total working fund}}$$

Table 14

Total Interest Earned to Total Working Fund Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2008-09	2009-10	2010-11	2011-12	2012-13			
NIBL	6.16	8.12	9.94	9.1	8.04	8.27	1.27	15.30
SCB	4.71	5.08	6.21	6.89	5.56	5.69	0.78	13.75
NSBI	4.84	5.97	6.73	6.49	6.34	6.07	0.66	10.94

(As per annexure A14 and schedule 1)

The table clearly shows a fluctuating trend of ratios of all three banks. NIBL has the highest ratio of 9.94% and similarly, SCB and NSBI Bank have highest of 6.89% and 6.73% respectively. In average, NIBL Bank has the highest mean ratio of 8.27% compared to 5.69% and 6.07% of SCB and NSBI. However, NIBL Bank has the highest coefficient of variation than the other two specifying inconsistency.

In conclusion, NIBL is more successful towards the goal of earning interest income with higher earning power whereas SCB is slightly poor in this regard. It could be said that NIBL Bank is strong in case of earning high interest from its total working fund by maintaining consistency in comparison to SCB and NSBI.

5.   Total Interest paid to Total Working Fund Ratio

This ratio measures the percentage of total interest paid against the total working fund. High ratio indicates higher interest expenses on the total working fund and vice versa. The ratio is computed as,

$$\text{Total Interest Paid to Total Working Fund Ratio} = \frac{\text{Total interest paid}}{\text{Total working fund}}$$

Table 15

Total Interest paid to Total Working Fund Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2008-09	2009-10	2010-11	2011-12	2012-13			
NIBL	3.18	4.46	6.2	5.8	3.79	4.69	1.15	24.62
SCB	1.36	1.43	1.31	2.42	1.34	1.57	0.43	27.09
NSBI	2.73	3.79	4.55	4.77	3.84	3.94	0.72	18.17

(As per annexure A15 and schedule 1)

The above table shows a fluctuating trend of ratios of all three banks. NIBL has higher ratio of 6.20% in FY 2010-11. In the same way SCB and NSBI Bank has its higher ratio of 2.42% and 4.77% in the FY 2011-12.

The mean ratio on SCB is lower which means NIBL and NSBI Bank has not paid higher interest. C.V. of SCB is higher than that of NIBL and NSBI Bank which shows that SCB is less consistent.

The above analysis shows that SCB is in better position from the interest expenses point of view than that of NIBL and NSBI Bank. It seems to be successful to collect its working fund form less expensive sources. NIBL Bank has higher interest expenses on its total working fund than that of SCB and NSBI.

6. Total Interest Earned to Total Operating Income Ratio

This ratio depicts the extent on which the banks are successful in mobilizing their total assets to generate high income as interest. This ratio actually reveals the earning capacity of a commercial bank by mobilizing its operation income. Higher ratio implies better performance of the bank in terms of interest earning on its total operating income and is worked out as:

Total Interest Earned to Total Operating Income Ratio = $\dfrac{\text{Total interest earned}}{\text{Total operating income}}$

Table 16

Total Interest Earned to Total Operating Income Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2008-09	2009-10	2010-11	2011-12	2012-13			
NIBL	158.38	170.15	204.81	205.6	146.98	177.18	24.03	13.56
SCB	90.21	88.88	110.46	108.81	91.31	97.93	9.60	9.80
NSBI	176.24	205.06	218.14	251.81	187.1	207.67	26.37	12.70

(As per annexure A16 and schedule 1)

All three banks have a fluctuating tendency with regards to proportion of interest income in total operating income. NIBL has maintained its highest ratio of 205.60% in 2011-12 while SCB and NSBI Bank have maintained their highest ratio of 110.46% and 251.81% in the FY 2010-11 and 2011-12 respectively.

In average, NSBI has the higher ratio than NIBL and SCB, i.e. 207.67% versus 177.18% and 97.93%. If we consider the coefficient of variation, SCB Bank is more consistent than the other two banks with the least value among the three banks. Hence, SCB Bank is in better position regarding the mobilization of interest bearing assets such as loan and advance and investment. A note is to be made that such activities have more risk.

4.1.4   Risk Ratio

1. Credit Risk Ratio:

This ratio is very much important to bank to examine the project i.e. the risk involved in it to avoid default or non- payment of loan before making investment. This ratio measures the risk behind making investment or granting loan. Because of unavailability of data of performing assets; ratio is calculated with the help of loan and advance and total assets. This ratio is computed as:

$$\text{Credit Risk Ratio} = \frac{\text{Total Loan \& Advance}}{\text{Total Asset}}$$

Table 17
Credit Risk Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2008-09	2009-10	2010-11	2011-12	2012-13			
NIBL	68.37	70.36	70.42	63.32	63.43	67.18	3.19	4.75
SCB	34.14	39.68	42.06	46.97	50.03	42.58	5.56	13.06
NSBI	50.16	45.94	46.36	45.03	44.43	46.38	2.01	4.32

(As per annexure A17 and schedule 1)

During the five-year period of study, SCB banks' credit risk ratios are in increasing trend whereas of NIBL and NSBI Bank's is in fluctuating trend. NIBL has the highest ratio of 70.42% in the FY 2010-11 with the lowest being 63.32% in the FY 2011-12. Similarly, SCB and NSBI Bank have the highest credit risk ratio of 50.03% and 50.16% in the FY 2012-13 and 2008-09 respectively.

The above table clearly depicts NIBL has the higher average ratio than that of SCB and NSBI which does mean NIBL has higher credit when compared to other two. However, the coefficient of variation of SCB is higher than that of NIBL and NSBI Bank.

2. Liquidity Risk Ratio:

Cash and bank balance are the most liquid of all the assets and considered bank's liquidity sources. Deposits and the other hand refer to the liquidity needs of bank. This ratio measures the risk associated with the liquid assets i.e. cash and bank balance that are kept to satisfy the cash demand of customers. A higher ratio

shows that the banks have sufficient cash to meet its current obligations i.e. lower liquidity risk, but that may have and adverse impact on the profitability position of the bank. This ratio is worked out as:

$$\text{Liquidity Risk Ratio} = \frac{\text{Cash and bank balance}}{\text{Total Deposit}}$$

Table 18
Liquidity Risk Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2008-09	2009-10	2010-11	2011-12	2012-13			
NIBL	16.96	13.61	16.24	20.7	21.66	17.83	2.97	16.63
SCB	14.69	7.19	19.1	23.61	23.85	17.69	6.23	35.24
NSBI	4.21	9.86	11.5	10.66	13.33	9.91	3.08	31.02

(As per annexure A18 and schedule 1)

The table evidently shows the fluctuating trend of liquidity risk ratios of NIBL and SCB banks but increasing trend of NSBI bank during the five years of study. All three banks are able to maintain the highest ratio in the FY 2012-13. NIBL Bank has maintained highest ratio of 21.66% same way SCB's highest ratio is 23.85% and NSBI's highest ratio is 13.33%.

In average, NSBI has the lowest liquidity risk ratio of 9.91% comparatively than the other two banks. At the same time, SCB also has the highest coefficient of variation of 35.24% in comparison to 16.63% and 31.02% of NIBL and NSBI Bank respectively indicating liquidity risk of SCB is high.

3. Growth Ratio

Under this section, growth ratio of Total Deposit, Total Investment, Loan and Advance and Net Profit are calculated.

Growth ratio represents how well the CBs are maintaining their economic and financial status. The higher a ratio, better the executing of the bank and vice versa. Under this title, four types of ratios are studied. They are directly related to the fund mobilization and investment of CB. These ratios are:

1. Growth Ratio of Total Deposit:

Table 19

Growth Ratio of Total Deposit

Banks	Fiscal Years					Growth Ratio (%)
	2008-09	2009-10	2010-11	2011-12	2012-13	
NIBL	46,698.10	50,094.73	50,138.12	57,010.60	62,428.85	7.53%
SCB	35,350.82	35,182.72	37,999.24	35,965.63	39,466.45	2.79%
NSBI	27,957.22	34,896.42	42,415.44	53,337.26	58,920.46	20.49%

(As per schedule 2)

The above table shows the comparative growth rate of total deposit of three banks. The growth ratio of NSBI is much higher with 20.49% than that of NIBL and SCB Bank (i.e. 7.53% and 2.79%). This concludes that NSBI's performance in collection of deposit is better year-by-year in comparison to NIBL and SCB Bank.

2. Growth Ratio of Loan and Advance:

Table 20

Growth Ratio of Loan and Advance

Banks	Fiscal Years					Growth Ratio (%)
	2008-09	2009-10	2010-11	2011-12	2012-13	
NIBL	36,241.21	40,318.31	41,095.51	41,637.00	46,400.05	6.37%
SCB	13,679.76	15,956.96	18,427.27	19,575.97	22,828.84	13.66%
NSBI	15,131.75	17,480.55	21,365.77	26,142.09	28,788.15	17.44%

(As per schedule 2)

The above comparative table depicts the growth rate of loan and advance during the five-year period of three banks. It is clear from the table that growth ratio of NSBI is much better than that of NIBL and SCB Bank. This does conclude that NSBI has performed better in terms of granting loan and advance in compared to other banks during these five years.

3. Growth Ratio of Total Investment:

Table 21

Growth Ratio of Total Investment

Banks	Fiscal Years					Growth Ratio (%)
	2008-09	2009-10	2010-11	2011-12	2012-13	
NIBL	7,399.81	8,635.53	7,423.11	10,438.49	11,435.27	11.49%
SCB	20,236.12	19,847.51	17,258.68	12,966.64	12,753.52	(10.90%)
NSBI	13,286.18	16,305.63	18,911.02	24,463.45	25,906.12	18.17%

(As per schedule 2)

The above table reflects the growth rate of investment of each bank year-by-year. Comparatively, the growth ratio of NSBI Bank (18.17%) is higher than that of NIBL (11.49%) and SCB (-10.90%) and this signifies that investment of NSBI Bank is enhanced than of the other two.

