

**LIQUIDITY MANAGEMENT OF COMMERCIAL
BANKS IN NEPAL**

**(WITH REFERENCE TO GLOBALIME BANK LTD AND STANDARD CHARTERED BANK NEPAL
LTD)**

A THESIS

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RECOMMENDATION

This is to certify that the thesis:

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BANKS IN NEPAL

(WITH REFERENCE TO GLOBALIME BANK LTD AND STANDARD CHARTERD BANK NEPAL LTD)

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and found the thesis to be original work of the student and written According to the prescribed format. We recommend the thesis to be accepted as partial fulfillment of the requirement for Master's Degree in Business Studies (M.B.S.)

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DECLARATION

I hereby declare that the work reported in this thesis entitled " **Liquidity Management Of Commercial Banks In Nepal (With Reference To Global Ime bank Ltd And Standard Charterd Bank Nepal Ltd)**" submitted to Nepal Commerce Campus, Faculty of Management, Tribhuvan University, is my original work done in the form of partial fulfillment of the requirements of the Master's Degree in Business Studies (MBS) under the supervision and guidance of Thesis Supervisor Mr. **Suraj Tandan** of Nepal Commerce Campus, Tribhuvan University.

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ABBREVIATIONS

*	Multiplication
Adj	Adjusted
ATM	Automated Teller Machine
BAFIA	Banking and Financial Institution Act
Contd	Continued
CV	Coefficient of Variance
Dr.	Doctor
e.g	For Example
ed	Edition
Etal	And others
Etc	Etcetera
FOM	Faculty of Management
FY	Fiscal Year
GIBL	Global IME Bank Limited
i.e	That is
JVB	Joint Venture Bank
No	Number
S.D	Standard Deviation
SCBNL	Standard Chartered Bank Nepal Limited
T.U	Tribhuvan University

CHAPTER-I

INTRODUCTION

1.1 Introduction

Nepal is a landlocked country with India in the southern, eastern, western sides and China in northern sides. Nepal has a great variation in languages (70 spoken), religions, ethnic groups (more than 61), geographic structures, occupation, culture and traditions - but a strong unity among these variations. Hence, we can find unity in diversity in Nepal. The country has many ever flowing rivers, thick tropical jungles, greatest mountain ranges and different climatic conditions. Owing to its diversity, we find a special eco-system here. Various species of animals, rare in the world such as the one horned, rhino are also found here. Nepal has an astonishing collection of sightseeing and adventurous opportunities. The country is home to different kinds of butterflies & of birds also. Nepal has a rich culture, tradition and numerous festivals. Different kinds of festivals are celebrated throughout the year, based on the customs & beliefs in a particular area. The country is 1, 47,181sq. km in area and the capital city is Kathmandu. Agriculture is the primary economic backbone of Nepal. Farming is the occupation of more than 75% people in Nepal.

Financial institution can be considered as the catalyst to the economic growth of a country. The development process of a country involves the mobilization and deployment of resources. Development of trade, commerce and industry are the prime requisite for the attainment of the economic political and social goals. To fulfill the purpose of planning, financial functions more often dominate the other functions. "There is always lack of finance in underdeveloped economy because natural resources are either underutilized or unutilized in productive sectors or even other purposes i.e. social welfare and so on. Likewise, underdeveloped countries are not deficient in land, water, mineral, forest or power resources, though they may be untapped; constituting only potential resources." This country so in these countries for the rapid development of the economy, there should be proper mobilization of resources. Due to various difficulties or even ignorance of the people, such resources have not been properly utilized. Hoarding could be one of the reasons for this. So, banks and other financial institutions play a vital role to encourage thrift and discourage hoardings by mobilizing the resources and removing the habit of hoarding. They pursue rapid

economic growth, developing the banking habit among the people, collecting the small-scattered resources in one bulk and utilizing them in future productive purposes and rendering other valuable services to the country. Thus, this gives the individuals an opportunity to borrow funds against future income, which may improve the economic well-being of the borrower. Financial institution in the economy plays a crucial role in the process of economic growth of the country. Financial institution refers to a business concern which is mainly confined to finance for the development of the trade, commerce and industry. Trade, commerce and industry are the prime factors of the economic development. Bank is a financial institution, which primarily deals in borrowing and lending. Banking is a vital part of national economy and vehicle for the mobilizations of economy's financial resources and extension of credit to the business and service enterprises.

Commercial banks are the heart of the financial system. They hold the deposits of individuals, government establishment and business units. They make funds available through their lending and investing activities to borrowers: individuals, business firms and Government establishments. In doing so, they assist both the flow of goods and services from the producers to consumers and the financial activities of the government. They provide a large portion of medium of exchange and they are the media through which monetary policy is affected. These facts show that the commercial banking system of a nation is very important to the functioning of its economy.

Nepalese Financial System and Financial Service

Nepal Bank Limited (NBL) established in 1994 B.S was the first commercial bank in Nepal. Following the establishment of Nepal Rastra Bank (NRB), the central bank of the country in 1956, was a major step towards the evolution and generalization of Nepalese financial system.

The institutional network and volume of operations of the financial system has been expanded and diversified with a number of commercial banks which were five in 1990 and are 30 at the present. Similarly a number of other financial institutions came into operation rapidly. The banking system comprises one central bank and 30 commercial banks, the non-bank financial institutions comprise development banks, rural development banks, finance companies, financial cooperatives, non-governmental financial organizations, contractual saving institutions like Employees Provident Fund, Citizen Investment Trust and Insurance Companies, Postal saving offices, and Nepal Stock Exchange. In addition, there are other

quasi-financial institutions such as the Deposit Insurance and Credit Guarantee Corporation, Rural Housing Finance Company etc.

After the openness and liberalization in the financial system, the establishment of banks and financial institutions tremendously increased. The establishment process, in fact took an aggressive move. This type of development can be observed also in insurance services. The institutional network and volume of operations of insurance companies has expanded and diversified enough with the number of companies going up from four in 1990 to 18 at present. Service sector is a major contributor on Gross Domestic Product (more than 50 percent in and average) and financial service is a major component of this sector. Financial services sector consists basically banking service and insurance service. Such services in Nepal are very important because they provide many opportunities for efficient allocation of resources, utilization, promotion of economic activities, and fair competition and increase in the foreign direct investment. Liberalization of trade in financial serves has many positive advantages like economic growth, introduction of advanced financial practices and market efficiency (NepalRastra Bank Samachar; 2066:74).

The concept of financial institutions in Nepal was introduced when the first commercial bank, Nepal Bank Limited (NBL), was established as a semi-government organization. In Baisakh 14, 2013 B.S., the first central bank named as Nepal Rastra Bank was established with an objective of supervising, protecting and directing the functions of commercial banking activities. Consequently, another commercial bank fully owned by government, named as Rastriya Banijya Bank was established in 2022 B.S. Under the Banijya Bank act 2021 B.S. In the fiscal year ADBL 2039/40, new banking policy was introduced for the establishment of new banks by the joint investment of foreign nations. Its objective was to create healthy competitive banking system and to provide cheap banking facilities to the people. The establishment of joint venture banks gave a new horizon to the financial sector of the country. Nepal Arab Bank Limited (NABIL) is the first joint venture commercial bank (JVCB) incorporated in 2041 B.S. In 2043 B.S., the second JVCB Nepal Indosuez Bank Ltd (liquidly called Nepal Investment Bank Limited) in the form of JVBS was also established. But more came into existence after the initiation of government's policy of economic liberalization and privatization in 2049 B.S. They are Himalayan Bank Ltd. (2049), Nepal SBI Bank Ltd. (2050), Nepal Bangladesh Bank Ltd. (2051), Global Ime Bank Ltd. (2051) and Bank of

Kathmandu (2052) came into existence in chronological order. Under favorable environment, various other banks were established thereafter.

A joint venture is the joining of forces between two or more enterprises for the purpose of carrying out a special operation (industrial or commercial investment, production or trade). These JVBs came into existence to accelerate the pace of economic development and financial system of the nation. Proper financial decision making is extremely important in banking transaction for its efficiency and profitability. Most of the financial decisions of a bank are concerned with liquid assets and liquid liabilities. The working capital management of a bank is different from other types of business enterprises. A bank plays a significant role to fulfill the requirement of working capital of other type of business enterprise. It also needs to efficiently manage its own working capital Investment in working capital of other business enterprises is a part of liquid assets of bank's working capital and we can consider deposits and short term borrowings as a part of liquid liabilities.

1.2 Background of the Study

Liquidity refers to how quickly and cheaply an asset can be converted into cash. Money (in the form of cash) is the most liquid asset. Assets that generally can only be sold after a long exhaustive search for a buyer are known as illiquid.

"Managing liquidity involves estimating liquidity needs and providing for them in the most cost-effective way possible. Banks can obtain liquidity from both sides of the balance sheet as well as from off-balance-sheet activities. A manager who attempts to control liquidity solely by adjustments on the asset side is sometimes ignoring less costly sources of liquidity. Conversely, focusing solely on the liability side or depending too heavily on purchased wholesale funds can leave the bank vulnerable to market conditions and influences beyond its control. Effective liquidity managers consider the array of available sources when establishing and implementing their liquidity plan." (Khubchandani; 2002: 61.)

"Liquidity means a matter of maintaining what the bank has promised to pay the depositors - cash. In order to fulfill the promise, primary reserves are the first drawn on to satisfy

depositors. In the banking system primary reserves are known as legal reserve and working reserves. The term is economic rather than accounting concept. Legal reserves are the requirement of monetary authority. Bank management, student of banking studies and monetary authority are referring the other names for primary reserve to designate certain ideas and concept regarding banks' assets. Primary reserves include non-earning assets such as cash in vault, the deposits carried out by banks with correspondent banks and central bank, and cash items. The cash items represent cheques held or in process of collection by the banks. The objective of primary reserves in banking system is maintaining liquidity and solvency"(Sinkey; 1983:135).

The amount of liquidity that a commercial bank or the commercial banking system should maintain is one of the basic problems of the bank management. If too much liquidity is maintained, it means that the bank and the banking system are foregoing income. Too, little, however, may be fatal not only to an individual bank but to the commercial banking system as a whole, the financial structure of the country, and the economy of the nation. Too little liquidity and the demands of the depositors in the form of 'runs' on the banks are like oil and water, they do not mix well"(Reed; 2002:115).

1.3 Liquidity of Conclusion

Liquidity means a matter of maintaining what the bank has promised to pay the depositors - cash. In order to fulfill the promise, primary reserves are the first drawn on to satisfy depositors. In the banking system primary reserves are known as legal reserve and working reserves.

1.4 Introduction of Global IME Bank Limited

Globalime Bank started its operations in 2013 with a view and objective of extending professionalized and efficient banking services to various segments of the society. The bank is providing customer-friendly services through its Branch Network. All the branches of the bank are connected through Anywhere Branch Banking System (ABBS), which enables customers for operational transactions from any branches. With an aim to help Nepalese citizens working abroad, the bank has entered into arrangements with banks and finance companies in different countries, which enable quick remittance of funds by the Nepalese citizens in countries like UAE, Kuwait, Bahrain, Qatar, Saudi Arabia, Malaysia, Singapore

and U K. Bank has set up its representative offices at New Delhi (India) to support Nepalese citizen remitting money and advising banking related services.

1.5 Introduction of Standard Chartered Bank Nepal Limited

Standard Chartered Bank Limited, which was formerly known as Nepal Grindlays Bank, was established in 1987 A.D. as a second foreign joint venture bank under the company act. Its ownership is 75% of the shares held by Standard Chartered Grindlays Bank, 25% of shares by local ownership. Standard Chartered Bank completes 23 years of operation in 2010. This was considered a unique opportunity to refresh the Brand. Standard Chartered plays an active role in supporting those communities in which its customers and staffs live. The focus of the Standard Chartered group is on projects that assist needy children, particularly in the area of education and environment. The bank is in a position to service customers through a large domestic network. In addition to which the global network of Standard Chartered Bank gives the Bank the unique opportunity to provide truly international banking in Nepal. SCBNL Standard Chartered Bank focuses mainly on corporate and consumer banking, catering to a wide range of customers from individuals, to mid-market local corporate to multinationals and large public sector companies as well as embassies, aid agencies, airlines, hotels, and government corporations. The bank has been the pioneer in introducing consumer-focused product and services in the country. With the mission statement “To be the leading international bank in our principal markets”, the bank operates through 13 offices, spread throughout Nepal and focuses mainly on corporate, consumer and commercial banking, providing services for international firms as well. The bank contributed to a large extent in the development of the country by the way of loans to industrial projects, the priority and deprived sectors. With the liquid slowdown in the economy due to domestic and international factors and recently introduced changes in the NRB directives, the bank has taken the following strategies to achieve the targets goals:

- Follow the standard banking practices
- To have the largest deposit base among the private sector banks.
- Increases the profitability and shareholder's wealth
- Dominate cards acquiring market
- Expand delivery channels to stimulate additional fee revenue.

- Increase consumer bank contribution- ATM, consumer loans mortgages, personal loans etc.
- To become bigger, more profitable and complete with biggest competitors.
- To provide best customer services.

1.6 Focus of the Study

Liquidity management refers to as using money to get long-term benefit. Investment in its broad sense means the sacrifice of certain percent value for (possible uncertain) future value. In pure financial sense, the subsequent use of the term investment will be in the prevalent financial sense, of the placing of money in the hands of other for their use, in return for a proper instrument entitling holder's to fixed income payment or the participation in expected profits. The present economic position of Nepal is encouraging the savers to deposit their money in banks rather than investing in stocks, assets and new business etc., which in turn is hampering the bank's portfolio because deposits are higher and limited safe investment areas are decreasing day by day. In spite of low interest rate, the depositors are feeling secured towards commercial banks but the highest surplus deposits are almost idle in the bank due to continuous fall in Nepalese economy because of conflict situation, changed taxation policy, and adversely affected tourism industry and agricultural industry. It revolves round the concept of managing the surplus financial assets in which way, which leads to the wealth maximization and provides a significant future source of income. It focuses on analyzing the causes of investment problems, their management and remedies, and developing the new investment areas and sectors, which can again boost the Nepalese economy.

