

**INVESTMENT POLICY ANALYSIS OF COMMERCIAL
BANKS**

(A Comparative Study of Himalayan Bank Ltd. & Nepal SBI Bank Ltd.)

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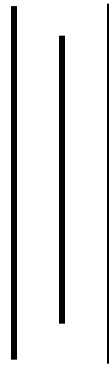
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TABLE OF CONTENTS

Recommendation

Viva-Voce Sheet

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Table of Contents

List of Tables

List of Figures

Abbreviations

Page No.

CHAPTER – I INTRODUCTION

1.1 General Background of the Study	1
1.2 Brief Profile of Sample Companies	3
1.3 Statement of the Problem	4
1.4 Objectives of the Study	7
1.5 Significance of the Study	7
1.6	Limitations of the Study
	8
1.7 Organization of the Study	8

CHAPTER – II REVIEW OF LITERATURE

2.1	Conceptual Framework
	10
2.1.1	Banking in Nepal
	15
2.1.2	The Commercial Bank
	16
2.1.2.1	Functions of Commercial Banks
	18
2.1.3	Concept of Investment
	20
2.1.4	Principles of Sound Investment Policy of Banks
	25
2.1.4.1	Liquidity
	26
2.1.4.2	Profitability
	27

2.1.4.3 Safety	28
2.1.4.4 Diversification	28
2.1.4.5 Marketability	29
2.2 Review of Previous Studies	30
2.2.1 Review of Articles	30
2.2.2 Review of Research Papers	35
2.2.3 Review of Thesis	36
2.3 Research Gap	46

CHAPTER – III RESEARCH METHODOLOGY

3.1 Introduction	48
3.2 Research Design	48
3.3 Population and Sample	48
3.4 Nature and Sources of Data	49
3.5 Data Presentation and Analysis Techniques	49
3.6 Tools for Analysis	49
3.6.1 Financial Tools	50
3.6.2 Statistical Tools	56

CHAPTER – IV DATA PRESENTATION AND ANALYSIS

4.1 Analysis of Investment Sectors	61
4.2 Financial Analysis	64
4.2.1 Analysis of Liquidity Position	64
4.2.2 Analysis of Assets Management	72
4.2.3 Analysis of Profitability Position	78
4.2.4 Analysis of Risk	87
4.2.5 Growth Analysis	90
4.3 Statistical Analysis	96
4.3.1 Correlation Analysis	96
4.3.2 Trend Analysis	102
4.4 Major Findings	108

CHAPTER – V SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary	112
5.2 Conclusion	115
5.3 Recommendations	117

Bibliography

Appendix

LIST OF TABLES

Table No. No.	Title	Page
4.1	Investments Pattern of Himalayan Bank Ltd	61
4.2	Investments Pattern of Nepal SBI Bank Ltd	62
4.3	Current Ratio of HBL and NSBI	65
4.4	Cash and Bank Balance to Total Deposit Ratio of HBL and NSBI	66
4.5	Cash and Bank Balance to Current Assets Ratio of HBL and NSBI	68
4.6	Investments on Government Securities to Current Assets Ratio of HBL and NSBI	70
4.7	Loan and Advance to Total Deposit Ratio of HBL and NSBI	72
4.8	Total Investments to Total Deposit Ratio of HBL and NSBI	74
4.9	Total OBS Operation to Loan and Advances Ratio of HBL and NSBI	75
4.10	Loan Loss Ratio of HBL and NSBI	76
4.11	Return on Loan and Advance Ratio of HBL and NSBI	78
4.12	Return on Total Assets Ratio of HBL and NSBI	80
4.13	Return on Equity Ratio of HBL and NSBI	81
4.14	Total Interest Earned to Total Outside Assets Ratio of HBL and NSBI	83
4.15	Total Interest Earned to Total Operating Income Ratio of HBL and NSBI	85
4.16	Total Interest Paid to Total Deposit Ratio of HBL and NSBI	86
4.17	Credit Risk Ratio of HBL and NSBI	87
4.18	Capital Risk Ratio of HBL and NSBI	89
4.19	Growth Ratio of Total Deposit of HBL and NSBI in Rupees	90
4.20	Growth Ratio of Total Deposit of HBL and NSBI in Percentage	91
4.21	Growth Ratio of Loan and Advance of HBL and NSBI in Rupees	92
4.22	Growth Ratio of Loan and Advance of HBL and NSBI in Percentage	92
4.23	Growth Ratio of Total Investments of HBL and NSBI in Rupees	93
4.24	Growth Ratio of Total Investments of HBL and NSBI in Percentage	93
4.25	Growth Ratio of Net Profit of HBL and NSBI in Rupees	95