4. Growth Ratio of Net Profit:

Table 22

Growth Ratio of Net Profit

Banks	Fiscal Years					Growth Ratio (%)
	2008-09	2009-10	2010-11	2011-12	2012-13	
NIBL	900.62	1,265.95	1,176.64	1,039.28	1,915.87	20.77%
SCB	1,025.12	1,085.87	1,119.17	1,168.97	1,217.94	4.40%
NSBI	316.37	391.74	464.57	480.11	771.47	24.96%

(As per schedule 2)

The above table shows the comparative table of growth rate of net profit of all three banks. NSBI Bank has higher growth ratio of 24.96% than that of NIBL and SCB (20.77% and 4.40%). This indicates NSBI Bank has maintained better net profit during these five years when compared to the other two banks.

From the above analysis, it is concluded that NSBI's operation with regards to all aspects like collection of deposit, granting of loan and advance, investment and net profit is comparatively better than other two banks. SCB's performance with regards to collection of deposit, investment and net profit is poor during these five years of study. However, NIBL is poor in regards with granting loans and advance.

4.2 ANALYSIS OF STATISTICAL TOOLS

In order to achieve the objective of this study, some essential statistical tools are used such as Trend Analysis, Coefficient of Correlation Analysis, Standard Deviation, and Coefficient of Variation.

4.2.1 Trend Analysis:

Under this segment, current and projected trend values of loan & advance to total deposit ratio and total investment to total deposit ratio of NIBL, NIBL, and HBL are calculated from FY 2005-06 to 2011-12 as per schedule 3, 4, 5, 6, 7, and 8.

Table 23

Current and Projected Trend Values of Loan and Advance to Total Deposit

Years	Banks		
	NIBL	SCB	NSBI
2008-09	80.29	39.49	52.81
2009-10	78.88	44.23	51.65
2010-11	77.48	48.96	50.49
2011-12	76.08	53.70	49.33
2012-13	74.67	58.43	48.17
2013-14	73.27	63.17	47.01
2014-15	71.87	67.91	45.85

(As per schedule 3, 5, & 7)

The above table depicts that projected trend values of SCB Bank is in increasing trend whereas NIBL and NSBI are in decreasing trend. This trend of ratio does signify that NIBL, HBL and NIC Bank may use more than 72%, 68% and 46% of their total deposit in providing loan and advance up until FY 2014-15.

Table 24

Current and Projected values of Total Investment to Total Deposit

Years	Banks		
	NIBL	SCB	NSBI
2008-09	15.704	59.53	47.328
2009-10	16.305	52.51	46.532
2010-11	16.906	45.49	45.736
2011-12	17.507	38.46	44.94
2012-13	18.108	31.44	44.144
2013-14	18.709	24.42	43.348
2014-15	19.31	17.40	42.552

 (As per schedule 4, 6, & 8)

The above table shows that the present and projected trend values are in decreasing trend for SCB and NSBI and in increasing trend for NIBL Bank. The ratio of SCB and NSBI on total investment to total deposit will be 17.40 and 42.55 for the FY 2014-15. It does mean that they may not use their deposit in investment in the upcoming years as per trend. NIBL Bank may use more than 25% of their deposit in investment in various sectors. Thus, it can be concluded that SCB and NSBI's investment policies are predicted to be decreased.

4.2.2 Coefficient of Correlation Analysis:

Under this analysis, Karl Pearson coefficient of correlation is used to uncover the relationship between total deposit and loan and advance, total deposit and total investment and outside asset and net profit.

1.   Coefficient of correlation between Total Deposit and Loan & Advance:

Coefficient of correlation (r) between Deposit and Loan & Advance measures the degree of relationship between these two variables. The main objective of

correlation analysis between deposit and loan & advance is to find out whether deposit is significantly used as loan & advance or not.

Table 25

Coefficient of Correlation between Total Deposit and Loan and Advance

Evaluation Criteria	Banks		
	NIBL	SCB	NSBI
r	0.9236	1	0.9988
r^2	0.8531	1	0.9976
P.E. r	0.0443	0	0.0007238
6 P.E. r	0.2658	0	0.0043

(As per schedule 9, 11, & 13)

Here, deposit is the independent variable (x) and loan & advance is dependent variable (y). The main objective of computing 'r' between these two variables is to justify whether deposit is significantly used as loan & advance or not. The above table shows the value of 'r', 'r^2,' P.E. r, and 6 P.E. r between deposit and loan & advance of NIBL with comparison to SCB and NSBI Bank during the study period 2008-09 to 2012-13. From the above table in respect to NIBL, it is found that coefficient of correlation between deposit and loan & advance is 0.9236. It shows the positive relationship between these two variables. Furthermore, when we consider the value of coefficient of determination (r^2), it is 0.8531 which does mean only 85.31% of the variation in the dependent variable is explained by the independent variable. At the same time, considering the value of 'r' and comparing it with '6 P.E. r', we find that 'r' is much more than value of '6 P.E. r' which does mean that the value of 'r' is significant. Hence, there is significant relationship between deposit and loan & advance of NIBL. This indicates that NIBL is successful to mobilize its deposit appropriately.

In case of SCB and NSBI Bank it is found that coefficient of correlation between deposits and load and advances of SCB and NSNI Bank is 1 and 0.9988 respectively, which explains the positive relationship between these two variables. The values of "r^2" are 1 and 0.9976 which indicates 100% and 99.76% of variation in the dependent variable (loans and advances) has been explained by independent variable (deposits). Further, the values of "r" are higher than 6P.Er which shows the significant value of "r" of both banks. Hence we could say that there is significant relationship between deposit and loan and advances. The banks have use the appropriate policy to mobilize its deposit on loan and advances

The value of "r" is significant in all cases the banks having positive relationship between deposit and loan and advances, all the banks have properly utilized the deposit to grant loan and advances. The relationship is significant as their values of 'r' are higher than '6 P.E. r' and the value of r^2 shows high percent in the dependent variable which has been explained by the independent variable. This indicates that NIBL, SCB and NSBI Bank are successful in mobilizing their deposit properly.

2. Coefficient of Correlation between Total Deposit and Total Investment:

Coefficient of correlation (r) between Deposit and Total Investment measures the degree of relationship between these two variables. The main objective of correlation analysis between deposit and total investment is to find out whether deposit is significantly used as investment or not.

Table 26

Coefficient of Correlation between Total Deposit and Total Investment

Evaluation Criteria	Banks		
	NIBL	SCB	NSBI
r	0.9625	(0.6281)	0.9973
r2	0.9265	0.3946	0.9946
P.E. r	0.0222	0.4084	0.0016236
6 P.E. r	0.1331	1.0958	0.0097

(As per schedule10, 12, & 14)

Here, deposit is the independent variable (x) and total investment is dependent variable (y). The main objective of computing 'r' between these two variables is to justify whether deposit is significantly used as total investment or not. The above table shows the value of 'r', (r^2), P.E. r, and 6 P.E. r between deposit & total investment of NIBL with comparison to SCB and NSBI Bank during the study period 2008-09 to 2012-13. From the above table in respect to NIBL, it is found that coefficient of correlation between deposit and total investment is 0.9625. It shows the positive relationship between these two variables. Furthermore, when we consider the value of coefficient of determination (r^2), it is 0.9265 which does

mean 92.65% of the variation in the dependent variable is explained by the independent variable. At the same time, considering the value of 'r' and comparing it with '6 P.E. r', we find that 'r' is higher than value of '6 P.E. r' which does mean that NIBL is capable in investment mobilizing its deposit.

In case of SCB Coefficient of correlation between deposits and total investment is negative i.e. -0.6281 which shows the negative relationship between those two variables. The value of "r^2" is 0.3946 which means 39.46% in the dependent variable has been explained by independent variable i.e. deposit. Further analysis shows that the value of "r" is lower than value of 6p.Er i.e -0.6281< 1.0958 which indicates that the value of r is insignificant. It means there is no significant relationship between deposits & total investment. Likewise the bank has not taken policy of maximizing the use of their deposit as investment.

Likewise in case of NSBI Bank, coefficient of correlation between deposits and total investment is 0.9973 which explains positive relationship between these two variables. The value of "r^2" is 0.9946 which indicates 99.46% of variation in the dependent variable (total deposit) has been explained by independent variable (total investment). Further, the value of "r" is higher than 6P.Er i.e. 0.9973> 0.0097 which shows that the significant value of "r". Hence, we could say that there is significant relationship between total deposit & total investment. The bank is successful to mobilize its deposit on deposit and investment.

So, in conclusion NIBL and NSBI Bank have the positive relationship between deposit and total investment and SCB has negative relationship. Since the value of 'r' is less than values of '6 P.E. r', of SCB and the relationship is not significant and the value of r^2 shows less percent in the dependent variable which has been explained by the independent variable. This indicates that SCB is not successful in maximizing the investment of their deposit where as NIBL and NSBI is successful in this matter.

5.1. Major Findings of the Study

The main findings of the secondary data are derived on the basic analysis of financial data of NIBL, SCB and NSBI Bank which are given below.

5.1.1 Liquidity Ratios

The liquidity ratios of NIBL, SCB and NSBI Bank reveal that:
1. In average, the current ratio of SCB is higher than that of NIBL and NSBI Bank. At the same time, SCB's ratios also seem to be more variable than that of the other two banks.

2. In average, NIBL has the highest cash and bank balance to total deposit ratio than SCB and NSBI Bank. NSBI has the poor maintenance of its liquidity which indicates the poor performance of the bank than other two.

3. The mean ratio of cash and bank balance to current asset of NIBL is higher ratio than that of the other two banks and its ratios are more consistent than that of SCB and NSBI Bank.

4. In average, SCB has the higher ratio of government securities to current asset than NIBL and NSBI Bank, which means that SCB has invested as much of its current assets than the other two. NSBI also has the highest coefficient of variation which indicates its instability.

5. NIBL Bank has the highest loan and advance to current asset ratio and its coefficient of variation is in the middle of SCB and NSBI indicating uniformity in comparison to SCB and NSBI.

5.1.2. Asset Management Ratios

The asset management ratios of NIBL, SCB and NSBI Bank reveal that:

1. In average, NIBL Bank has the higher ratio of loan and advance to total deposit in comparison to SCB and NSBI indicating its strong position regarding the mobilization of total deposit on loan and advance.

2. The mean ratio of total investment to total deposit of SCB is higher than that of NIBL and NSBI Bank. It also has good variability of ratios in this case.