1.7 Statement of the Problem

Liquidity management on bank is also difficult as that of manufacturing and non-manufacturing business organization. Commercial banks are great monetary institutions which are playing important role to the general welfare of the economy. The responsibilities of commercial banks are more than any other financial institutions. They must be ready to pay on demand a good share of their liabilities without warning or notice. Bank collects funds from different types of deposits for providing loan and advances to different sector. To get higher return, banks must try to increase funds from deposits as well as their investment. The first motive of banking business is to borrow public saving and lend to needy people. But commercial banks always face the problem for utilizing more deposits as investment fully

and productivity. The gap between collection of deposits and disbursement of loans increase the cash balance on bank which its large amount of liabilities on its depositors demand without notice. But large amount of idle cash balance also decrease profitability of banks. The need of liquidity management for economic development of a country is no more to question. But we are facing an acute problem of resource mobilization. We have 31 commercial banks in Nepal, which are very much considered to be vital financial institutions to mobilize domestic resources. They have of course a good performance in the course of mobilizing idle deposits. The problems associated with commercial banks with regard of liquidity Management and reinvestment aspects are highlighted below:

- a. What is the deposit position of the sampled banks?
- b. What is the investment position of the sampled banks?
- c. What is the relationship between investment, loan and advances and Total deposits?
- d. Are they maintaining sufficient liquidity?
- e. What is the gap between deposits and investments of the sampled Banks?

1.8 Objective of the Study

The main objective of the study is to examine how Global Ime Bank and Standard Chartered Bank Limited manage their liquidity. The specific objectives of this study are as follows:

- To analyze the liquidity management, deposit and investment position of the banks.
- To find out the relationship between deposit, investment, loans and advances and net profit.
- To find out the trend analysis of deposit, investment, loans and advances and net profit.
- To recommend for the improvement based on findings.

1.9 Significance of the Study

Nepalese commercial banks are operating in the competitive environment. In this situation, banks have to adopt suitable strategies for their existence. They should balance and coordinate the different functional areas of business concern. The success or failure of any organization depends on its strategy, which is affected by working capital management. Working capital management is the of problem to prepare proper strategy on its favor. The

study helps to know how well the banks are utilizing their deposits. It is important to policy makers and academic professionals to formulate policies and plans based on the performance of these banks. The study also guides to investors, customers (depositors, loan takers as well as other types of clients), competitors, personnel of the banks, stockbrokers, dealers, market makers, etc. to take various decisions regarding deposits and borrowings.

1.10 Limitations of the Study

The study has following Limitations:

- The study is based only on secondary data so it may contain reporting errors.
- There are total, 30 commercial banks in the financial market but this researcher takes only two from them. The sampled banks are Global Ime Bank and Standard Chartered Bank.
- The study covers the past and present state of the commercial banks in Nepal and will not make any projection in future.
- The study is made within limited timeframe, limited data, and with lack of research experiments.
- This research used only the selective tools for analysis and interpretation of data.

1.11 Organization of the Study

The first chapter includes general background of the study, historical perspective of banking industry, overview of sample banks, statements of the problem, objectives of the study, significance of the study and limitation of the study. The second chapter, review of literature contains the review of related books, journals, and past research works. Similarly the third chapter expresses the way and the technique of the studying applied in the research process. It includes research design, population and sample, data collection procedure and processing, tools and methods of analysis. The fourth chapter is the important chapter in which collected and processed data are presented, analyzed and interpreted with using financial tools as well as statistical tools. Finally, the fifth and the last chapter provide the summary of the study, conclusion and recommendations

CHAPTER – II

REVIEW OF LITERATURE

2.1 Conceptual Framework

Liquidity refers to how quickly and cheaply an asset can be converted into cash. Money (in the form of cash) is the most liquid asset. Assets that generally can only be sold after a long exhaustive search for a buyer are known as illiquid.

"Managing liquidity involves estimating liquidity needs and providing for them in the most cost-effective way possible. Banks can obtain liquidity from both sides of the balance sheet as well as from off-balance-sheet activities. A manager who attempts to control liquidity solely by adjustments on the asset side is sometimes ignoring less costly sources of liquidity. Conversely, focusing solely on the liability side or depending too heavily on purchased wholesale funds can leave the bank vulnerable to market conditions and influences beyond its control. Effective liquidity managers consider the array of available sources when establishing and implementing their liquidity plan." (Khubchandani; 2002: 61.

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The amount of liquidity that a commercial bank or the commercial banking system should maintain is one of the basic problems of the bank management. If too much liquidity is maintained, it means that the bank and the banking system are foregoing income. Too, little, however, may be fatal not only to an individual bank but to the commercial banking system

as a whole, the financial structure of the country, and the economy of the nation. Too little liquidity and the demands of the depositors in the form of 'runs' on the banks are like oil and water, they do not mix well"(Reed ;2002:115).

2.2 Importance of Liquidity Management

The important of liquidity management are as follows:

- To Fulfill the Demand of the Debtor
- To Provide Security to the Banks
- To Meet the Expenses for the Bank's Daily Administrative Work
- To Pay all Sorts of Deposit.

2.3 Practice of Liquidity Management in Nepalese Commercial Banks

Nepal Rastra Bank (NRB) is the regulatory body of the banking industry. NRB issues the rules and regulations to facilitate the banking operation in Nepal like other regulations. There is a regulation for maintaining liquidity by commercial banks. Revision in monetary policy and operational procedure is continuation from time to time. The regulation is called Cash Reserve Ratio (CRR). It is directly related to the liquid assets of commercial banks. The regulation specifies the cash reserve ratio of commercial to central bank and its own vault to operate day to- day operation (transaction). It is a policy instrument of central bank for money supply. Money supply is a variable of monetary policy through which the bank plans to maintain adequate liquidity in the economy. It changes as per the requirement of the economy. According to the central bank's regulation, commercial banks need to consider the following rule to calculate Total deposit means liquid, saving and fixed deposit account as well as call money deposit and certificate of deposit. For this purposes, deposits held in convertible foreign currency, employee guarantee amount and margin account would not be included.

- a. Fixed deposit means a deposit in local currency accepted with a condition to repay on
- b. Completion of stipulated time period.
- c. Liquid and saving deposit means all deposit accounts other than fixed deposit.
- d. Cash in vault shall include only the local liquid and foreign currency (except clearing cheque)

A complete procedure for compliance test is in place. Failure in any respect under the regulations liable to pay penalty at a very high rate of interest. Procedures for compliance test are as follows:

- a) The cash reserve requirement is examined on a weekly basis.
- b) The cash reserve requirement shall be examined against the average weekly balance of deposit liabilities of immediately preceding 4th week. In case of full holiday in the preceding 4th week, the average deposit of immediately preceding 5th week shall be considered.
- c) Only the balance held in ordinary account with Nepal Rastra Bank NRB shall be eligible for inclusion in cash reserve. Balance held with NRB in special accounts opened for specific purpose and foreign currency accounts shall not be included for this purpose.
- d) For the purpose, all branches offices of the bank shall constitute as one unit.
- e) The central bank monitors that the regulation is followed or not.

2.4 Liquidity Monitoring Framework of Nepal Rastra Bank

"Liquidity means a matter of maintaining what the bank has promised to pay the depositors - cash. In order to fulfill the promise, primary reserves are the first drawn on to satisfy depositors. In the banking system primary reserves are known as legal reserve and working reserves. The term is economic rather than accounting concept. Legal reserves are the requirement of monetary authority

1) Ratio Approach: Liquid Assets to Short Term Liabilities

Liquid Assets to Short term Liabilities = $\frac{\text{Unencumbered Liquid Assets}}{\text{Short term Liabilities coming due in 30 days}} \times 100$

Short term Liabilities coming due in 30 days

For the liquidity monitoring purpose, Liquid assets are defined as;

Liquid Assets is the sum of;

- Cash
- Bank Balance
- Money at calls at short notice

- Investment in Government Securities and Reverse Repo
- Placement up to 30 days

Liquid assets should include unencumbered liquid assets only. Unencumbered assets are those assets which are free from any debt obligation and can be easily sold or mortgaged.

Short Term Liabilities / Cash Outflows

Similarly short-term liabilities are the immediate obligations of the banks. Banks and financial institutions should have sufficient liquid assets to meet expected outflows over the next 30 days. Total short term liabilities (cash outflows) are total expected outflows over the next 30-day period. Each item will have an assumed 30-days outflow based on the defined contractual obligation. Short term liabilities in the above ratio include;

On Balance Sheet Item:

- 20% of Current Deposit
- 15% of Saving Deposit
- 50% of Call Deposit
- 100 % of Margin Deposits to be paid within next 30 days
- 100% of Fixed Deposit maturing in next 30 days
- 100 % of borrowing from the NRB which should be paid in next 30 days
- 100% of borrowings from other Banks and financial Institutions maturing in next 30 days
- All other contractual obligations coming due within 30 days). Fundamentals of Investments.

Off balance sheet items:

- 100% of LC amount to be settled within next 30 days.
- 100% of Irrevocable loan commitments
- 100% of Acceptance liabilities maturing within next 30 days.

A bank having sufficient pool of liquid assets to cover its liability is considered a bank having satisfactory liquidity position. Quantifying same principle, when liquid assets to short term liabilities is more than 100%, the bank has sufficient liquid assets to meet its obligation

reflecting a comfortable scenario in terms of liquidity. The ratio shall be monitored on a weekly basis. Other Liquid assets and liabilities, which are not defined, should be included on the remaining term to maturity.

Reporting Requirement: The report should cover the assets and liability portion as stated Above from Sunday to Friday of every week.

- Interval: weekly (as on Friday of every week).
- Submission Every Tuesday for immediate Past week.

2. Deposit and Credit Concentration

- A. Top 10 Depositors: Corporate
- B. Top 10 Depositors: Individual
- C. Top 10 Borrowers: Funded Only

Reporting Requirement:

- Interval: Monthly (as on month end data).
- Submission: Every month; within 7th of following month of Nepali calendar

3. Inter-bank Transaction

- Number of times the bank borrowed during the period (one week):
- Number of rollover of the borrowing from same institution(regardless of partial payments):
- Outstanding borrowing at the end of the reporting period
- Maximum amount of borrowing in one transaction: (Rs in lakhs)
- Average borrowing per transaction: (Rs in lakhs)

(Sum of all the borrowing during the period divided by number of transactions)

Reporting Requirement:

- Interval: weekly (as on friday of every week).
- Submission: Every Tuesday for immediate past week

4. Borrowing from NRB

New reporting formats are developed for the banks and financial institutions. They are;

A. Repo Monitoring

- Number of times the bank used Repo facilities during the last month:
- Outstanding repo at the end of the period:
- Maximum amount Per Transaction: (Rs in Lac)
- Average Amount Per Transaction: (Rs in Lac)
(Sum of all the Repo transaction during the period divided by number of transaction)

Reporting Requirement:

- Interval: weekly (as on Friday of every week).
- Submission: Every Tuesday for immediate Past/Previous week.

B. SLF Monitoring

- Number of times the bank used SLF facilities during the week:
- Outstanding SLF at the end of the period:
- Maximum Amount Per Transaction: (Rs in Lakhs)
- Average Amount Per Transaction: (Rs in Lakhs)
(Sum of SLF amount during the period divided by number of transaction)

Reporting Requirement

- Interval: weekly (as on Friday of every week).
- Submission: Every Tuesday for immediate Past week.

C. Refinance from NRB

Outstanding amount of Refinance facilities from NRB:

Number of times the bank utilized the facility during the last one month period:

reporting requirement:

- Interval: Monthly.
- Submission: Every month; within 15th of following month of Nepali Calendar.

D. Outright Sales

Reporting Requirement:

- Interval: Monthly.
- Submission: Every month; within 15th of following month of Nepali Calendar.

5. Matching Assets and Liabilities: Liquidity Profile/ Structural Liquidity Table

In addition to above information, banks are required to submit the assumption made for categorization of the assets and liabilities (which has no fixed maturity) under different time buckets. For example;

Assumptions on:

- Categorization of Current Deposit
- Categorization of Saving Deposit
- Assets and liability categorization which have no fixed maturity.

Negative net assets during the one week, one month, 31-90 days and 91-180 days buckets exceed the limit of 5 %, 10%, 15 % and 20% of the total liabilities in the respective time buckets, the bank need to show by way of a foot note as to how does it propose to finance the gap to bring the mismatch within the prescribed limits.

Reporting requirement:

- Interval: Monthly (as on month end data).
- Submission: Every month; within 7th of following month of Nepali Calendar

Note: Bank refers to A, B and C class institutions licensed by Nepal Rastra Bank.

2.5 Nepal Rastra Bank Directives

Provisions Relating to Compulsory Reserve/Statutory Liquidity

The following directives have been issued with regard to compulsory reserve and liquid assets to be maintained by a licensed institution based on its deposit and borrowing liabilities having exercised the powers conferred by Section 79 of the Nepal Rastra Bank Act, 2002.

(A) Provisions Relating to Compulsory Reserve:

1. For "A", "B", "C" And "D" Classes Micro-Banking Institutions Collecting Deposits of General Public

1. It shall be mandatory for class "A" institutions licensed by this bank and for the "B" and "C" classes institutions licensed by this bank and accepting the current/calls accounts to maintain a deposit of 5.5 percent of the total deposit liabilities at this bank. Provided that, "B" and "C" class licensed institutions accepting deposits other than the "Current Deposit and "D" class micro-banking institutions collecting deposits of general public shall have to maintain mandatory balance at 2 percent of their total deposit liabilities.
2. The "B" and "C" class licensed institution and class "D" micro-banking institutions accepting deposits from general public situated in the location where there is no office of this bank may maintain a separate current account for this purpose with the nearby "A" class institution. However, the amount deposited in a class "A" licensed institution with the condition of earning interest shall not be counted as compulsory reserve. The information of such account shall be given to this bank's bank and Financial Institution's Regulation Department and Concerned Supervision Department.(Liquidity Management in Banking Crisis)
3. In case the balance to be maintained as above Sub-Clause (1) falls short, the following fine is imposed
 - (a) For the first time of shortfall in maintaining the compulsory reserve, at the rate of the percentage of the existing bank rate on such shortfall amount;
 - (b) For the second time of shortfall in maintaining the compulsory reserve, at the rate of double of the percentage of the existing bank rate on such shortfall amount;
 - (c) For the third time and successive times of shortfalls thereafter in maintaining the compulsory reserve, at the rate of triple of the percentage of the existing bank rate on such shortfall amount.
4. For the purpose of calculation of "times" under sub-clauses (a), (b), and (c) above, separate times is calculated on every fiscal year basis. Moreover, in case any licensed institution fails to maintain compulsory reserve for a consecutive period of three weeks, it is fined at the rate of first time for the first week, of the second time for the second week and of the third time for the third week.
5. The fine at the existing bank rate on shortfall amount is on weekly basis. Such shortfall amount shall be multiplied by the percentage of bank rate and be divided by 52.
6. For the purpose of calculation of compulsory reserve to be maintained, the following procedures is followed: -
 - a) The compulsory reserve shall be examined on weekly basis (from every Sunday to Saturday).