3. In average, NIBL Bank has maintained higher loan and advance to total working fund ratio than that of SCB and NSBI. SCB has higher coefficient of variation suggesting of less uniformity and resulting higher risk.

4. NIBL has the lowest mean ratio of investment on government securities to total working fund than the other two banks indicating its poor performance whereas SCB has the highest mean ratio. NSBI has the highest coefficient of variation also indicating more variability than SCB and NIBL Bank.

5. SCB has the highest mean ratio of investment on shares and debentures to total working fund than NIBL and NSBI Bank whereas NIBL Bank is inconsistent and unstable in terms of investment on shares and debentures than SCB and NSBI.

5.1.3. Profitability Ratios

The profitability ratios of NIBL, SCB and NIBL Bank reveal that:

1. In average, SCB has the higher ratio of return on loan and advance than that of NIBL and NSBI Bank and however NSBI Bank's return on loan and advance has been found in increasing trend.

2. The mean ratio of return on total working fund of SCB is higher than of NIBL and NSBI Bank. SCB's return on working fund is more efficient than that of NIBL and NSBI Bank.

3. The mean ratio of return on equity of SCB is higher than of NIBL and NSBI Bank and its coefficient of variation is the lowest too which does signify its consistency.

4. In average, NIBL Bank has the highest total interest earned to total working fund ratio in compared to SCB and NSBI. Hence, NIBL Bank is more successful towards the goal of earning interest income with higher earning power.

5. The mean ratio on SCB is lower which means NIBL and NSBI Bank has not paid higher interest. C.V. of SCB is higher than that of NIBL and NSBI Bank which shows that SCB is less consistent.

6. In average, NSBI Bank has the higher ratio of total interest earned to total operating income than NIBL and SCB. NSBI Bank is in better position regarding the mobilization of interest bearing assets such as loan and advance and investment.

5.1.4. Risk Ratios

The risk ratios of NIBL, SCB and NSBI Bank reveal that:

1. NIBL Bank has the higher average credit risk ratio than that of SCB and NSBI. SCB has the lowest credit risk ratio among the three banks where as NSBI has the lowest coefficient of variation.

2. In average, NSBI has the lowest liquidity risk ratio comparatively than the other two banks. Similarly, its ratios are more homogeneous than that of NIBL and SCB Bank. At the same time, SCB also has the highest coefficient of variation in comparison to NIBL and NSBI Bank indicating liquidity risk of SCB is high.

5.1.5. Growth Ratios

The growth ratios of NIBL, SCB and NSBI Bank reveal that:

1. The growth ratio of total deposits of NSBI is higher at 20.49% than that of NIBL at 7.53% and SCB Bank at 2.79% concluding NSBI's better performance in collection of deposit every year.

2. The growth ratio of loan and advance of NSBI is extremely better with 17.44% than that of NIBL and SCB Bank with 6.37% and 13.66% respectively.

3. The growth ratio of total investment of NSBI Bank (18.17%) is higher than that of NIBL (11.49%) and SCB (-10.90%).

4. NSBI Bank has higher growth ratio of net profit of 24.96% than that of NIBL and SCB (i.e. 20.77% and 4.40% respectively).

From the above analysis, it can be concluded that NSBI's is better in all aspect of operation with regards to collection of deposit, granting of loan and advance, net profit and total investment. NIBL's is performance with regards to granting of loans and advance is poor but SCB's performance with regards to collection of deposit, net profit and investment is poor and it has not made any significant strategy to win the confidence of its shareholders and customers.

5.1.6. Trend Analysis

Trend analysis of the study period and its projection for the next five years for loan and advance to total deposit and total investment to total deposit of NIBL, SCB and NSBI Bank reveals that:

1. Trend values of loan and advance to total deposit of SCB is increasing which does mean it is using large portion of their deposits toward providing secured loans and advance. NIBL and NSBI Bank are in decreasing trend and they may utilize more than 72% and 46% respectively of their deposit in loan and advance whereas SCB Bank may use more than 68%.

2. Trend values of total investment to total deposit of SCB and NSBI are decreasing which does indicate negative investment policy of the banks. Comparatively, NIBL Bank is ahead in investing more portion of its deposit in the potential sectors.

5.1.7. Co-efficient of Correlation Analysis

Coefficient of correlation analysis between different variables of NIBL SCB and NSBI Bank reveals that:

1. Coefficient of correlation between deposit and loan & advance of NIBL Bank is found to be lower than that of SCB and NSBI. This indicates poor position of NIBL Bank in mobilizing deposit as loan & advances and it also has insignificant relationship between deposit and loan & advance. In case of SCB and NSBI, there is significant relationship between deposit and loan & advance.

2. Coefficient of correlation between deposit and total investment of NSBI is found to be higher than the other two banks. This indicates NSBI is more successful in mobilizing deposit as total investment. On the other hand, NIBL and SCB are not so successful in maximizing the investment of their deposit.

CHAPTER V

SUMMARY, CONCLUSION AND RECOMMMENDATIONS

In this conclusion chapter, summary, finding and some prescribed recommendations have been put forward for the benefit of the selected banks

along with conclusions derived from the study are highlighted in order to fit the country from the present economic turmoil.

5.1   Summary

Investment is time, energy, or matter spent in the hope of future benefits. Investment has different meanings in economics and finance. In economics, investment is the accumulation of newly produced physical entities, such as factories, machinery, houses, and goods inventories. In finance, investment is putting money into an asset with the expectation of capital appreciation, dividends, and/or interest earnings. This may or may not be backed by research and analysis. Most or all forms of investment involve some form of risk, such as investment in equities, property, and even fixed interest securities which are subject, among other things, to inflation risk. It is indispensable for project investors to identify and manage the risks related to the investment.

Financial institutions like banks are the replica of modernization of the society and play a vital role in the development of economic growth of the country. Economic activity could not survive without the continuing flow of money and credit in the market. The economy of all market oriented nations depends on the efficient operations of complex and delicately balanced system of money and credit.
Banks are indispensable element in these systems. Commercial banks furnish necessary capital needed for trade and commerce for mobilizing the dispersed saving of the individuals and institutions. They provide the bulk of the money supply as well as the primary means of facilitating the flow of credit. 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 first banking of Nepal, Nepal bank limited from government sector was established in 1994. Presently 31 commercial banks are in operation in the country, among 30 banks are listed in NEPSE out of 31 commercial banks, three banks are selected as the sample banks for this thesis work. The objectives, functions, policies and strategies of these banks have been emphasized and the performances of the three sample banks have been analyzed. The main purpose of selecting these three banks is, they have been offering all kinds of available facilities available in banking sectors in the country. The study is mainly based on the secondary data publicly available in the NEPSE data base and the annual report of respective banks. for the study, the five year's data of the banks have been pooled starting from FY 2008/2009 to 2012/2013.the collected data of the banks for the study

purpose are thoroughly processed, tabulated for the required format; different measures of the data have been calculated using different statistical tools and financial tools with the best effort.

5.2 Conclusion

The facts and matters needed for various parts of the study have been discussed in the previous chapters. Obviously, analytical part is the core of the study that formulates the comparative analysis of various aspects of the investment of the commercial banks with the assistance of some important financial as well as statistical tools.

After completion of the basic analysis needed for the study, the final and most important task of the researcher is to procure finding issues and gaps of the study and recommend for further development which would be significant to the top management of the bank to initiate action and achieve the desired result. The purpose of the researcher is not only to draw attention to errors but also to rectify them and show directions for further progression and enhancement.

5.3. Recommendations

After going over the analysis and findings, following recommendations are made in order to overcome the weakness and inefficiency and make better policy on fund utilization and investment.

5.3.1 Liquidity Position

- The liquidity position of a bank can be affected by external as well as internal factors which include interest rates, investment situation, supply and demand position of deposits and loans, central bank's instruction, the lending policies, capability of management, strategic planning, and funds flow situation. As NSBI has maintained the ratio of cash and bank balance to total deposit lower than that of NIBL and SCB, it is recommended to increase cash and bank balance to meet current obligations and loan demand.

- Government securities such as treasury bills, bonds, saving certificates, etc. are safest medium of investment as they are risk-free and highly liquid in nature. The study reveals that NIBL has not invested more funds in government securities and so is recommended to invest more funds in this sector and not making them idle.

5.3.2 Asset Management Position

- To achieve success in competitive banking environment, deposit must be utilized as loan and advances. Carelessness in utilizing this asset could be one of the main reasons of failure. It is found that SCB's loan and advance to total deposit is lower than NIBL and NSBI Bank which indicates it has not properly used its fund as loan and advance. Hence, SCB is recommended to follow liberal policy.

- Commercial bank needs to mobilize its funds in different sectors such as purchasing share and debentures of other financial and non-financial companies. This is required in order to achieve success and also to promote financial and economic development of the country through industrialization and commercialization. Out of total working fund, SCB has invested more of its funds as total investment. NIBL and NSBI Bank are recommended to invest their more portions in different kinds of companies in different sectors.

- Loan default in commercial bank is a result of various factors such as political influences, lack of the necessary skills of project appraisal, improper collateral evaluation, irregular supervision and lack of entrepreneurship attitude. Political and administrative elements are highly prevailing in each and every sectors of Nepalese investment. Commercial banks always keep a distance from these influences.

- Banks can gain more net profit if it can reduce its non-performing asset (NPA). They experience many difficulties in recovering loans and their large amount of loan is being blocked as NPA. Therefore, there is an urgent need to work out a suitable mechanism through which the default loans can be recovered. So, the three banks are suggested to implement a sound collection policy including procedure which ensures rapid identification of delinquent loans, immediate contact with burrower, and continued follow-up until loan is recovered and legal procedure if required.

- Regarding NPA, the bank must focus on credit risk management. The thorough analysis of the project and feasibility studies before granting credit facility can reduce the default. In addition to this, corporate morals and strong corporate culture with high degree of awareness of credit risk should be present. Hence, adequate policies and procedures need to be established.

5.3.3 Profitability Position

- NIBL, SCB and NSBI Bank being the banks of private sector, they cannot keep away their eyes from the profit motive. They should be more careful in increasing profit in a real sense to maintain the confidence of shareholder, depositors, and customers. Hence they need to form a committee to identify the reasons behind the sharp decline in profit over the years and adopt various measures to improve its profitability. All the three banks have the fluctuating total income and so they have not been able to gain the optimum profit. So, they are recommended to decrease the expenses by controlling the operating expenses as well as by collecting the interest free deposits.