- b) The compulsory reserve shall be examined against the average weekly Balance of deposit liabilities of immediately preceding two weeks. In the case of full holidays in any week, the average deposit of immediately preceding week is considered.
- c) For the purpose of calculation compulsory reserve, the weekly average of total deposit liabilities and balance held with this bank is determined by aggregating the total amount of daily balances from Sunday to Saturday and dividing the same by the figure seven. In doing so, if any holiday falls in the week, the balance of the preceding day is considered as the balance for the day.
- d) For this purpose, the particulars relating to each Sunday to Saturday (in the case of holiday, the previous day's balance has to be mentioned) is compulsorily submitted to the concerned Supervision Department of this bank in the prescribed format referred to in Directives Form No. 13.1 within seven days from the date of the end of the week.

7 For this purpose, all offices of a licensed institution is constituted as one unit.

8 Any amount of local currency lying in transit for fund transfer and meant to be credited in the account with this bank shall be included in the balance held with this bank. Explanation:

- a. For the purpose of this Section, "total deposit" means the amount of current, savings, and fixed deposit including the money collected by the licensed institutions through various financial instruments as prescribed by this Bank.
- b. Only the balance held in ordinary account of this Bank shall be considered for compulsory reserve. For the purpose, balances held in special accounts and foreign currency accounts shall not be included.
- c. For the purpose of calculating compulsory reserve, balance of foreign currency accounts and staff guarantee account and margin account shall not be included for this purpose.
- d. "Current Account" means the deposit accounts maintained with the bank and financial institutions having the facility for withdrawal on demand.
- e. "Savings Deposit" means the deposit accounts maintained with the bank and financial institutions with an objective of saving.
- f. "Fixed Deposit" means the deposit accounts maintained with the bank and financial institutions for a stipulated time period.
- g. For the purpose of calculating compulsory reserve, the cash in transit to be balanced at the note fund of Rastriya Banijya Bank and Nepal Bank Limited in the places where there is no office of this bank may also be included. If amount is balanced at or withdrawn from the note fund, the concerned bank

has had to send details thereof to the Currency Management Department and the concerned supervision department.

2. For "D" Class Licensed Institutions

The "D" class licensed institutions shall maintain compulsory reserve equivalent to a minimum of zero point five percent of the amount collected from individual group members, group wise, special savings and borrowed fund with this bank or in a special current account with "A" class licensed institution in places where there is no branch office of this Bank. The information of such account is given to the bank and financial institutions regulation department and concerned supervision department of this bank.

2. Explanation

3. For the purpose of this sub-clause, "borrowed fund" means, the amount borrowed by the licensed institution from other licensed institution, individual, firm, corporate bodies (domestic and foreign) and company.

a. "D" class licensed institutions shall have to maintain a minimum of two point five percent of its total deposit liability in the form of liquid asset. The 'liquid assets' comprises the following:-

- i. Cash in one's own valu.
- ii. Investment in Government securities
- iii. Investment in Nepal Rastra Bank bonds, or
- iv. Deposit maintained with "A" Class licensed institution.

b. Any excess amount placed in the deposit pursuant to sub-clause (1) above shall be available for calculation under the requirement of sub-clause (2).

c. The calculation of compulsory reserve and liquid assets shall be as follows: -

- i. The compulsory reserve and liquid assets shall be calculated monthly on the basis of daily average balances.
- ii. A maximum proportion at 90 percent shall be considered as liquid assets in respect of the amount placed in the fixed deposit with "A" class licensed institution.
- iii. For the purpose of calculation of liquid assets under sub-clause (2), the amounts borrowed against the fixed deposit receipt or Government securities and Nepal Rastra Bank bonds, up to the amount of borrowing, is deducted.
- iv. The "D" class licensed institutions is submit returns as to the compulsory reserve and liquid assets as provided in the Directives

Form No. 13.2 on a monthly basis within 15 days of the close of the month to the concerned Supervision Department of this bank.

- d. In case of non-maintenance of compulsory reserve and liquid assets or the "D" class licensed institutions failing to maintain deposit with this bank according to sub-clause (1) above or in case such deposits fall short, fines pursuant to Point No. 1(3) shall be imposed for the default period.
- e. Notwithstanding anything contained in the foregoing, exemption may be given with regard to the provisions of compulsory reserve in the amount of loan and advance transferred to micro finance development bank of class 'D' carrying out the transaction of bulk loan with the condition of recovering such loans from other banks and financial institutions.
- f. Other provisions relating to compulsory reserve to be maintained by class 'D' licensed institution carrying out transaction of retail micro banking including collecting deposits from general public and the returns to be furnished to this bank is as referred to in point No. 1 of these Directives. Moreover, in the case of such micro finance development banks, provision of Point No. 2 of these Directives shall not apply. 3. other Provisions

4. In order to render the functioning of the licensed institution well-managed, easy and convenient, the institutions of class 'A', 'B' and 'C' licensed from this bank, other than the market-makers, may also make payment of the principal and interest of government bond and make a claim to this bank for reimbursement thereof. For the period of non-receipt of reimbursement of the amount of payment of principal of Government of Nepal securities from this bank to the licensed institution, the said amount shall also be calculated in the ratio of compulsory reserve. Moreover, in the event where the principal amount could not be paid to the concerned banks and financial institution for the reason of falling a public holiday, the said principal amount shall, for the duration of the said holiday, be calculated in the compulsory reserve ratio to be maintained at this bank.

(B) Provisions Relating to Statutory Liquidity Ratio:

The licensed banks and financial institution of classes 'A', 'B' and 'C' shall have to maintain the statutory liquidity ratio at the rate prescribed from time to time. While maintaining the statutory liquidity ratio according to this provision, the government securities, the amount in the call deposit in the class "A" commercial bank for the same purpose and the remaining amount in excess of the amount required for the compulsory reserve ration may also be

calculated as the eligible instruments. The following provisions have been made with regard to calculation of the statutory

liquidity ratio:

- a. The domestic deposit liability maintained at the end of the just preceding month is taken as the basis for calculating the statutory liquidity ratio.
- b. Such ratio shall be calculated and the statement the statutory liquidity ratio amount of each whole month is submitted as stated in Directive Form No.
- c. In case the said deposit falls short, fine shall be imposed as follows subject to the provision made in sub-Section (1) of Section 99 of the Nepal Rastra Bank Act, 2002:
 - i. In cases where the statutory liquidity ratio falls short for the first time, at the percentage of prevailing bank rate for the amount fallen short;
 - ii. In cases where the statutory liquidity ratio falls short for the second time, at double of the percentage of prevailing bank rate for the amount fallen short;
 - iii. In cases where the statutory liquidity ratio falls short for the third time and whatsoever time thereafter, at triple of the percentage of prevailing bank rate for the amount fallen short.
- d. While determining the time for clauses (a), (b) and (c), separate time is determined for each of the fiscal year.
- e. In the amount falling short of the statutory liquidity ratio, fine is imposed fallen short is multiplied with the percentage of the bank rate and divided by twelve.
- f. For the purpose of fine in the event of falling short of the statutory liquidity ratio, the bank rate published as prescribed by this bank shall be taken as the base.

2.6 Review of Journal and Articles

Krit Chalermdundrichai (2011) there is various aspects of liquidity, but to confine the definition in related context, longer term liquidity management will be in focus. As it became evident in the crisis, illiquidity rather than insolvency caused banks' failure. In this regards, Liquidity has divided good banks from ailing ones. Sound but poor liquidity banks may not be able to withstand bankruptcy risk. Thus, it is not exaggerate to say "Liquidity is REAL king", especially, when market is squeezed or under crisis.

From liquidity management's perspective, with notice, banks have been encouraged to extend or lengthen sources of funding. Non-technically speaking, primary purpose is to narrowing the gap between funding and lending. The greater the gap is, the more risky the bank is exposed to. As a result, term funding including interbank borrowing rather than overnight or call can be considered as a more secure funding source, in a sense that it creates certainty of due maturities in orderly manner. In retail market, banks started offering long-dated financial products ie., B/E and ultra-long fixed deposits as they learn to be less reliable on short-term funding to mitigate the gapping.

Khadaklal Shiva Prasad (2010) Measuring and managing the liquidity needs are vital for effective operation of commercial banks. By assuring a bank's ability to meet its liabilities as they become due, liquidity management can reduce the probability of an adverse situation developing. The importance of liquidity transcends individual institutions, as liquidity shortfall in one institution can have repercussions on the entire system. Bank managements should measure, not only the liquidity positions of banks on an ongoing basis, but also examine how liquidity requirements are likely to evolve under different conditions.

Banks are in the business of maturity transformation. They lend for longer time periods, as borrowers normally prefer a longer time frame. But their liabilities are typically short term in nature, as lenders normally prefer a shorter time frame (liquidity preference). This results in long-term interest rates typically exceeding short-term rates. Hence, the incentive for banks for performing the function of financial intermediation is the difference between interest receipt and interest cost which is called the interest spread. It is implicit, therefore, that banks will have a mismatched balance sheet, with liabilities greater than assets in short term, and with assets greater than liabilities in the medium and long term. These mismatches, which represent liquidity risk, are with respect to various time horizons. Hence, the overwhelming concern of a bank is to maintain adequate liquidity.

Liquidity has been defined as the ability of an institution to replace liability run off and fund asset growth promptly and at a reasonable price. Maintenance of superfluous liquidity will, however, impact profitability adversely. It can also be defined as the comprehensive ability of a bank to meet liabilities exactly when they fall due or when depositors want their money back. This is a heart of the banking operations and distinguishes a bank from other entities.

Objectives and Methodology of the Study. Though Basel Capital Accord and subsequent NRB guidelines have given a structure for Liquidity Management and Asset Liability Management in banks, the Indian banking system has not enforced the guidelines in total. The banks have formed Asset-Liability Committee (ALCO) as per the guidelines; but these committees rarely meet to take decisions. Taking this as a base, this research article attempts to find out the status of Liquidity Management in State Bank of India with the help of "Cash Flow Approach" methodology for controlling liquidity risk. To achieve the main purpose, the following objectives are set forth:

- To identify the liquidity risks faced by the banks.
- Classification of assets and liabilities into different time buckets as per RBB guidelines issued for liquidity management in banks.
- Analysis of liquidity risk through Cash Flow Approach Method.

Walt (2008), in his article, "Sound practices for Managing Liquidity in Banking Organizations" attributed Liquidity, or the ability to fund increases in assets and meet obligations as they come due, is crucial to the ongoing viability of any banking organization. Sound liquidity management can reduce the probability of serious problems. Indeed, the importance of liquidity transcends the individual bank, since a liquidity shortfall at a single institution can have system – wide repercussions. For this reason, the analysis of liquidity requires bank management not only to measure the liquidity position of the bank on an ongoing basis but also to examine how funding requirements are likely to evolve under various scenarios, including adverse conditions.

Shrestha (2007) in his article "The Efficiency of Liquidity Monitoring and Forecasting Framework the Nepal Rastra Bank in the Context of Liquidity Management in the Nepalese Banking and Financial System" has stated liquidity management as the part of risk management framework of financial services industry. He found taking high liquidity risk as well as high credit risk are two main factors that cause banks to fail. Although high liquidity risk alone is not likely to cause banks failures, a liquidity crisis usually signals a need for change. He concluded proper liquidity management ensures that banks and financial institutions' financial commitments and obligations are met. Maintaining adequate liquidity also helps in avoiding forced sale of assets. The need for bank liquidity stems from seasonal,

cyclical trend and short-term irregular movements in deposits and loans. The different sources available to meet these liquidity needs were identified and grouped into asset and liability liquidity sources. The treasury manager must consider the purpose of the liquidity need, the length of time for which funds are needed, the access to liability markets, the cost and the characteristics of various liquidity sources and interest rate forecasts.

2.7 Review of Previous Thesis

Limbu (2010). In his dissertation, “Credit Management of NABIL Bank Limited” highlighted that aggregate performance and condition of Nabil bank. In the aspect of liquidity position, cash and bank balance reserve ratio shows the more liquidity position. Cash and bank balance to total deposit has fluctuating trend in 5 years study period. cash and bank balance to current deposit is also fluctuating. The average mean of Cash and bank balance to interest sensitive ratio is able to maintain good financial condition.

- The main objectives of the research study are as follow.
- To evaluate various financial ration of the Nabil Bank.
- To analyze the portfolio of lending of selected sector of banks
- To determine the impact of deposit in liquidity and its effect on lending practices.
- To offer suitable suggestions based on findings of this study.

Poudel (2011) made a thesis report entitled "A Study on Liquidity and Investment Position of Joint Venture Commercial Banks in Nepal", the study had based on the special reference to the Global Ime Bank Ltd and NABIL Bank ltd.

His major objectives were as under:

- To analyze the functions, objectives procedure and activities of the Global IME Bank and
NABIL Bank Ltd
- To analyze the lending practices and resources utilizations of sample banks.
- To determine the impact of growth in deposit on liquidity and lending practices.
- To examine the lending efficiency and its contribution to profit.
- To make suitable suggestions based on the findings of this study. The financial and statistical tools are used.

The major findings from the study were:

There is no standard and uniform rate or ratio for maintaining liquid assets by the commercial banks. The manager may decide to maintain an appropriate level of liquid assets based on his own judgment. Liquidity management decision should be made based on the relation to the source of funds and statutory obligation. Nature of a source of fund may vary with the other. Like there are demand deposit and time deposit bearing different natures. Demand deposit has nature of high turnover. Therefore it requires high level of liquid assets to support withdrawals. Since the 80-90 Percent of funds of commercial banks is deposit, the proportion of demand deposit to total deposit liability largely determined the level of liquid fund. The banks do not have constant and consistent liquidity and investment policy. Both the banks are adopting discretionary fund management approach. The banks are adhering to theory of shift ability while investing on marketable securities, especially on government securities. Anticipated income approach is also adopted in case of long-term loans. There are various active external factors affecting liquidity position of the banks, the deposit liability in the latest two year has increased substantially. Therefore, it is suggested to conduct a study to find the reason behind over increasing trend of deposit of the banks.

Malla (2012) has conducted thesis entitled, "Financial Performance of Commercial Bank with Special Reference to Himalayan & NABIL Bank Ltd." The main objective of the study is to analyze the liquidity position & the profitability of these two banks.

She has found that the high liquidity ratios are maintained by these banks. The measurement of assets management has revealed that the total liability to total assets of HBL has the highest ratio than of NABIL. She has also found that considering EPS, earning per share performance of HBL is better than NABIL but comparing net profit and shareholders' equity, the performance of NABIL is better. She concludes that the overall liquidity ratio of NABIL is better; it has low degree of surviving capacity in the adverse liquidity position caused by interest sensitive deposit.

Tiwari (2013) has conducted a research in the topic, "liquidity management of Himalayan bank limited". The main objective of the study is to visualize and analyze the Liquidity position of Himalayan bank. Analyzing liquidity ratio of HBL, he found that the bank is able to meet its short-term obligations. The bank has also maintained the cash, cash equivalent and bank balance, balance in Nepal Rastra Bank, money at call, investment in government

securities to meet daily cash requirements. Lastly, he suggests that HBL has to rethink & reorganize major strategies on resources collection and mobilization.

2.8 Research Gap

There are various researchers conduct on lending practice, credit policy, financial performance, credit management and liquidity mobilization of various commercial banks. In order to perform those analysis researchers have used various ratio analysis. In the past research topic on liquidity mobilization the researcher has focused on the limit ratios which are incapable of solving the problems. Actually liquidity mobilization is determined by various factors. In this research various ratio are systematically analyzed and generalized. Past researchers are not properly analyzed about investment aspect' mobilization of fund and its impact on the profitability. The ratios are not categorized according to nature. Here in this research all ratios are categorized according to their area and nature.

CHAPTER-III

RESEARCH METHODOLOGY

3.1 Introduction

Research methodology is a collective term for the structured process of conducting research. There are many different methodologies used in various types of research and the term is usually considered to include research design, data gathering and data analysis. Research methodologies can be quantitative (for example, measuring the number of times someone does something under certain conditions) or qualitative (for example, asking people how they feel about a certain situation). Ideally, comprehensive research should try to incorporate both qualitative and quantitative methodologies but this is not always possible, usually due to time and financial constraints. Research methodologies are generally used in academic research to test hypotheses or theories. A good design should ensure the research is valid, i.e. It clearly tests the hypothesis and not extraneous variables, and that the research is reliable, i.e. It yields consistent results every time.

Part of the research methodology is concerned with the how the research is conducted. This is called the study design and typically involves research conducted using questionnaires, interviews, observation and/or experiments. The term research methodology, also referred to as research methods, usually encompasses the procedures followed to analyze and interpret the data gathered. These often use a range of sophisticated statistical analyses of the data to identify correlations or statistical significance in the results. Objective, representative research can be difficult to conduct because tests can normally only be conducted on a small sample (e.g. You cannot test a drug on every person in the world so a sample needs to be used in research). This means that researchers need to have a very detailed understanding of the types and limitations of research methodologies which they are using.

3.2 Research Design

Research designs are concerned with turning the research question into a testing project. The best design depends on research questions. Every design has its positive and negative sides. The research design has been considered as a "blueprint" for research, dealing with problems:

what questions to study, what data are relevant, what data to collect, and how to analyze the results. To achieve the objective of this study, analytical and descriptive research designs have been used.

3.3 Population and Sample

In the present context, there are 30 commercial banks operating in Nepal. The study of all these banks within this research was almost impossible. Hence, considering this number of banks as total population. Due to limited time and resource information among 30 commercial banks the study has been confined to only two commercial banks, namely Standard Chartered Bank Nepal Limited (SCBNL) and Global IME Bank Limited via simple random sampling method which tried to achieve the objectives set out by analyzing the data.

3.4 Nature and Sources of Data

The data used in this study are secondary in nature. Published annual reports of the concerned banks are taken as basic source of data. The data relating to financial performance are directly obtained from the concerned banks. Similarly, related books, magazine, journals, articles, reports, bulletins, data from Nepal Stock Exchange and Nepal Rastra Bank, Central Bureau of statistics, related website from internal sources etc. as well as other supplementary data and various economic surveys are also used. Previous related studies to the subject are also counted as source of information. Since the data have been obtained from secondary sources, after collection of financial statement, master sheet of financial data have been extracted and tabulated as per the need of this study. In order to process the data, financial statement and other available information were reviewed. These data were grouped in different tables and charts according to their nature. Most of the data have been compiled in one form and processed and interpreted as required.

3.5 Method of Data Analysis

Financial as well as the statistical tools are used to make the analysis more convenient, reliable and authentic. For data analysis, different items from the balance sheet and other statements are tabulated. Their ratios, percentages, mean, standard deviations, and coefficients of variations are then calculated and presented in the tables. Likewise, trend analysis is also used to know the trend of various ratios. Following are the brief introductions of the financial and statistical tools used in this study.

3.5.1 Financial Tools

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

a.) Liquid Ratio

This ratio indicates the liquid short-term solvency position of a bank. Higher liquid ratio indicates a better liquidity position. In other words, liquid ratio represents a margin of safety, i.e. a cushion of protection for creditors and the higher the liquid ratio, the greater the margin of safety. Large amounts of liquid assets in relation to liquid liabilities, more the bank's ability to meet its liquid obligations.

$$\text{Liquid Ratio} = \frac{\text{Liquidity Assets}}{\text{Liquidity Liability}}$$

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

$$\text{Cash and bank balance to total deposit ratio} = \frac{\text{Cash and Bank Balances}}{\text{Total Deposits}}$$

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

c.) Quick Ratio

Quick ratio establishes a relationship between quick assets and current liabilities. An asset is liquid if it can be converted into cash immediately or reasonably soon without a loss of original value. Cash is a most quick asset. Other assets which are considered to be relatively liquid and included in quick assets are book debts and marketable securities. For Quick Ratio,

Cash and bank balance and government securities are included in quick assets. This ratio can be found out by dividing the total of quick assets by total liquid liabilities.

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

ii) Assets Management Ratios:

Asset management ratio measures the proportion of various assets and liabilities in balance sheet. The proper management of assets and liability ensures its effective utilization. The banking business converts the liability into assets by way of its lending and investing functions. The following are the various ratios relating to determine the efficiency of the subjected bank in managing its assets and in portfolio management.

a.) Loan and Advances to Total Deposit Ratio: This ratio is also called credit- deposit ratio (C D ratio). It is calculated to find out how successfully the bank is able to utilize its total deposits on loan and advances for profit generating purpose. Greater ratio implies better utilization of total deposits. This ratio can be obtained by dividing loan and advances by total deposit as under;

$$\text{Loan and Advances to total deposit ratio} = \frac{\text{Loan and Advances}}{\text{Total Deposits}}$$

b.) Total Investment to Total Deposit Ratio:

Investment is one of the major forms of credit creation to earn income. This implies the utilization of firm's deposit on investment on government securities, shares and debentures of other companies and banks. This ratio can be calculated by total investment divided by total deposit as:

$$\text{Total investment to total deposit ratio} = \frac{\text{Total Investment}}{\text{Total Deposits}}$$

c.) Loan and Advances to Total Assets Ratio

A commercial bank's working fund plays very active role in profit generation through fund mobilization. This ratio reflects the extent to which the banks are successful in mobilizing

their total assets on loan and advances for the purpose of income generation. A high ratio indicates better mobilization of funds as loan and advance and vice-versa.

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

iii) Profitability Ratios:

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

a.) Return on Total Asset Ratio (ROA)

This ratio measures the overall profitability of all working fund i.e. total assets. It is also known as return on assets (ROA). This ratio is calculated by dividing net profit (loss) by total working funds. This can be presented as;

$$\text{Return on Total Asset Ratio} = \frac{\text{Net profit After Tax}}{\text{Total Assets}}$$

b.) Return on Equity (ROE)

Net worth refers to the owner's claim of a bank. The excess amount of total assets over total liabilities is known as net worth. This ratio measures how efficiently the bank has used funds of the shareholders. This ratio can be computed by dividing net profit by total equity capital (net worth). This can be calculated as;

$$\text{Return on Equity} = \frac{\text{Net Profit}}{\text{Total Equity Capital}}$$

3.5 .2 Statistical Tools

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

i) Mean:

A mean is the average value or the sum of all the observation divided by the number of observations and it is given by the following formula:

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

Where

\bar{X} = Mean of the values

$\sum X$ = Summation of the values

N = No. of Observations

ii) Coefficient of variation:

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

$$\text{Coefficient of variation (C.V.)} = \frac{\sigma}{\bar{X}} * 100$$

iii) Measures of Correlation:

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

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

Where, $x = X - \bar{X}$

$y = Y - \bar{Y}$

σ_1 = Standard series of X

σ^2 = Standard series of Y

N = Number of pairs of Observations

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

CHAPTER- IV

PRESENTATION AND ANALYSIS OF DATA

In the process of fulfilling objectives of this research, data revealed are tabulated and presented followed by analysis and interpretation in this chapter. Furthermore, the findings of this research are also presented at this chapter.

4.1 Financial Analysis

In this part various financial ratios related are presented to evaluate and analyze the performance of commercial banks i.e. GIBL and SCBNL. Some important financial ratios are only calculated in the point of view of fund mobilization. The ratios are designed and calculated to highlight the relationship between financial items and figures. It is a kind of mathematical relationship and procedure dividing one item by another.

4.1.1 Liquidity Ratios

Liquidity of any business organization is directly related with the working capital or liquid assets and liquid liabilities of that organization. In other words, one of the main objectives of working capital management is keeping sound liquidity position. Bank is different organization which is engaged in mobilization of funds. Therefore, without sound liquidity position, bank is not able to operate its function. To measure the bank's solvency position or ability to meet its short-term obligation, various liquidity ratios are calculated and to know the trend of liquidity, trend analysis of major liquidity ratios have been calculated.

4.1.2 Liquid Ratio

This ratio indicates the liquid short term solvency position of bank. Higher liquid ratio indicates better liquidity position. In other words, liquid ratio represents a margin of safety, i.e. a cushion of protection for creditors and the highest the liquid ratio, greater the margin of safety, large the amount of liquid assets in relation to liquid liabilities, more the bank's ability to meet its liquid obligations.

Table: 4.1
Calculation of Liquidity Ratio

(Rs. in Millions)

Fiscal Year	SCBNL			GIBL		
	Liquid Assets	Liquid Liabilities	Ratio	Liquid Assets	Liquid Liabilities	Ratio
2008/09	22897.90	21487.25	1.07	19223.47	17628.85	1.09
2009/010	22103.29	20985.87	1.05	21117.03	18459.45	1.14
2010/011	23259.98	22478.35	1.03	23262.26	21364.57	1.09
2011/012	29473.42	25542.16	1.15	26630.51	24183.53	1.10
2012/013	32202.04	26593.82	1.21	33292.55	24856.88	1.34
Mean	1.10			1.15		
S.D	0.066			0.095		
C.V	.06			.08		

(Source Annex I)

Figure: 4.1
Liquid Assets and Liabilities of SCBNL

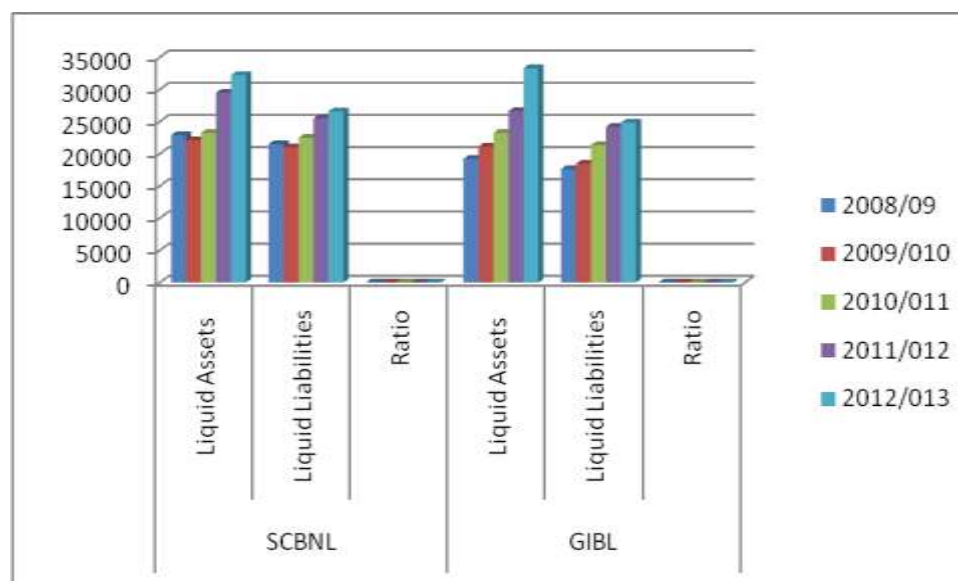


Table 4.1 depicts that the liquid assets and current liabilities of SCBNL are in fluctuating trend. In the year 2004/05 it has liquid assets and liabilities of Rs 22897.90 and RS 21487.25. In the year 2005/06 its liquid assets and liabilities decreased to Rs 22103.29 and Rs 20985.87. From the year 2006/07 to 2008/09 its liquid assets and liability are increased. Similarly the liquid assets and current liabilities of GIBL are in increasing trend from year 2004/05 to 2008/09.

The standard deviation is 0.066 in SCBNL whereas it is 0.095 in GIBL. Similarly, coefficients of variation are 0.06 in SCBNL and 0.08 in GIBL. Hence, it shows there is more variation in liquid ratio maintained by GIBL compared to SCBNL.

4.1.3 Quick Ratio

Quick ratio establishes a relationship between quick assets and current liabilities. An asset is liquid if it can be converted into cash immediately or reasonably soon without a loss of original value. Cash is a most quick asset. Other assets which are considered to be relatively liquid and included in quick assets are book debts and marketable securities. For Quick Ratio, Cash and bank balance and government securities are included in quick assets. This ratio can be found out by dividing the total of quick assets by total liquid liabilities.