5.3.4 Risk Position

- Portfolio management of bank assets basically means allocation of funds into different components of banking assets having different degrees of risk and varying rate of return in such a way that the conflicting goal of maximum yield and minimum risk can be achieved. So, portfolio condition should be examined from time to time and attention should be given to maintain equilibrium in the portfolio condition as far as possible. The bank should make continuous efforts to explore new, competitive and high yielding investment opportunities to optimize its investment portfolio.

- In the present scenario when there is high liquidity in the market and most of the commercial banks are flooding towards the retail banking, these three banks should also come up with innovative and competitive rates to grab the market position. The most effective weapon for achieving this target would be to apply very simple procedure and prompt decision on the credit request.

- NIBL, SCB and NSBI need to adopt innovative approach for marketing in the light of growing competition in the banking sector. The business of the bank should be customer oriented. They should strengthen and activate their marketing function as it is an effective tool to attract and retain the customers. For this purpose, the bank should formulate new strategies of serving customers in a more convenient and satisfactory way by optimally utilizing the modern technology and offering new facilities to the customers at competitive prices.

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Standard Chartered Bank Nepal Limited https://www.sc.com/np/en/

Nepal SBI Bank www.nepalsbi.com.np

Nepal Stock Exchange www.nepalstock.com.np

LIQUIDITY RATIOS

Current Ratio
Annexure A1

Nepal Investment Bank Limited

Fiscal Year	Current Ratio	Current Assets	Current Liabilities
2008-09	1.08	51,950.05	48,052.96
2009-10	1.09	56,169.17	51,670.02
2010-11	1.09	57,248.38	52,147.06
2011-12	1.10	64,699.79	58,656.29
2012-13	1.10	72,083.32	65,331.51

Standard Chartered Bank Nepal Limited

Fiscal Year	Current Ratio	Current Assets	Current Liabilities
2008-09	1.08	39,929.28	37,014.10
2009-10	1.09	40,094.78	36,843.61
2010-11	1.09	43,704.45	40,132.74
2011-12	1.11	41,587.42	37,554.88
2012-13	1.11	45,549.58	41,013.53

Nepal SBI Bank Limited

Fiscal Year	Current Ratio	Current Assets	Current Liabilities
2008-09	1.06	29,912.86	28,253.83
2009-10	1.06	37,629.43	35,397.13
2010-11	1.06	45,671.23	43,008.94
2011-12	1.06	57,343.79	54,262.25
2012-13	1.07	64,134.56	60,197.20

Cash and Bank Balance to Total Deposit Ratio
Annexure A2

Nepal Investment Bank Limited

Fiscal Year	Ratio (%)	Cash & Bank Balance	Total Deposit
2008-09	16.96	7,918.00	46,698.10
2009-10	13.61	6,815.89	50,094.73
2010-11	16.24	8,140.37	50,138.12
2011-12	20.70	11,803.75	57,010.60
2012-13	21.66	13,519.49	62,428.85

Standard Chartered Bank Nepal Limited

Fiscal Year	Ratio (%)	Cash & Bank Balance	Total Deposit
2008-09	14.69	5,192.71	35,350.82
2009-10	7.19	2,530.07	35,182.72
2010-11	19.10	7,256.68	37,999.24
2011-12	23.61	8,492.27	35,965.63
2012-13	23.85	9,414.06	39,466.45

Nepal SBI Bank Limited

Fiscal Year	Ratio (%)	Cash & Bank Balance	Total Deposit
2008-09	4.21	1,176.44	27,957.22
2009-10	9.86	3,441.26	34,896.42
2010-11	11.50	4,877.83	42,415.44
2011-12	10.66	5,686.63	53,337.26
2012-13	13.33	7,852.33	58,920.46

Cash and Bank Balance to Current Asset Ratio

Annexure A3

Nepal Investment Bank Limited

Fiscal Year	Ratio (%)	Cash & Bank Balance	Current Assets
2008-09	15.24	7,918.00	51,950.05
2009-10	12.13	6,815.89	56,169.17
2010-11	14.22	8,140.37	57,248.38
2011-12	18.24	11,803.75	64,699.79
2012-13	18.75	13,519.49	72,083.32

Standard Chartered Bank Limited

Fiscal Year	Ratio (%)	Cash & Bank Balance	Current Assets
2008-09	13	5,192.71	39,929.28
2009-10	6.31	2,530.07	40,094.78
2010-11	16.60	7,256.68	43,704.45
2011-12	20.42	8,492.27	41,587.42
2012-13	20.67	9,414.06	45,549.58

Nepal SBI Bank Limited

Fiscal Year	Ratio (%)	Cash & Bank Balance	Current Assets
2008-09	3.93	1,176.44	29,912.86
2009-10	9.14	3,441.26	37,629.43
2010-11	10.68	4,877.83	45,671.23
2011-12	9.91	5,686.63	57,343.79
2012-13	12.24	7,852.33	64,134.56

Investment on Government Securities to Current Asset Ratio
Annexure A4

Nepal Investment Bank Limited

Fiscal Year	Ratio (%)	Government Securities	Current Asset
2008-09	4.87	2,531.30	51,950.05
2009-10	6.96	3,911.85	56,169.17
2010-11	6.23	3,564.60	57,248.38
2011-12	8.17	5,282.96	64,699.79
2012-13	7.07	5,098.97	72,083.32

Standard Chartered Bank Limited

Fiscal Year	Ratio (%)	Government Securities	Current Asset
2008-09	22.67	9,050.99	39,929.28
2009-10	19.65	7,878.57	40,094.78
2010-11	21.30	9,309.11	43,704.45
2011-12	17.42	7,242.99	41,587.42
2012-13	9.44	4,299.02	45,549.58

Nepal SBI Bank Limited

Fiscal Year	Ratio (%)	Government Securities	Current Asset
2008-09	9.81	2,933.85	29,912.86
2009-10	9.89	3,720.59	37,629.43
2010-11	10.25	4,682.12	45,671.23
2011-12	5.96	3,417.98	57,343.79
2012-13	4.28	2,742.52	64,134.56

Loans and Advance to Current Asset Ratio
Annexure A5

Nepal Investment Bank Limited

Fiscal Year	Ratio (%)	Loans & Advance	Current Asset
2008-09	69.76	36,241.21	51,950.05
2009-10	71.78	40,318.31	56,169.17
2010-11	71.78	41,095.51	57,248.38
2011-12	64.35	41637.00	64,699.79
2012-13	64.37	46400.05	72,083.32

Standard Chartered Bank Limited

Fiscal Year	Ratio (%)	Loans & Advance	Current Asset
2008-09	34.26	13679.76	39,929.28
2009-10	39.80	15956.96	40,094.78
2010-11	42.16	18427.27	43,704.45
2011-12	47.07	19575.97	41,587.42
2012-13	50.12	22828.84	45,549.58

Nepal SBI Bank Ltd

Fiscal Year	Ratio (%)	Loans & Advance	Current Asset
2008-09	50.59	15131.75	29,912.86
2009-10	46.45	17480.55	37,629.43
2010-11	46.78	21365.77	45,671.23
2011-12	45.59	26142.09	57,343.79
2012-13	n	28788.15	64,134.56

Loan and Advance to Total Deposit Ratio

Annexure A6

Nepal Investment Bank Limited

Fiscal Year	Ratio (%)	Loans & Advance	Total Deposit
2008-09	77.61	36,241.21	46,698.10
2009-10	80.48	40,318.31	50,094.73
2010-11	81.96	41,095.51	50,138.12
2011-12	73.03	41637	57,010.60
2012-13	74.32	46400.05	62,428.85

Standard Chartered Bank Limited

Fiscal Year	Ratio (%)	Loans & Advance	Total Deposit
2008-09	38.70	13679.76	35,350.82
2009-10	45.35	15956.96	35,182.72
2010-11	48.49	18427.27	37,999.24
2011-12	54.43	19575.97	35,965.63
2012-13	57.84	22828.84	39,466.45

Nepal SBI Bank Limited

Fiscal Year	Ratio (%)	Loans & Advance	Total Deposit
2008-09	54.12	15131.75	27,957.22
2009-10	50.09	17480.55	34,896.42
2010-11	50.37	21365.77	42,415.44
2011-12	49.01	26142.09	53,337.26
2012-13	48.86	28788.15	58,920.46

Total Investment to Total Deposit Ratio
Annexure A7

Nepal Investment Bank Limited

Fiscal Year	Ratio (%)	Total Investment	Total Deposit
2008-09	15.85	7,399.81	46,698.10
2009-10	17.24	8,635.53	50,094.73
2010-11	14.81	7,423.11	50,138.12
2011-12	18.31	10438.49	57,010.60
2012-13	18.32	11435.27	62,428.85

Standard Chartered Bank Limited

Fiscal Year	Ratio (%)	Total Investment	Total Deposit
2008-09	57.24	20236.12	35,350.82
2009-10	56.41	19847.51	35,182.72
2010-11	45.42	17258.68	37,999.24
2011-12	36.05	12966.64	35,965.63
2012-13	32.31	12753.52	39,466.45

Nepal SBI Bank Limited

Fiscal Year	Ratio (%)	Total Investment	Total Deposit
2008-09	47.52	13286.18	27,957.22
2009-10	46.73	16305.63	34,896.42
2010-11	44.59	18911.02	42,415.44
2011-12	45.87	24463.45	53,337.26
2012-13	43.97	25906.12	58,920.46

Loans and Advance to Total Working Fund Ratio
Annexure A8

Nepal Investment Bank Limited

Fiscal Year	Ratio (%)	Loans and Advance	Total Working Fund
2008-09	68.37	36,241.21	53,010.80
2009-10	70.36	40,318.31	57,305.41
2010-11	70.42	41,095.51	58,356.83
2011-12	63.32	41637.00	65,756.23
2012-13	63.43	46400.05	73,152.15

Standard Chartered Bank Limited

Fiscal Year	Ratio (%)	Loans and Advance	Total Working Fund
2008-09	34.14	13,679.76	40,066.57
2009-10	39.68	15,956.96	40,213.32
2010-11	42.06	18,427.27	43,810.52
2011-12	46.97	19,575.97	41,677.05
2012-13	50.03	22,828.84	45,631.10