Table: 4.2
Calculation of Quick Ratio

(Rs. in Millions)

Fiscal Year	SCBNL			GIBL		
	Quick Assets	Current Liabilities	Ratio	Quick Assets	Current Liabilities	Ratio
2008/09	12713.15	21487.25	0.60	5259.58	17628.85	0.30
2009/010	13154.27	20985.87	0.61	4842.83	18459.45	0.26
2010/011	13935.4	22478.35	0.60	4857.98	21364.57	0.23
2011/012	11405.5	25542.16	0.45	6267.83	24183.53	0.26
2012/013	14180.7	26593.82	0.53	6951.86	24856.88	0.28
Mean	0.55			0.26		
S.D	0.059			0.024		
C.V	0.105			0.092		

(Source Annex I)

Figure: 4.2

Quick Assets and Current Liabilities of SCBNL

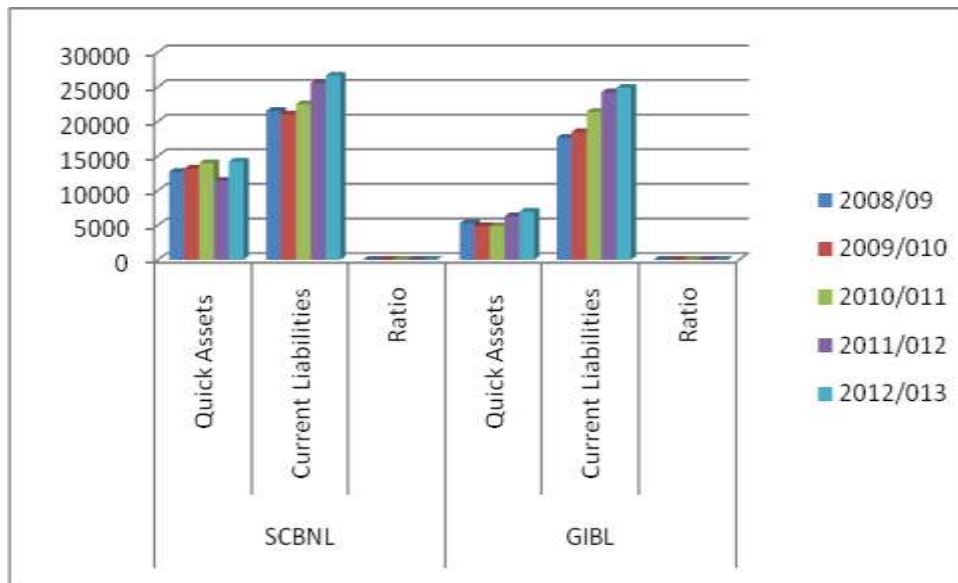


Table: 4.2 shows that the quick ratios of SCBNL are in increasing trend except in the final years of the study period. The ratio is highest (0.61) in the year 2005/06 and lowest (0.45) in the year 2007/08. The average quick ratio of SCBNL is 0.55. The yearly quick ratios are lower than the average in the year 2007/08 and 2008/09 only. However the ratio is higher in the first and second year of the study period. The quick ratios of GIBL are fluctuating over the study period. It is highest (0.30) in the year 2004/05 and lowest (0.23) in the year 2006/07. The average quick ratio of GIBL is 0.26. In the first years of the study period, the yearly quick ratios are higher than the average ratio. The average quick ratio of SCBNL is higher than that of GIBL. The above analysis helps to conclude that the quick ratios of SCBNL are always better than GIBL. It shows the better liquidity position of SCBNL in comparison to GIBL.

4.1.4 Cash and Bank Balance to Total Deposit Ratio:

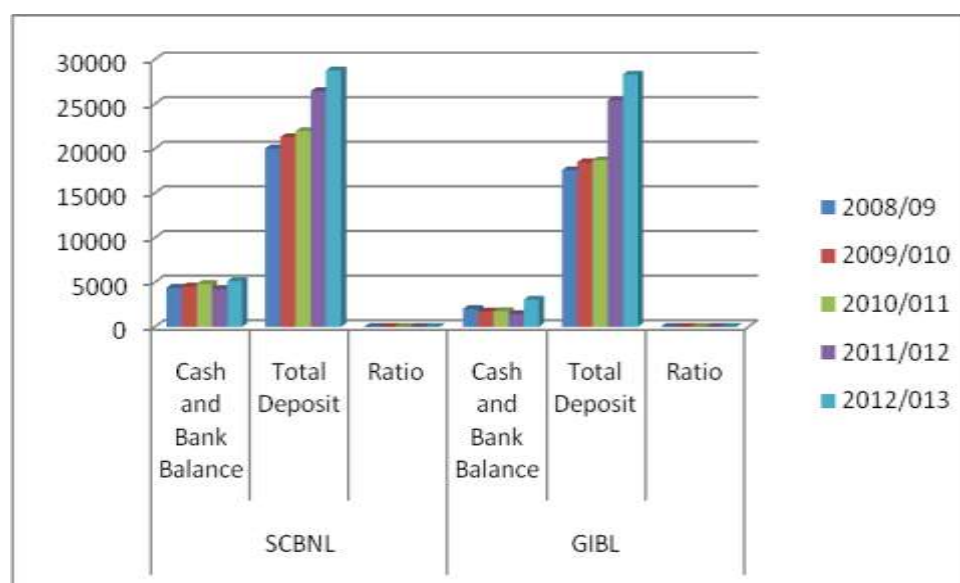
Cash and bank balances are the most liquid current assets. This ratio measures the percentage of most liquid fund with the bank to make immediate payment to the depositor. This ratio can be computed by dividing cash and bank balance by total deposit.

Table: 4.3**Calculation of cash and Bank balance to Total Deposit Ratio**

(Rs. in Millions)

Fiscal Year	SCBNL			GIBL		
	Cash and Bank Balance	Total Deposit	Ratio	Cash and Bank Balance	Total Deposit	Ratio
2008/09	4370.59	20015.47	0.22	2014.47	17568.58	0.11
2009/010	4520.15	21269.85	0.21	1717.35	18456.32	0.09
2010/011	4812.25	21956.36	0.22	1757.34	18678.87	0.09
2011/012	4247.77	26442.99	0.16	1448.13	25418.92	0.06
2012/013	5129.71	28770.02	0.18	3048.52	28304.22	0.11
Mean	0.19			0.09		
S.D	0.025			0.021		
C.V	0.13			0.2070		

(Source Annex I)

Figure: 4.3**Cash and Bank balance to Total Deposit of SCBNL**

The above data shows that the Cash and Bank Balances to Total Deposits ratio of both the bank are fluctuating. SCBNL has its highest ratio 0.22 in the year 2004/05 and 2006/07. Likewise GIBL has its highest ratio 0.11 in the year 2004/05 and 2008/09.

From the above analysis, it can be concluded that from the average ratios shows that liquidity position of SCBNL is better than GIBL because it has higher average ratio than that of GIBL. According to C.V., the cash and bank balance position with respect to total deposit, is better in the case of SCBNL than GIBL.

4.2 Assets Management Ratios:

Asset management ratio measures the proportion of various assets and liabilities in balance sheet. The proper management of assets and liability ensures its effective utilization. The banking business converts the liability into assets by way of its lending and investing functions. The following are the various ratios relating to determine the efficiency of the subjected bank in managing its assets and in portfolio management.

4.2.1 Loan and Advances to Total Deposit Ratio:

This ratio is also called credit- deposit ratio (C D ratio). It is calculated to find out how successfully the bank is able to utilize its total deposits on loan and advances for profit generating purpose. Greater ratio implies better utilization of total deposits.

Table: 4.4

Calculation of Loan and Advances to Total Deposit Ratio

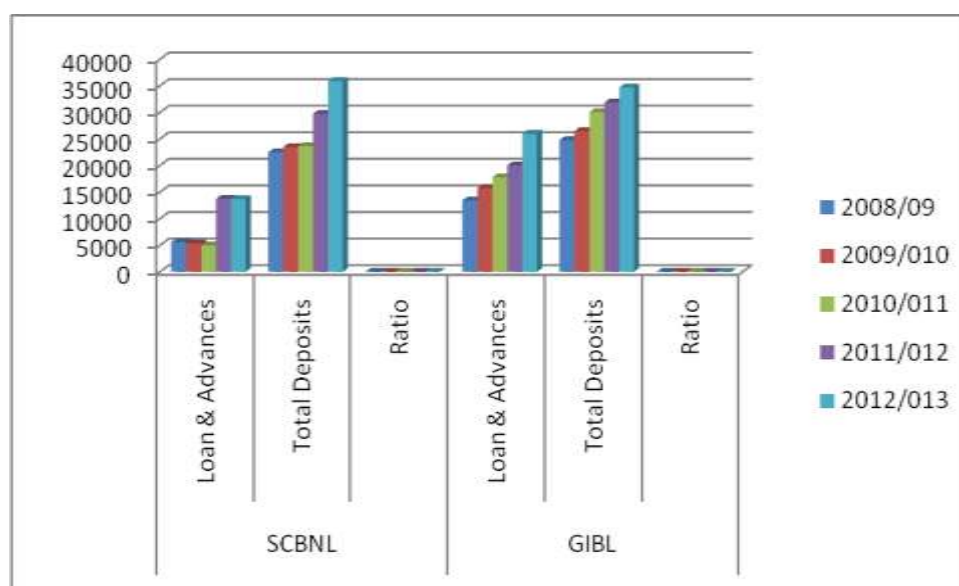
(Rs. in Millions)

Fiscal Year	SCBNL			GIBL		
	Loan & Advances	Total Deposits	Ratio	Loan & Advances	Total Deposits	Ratio
2008/09	5592.62	22486.52	0.25	13451.66	24814.01	0.54
2009/010	5324.87	23459.37	0.23	15761.97	26490.85	0.59
2010/011	5000.00	23648.79	0.21	17793.72	30048.41	0.59
2011/012	13718.60	29744.00	0.46	20016.05	31842.79	0.63
2012/013	13679.76	35871.72	0.38	25963.94	34681.34	0.75
Mean	0.30			0.62		
S.D	0.09			0.07		
C.V	0.29			0.11		

(Source Annex I)

Figure: 4.4

Loan and Advances to Total Deposit of SCBNL



The above table shows that the loan and advances to total deposits of both the bank are changing over study period. The loan and advances of SCBNL was highest of Rs13718.60 on year 2007/08. Likewise the loan and advances of the GIBL was highest of Rs 25963.94 on year 2008/09. Similarly the total deposits of both the bank are in increasing trends. SCBNL has its highest deposits of Rs 35871.72 on year 2008/09 and likewise GIBL has its highest deposits of Rs 34681.34 on year 2008/09. The standard deviation of SCBNL is 0.09 whereas it is 0.07 in GIBL. The coefficient of variation of SCBNL is 0.29 and it is 0.11 in GIBL. Thus C.V. of GIBL is lower than SCBNL. This shows that there is less variation in loan and advance to total deposit ratio maintained by GIBL compared to SCBNL. In other words, GIBL has low risk. The above analysis helps to conclude that loan and advances to total deposit ratio or total deposit turnover ratio of SCBNL is better than GIBL. It is the indication of better performance of SCBNL. Thus SCBNL is utilizing the funds more efficiently for the profit generating purpose on loan and advances than GIBL. However, higher C.V. in SCBNL compared to GIBL shows high risk in loan and advances to total deposit ratio of SCBNL.

4.2.2 Total Investment to Total Deposit Ratio

Commercial banks and financial companies invest their collected funds in various government securities and other financial or non-financial companies. This ratio measures

how successfully and efficiently the banks are mobilizing their funds on investment in various securities. This ratio of GIBL and SCBNL are calculated and presentation below.

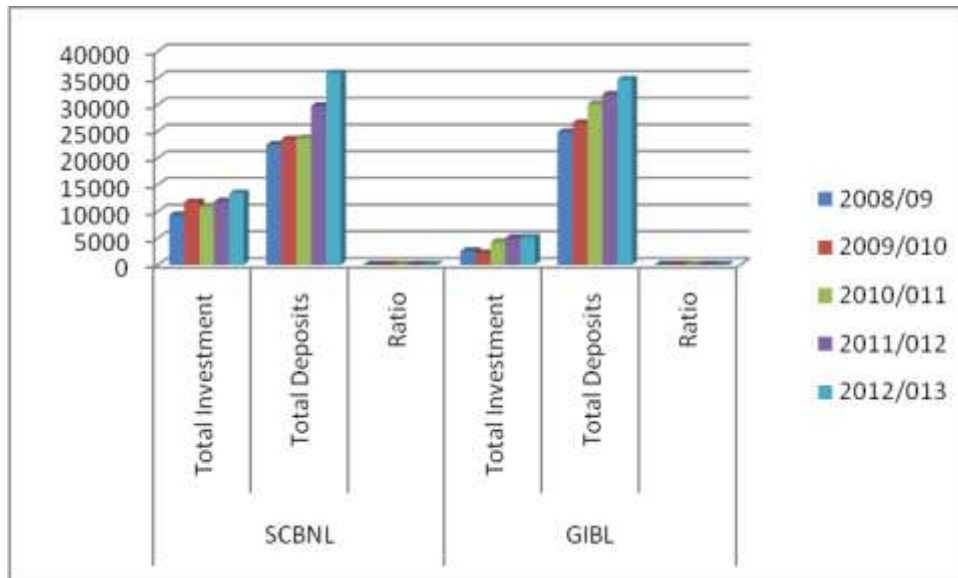
Table: 4.5
Calculation of Total Investment to Total Deposit Ratio

(Rs. in Millions)

Fiscal Year	SCBNL			GIBL		
	Total Investment	Total Deposits	Ratio	Total Investment	Total Deposits	Ratio
2008/09	9292.1	22486.52	0.41	2535.7	24814.01	0.10
2009/010	11692.3	23459.37	0.50	2128.9	26490.85	0.08
2010/011	10889.02	23648.79	0.46	4200.5	30048.41	0.14
2011/012	11823.4	29744.00	0.40	4984.3	31842.79	0.16
2012/013	13340.2	35871.72	0.37	5059.6	34681.34	0.15
Mean	0.42			0.12		
S.D	0.046			0.031		
C.V	0.11			0.25		

(Source Annex I)

Figure: 4.5
Total Investments to Total Deposit of SCBNL and GIBL



In the above table demonstrates that the total investment to total deposits of both the bank is changing over the study period. SCBNL has highest total investment of Rs 13340.2 on year 2008/09. Likewise GIBL has highest total investment of Rs 5059.6 on year 2008/09. The total average investment of SCBNL for the five year was 0.42 as compared to the total average investment of GIBL 0.12. The C.V. of GIBL is higher than the CV of SCBNL i.e

0.25>0.11 so it seems that GIBL is more inconsistency than SCBLN. It signifies SCBNL has successfully allocated its depositing investment portfolio.

4.2.3 Loan and Advances to Total Assets Ratio

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

Table: 4.6
Calculation of Loan and Advances to Total Assets Ratio

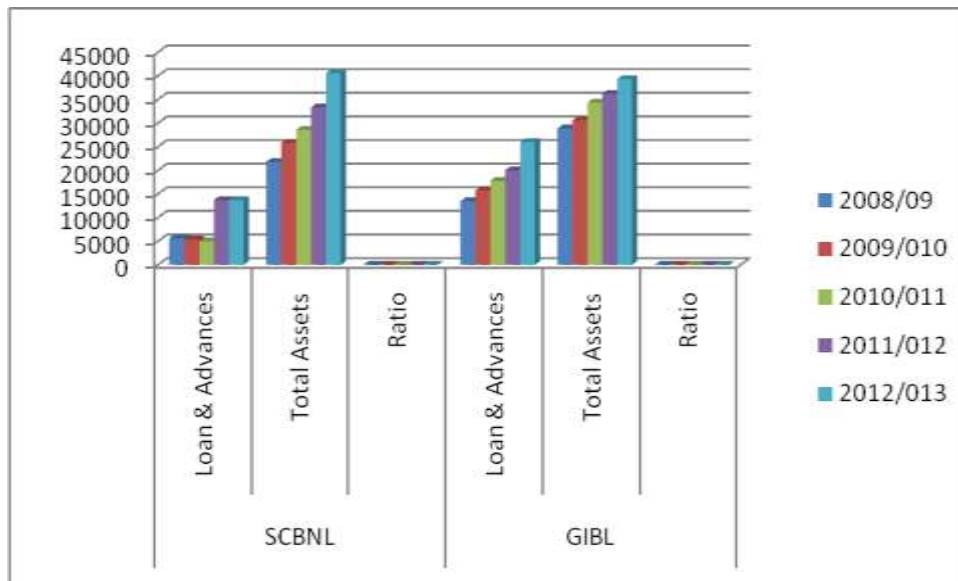
(Rs. in Millions)

Fiscal Year	SCBNL			GIBL		
	Loan & Advances	Total Assets	Ratio	Loan & Advances	Total Assets	Ratio
2008/09	5592.62	21781.68	0.26	13451.66	28871.34	0.47
2009/010	5324.87	25776.33	0.21	15761.97	30579.80	0.52
2010/011	5000.00	28596.68	0.17	17793.72	34314.86	0.52
2011/012	13718.60	33335.79	0.41	20016.05	36175.53	0.55
2012/013	13679.76	40587.47	0.34	25963.94	39320.32	0.66
Mean	0.27			0.54		
S.D	0.087			0.065		
C.V	0.32			0.12		

(Source Annex I)

Figure: 4.6

Loan and Advances to Total Assets of SCBNL and GIBL



The above table shows that the loan and advances of SCBNL is changing over study period and the GIBL loan and advances is in increasing trend over study period. In the year 2004/05 SCBNL has RS 5592.62 loan and advances which decrease to Rs 5000.00 in the year 2006/07 and again it started to increase and reach to Rs 13718.60 in year 2007/08 and again it falls to Rs 13679.76 in year 2008/09. Likewise GIBL loan and advances was increasing every year. It has Rs 13451.66 in year 2004/05 and reached to Rs 25963.94 in 2008/09.

The mean of GIBL is greater than SCBNL. It reveals that in total assets, GIBL has high proportion of loan and advances. GIBL has utilized its total assets more efficiently in the form of loan and advances. The higher C.V. of SCBNL states that it has less uniformity in these ratios throughout the study period than that of GIBL. S.D. and C.V. of SCBNL has high than the GIBL.

4.3 Profitability Ratios:

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

4.3.1 Return on Total Asset Ratio (ROA)

This ratio measures the overall profitability of all working fund i.e. total assets. It is also known as return on assets (ROA). This ratio is calculated by dividing net profit (loss) by total working funds.

Table: 4.7

Calculation of Return on Total Asset Ratio

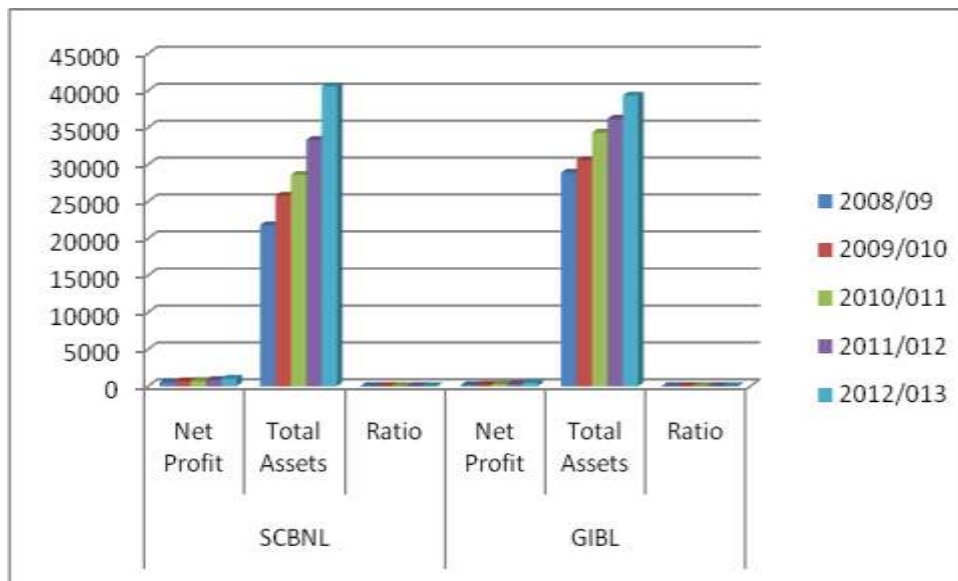
(Rs. in Millions)

Fiscal Year	SCBNL			GIBL		
	Net Profit	Total Assets	Ratio	Net Profit	Total Assets	Ratio
2008/09	536.24	21781.68	0.025	143.66	28871.34	0.005
2009/010	658.76	25776.33	0.026	170.8	30579.80	0.006
2010/011	691.69	28596.68	0.024	237.3	34314.86	0.007
2011/012	818.92	33335.79	0.025	296.41	36175.53	0.008
2012/013	1025.11	40587.47	0.025	451.2	39320.32	0.011
Mean	0.0248			0.0074		
S.D	0.0002			0.0003		
C.V	0.080			0.45		

(Source Annex I)

Figure: 4.7

Net profits to Total Assets of SCBNL and GIBL



The above table shows that the both the banks have their net profit on increasing trends. SCBNL has its highest profit of Rs 1025.11 in the year 2008/2009. Likewise GIBL has its highest profit of Rs 451.2 in the year 2008/009. The analysis above helps to conclude that the overall profitability of SCBNL has been better than GIBL. SCBNL is efficiently using its working fund of assets to earn higher rate of profit.

4.3.2 Return on Equity (ROE):

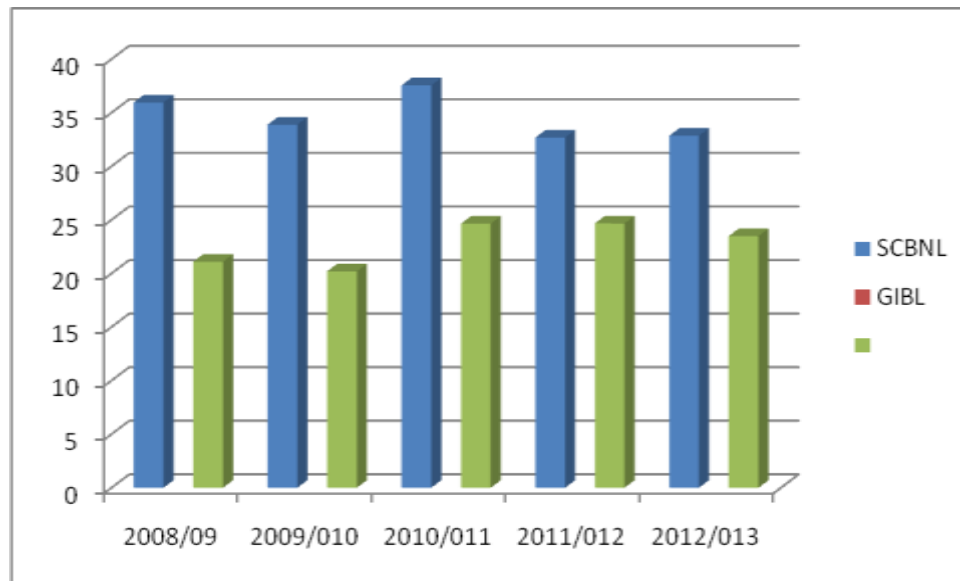
Net worth refers to the owner's claim of a bank. The excess amount of total assets over total liabilities is known as net worth. This ratio measures how efficiently the bank has used funds of the shareholders. This ratio can be computed by dividing net profit by total equity capital (net worth).

Table: 4.8
Return on Equity Ratio

Fiscal Year	SCBNL	GIBL
2008/09	35.96	21.10
2009/010	33.89	20.20
2010/011	37.55	24.65
2011/012	32.68	24.67
2012/013	32.85	23.49
Mean	34.59	22.82
S.D	1.88	0.044
C.V	0.054	0.0019

(Source Annex I)

Figure: 4.8
Returns on Equity Ratio



The above table indicated the efficiency of the banks in generating profit through mobilizing the shareholders property. The table showed that the return on Shareholders equity of SCBNL was highest, 37.55%, in the fiscal year 2005/06 and lowest, 32.68%, in the fiscal year 2006/07. In average, the ROE in SCBNL was 34.59%, which indicated that SCBNL was able to generate Rs. 34.59 as net income from the mobilization of Rs. 100 of shareholders equity. Also, the coefficient of variation, 0.054 indicates consistency in the ratio. Likewise the ROE of GIBL was highest 24.67 % in the year 2007/08 and has lowest ROE 20.20% in the year 2005/2006. Comparing the banks, it can be concluded that SCBNL was most effective in optimally mobilizing the shareholders equity, since ROE of SCBNL (34.59%) was highest in comparison with that of GIBL (22.82%).

4.4 Statistical Analysis

4.4.1 Coefficient of Correlation Analysis

Co-efficient of co-relation shows the relationship between two or more than two variables. It measures that the two variables are positively or negatively co-related. For this purpose, Karl Pearson's co-efficient of correlation has been taken and applied to find out and analyze the relationship between deposit and loan and advances, deposit and total investment, total assets and net profit, total investment and net profit and also analyze the correlation of total deposit, total investment, loan and advances and net profit GIBL and SCBNL using Karl Persons coefficient of correlation, value of coefficient of determination (R²) probable error (P.Er.) and (6 P.Er.) are also calculated and value of them are analyzed.

A) Correlation Coefficient between Deposit and Loan and Advances

Deposit have played vary important role in performance of a commercial banks and similarly loan and advances are very important to mobilize the collected deposits. Co-efficient of correlation between deposit and loan and advances measures the degree of relationship between these two variables. In this analysis, deposit is independent variable (X) and loan and advances are dependent variable (Y). The main objectives of computing r between these two variables is to justify whether deposit are significantly used as loan and advances in proper way or not.

Table: 4.9
Correlation between Deposit and Loan and Advances

Banks	r	R ²	P.Er.	6 P.Er.	Remarks
SCBNL	0.91	0.82	0.08	0.48	significant
GIBL	0.86	0.73	0.12	0.72	significant

(Source Annex II)

From the above table, it is found that coefficient of correlation between deposits and loan and advances of SCBNL and GIBL is 0.91 and 0.86. It is shows that both have the positive relationship between these two variables. The correlation coefficient of both banks is significant because the correlation coefficient is greater than the relative value of 6 P.Er. in other words, there is significant relationship between deposits and loan and advances.

B) Coefficient of Correlation between Total Deposits and Total

Investment

The coefficient of correlation between deposit and investment measures the degree of relationship between these two variables or deposit is significantly utilized or not. In correlation analysis, deposit is independent variable (X) and total investment is dependent variable (Y).

Table: 4.10
Coefficient of Correlation between Total Deposits and Total
Investment

Banks	r	R ²	P.Er.	6 P.Er.	Remarks
SCBNL	0.84	0.70	0.13	0.80	significant

GIBL	0.80	0.64	0.16	0.96	significant
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(Source Annex II)

From the above Table, we found that the coefficient of correlation between total deposit and total investment of SCBNL is 0.84. It shows the high degree positive correlation. In addition, coefficient of determination of GIBL is 0.80. It means only 80 percent of total investment is explained by total deposit. The correlation coefficient is significant because the correlation coefficient is higher than 6 P.Er. It refers that there is significant relationship between total deposit and total investment of GIBL. Similarly, there is high degree correlation positive coefficient between total deposit and total investment of SCBNL, which is indicator by correlation coefficient of 0.84. The value of coefficient of determination is found 0.70 this refers that 70 percent of the variation in total investment is explained by total deposit. The correlation coefficient is insignificant because the correlation coefficient is more than 6 P.Er. It refers that there is significant relationship between total deposit and total investment of SCBNL. From the above analysis, the conclusion can be drawn in the case of GIBL and SCBNL that both banks have high degree positive correlation.

C) Coefficient of Correlation between Total Investment and Net Profit

Coefficient of correlation between total investment and net profit measures the degree of their relationship. In the, correlation analysis, investment is independent variable and net profit is dependent variable. The following Table shows the coefficient of correlation coefficient of determination, probable error and six times of P.Er. During the fiscal year 2004/05 to 2008/09.