Nepal SBI Bank Limited

Fiscal Year	Ratio (%)	Loans and Advance	Total Working Fund
2008-09	50.16	15131.75	30,166.44
2009-10	45.94	17480.55	38,047.68
2010-11	46.36	21365.77	46,088.23
2011-12	45.03	26142.09	58,059.71
2012-13	44.43	28788.15	64,796.15

Investment on Government Securities to Total Working Fund Ratio
Annexure A9

Nepal Investment Bank Limited

Fiscal Year	Ratio (%)	Government Securities	Total Working Fund
2008-09	4.78	2,531.30	53,010.80
2009-10	6.83	3,911.85	57,305.41
2010-11	6.11	3,564.60	58,356.83
2011-12	8.03	5,282.96	65,756.23
2012-13	6.97	5,098.97	73,152.15

Standard Chartered Bank Limited

Fiscal Year	Ratio (%)	Government Securities	Total Working Fund
2008-09	22.59	9,050.99	40,066.57
2009-10	19.59	7,878.57	40,213.32
2010-11	21.25	9,309.11	43,810.52
2011-12	17.38	7,242.99	41,677.05
2012-13	9.42	4,299.02	45,631.10

Nepal SBI Bank Limited

Fiscal Year	Ratio (%)	Government Securities	Total Working Fund
2008-09	9.73	2,933.85	30,166.44
2009-10	9.78	3,720.59	38,047.68
2010-11	10.16	4,682.12	46,088.23
2011-12	5.89	3,417.98	58,059.71
2012-13	4.23	2,742.52	64,796.15

Investment on Shares and Debentures to Total Working Fund Ratio
Annexure A10

Nepal Investment Bank Limited

Fiscal Year	Ratio (%)	Shares and Debentures	Total Working Fund
2008-09	0.12	64.27	53,010.80
2009-10	0.12	66.65	57,305.41
2010-11	0.12	72.91	58,356.83
2011-12	0.27	174.41	65,756.23
2012-13	0.42	305.35	73,152.15

Standard Chartered Bank Limited

Fiscal Year	Ratio (%)	Shares and Debentures	Total Working Fund
2008-09	0.29	115.42	40,066.57
2009-10	0.29	115.42	40,213.32
2010-11	0.27	117.92	43,810.52
2011-12	0.28	117.92	41,677.05
2012-13	0.24	109.43	45,631.10

Nepal SBI Bank Limited

Fiscal Year	Ratio (%)	Shares and Debentures	Total Working Fund
2008-09	0.11	32.95	30,166.44
2009-10	0.10	37.02	38,047.68
2010-11	0.09	39.65	46,088.23
2011-12	0.05	30.70	58,059.71
2012-13	0.05	30.70	64,796.15

Return on Loans and Advances Ratio

Annexure A11

Nepal Investment Bank Limited

Fiscal Year	Ratio (%)	Net Profit	Loans and Advance
2008-09	2.49	900.62	36,241.21
2009-10	3.14	1,265.95	40,318.31
2010-11	2.86	1,176.64	41,095.51
2011-12	2.50	1,039.28	41637.00
2012-13	4.13	1,915.87	46400.05

Standard Chartered Bank Limited

Fiscal Year	Ratio (%)	Net Profit	Loans and Advance
2008-09	7.49	1,025.12	13,679.76
2009-10	6.81	1,085.87	15,956.96
2010-11	6.07	1,119.17	18,427.27
2011-12	5.97	1,168.97	19,575.97
2012-13	5.34	1,217.94	22,828.84

Nepal SBI Bank Limited

Fiscal Year	Ratio (%)	Net Profit	Loans and Advance
2008-09	2.31	316.37	13,679.76
2009-10	2.45	391.74	15,956.96
2010-11	2.52	464.57	18,427.27
2011-12	2.45	480.11	19,575.97
2012-13	3.38	771.47	22,828.84

Return on Total Working Fund Ratio
Annexure A12

Nepal Investment Bank Limited

Fiscal Year	Ratio (%)	Net Profit	Total Working Fund
2008-09	1.70	900.62	53,010.80
2009-10	2.21	1,265.95	57,305.41
2010-11	2.02	1,176.64	58,356.83
2011-12	1.58	1,039.28	65,756.23
2012-13	2.62	1,915.87	73,152.15

Standard Chartered Bank Limited

Fiscal Year	Ratio (%)	Net Profit	Total Working Fund
2008-09	2.56	1,025.12	40,066.57
2009-10	2.70	1,085.87	40,213.32
2010-11	2.55	1,119.17	43,810.52
2011-12	2.80	1,168.97	41,677.05
2012-13	2.67	1,217.94	45,631.10

Nepal SBI Bank Limited

Fiscal Year	Ratio (%)	Net Profit	Total Working Fund
2008-09	1.05	316.37	30,166.44
2009-10	1.03	391.74	38,047.68
2010-11	1.01	464.57	46,088.23
2011-12	0.83	480.11	58,059.71
2012-13	1.19	771.47	64,796.15

Return on Equity Ratio

Annexure A13

Nepal Investment Bank Limited

Fiscal Year	Ratio (%)	Net Profit	Total Equity Capital
2008-09	23.05	900.62	3,907.84
2009-10	27.61	1,265.95	4,585.39
2010-11	22.80	1,176.64	5,159.76
2011-12	17.18	1,039.28	6,049.94
2012-13	27.29	1,915.87	7,020.64

Standard Chartered Bank Limited

Fiscal Year	Ratio (%)	Net Profit	Total Equity Capital
2008-09	33.58	1,025.12	3052.47
2009-10	32.22	1,085.87	3369.71
2010-11	30.43	1,119.17	3677.78
2011-12	28.36	1,168.97	4122.17
2012-13	26.38	1,217.94	4617.57

Nepal SBI Bank Limited

Fiscal Year	Ratio (%)	Net Profit	Total Equity Capital
2008-09	18.47	316.37	1712.61
2009-10	15.99	391.74	2450.55
2010-11	16.13	464.57	2879.29
2011-12	15.02	480.11	3197.46
2012-13	20.31	771.47	3798.96

Total Interest Earned to Total Working Fund Ratio
Annexure A14

Nepal Investment Bank Limited

Fiscal Year	Ratio (%)	Total Interest Earned	Total working Fund
2008-09	6.16	3,267.94	53,010.80
2009-10	8.12	4,653.52	57,305.41
2010-11	9.94	5803.44	58,356.83
2011-12	9.10	5982.64	65,756.23
2012-13	8.04	5878.27	73,152.15

Standard Chartered Bank Limited

Fiscal Year	Ratio (%)	Total Interest Earned	Total working Fund
2008-09	4.71	1887.22	40,066.57
2009-10	5.08	2042.11	40,213.32
2010-11	6.21	2718.70	43,810.52
2011-12	6.89	2870.97	41,677.05
2012-13	5.56	2535.36	45,631.10

Nepal SBI Bank Limited

Fiscal Year	Ratio (%)	Total Interest Earned	Total working Fund
2008-09	4.84	1460.45	30,166.44
2009-10	5.97	2269.70	38,047.68
2010-11	6.73	3099.91	46,088.23
2011-12	6.49	3769.48	58,059.71
2012-13	6.34	4110.51	64,796.15

Total Interest paid to Total Working Fund Ratio

Annexure A15

Nepal Investment Bank Limited

Fiscal Year	Ratio (%)	Total Interest Paid	Total working Fund
2008-09	3.18	1686.97	53,010.80
2009-10	4.46	2553.85	57,305.41
2010-11	6.20	3620.34	58,356.83
2011-12	5.80	3814.41	65,756.23
2012-13	3.79	2774.79	73,152.15

Standard Chartered Bank Limited

Fiscal Year	Ratio (%)	Total Interest Paid	Total working Fund
2008-09	1.36	543.79	40,066.57
2009-10	1.43	575.74	40,213.32
2010-11	1.31	575.74	43,810.52
2011-12	2.42	1007.20	41,677.05
2012-13	1.34	611.38	45,631.10

Nepal SBI Bank Limited

Fiscal Year	Ratio (%)	Total Interest Paid	Total working Fund
2008-09	2.73	824.70	30,166.44
2009-10	3.79	1443.69	38,047.68
2010-11	4.55	2096.04	46,088.23
2011-12	4.77	2770.80	58,059.71
2012-13	3.84	2486.98	64,796.15

Total Interest Earned to Total Operating Income Ratio
Annexure A16

Nepal Investment Bank Limited

Fiscal Year	Ratio (%)	Total Interest Earned	Total Operating Income
2008-09	158.38	3,267.94	2063.31
2009-10	170.15	4,653.52	2734.93
2010-11	204.81	5803.44	2833.59
2011-12	205.60	5982.64	2909.84
2012-13	146.98	5878.27	3999.41

Standard Chartered Bank Limited

Fiscal Year	Ratio (%)	Total Interest Earned	Total Operating Income
2008-09	90.21	1887.22	2092.13
2009-10	88.88	2042.11	2297.71
2010-11	110.46	2718.7	2461.26
2011-12	108.81	2870.97	2638.45
2012-13	91.31	2535.36	2776.72

Nepal SBI Bank Limited

Fiscal Year	Ratio (%)	Total Interest Earned	Total Operating Income
2008-09	176.24	1460.45	828.67
2009-10	205.06	2269.70	1106.83
2010-11	218.14	3099.91	1421.06
2011-12	251.81	3769.48	1496.94
2012-13	187.10	4110.51	2196.90

Credit Risk Ratio
Annexure A17

Nepal Investment Bank Limited

Fiscal Year	Ratio (%)	Loans and Advance	Total Asset
2008-09	68.37	36,241.21	53,010.80
2009-10	70.36	40,318.31	57,305.41
2010-11	70.42	41,095.51	58,356.83
2011-12	63.32	41637.00	65,756.23
2012-13	63.43	46400.05	73,152.15

Standard Chartered Bank Limited

Fiscal Year	Ratio (%)	Loans and Advance	Total Asset
2008-09	34.14	13,679.76	40,066.57
2009-10	39.68	15,956.96	40,213.32
2010-11	42.06	18,427.27	43,810.52
2011-12	46.97	19,575.97	41,677.05
2012-13	50.03	22,828.84	45,631.10