Table: 4.11

Coefficient of Correlation between Total Investment and Net Profit

Banks	r	R ²	P.Er.	6 P.Er.	Remarks
SCBNL	0.92	0.84	0.068	0.41	significant
GIBL	0.87	0.75	0.11	0.67	significant

(Source Annex II)

Above Table shows, correlation coefficient between total investment and net profit of GIBL is 0.87 which implies there is positive correlation between total investment and net profit. In addition, coefficient of determination of GIBL is 0.75. It means only 75 percent is contribute

by total investment. Obviously, this correlation is significant at all due to coefficient of determination is higher than P. Error. On the other hand SCBNL has high positive correlation between total investment and net profit i.e. 0.92. The coefficient of determination of SCBNL is 0.84 It means 84 percent of Profit is contribute by total investment but this relationship is significant as its correlation coefficient is higher than 6 P.Er. i.e 0.92. GIBL has more significant relationship between total investment and net profit than that of SCBNL Thus it can be concluded that the degree of relationship between total investment and net profit of GIBL is little high than the SCBNL. This little correlation coefficient indicates that the bank has poor performed in order to generate net profit.

4.5 Trend Analysis

Trend analysis plays an important role in the analysis and interpretation of financial statement. Trend in general terms, signifies a tendency. It helps in forecasting and planning future operation. Trend analysis is a statistical tool, which shows the previous trend of the financial performance and forecasts the future financial results of the firms.

A) Trend Analysis of Total Deposit:

Deposits are the important part in banking sector hence its trend for next seven years will be forecasted for future analysis. This is calculated by the least square method. Here the effort has been made to calculate the trend values of Total deposit of GIBL and SCBNL for further Five year.

Table: 4.12
Trend Analysis of Total Deposit of SCBNL and GIBL

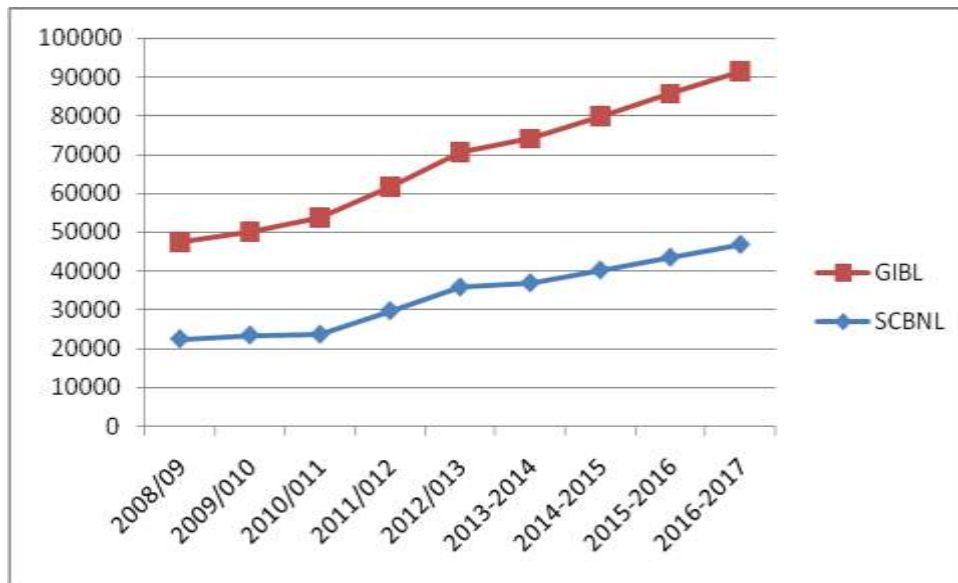
(Rs. in Millions)

Year	SCBNL	GIBL
2008/09	22486.52	24814.01
2009/010	23459.37	26490.85
2010/011	23648.79	30048.41
2011/012	29744	31842.79
2012/013	35871.72	34681.34
2013-2014	36958.67	37101.46
2014-2015	40264.2	39610.12
2015-2016	43569.73	42118.78
2016-2017	46875.26	44627.44

(Source Annex II)

Figure: 4.14

Trend Analysis of Total Deposit of SCBNL and GIBL



The above table shows that the total deposits of both the banks have increasing trend. It seems that the incensement of total deposits of SCBNL is higher than that of GIBL. From the above trend analysis it is clear that SCBNL has higher position in collecting deposit than GIBL.

B) Trend Analysis of Loan And Advances

Here, the trend values of loan and advances Between SCBNL and GIBL have been calculated for further five year. The following Table shows the actual and trend values of SCBNL and GIBL.

Table: 4.13

Trend Analysis of Loan and advances of SCBNL and GIBL

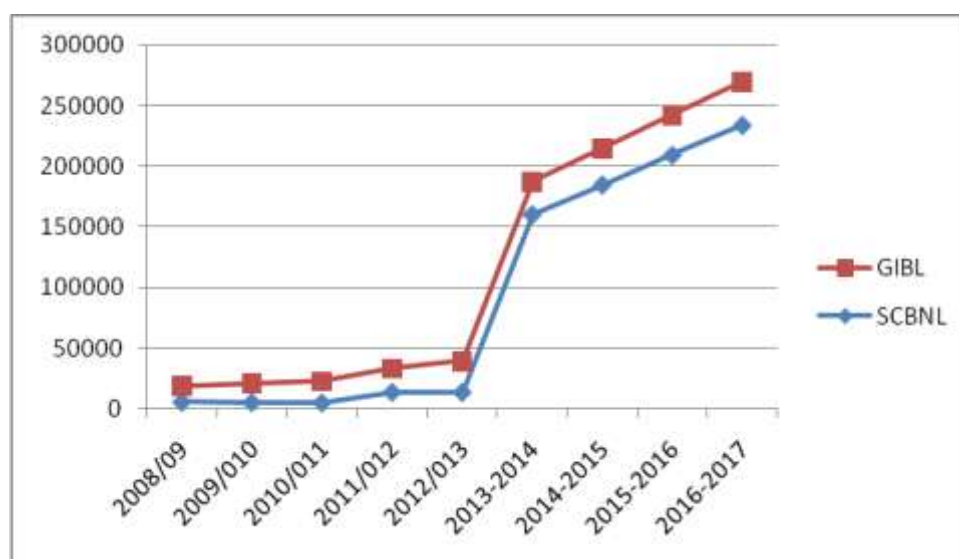
(Rs. in Millions)

Year	SCBNL	GIBL
2008/09	5592.62	13451.66
2009/010	5324.87	15761.97
2010/011	5000.00	17793.72
2011/012	13718.60	20016.05
2012/013	13679.76	25963.94
2013-2014	160338.1	27381.06
2014-2015	184906.9	30308.924
2015-2016	209475.7	33236.788
2016-2017	234044.5	36164.652

(Source Annex II)

Figure: 4.13

Trend Analysis of Loan and advances of SCBNL and GIBL



The above table shows that the total deposits of both the banks have increasing trend. The increasing trend of GIBL is higher and aggressive than SCBNL. From the above analysis, it is clear that both SCBNL and GIBL is mobilizing its collected deposits and other funds in the form of loan and advances.

C) Trend Analysis of Total Investment

Here, the trend values of total investment Between SCBNL and GIBL have been calculated for further five year. The following Table shows the actual and trend values of SCBNL and GIBL.

Table: 4.14

Trend Analysis of Total Investment of SCBNL and GIBL

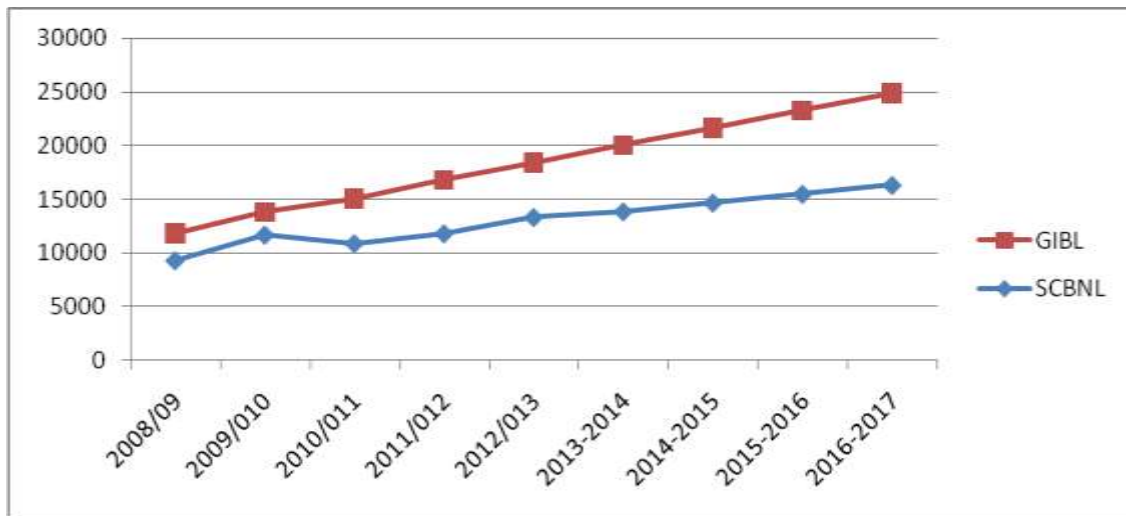
(Rs. in Millions)

Year	SCBNL	GIBL
2008/09	9292.1	2535.7
2009/010	11692.3	2128.9
2010/011	10889.02	4200.5
2011/012	11823.4	4984.3
2012/013	13340.2	5059.6
2013-2014	13875.59	6152.76
2014-2015	14698.32	6943.08
2015-2016	15521.05	7733.4
2016-2017	16343.78	8523.72

(Source Annex II)

Figure: 4.14

Trend Analysis of Total Investment of SCBNL and GIBL



The above table shows that the total investment of both the banks has increasing trend. The increasing trend of SCBNL is higher and aggressive than GIBL. The forecasted trend projected that the SCBNL has greater increment rate in total investment than the increment rate of GIBL. The figure indicates SCBNL has highly mobilized the total investment.

D) Trend Analysis of Net Profit

Here, the trend values of net profit Between SCBNL and GIBL have been calculated for further five year. The following Table shows the actual and trend values of SCBNL and GIBL.

Table: 4.15

Trend Analysis of Net Profit of SCBNL and GIBL

(Rs. in Millions)

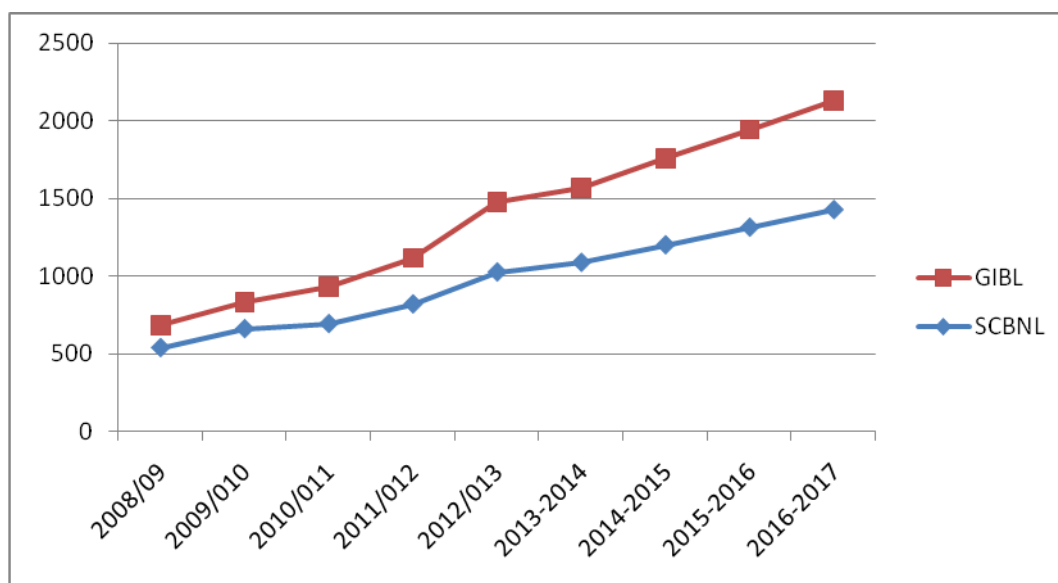
Year	SCBNL	GIBL
2008/09	536.24	143.66
2009/010	658.76	170.8
2010/011	691.69	237.3
2011/012	818.92	296.41
2012/013	1025.11	451.2
2013-2014	1087.51	482.077
2014-2015	1201.3	556.146
2015-2016	1315.09	630.215

2016-2017	1428.88	704.284
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(Source Annex II)

Figure: 4.15

Trend Analysis of Net Profit of SCBNL and GIBL



The above table shows that the total investment of both the banks has increasing trend. The increasing trend of SCBNL is higher and aggressive than GIBL. Above statistics, shows that both the banks have consistent net profit throughout the study period. In conclusion, SCBNL is doing better in order to generate net profit during the projected study period, though both GIBL and SCBNL have increasing trend.

4.6 Major Findings of the Study

- There is more variation in liquid ratio maintained by GIBL compared to SCBNL.
- The quick ratios of SCBNL are always better than GIBL. It shows the better liquidity position of SCBNL in comparison to GIBL.
- The cash and bank balance position with respect to total deposit, is better in the case of SCBNL than GIBL.
- Loan and advances to total deposit ratio or total deposit turnover ratio of SCBNL is better than GIBL. It is the indication of better performance of SCBNL. Thus SCBNL is utilizing the funds more efficiently for the profit generating purpose on loan and advances than GIBL.

- In case of total investment to total deposits it seems that GIBL is more inconsistency than SCBNL. It signifies SCBNL has successfully allocated its depositing investment portfolio.
- GIBL has utilized its total assets more efficiently in the form of loan and advances. The higher C.V. of SCBNL states that it has less uniformity in these ratios throughout the study period than that of GIBL. S.D. and C.V. of SCBNL have high than the GIBL.
- The analysis above helps to conclude that the overall profitability of SCBNL has been better than GIBL. SCBNL is efficiently using its working fund of assets to earn higher rate of profit.
- Comparing the banks, it can be concluded that SCBNL was most effective in optimally mobilizing the shareholders equity
- There is significant relationship between deposits and loan and advances of both the banks.
- There is significant relationship between total deposit and total investment of SCBNL and GIBL.
- It can be concluded that the degree of relationship between total investment and net profit of GIBL is little high than the SCBNL. This little correlation coefficient indicates that the bank has poor performed in order to generate net profit.
- It seems that the incensement of total deposits of SCBNL is higher than that of GIBL. From the above trend analysis it is clear that SCBNL has higher position in collecting deposit than GIBL.

CHAPTER-V

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary

Establishment of commercial banks, especially joint venture banks, has continued in response to the economic liberalization policies of the Government. As a result, in Nepal there are seventeen commercial banks at present competing with each other in their business. These joint venture banks have concentrated themselves on financing foreign trade, commerce and industry. As mentioned earlier, this study concentrates on the comparative analysis of working capital position of aforementioned banks Standard Charter Bank Nepal Limited (SCBNL) and Global Ime Bank Limited (GIBL). From the perspective of the researcher, these two banks are chosen for study mainly because of accessibility and availability of financial data for latest five year period. To fulfill the objective, an appropriate research methodology has been developed, which includes ratio analysis as financial tool and trend analysis, correlation coefficient. The major ratio analysis consists of the composition of working capital, liquidity position, turnover position, capital structure position and profitability position. Under these, main ratios and their trend position are studied in the chapter four. In order to test the relationship between the various components of working capital, Karl Pearson's Correlation Coefficient r^2 is calculated and analyzed. Some null hypothesis formulated in chapter three are tested in appendices and results are analyzed in chapter four.

5.2 Conclusion

In conclusion, it can be said that working capital management is one of the most important parts of every financial institutions. Working capital is a crucial capital, which is often compared to lifeblood of the human being. After analyzing the two samples banks SCBNL and GIBL comparatively using various financial and statistical tools, various important conclusions have been derived from the study. The average cash and bank balance and Government securities percentage is higher in GIBL than in SCBNL. The net working capitals of only SCBNL are positive in the first year of the study period. Comparatively, SCBNL has higher net working capital that GIBL. Both the banks are able to maintain adequate liquidity position to meet the short term or even instant obligations in that period.

The liquid ratio of both SCBNL and GIBL are below the normal standard ratio of 2:1. However, the liquidity position of SCBNL is slightly better than that of GIBL. Although higher liquidity means lower risk as well as lower profit, but in commercial bank, higher liquidity is not always the cause of lower profitability. In case of profitability position, profitability in terms of interest earned to total assets ratio of GIBL is slightly higher than that of SCBNL. Therefore, GIBL is more efficiently using its total assets (funds) to earn interest income. The net profit to total assets and the net profit to deposit ratios are also higher in SCBNL than in GIBL. Thus, it is concluded that the average profitability ratio of SCBNL is higher than that of GIBL. Both the banks have constant level of growth in profitability during the study period. To acquire higher profits they should take strong steps for the better management, strong marketing and strategic development etc. The correlation coefficient of the variables selected for the statistical analysis shows that SCBNL has significant relationship with cash and bank balance and liquid liabilities and government securities and total deposits but insignificant relationship with loan and advances and net profit and loan and advances and total deposit. Similarly, GIBL has insignificantly relationship with cash and bank balance and liquid liabilities and Government securities and total deposits except loan and advances and total deposits and loan and advances and net profit. Therefore, from above all, it can be concluded that both the banks are not of much difference. Comparatively, SCBNL is financially steady and better than GIBL. But it does not mean that GIBL is not performing well. Both banks are striving for better performance by adopting various new strategic and providing additional services.

5.3 Recommendations

On the basis of the major findings drawn on the previous chapter and the conclusion made in this chapter, the following recommendations have been given for the enhancement of the liquidity and profitability position of the sampled banks;

- There is more variation in liquid ratio maintained by GIBL compared to SCBNL. Thus it is recommended that SCBNL should also provide variation in Liquid ratio. It would be better if all the banks focus on collecting the deposit through fixed deposit, which requires less liquidity in the bank and the bank can invest such money in productive sector. The net profit earned and the net profit margin of GIBL was lowest. It would be better if GIBL reengineers the portfolio of its investment to achieve

higher profit. Although SCBNL earned highest profit within these five years period, the interest income to loan and advances of SCBNL was lowest.

- There is significant relationship between total deposit and total investment of SCBNL and GIBL.
- It can be concluded that the degree of relationship between total investment and net profit of GIBL is little high than the SCBNL. This little correlation coefficient indicates that the bank has poor performed in order to generate net profit.
- Thus, SCBNL should seek the high interest earning grant. For the purpose, the bank should develop an innovative approach to bank marketing and 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.
- The bank is also required to explore new market areas. For this purpose, it is recommended to form a strong market department in its central level, which deals with the banking products, places, price and promotion.
- Loan and advances to total deposit ratio or total deposit turnover ratio of SCBNL is better than GIBL. It is the indication of better performance of SCBNL. Thus SCBNL is utilizing the funds more efficiently for the profit generating purpose on loan and advances than GIBL

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ANNEX I

Calculation of Liquidity Ratio

- 1) Calculation of mean Standard deviation and C.V. of SCBNL

Calculation of Liquidity Ratio

- 1) Calculation of mean Standard deviation and C.V. of SCBNL

$$\text{Mean } (\bar{X}) = \frac{\sum X}{N} = 5.51/5 = 1.10$$

$$\text{Standard Deviation} = \frac{\sqrt{\sum (X - \bar{x})^2}}{N} = 0.066$$

$$\text{C.V.} = \frac{\sigma}{\bar{x}} * 100 = \frac{0.066}{1.10} = 0.06$$

Note likewise GIBL was also calculated.

Calculation of Quick Ratio

- 2) Calculation of mean Standard deviation and C.V. of GIBL**

Year	X	(X- \bar{x}) ²
2004-2005	0.30	0.0016
2005-2006	0.26	0
2006-2007	0.23	0.0009
2007-2008	0.26	0
2008-2009	0.28	0.0004
N=5	$\sum X = 1.33$	$\sum (X - \bar{x})^2 = 0.0029$

$$\text{Mean } (\bar{X}) = \frac{\sum X}{N} = 1.33/5 = 0.26$$

$$\text{Standard Deviation} = \frac{\sqrt{\sum (X - \bar{x})^2}}{N} = 0.024$$

$$\text{C.V.} = \frac{\sigma}{\bar{x}} * 100 = 0.092$$

Note likewise SCBNL was also calculated.

3) Calculation of cash and Bank balance to Total Deposit Ratio of SCBNL

Calculation of mean Standard deviation and C.V. of SCBNL

Year	X	(X- \bar{x}) ²
2008/09	0.22	0.0009
2009/010	0.21	0.0004
2010/011	0.22	0.0009
2011/012	0.16	0.0009
2012/013	0.18	0.0001
N=5	$\sum x=0.99$	$\sum(X-x)=0.0032$

$$\text{Mean } (\bar{X}) = \frac{\sum X}{N} = 0.99/5 = 0.19$$

$$\text{Standard Deviation} = \frac{\sqrt{\sum(X-\bar{x})^2}}{N} = 0.025$$

$$\text{C.V.} = \frac{\sigma}{\bar{x}} * 100 = 0.13$$

Note likewise GIBL was also calculated.

4) Calculation of Loan and Advances to Total Deposit of GIBL

Year	X	(X- \bar{x}) ²
2008/09	0.54	0.0064
2009/010	0.59	0.0009
2010/011	0.59	0.0009
2011/012	0.63	0.0001
2012/013	0.75	0.0169
N=5	$\sum x=3.1$	$\sum(X-x)=0.0252$

$$\text{Mean } (\bar{X}) = \frac{\sum X}{N} = 3.1/5 = 0.62$$

$$\text{Standard Deviation} = \frac{\sqrt{\sum(X-\bar{x})^2}}{N} = 0.07$$

$$\text{C.V.} = \frac{\sigma}{\bar{x}} * 100 = 0.11$$

Note likewise SCBNL was also calculated.

5) Calculation of Total Investment to Total Deposit of SCBNL

Year	X	(X- \bar{x}) ²	
2008/09	0.41	0.0001	
2009/010	0.50	0.0064	
2010/011	0.46	0.0016	
2011/012	0.40	0.0004	
2012/013	0.37	0.0025	
N=5	$\sum x=2.14$	$\sum (X-x)=0.011$	Mean

$$(\bar{X}) = \frac{\sum X}{N} = 2.14/5 = 0.42$$

$$\text{Standard Deviation} = \frac{\sqrt{\sum (X-\bar{x})^2}}{N} = 0.046$$

$$\text{C.V.} = \frac{\sigma}{\bar{x}} * 100 = 0.11$$

Note likewise GIBL was also calculated

6) Calculation of Loan and Advances to Total Assets of GIBL

Year	X	(X- \bar{x}) ²	
2008/09	0.47	0.0049	
2009/010	0.52	0.0004	
2010/011	0.52	0.0004	
2011/012	0.55	0.0001	
2012/013	0.66	0.0144	
N=5	$\sum x=2.72$	$\sum (X-\bar{x})^2=0.0202$	Mean (\bar{X}) $= \frac{\sum X}{N} = 2.72/5 = 0.54$

$$\text{Standard Deviation} = \frac{\sqrt{\sum (X-\bar{x})^2}}{N} = 0.065$$

$$\text{C.V.} = \frac{\sigma}{\bar{x}} * 100 = 0.12$$

Note likewise SCBNL was also calculated.

7) Calculation of Return on Equity of SCBNL

Year	X	(X- \bar{x}) ²
2008/09	35.96	1.8769
2009/010	33.89	0.49

2010/011	37.55	8.7616
2011/012	32.68	3.6481
2012/013	32.85	3.0276
N=5	$\sum x=172.93$	$\sum (X-\bar{x})^2= 17.8042$

x	y	D1=(x- \bar{x})	D2=(y- \bar{y})	D12	D22	D1*D*
5592.6	22487	-3070.7	-4555.2	9429198.49	20749847.04	13987652.64
5324.9	23459	-3338.4	-3583.2	11144914.6	12839322.24	11962154.88
5000	23649	-3663.3	-3393.2	13419766.9	11513806.24	12430309.56
13719	29744	5055.7	2701.8	25560102.5	7299723.24	13659490.26
13680	35872	5016.7	8829.8	25167278.9	77965368.04	44296457.66
43316.5	135211			84721261.3	130368066.8	96336065

$$\text{Mean } (\bar{X}) = \frac{\sum X}{N} = 172.93/5 = 34.59$$

$$\text{Standard Deviation} = \frac{\sqrt{\sum (X-\bar{x})^2}}{N} = 1.88$$

$$\text{C.V.} = \frac{\sigma}{\bar{x}} * 100 = 0.05$$

ANNEX II

Correlation between Deposit and Loan and Advances of SCBNL

Mean X = 8663.3

Mean y = 27042.2

Std x= 4116.33

Std y= 5106.23

$$R = \frac{\sum ny}{\sigma_1 \sigma_2 N} = 0.91$$

Likewise Correlation between Deposit and Loan and Advances of GIBL was calculated.

Coefficient of Correlation between Total Deposits and Total

Investment SCBNL

x	y	d1=X-x	d2=Y-y	d12	d22	D1*D2
9292.1	22486.52	-2115.6	-4555.56	4475763.36	20753126.91	9637742.736

11692.3	23459.37	284.6	-3582.71	80997.16	12835810.94	-1019639.266
10889.02	23648.79	-518.68	-3393.29	269028.9424	11514417.02	1760031.657
11823.4	29744	415.7	2701.92	172806.49	7300371.686	1123188.144
13340.2	35871.72	1932.5	8829.64	3734556.25	77962542.53	17063279.3
57037.02	135210.4			8733152.202	130366269.1	28564602.57

Mean X = 11407.40

Mean Y = 27042.08

STD x = 1321.6

STD y = 5106.19

$$R = \frac{\sum ny}{\sigma_1 \sigma_2 N} = 0.84$$

Coefficient of Correlation between Total Investment and Net Profit of SCBNL

x	y	d1=(X-x)	d2=(Y-y)	d1 ²	d2 ²	D1*D2
536.24	9292.1	-209.9	2115.3	44058.01	4474494.09	444001.47
658.76	11692.3	-87.38	284.9	7635.2644	81168.01	-24894.562
691.69	10889.02	-54.45	518.38	2964.8025	268717.8244	28225.791
818.92	11823.4	72.78	416	5296.9284	173056	30276.48
1025.1	13340.2	278.97	1932.8	77824.261	3735715.84	539193.216
3730.72	57037.02			137779.27	8733151.764	1016802.395

Mean X = 746.144

Mean Y = 11407.40

STD x = 165.99

STD y = 1321.6

$$R = \frac{\sum ny}{\sigma_1 \sigma_2 N} = 0.92$$

Trend Analysis of Loan and advances of GIBL

Trend analysis of total deposits of SCBNL

fiscal year (X)	Total Deposits(Y)	$x=X-3$	x^2	xy	$Y=a+bx$
1	22486.52	-2	4	-44973.04	22486.52
2	23459.37	-1	1	-23459.37	23459.37
3	23648.79	0	0	0	23648.79
4	29744	1	1	29744	29744
5	35871.72	2	4	71743.44	35871.72
	135210.4	0	10	33055.03	36958.67
					40264.2
					43569.73
	$a=27042.08$				46875.26
	$b=3305.503$				50180.79

year X	y	$x=X-3$	x^2	xy	
1	13451.66	-2	4	-26903.32	13451.66
2	15761.97	-1	1	-15761.97	15761.97
3	17793.72	0	0	0	17793.72
4	20016.05	1	1	20016.05	20016.05
5	25963.94	2	4	51927.88	25963.94
	92987.34	0	10	29278.64	27381.06
					30308.924
	$a=18597.468$	$b=2927.864$			33236.788
					36164.652

Trend Analysis of Total Investment of SCBNL

year X	y	$x=X-3$	x^2	xy	
1	9292.1	-2	4	-18584.2	11692.3
2	11692.3	-1	1	-11692.3	10889.02
3	10889.02	0	0	0	11823.4
4	11823.4	1	1	11823.4	13340.2
5	13340.2	2	4	26680.4	13875.59
	57037.02	0	10	8227.3	14698.32

					15521.05
	a=11407.40	b= 822.73			16343.78
					9292.1
					11692.3

Trend Analysis of Net profit of GIBL

year X	y	x=X-3	x ²	xy	
1	143.66	-2	4	-287.32	143.66
2	170.8	-1	1	-170.8	170.8
3	237.3	0	0	0	237.3
4	296.41	1	1	296.41	296.41
5	451.2	2	4	902.4	451.2
	1299.37	0	10	740.69	482.077
	a=259.87	b= 74.069			556.146
					630.215
					704.284
					778.353