Nepal SBI Bank Limited

Fiscal Year	Ratio (%)	Loans and Advance	Total Asset
2008-09	50.16	15131.75	30,166.44
2009-10	45.94	17480.55	38,047.68
2010-11	46.36	21365.77	46,088.23
2011-12	45.03	26142.09	58,059.71
2012-13	44.43	28788.15	64,796.15

Liquidity Risk Ratio
Annexure A18

Nepal Investment Bank Limited

Fiscal Year	Ratio (%)	Cash & Bank Balance	Total Deposit
2008-09	16.96	7,918.00	46,698.10
2009-10	13.61	6,815.89	50,094.73
2010-11	16.24	8,140.37	50,138.12
2011-12	20.70	11,803.75	57,010.60
2012-13	21.66	13,519.49	62,428.85

Standard Chartered Bank Limited

Fiscal Year	Ratio (%)	Cash & Bank Balance	Total Deposit
2008-09	14.69	5,192.71	35,350.82
2009-10	7.19	2,530.07	35,182.72
2010-11	19.10	7,256.68	37,999.24
2011-12	23.61	8,492.27	35,965.63
2012-13	23.85	9,414.06	39,466.45

Nepal SBI Bank Limited

Fiscal Year	Ratio (%)	Cash & Bank Balance	Total Deposit
2008-09	4.21	1,176.44	27,957.22
2009-10	9.86	3,441.26	34,896.42
2010-11	11.50	4,877.83	42,415.44
2011-12	10.66	5,686.63	53,337.26
2012-13	13.33	7,852.33	58,920.46

Schedule 1

Calculation of Mean, Standard Deviation and Coefficient of Variation

Fiscal Year	Ratio (X_1)	$(X_1 - \overline{X_1})^2$
2008-09	1.08	0.000100
2009-10	1.09	0.000000
2010-11	1.09	0.000000
2011-12	1.1	0.000100
2012-13	1.1	0.000100
Total	**5.46**	**0.000300**
Mean	**1.09**	

1. Mean $(\overline{X_1})$ $= \sum X_1/N$
   $= 5.46/5$
   $= 1.09$

2. Standard Deviation $\sqrt{\sum(X_1 - \overline{X_1})^2/n}$

   $= \sqrt{0.000300/5}$

   $= \sqrt{.00006}$

   $= 0.00775$

3. Coefficient of Variation $= (S.D./ Mean) \times 100$
   $= (0.00775/1.09) \times 100$
   $= 0.71$

Schedule 2

CALCULATION OF GROWTH RATIO

Let,

D_n = Data in the nth year

D_o = Data in the initial year

g = Growth rate

n = Number of years of study = 5

Then we have,

$D_n = D_o (1+g)^{n-1}$

Growth Ratio of Total Deposit of NIBL:

Here,

Dn = Total Deposit in 2012-13= 62,428.85

Do = Total Deposit in 2008-09= 46,698.10

(Amount in million)

Then we have,

$$D_n = D_o (1+g)^{n-1}$$

or, $62,428.85 = 46,698.10 (1+g)^{5-1}$

or, $(1+g)^4 = 1.3369$

or, $(1+g) = (1.3369)^{1/4}$

or, $g = 1.0753$

or, $g = 7.53\%$

Similarly, Growth Ratio of Total Deposit of SCB and NSBI Bank are calculated.

Growth Ratio of Loans and Advances of SCB:

Here,

Dn = Loan and Advance in 2012-13 = 22,828.84

Do = Loan and Advance in 2008-09 = 13,679.76

(Amount in Million)

Then we have,

$$D_n = D_o (1+g)^{n-1}$$

or,　22,828.84 = 13,679.76 $(1+g)^{5-1}$

or,　$(1+g)^4 = 1.6688$

or,　$(1+g) = (1.6688)^{1/4}$

or,　$g = 1.1366-1$

or,　$g = 13.66\%$

Similarly, Growth Ratio of Loans and Advances of NIBL and NSBI Bank are calculated.

Growth Ratio of Total Investment of NSBI Bank:

Here,

Dn = Total Investment in 2012-13 = 25906.12

Do = Total Investment in 2008-09 = 13286.18

(Amount in Million)

Then we have,

$$D_n = D_o (1+g)^{n-1}$$

or,　25906.12 = 13286.18 $(1+g)^{5-1}$

or,　$(1+g)^4 = 1.9498$

or,　$(1+g) = (1.9498)^{1/4}$

or,　$g = 1.1817-1$

or,　$g = 18.17\%$

Similarly, Growth Ratio of Total Investment of NIBL and SCB are calculated.

Growth Ratio of Net Profit of NIBL:

Here,

Dn = Net Profit in 2012-13 = 1,915.87

Do = Net Profit in 2008-09 = 900.62

(Amount in Million)

Then we have,

$$D_n = D_o(1+g)^{n-1}$$

or,　1,915.87 = 900.62 $(1+g)^{5-1}$

or,　$(1+g)^4 = 2.1273$

or,　$(1+g) = (2.1273)^{1/4}$

or,　$g = 1.2080-1$

or,　$g = 20.77\%$

Similarly, Growth Ratio of Net Profit of SCB and NSBI Bank are calculated.

TREND ANALYSIS

Schedule 3

Trend Analysis of Loan & Advance to Total Deposit of NIBL

Fiscal Year	Ratio (y)	x = t- 2010-11	x2	xy	Yc = a+bx
2008-09	77.61	(2.00)	4.00	(155.22)	80.29
2009-10	80.48	(1.00)	1.00	(80.48)	78.88
2010-11	81.96	-	-	-	77.48
2011-12	73.03	1.00	1.00	73.03	76.08
2012-13	74.32	2.00	4.00	148.64	74.67
Total	**387.40**			**10**	**(14.03)**

$a = \sum Y/N = 77.48$
$b = \sum xy/\sum x2 = (1.403)$

Projected Trend values for the Next Two Years

Fiscal Year	x = t- 2010-11	Yc = a+bx
2013-14	3	73.27
2014-15	4	71.87

Schedule 4

Trend Analysis of Total Investment to Total Deposit of NIBL

Fiscal Year	Ratio (y)	x = t- 2010-11	x2	xy	Yc = a+bx
2008-09	15.85	(2.00)	4.00	(31.7)	15.704

2009-10	17.24	(1.00)	1.00	(17.24)	16.305
2010-11	14.81	-	-	-	16.906
2011-12	18.31	1.00	1.00	18.31	17.507
2012-13	18.32	2.00	4.00	36.64	18.108
Total	**84.53**		**10**	**6.01**	

a = ∑Y/N = 16.906

b = ∑xy/∑x2 = 0.601

Projected Trend values for the Next Two Years

Fiscal Year	x = t- 2010-11	Yc = a+bx
2013-14	3	18.709
2014-15	4	19.31

Schedule 5

Trend Analysis of Loan & Advance to Total Deposit of SCB

Fiscal Year	Ratio (y)	x = t- 2010-11	x2	xy	Yc = a+bx
2008-09	38.7	(2.00)	4.00	(77.4)	39.49
2009-10	45.35	(1.00)	1.00	(45.35)	44.23
2010-11	48.49	-	-	-	48.96
2011-12	54.43	1.00	1.00	54.43	53.70
2012-13	57.84	2.00	4.00	115.68	58.43
Total	**244.81**		**10**	**47.36**	

a = ∑Y/N = 48.962

b = ∑xy/∑x² = 4.736

Projected Trend values for the Next Two Years

Fiscal Year	x = t- 2010-11	Yc = a+bx
2013-14	3	63.17
2014-15	4	67.91

Schedule 6

Trend Analysis of Total Investment to Total Deposit of SCB

Fiscal Year	Ratio (y)	x = t- 2010-11	x2	xy	Yc = a+bx
2008-09	57.24	(2.00)	4.00	-114.48	59.53
2009-10	56.41	(1.00)	1.00	-56.41	52.51
2010-11	45.42	-	-	-	45.49
2011-12	36.05	1.00	1.00	36.05	38.46
2012-13	32.31	2.00	4.00	64.62	31.44
Total	**227.43**		**10**	**-70.22**	

$a = \sum Y/N = 45.486$
$b = \sum xy/\sum x^2 = -7.022$

Projected Trend values for the Next Two Years

Fiscal Year	x = t- 2010-11	Yc = a+bx
2013-14	3	24.42
2014-15	4	17.40

Schedule 7

Trend Analysis of Loan & Advance to Total Deposit of NSBI Bank

Fiscal Year	Ratio (y)	x = t-2010-11	x2	xy	Yc = a+bx
2008-09	54.12	(2.00)	4.00	-108.24	52.81
2009-10	50.09	(1.00)	1.00	-50.09	51.65
2010-11	50.37	-	-	-	50.49
2011-12	49.01	1.00	1.00	49.01	49.33
2012-13	48.86	2.00	4.00	97.72	48.17
Total	**252.45**			**10**	**-11.6**

$a = \sum Y/N = 50.49$
$b = \sum xy/\sum x^2 = -1.16$

Projected Trend values for the Next Two Years

Fiscal Year	x = t- 2010-11	Yc = a+bx
2013-14	3	47.01
2014-15	4	45.85

Schedule 8

Trend Analysis of Total Investment to Total Deposit of NSBI Bank

Fiscal Year	Ratio (y)	x = t-2010-11	x2	xy	Yc = a+bx
2008-09	47.52	(2.00)	4.00	-95.04	47.328
2009-10	46.73	(1.00)	1.00	-46.73	46.532
2010-11	44.59	-	-	-	45.736
2011-12	45.87	1.00	1.00	45.87	44.94
2012-13	43.97	2.00	4.00	87.94	44.144
Total	**228.68**			**10**	**-7.96**

$a = \sum Y/N = 45.736$
$b = \sum xy/\sum x^2 = -0.796$

Projected Trend values for the Next Two Years

Fiscal Year	x = t- 2010-11	Yc = a+bx
2013-14	3	43.348
2014-15	4	42.552

COEFFICIENT OF CORRELATION ANALYSIS

Schedule 9

Coefficient of Correlation between Deposit and Loan & Advance of NIBL

Fiscal Year	Deposit (X)	Loan & Adv. (Y)	$x = X - \overline{X}$	x^2	$y = Y - \overline{Y}$	y^2	xy
2008-09	46,698.10	36,241.21	-6,575.98	43,243,512.96	-4,897.21	23,982,665.78	32,203,955.02
2009-10	50,094.73	40,318.31	-3,179.35	10,108,266.42	-820.11	672,580.41	2,607,416.73
2010-11	50,138.12	41,095.51	-3,135.96	9,834,245.12	-42.91	1,841.27	134,564.04
2011-12	57,010.60	41637.00	3,736.52	13,961,581.71	498.58	248,582.02	1,862,954.14
2012-13	62,428.85	46400.05	9,154.77	83,809,813.75	5,261.63	27,684,750.26	48,169,012.48
Total	266,370.40	205,692.08		160,957,419.97		52,590,419.74	84,977,902.40
Mean	53,274.08	41,138.42					

Coefficient of Correlation (r) $=$ $r = \dfrac{\Sigma xy}{\sqrt{\Sigma x^2}\ \sqrt{\Sigma y^2}}$ $=$ $\dfrac{84977902.40}{\sqrt{160957419.97}\ \sqrt{52590419.74}}$

Coefficient of Correlation (r) $=$ 0.9236

r^2 $=$ 0.8531

Probable Error (P.E. r) $=$ $\dfrac{(1-r^2) \times 0.6745}{\sqrt{N}}$ $=$ 0.0443

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$$6 \text{ P.E. r} = 0.2658$$

Schedule 10

Coefficient of Correlation between Deposit and Total Investment of NIBL

Fiscal Year	Deposit (X)	Total Invest (Y)	$x = X - \overline{X}$	x^2	$y = Y - \overline{Y}$	y^2	xy
2008-09	46,698.10	7,399.81	(6,575.98)	43,243,512.96	(1,666.63)	2,777,662.22	10,959,738.70
2009-10	50,094.73	8,635.53	(3,179.35)	10,108,266.42	(430.91)	185,685.15	1,370,020.07
2010-11	50,138.12	7,423.11	(3,135.96)	9,834,245.12	(1,643.33)	2,700,540.06	5,153,423.42
2011-12	57,010.60	10438.49	3,736.52	13,961,581.71	1,372.05	1,882,515.71	5,126,684.79
2012-13	62,428.85	11435.27	9,154.77	83,809,813.75	2,368.83	5,611,346.09	21,686,075.51
Total	266,370.40	45,332.21		160,957,419.97		13,157,749.25	44,295,942.49
Mean	53274.08	9066.442					

Coefficient of Correlation (r) $= r = \dfrac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}} = \dfrac{44,295,942.49}{\sqrt{160,957,419.97}\ \sqrt{13,157,749.25}}$

Coefficient of Correlation (r) $= 0.9625$

$r2 = 0.9265$

Probable Error (P.E. r) = $\underline{(1-r^2)}$ x 0.6745 /√N= 0.0222

6 P.E. r = 0.1331

Schedule 11

Coefficient of Correlation between Deposit and Loan & Advance of SCB

Fiscal Year	Deposit (X)	Loan & Adv. (Y)	$x=X - \overline{X}$	x^2	$y = Y - \overline{Y}$	y^2	xy
2008-09	35,350.82	13,679.76	(1,442.15)	2,079,796.62	(4,414.00)	19,483,396.00	6,365,650.10
2009-10	35,182.72	15,956.96	(1,610.25)	2,592,905.06	(2,136.80)	4,565,914.24	3,440,782.20
2010-11	37,999.24	18,427.27	1,206.27	1,455,087.31	333.51	111,228.92	402,303.11
2011-12	35,965.63	19,575.97	(827.34)	684,491.48	1,482.21	2,196,946.48	(1,226,291.62)
2012-13	39,466.45	22,828.84	2,673.48	7,147,495.31	4,735.08	22,420,982.61	12,659,141.68
Total	183,964.86	90,468.80		13,959,775.78		22,420,982.61	21,641,585.46
Mean	36,792.97	18,093.76					

Coefficient of Correlation (r) = $r = \dfrac{\Sigma xy}{\sqrt{\Sigma x^2}\ \sqrt{\Sigma y^2}}$ = $\dfrac{21,641,585.46}{\sqrt{13,959,775.78}\ \sqrt{22,420,982.61}}$

Coefficient of Correlation (r) = 1

r^2 = 1

Probable Error (P.E. r)   = $\underline{(1-r^2)}$ x 0.6745 /√N=   0

6 P.E. r   =   0

Schedule 12

Coefficient of Correlation between Deposit and Total Investment of SCB

Fiscal Year	Deposit (X)	Total Invest (Y)	x=X - $\overline{X}$	x^2	y = Y - $\overline{Y}$	y^2	xy
2008-09	35,350.82	20,236.12	(1,442.15)	2,079,796.62	3,623.63	13,130,694.38	(5,225,818.00)
2009-10	35,182.72	19,847.51	(1,610.25)	2,592,905.06	3,235.02	10,465,354.40	(5,209,190.95)
2010-11	37,999.24	17,258.68	1,206.27	1,455,087.31	646.19	417,561.52	779,479.61
2011-12	35,965.63	12,966.64	(827.34)	684,491.48	(3,645.85)	13,292,222.22	3,016,357.54
2012-13	39,466.45	12,753.52	2,673.48	7,147,495.31	(3,858.97)	14,891,649.46	(10,316,879.12)
Total	183,964.86	83,062.47		13,959,775.78		52,197,481.98	(16,956,050.92)
Mean	36,792.97	16,612.49					

Coefficient of Correlation (r)   = $r = \dfrac{\Sigma xy}{\sqrt{\Sigma x^2}\,\sqrt{\Sigma y^2}}$ = $\dfrac{-16,956,050.92}{\sqrt{13,959,775.78}\sqrt{52,197,481.98}}$

Coefficient of Correlation (r)   =   -0.6281

$$r^2 \quad = \quad 0.3946$$

Probable Error (P.E. r) $\quad = \quad$ (1-r^2) x 0.6745 / √N $\quad = 0.4084$

6 P.E. r $\quad = \quad$ 1.0958

Schedule 13

Coefficient of Correlation between Deposit and Loan & Advance of NSBI Bank

Fiscal Year	Deposit (X)	Loan & Adv. (Y)	$x = X - \overline{X}$	x^2	$y = Y - \overline{Y}$	y^2	xy
2008-09	27,957.22	15,131.75	(15,548.14)	241,744,657.46	(6,649.91)	44,221,303.01	103,393,731.67
2009-10	34,896.42	17,480.55	(8,608.94)	74,113,847.92	(4,301.11)	18,499,547.23	37,027,997.92
2010-11	42,415.44	21,365.77	(1,089.92)	1,187,925.61	(415.89)	172,964.49	453,286.83
2011-12	53,337.26	26,142.09	9,831.90	96,666,257.61	4,360.43	19,013,349.78	42,871,311.72
2012-13	58,920.46	28,788.15	15,415.10	237,625,308.01	7,006.49	49,090,902.12	108,005,744.00
Total	217,526.80	108,908.31		651,337,996.61		130,998,066.64	291,752,072.14
Mean	43,505.36	21,781.66					

Coefficient of Correlation (r) $\quad = \quad r = \dfrac{\Sigma xy}{\sqrt{\Sigma x^2}\,\sqrt{\Sigma y^2}} \quad = \quad \dfrac{291{,}752{,}072.14}{\sqrt{651{,}337{,}996.61}\ \sqrt{130{,}998{,}066.64}}$

Coefficient of Correlation (r) $\quad = \quad$ 0.9988

$$r^2 \quad = \quad 0.9976$$

Probable Error (P.E. r) $\quad = \quad (1-r^2) \times 0.6745 / \sqrt{N} = \quad 0.0007238$

6 P.E. r $\quad = \quad 0.0043$

Schedule 14

Coefficient of Correlation between Deposit and Total Investment of NSBI Bank

Fiscal Year	Deposit (X)	Total Invest (Y)	$x = X - \overline{X}$	x^2	$y = Y - \overline{Y}$	y^2	xy
2008-09	27,957.22	13286.18	(15,548.14)	241,744,657.46	(6,488.30)	42098036.89	100880996.8
2009-10	34,896.42	16305.63	(8,608.94)	74,113,847.92	(3,468.85)	12032920.32	29863121.52
2010-11	42,415.44	18911.02	(1,089.92)	1,187,925.61	(863.46)	745563.1716	941102.3232
2011-12	53,337.26	24463.45	9,831.90	96,666,257.61	4,688.97	21986439.66	46101484.14
2012-13	58,920.46	25906.12	15,415.10	237,625,308.01	6,131.64	37597009.09	94519843.76
Total	**217,526.80**	**98872.40**	**174021.44**	**651337996.61**		**114459969.13**	**272306548.51**
Mean	**43,505.36**	**19774.48**					

Coefficient of Correlation (r) $\quad = \quad r = \dfrac{\Sigma xy}{\sqrt{\Sigma x^2}\,\sqrt{\Sigma y^2}} \quad = \quad \dfrac{272306548.51}{\sqrt{651337996.61}\ \sqrt{114459969.13}}$

Coefficient of Correlation (r)   =   0.9973

r^2 =   0.9946

Probable Error (P.E. r)   = $(1-r^2) \times 0.6745 / \sqrt{N}$ =   0.0016236

6 P.E. r =   0.0097

Nepal Investment Bank Ltd.

Comparative Balance Sheet

<div align="right">(Rs. in '000)</div>

	FY	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013
1	Share Capital	2,407,069	2,409,098	3,011,372	3,766,155	4,144,808
2	Reserves and Funds	1,500,771	2,176,295	2,148,388	2,283,786	2,875,836
3	Debentures & Bonds	1,050,000	1,050,000	1,050,000	1,050,000	800,000
4	Borrowings	38,800	37,315	280,764	567,579	310,566
5	Deposits Liabilities	46,698,100	50,094,725	50,138,122	57,010,604	62,428,845
6	Bills Payable	82,338	38,144	8,250	2,977	2,888
7	Proposed Dividend	481,414	602,274	602,274	150,646	942,002
8	Income Tax Liabilities	38,297	37,195	-	-	-
9	Other Liabilities	714,015	860,367	1,117,657	924,484	1,647,209
	Total	**53,010,803**	**57,305,413**	**58,356,828**	**65,756,232**	**73,152,155**
1	Cash Balance	1,833,462	1,525,442	1,718,666	1,963,969	2,172,985
2	Balance with Nepal Rastra Bank	4,411,133	3,237,217	4,009,460	8,502,694	8,752,591
3	Balance with Banks/Financial Institutions	1,673,408	2,053,231	2,412,245	1,337,088	2,326,512
4	Money at Call and Short Notice	-	-	150,000	205,363	267,400
5	Investments	7,399,812	8,635,530	7,423,107	10,438,487	11,435,268
6	Loans, Advances and Bills Purchased	36,241,207	40,318,308	41,095,515	41,636,999	46,400,054
7	Fixed Assets	1,060,752	1,136,247	1,108,448	1,056,439	1,068,837
8	Non-Banking Assets	375	-	-	-	-
9	Other Assets	390,653	399,438	439,388	615,193	728,508

	Total	53,010,803	57,305,413	58,356,828	65,756,232	73,152,155

Nepal Investment Bank Ltd.
Comparative Profit & Loss Statement

(Rs. in '000)

	FY	2008/2009	2009/2010	2010/2
1	Interest Income	3,267,941	4,653,521	5,80
2	Interest Expenses	(1,686,973)	(2,553,847)	(3,620
	Net Interest Income	**1,580,968**	**2,099,674**	**2,18**
3	Commission & Discount	183,042	242,886	26
4	Other Operating Income	113,974	168,313	15
5	Exchange Profit	185,327	224,057	22
	Total Operating Income	**2,063,311**	**2,734,930**	**2,83**
6	Staff Expenses	(225,721)	(279,851)	(326
7	Other Operating Expenses	(360,533)	(433,596)	(456
8	Exchange Loss	-	-	
0	Operating Profit Before Prov. for Possible Loss	1,477,056	2,021,482	2,05
9	Provision for Possible Loss	(166,201)	(93,057)	(267
	Operating Profit	**1,310,855**	**1,928,425**	**1,78**
10	Non - Operating Income/ Loss	2,953	10,606	
11	Loss Provision Written Back	114,653	50,000	10
	Profit from Regular Operations	**1,428,461**	**1,989,032**	**1,89**
12	Profit/(Loss) from Extra-Ordinary Activities	-	-	(5
	Net Profit after considering all activities	**1,428,461**	**1,989,032**	**1,84**
13	Provision for Staff Bonus	(129,860)	(180,821)	(167
14	Income Tax Provision	-	-	
	Current Year's	(389,580)	(532,899)	(50
	Previous Year's	7,478	-	
	Deferred Tax Income / (Expense)	(15,879)	(9,363)	(1
	Net Profit /(Loss)	**696,732**	**1,265,950**	**1,17**

Standard Chartered Bank Ltd.
Comparative Balance Sheet

(Rs. in '000)

	FY	2008/2009	2009/2010	2010/2011
1	Share Capital	1,397,950	1,608,256	1,610,168
2	Reserves and Funds	1,654,520	1,761,453	2,067,609
3	Debentures & Bonds	-	-	-
4	Loans and Borrowings	300,000	-	350,000
5	Deposit Liability	35,350,824	35,182,721	37,999,242
6	Bills Payable	72,942	89,219	65,966
7	Proposed Dividend	465,983	769,166	805,084
8	Income Tax Liabilities	4,262	-	-
9	Other Liabilities	820,089	802,503	912,450
	Total	**40,066,571**	**40,213,320**	**43,810,520**

1	Cash Balance	463,346	509,031	610,691
2	Balance with Nepal Rastra Bank	1,851,132	819,509	1,638,277
3	Balance with Banks/Financial Institutions	822,685	600,767	726,828
4	Money at Call and Short Notice	2,055,549	1,669,460	4,280,888
5	Investments	20,236,121	19,847,511	17,258,682
6	Loans, Advances and Bills Purchased	13,679,757	15,956,955	18,427,270
7	Fixed Assets	137,293	118,540	106,071
8	Non-Banking Assets	-	-	-
9	Other Assets	820,687	691,547	761,812
	Total	**40,066,571**	**40,213,320**	**43,810,520**

<div align="center">

Standard Chartered Bank Ltd.
Comparative Profit & Loss Statement

</div>

(Rs. in '000)

	FY	2008/2009	2009/2010	2010
1	Interest Income	1,887,221	2,042,109	2,71
2	Interest Expenses	543,787	575,741	1,00
	Net Interest Income	**1,343,435**	**1,466,369**	**1,71**
3	Commission & Discount	288,031	338,298	31
4	Other Operating Income	33,191	34,479	3
5	Exchange Fluctuation Income	427,468	458,564	39
	Total Operating Income	**2,092,125**	**2,297,710**	**2,46**
6	Staff Expenses	253,056	312,964	36
7	Other Operating Expenses	276,327	295,305	30
8	Exchange fluctuation Loss	-	-	
	Operating Profit Before Prov for Possible Loss	**1,562,743**	**1,689,441**	**1,79**
9	Provision for Possible Loss	56,635	76,974	8
	Operating Profit	**1,506,108**	**1,612,467**	**1,70**
10	Non - Operating Income/(Expenses)	22,098	36,268	
11	Loan Loss Provision Written Back	101,075	58,293	6
	Profit from Regular Operations	**1,629,282**	**1,707,028**	**1,78**
12	Income/(Expenses) from Extra Ordinary Activities	(15,356)	(17,024)	(2
	Net Profit after considering all Activities	**1,613,926**	**1,690,004**	**1,75**
13	Provision for Staff Bonus	146,721	153,637	15
14	Provision for Income Tax	442,091	450,496	47
	Net Profit /(Loss)	**1,025,114**	**1,085,872**	**1,11**
	Accumulated Profit up to Previous Year	383,288	239,495	2
	This Year's Profit	1,025,115	1,085,872	1,11

	Total	**1,408,402**	**1,325,366**	1,14

NSBI Bank Ltd.
Comparative Balance Sheet

(Rs. in '000)

	FY	2008/2009	2009/2010	2010/2011
1	Share Capital	1,224,338	1,861,324	2,102,966
2	Reserves and Funds	488,268	589,229	776,326
3	Debentures & Bonds	200,000	200,000	200,000
4	Borrowings	-	-	-
5	Deposit Accounts	27,957,220	34,896,424	42,415,443
6	Bills Payable	62,947	72,368	80,685
7	Proposed Dividend and Dividend Payable	18,411	83,080	93,465
8	Income Tax Liabilities	-	-	-
9	Other Liabilities	215,253	345,252	419,347
	Total	**30,166,439**	**38,047,679**	**46,088,233**
1	Cash Balance	652,027	815,679	1,007,688
2	Balance with Nepal Rastra Bank	444,138	1,842,802	2,330,927
3	Balance with Banks/Financial Institutions	80,273	782,779	1,539,210
4	Money at Call and Short Notice	-	-	-
5	Investments	13,286,181	16,305,632	18,911,021
6	Loans, Advances and Bills Purchased	15,131,747	17,480,548	21,365,771
7	Fixed Assets	253,580	418,244	417,002
8	Non-Banking Assets	-	-	-
9	Other Assets	318,489	401,992	516,612
	Total	**30,166,439**	**38,047,679**	**46,088,233**

NSBI Bank Ltd.
Comparative Profit & Loss Statement

(Rs. in '000)

	FY	2008/ 2009	2009/ 2010	2010/ 2011	2011/ 2012	2012/ 2013
1	Interest Income	1,460, 445	2,269, 704	3,104, 231	3,769, 483	4,110, 514
2	Interest Expenses	824,7 00	1,443, 693	2,096, 038	2,770, 798	2,486, 978
	Net Interest Income	**635,7 45**	**826,0 10**	**1,008, 193**	**998,6 84**	**1,623, 535**
3	Commission & Discount	78,83 6	131,6 92	247,1 64	255,3 51	313,6 96
4	Other Operating Income	52,79 0	78,79 6	95,17 2	141,7 61	157,7 55
5	Exchange Fluctuation Income	61,29 4	70,32 8	70,53 2	101,1 38	101,9 15
	Total Operating Income	**828,6 66**	**1,106, 827**	**1,421, 063**	**1,496, 936**	**2,196, 902**
6	Staff Expenses	121,9 89	130,3 36	255,4 30	289,1 53	416,5 60
7	Other Operating Expenses	223,9 65	343,8 50	445,0 72	456,1 26	477,2 46
8	Exchange Fluctuation Loss	-	-	-	-	-
	Operating Profit Before Prov for Possible Loss	**482,7 11**	**632,6 40**	**720,5 60**	**751,6 56**	**1,303, 095**
9	Provision for Possible Loss	40,34 5	62,35 0	46,30 8	78,01 1	128,0 40
	Operating Profit	**442,3 66**	**570,2 90**	**674,2 52**	**673,6 44**	**1,175, 054**
10	Non - Operating Income/(Expenses)	2,516	2,552	3,113	2,182	(287)
11	Loan Loss Provision Written Back	198,6 72	56,62 1	179,1 22	91,69 5	43,86 1
	Profit from Regular Operations	**643,5 55**	**629,4 64**	**856,4 88**	**767,5 22**	**1,218, 628**
12	Profit/(Loss) from Extra-Ordinary Activities	(156, 220)	(37,2 26)	(137, 672)	(12,2 03)	2,326
	Profit after considering all activities	**487,3 34**	**592,1 98**	**718,8 15**	**755,3 18**	**1,220, 954**
13	Provision for Staff Bonus	44,30 3	53,83 6	65,34 6	68,66 5	110,9 95

1 4	Provision for Income Tax	126,6 58	146,6 20	188,9 03	206,5 48	338,4 87
	Current Year's	133,1 23	183,0 15	206,5 31	229,0 51	363,5 30
	Deffered tax	2,582	(28,3 95)	(4,92 8)	729	565
	Previous Year's	(9,04 8)	(7,99 9)	(12,6 99)	(23,2 33)	(25,6 08)
	Net Profit /(Loss)	**316,3 73,**	**391,7 42**	**464,5 64**	**480,1 05**	**771,4 71**