4.26	Growth Ratio of Net Profit of HBL and NSBI in Percentage	95
4.27	Correlation between Total deposit and Total Investment of HBL and NSBI	97
4.28	Correlation between Loan and Advances and Net Profit of HBL and NSBI	98
4.29	Correlation between Total Deposits and Net Profit of HBL and NSBI	99
4.30	Correlation between Total Investments and Net Profit of HBL and NSBI	100
4.31	Correlation between Total Investments and Loan and Advance of HBL and NSBI	101
4.32	Correlation between Total Deposits and Loan and Advance of HBL and NSBI	102
4.33	Trend Values of Total Deposits of HBL and NSBI	103
4.34	Trend Values of Total Investments of HBL and NSBI	104
4.35	Trend Values of Total Investments of HBL and NSBI	105
4.36	Trend Values of Net Profit of HBL and NSBI	107

LIST OF FIGURES

Figure No.	Title	Page No.
4.1	Investments Pattern of Himalayan Bank Ltd	62
4.2	Investments Pattern of Nepal SBI Bank Ltd	63
4.3	Current Ratio of HBL and NSBI	65
4.4	Cash and Bank Balance to Total Deposit Ratio of HBL and NSBI	67
4.5	Cash and Bank Balance to Current Assets Ratio of HBL and NSBI	69
4.6	Investments on Government Securities to Current Assets Ratio of HBL and NSBI	71
4.7	Loan and Advance to Total Deposit Ratio of HBL and NSBI	72
4.8	Total Investments to Total Deposit Ratio of HBL and NSBI	74
4.9	Total OBS Operation to Loan and Advances Ratio of HBL and NSBI	75
4.10	Loan Loss Ratio of HBL and NSBI	77
4.11	Return on Loan and Advance Ratio of HBL and NSBI	79
4.12	Return on Total Assets Ratio of HBL and NSBI	80
4.13	Return on Equity Ratio of HBL and NSBI	82
4.14	Total Interest Earned to Total Outside Assets Ratio of HBL and NSBI	83
4.15	Total Interest Earned to Total Operating Income Ratio of HBL and NSBI	85
4.16	Total Interest Paid to Total Deposit Ratio of HBL and NSBI	86
4.17	Credit Risk Ratio of HBL and NSBI	88
4.18	Capital Risk Ratio of HBL and NSBI	89
4.19	Total Deposits	91
4.20	Loan and Advance	92
4.21	Total Investments	94
4.22	Net Profit	95
4.23	Trend values of Total Deposits of HBL and NSBI	103
4.24	Trend values of Total Investments of HBL and NSBI	105
4.25	Trend values of Loan and Advances of HBL and NSBI	106
4.26	Trend values of Net Profit of HBL and NSBI	107

ABBREVIATIONS

B.S.	:	Bikram Sambat
C.V.	:	Coefficient of Variation
e.g.	:	Example
Etc.	:	Extra
viz.	:	Namely
FY	:	Fiscal Year
Govt.	:	Government
HBL	:	Himalayan Bank Limited
i.e.	:	That is
JVB's	:	Joint Venture Banks
Ltd.	:	Limited
Nabil	:	Nabil Bank Limited
No.	:	Number
NRB	:	Nepal Rastra Bank
NSBI	:	Nepal SBI Bank Limited
P.Er.	:	Probable Error
r.	:	Coefficient of Correlation
Rs.	:	Rupees
S.D.	:	Standard Deviation
T.U.	:	Tribhuvan University

CHAPTER - I

INTRODUCTION

1.1 General Background of the Study

An investment policy is any government regulation or law that encourages or discourages foreign investment in the local economy. A sound investment policy is very essential in a nation's economy for economical as well as financial growth of a country. Investment, in its broadest sense, means the sacrifice of current currencies and resources for the sake of future currencies and resources. An investment is one of the decisions of finance function that involves the decision of capital to establish commercial or industrial venture. In other words it involves commitment of funds into long-term assets that would yield benefits in coming future period.

The well-organized financial system of a country plays a great role in the economic development of that country, as it transfers financial resources from savers to those who need them. As part of the financial system, financial institutions such as commercial banks, finance companies and financial cooperative societies are important vehicles for the development of economy, trade and business and other productive sectors that contribute to the economic growth of the nation. The mobilization of financial resources, capital formation, and their proper utilization play key role in the economic development of the country. Among them, the role of commercial banks is perhaps the most important in the economic development in the country.

Commercial banks provide capital for the development of industry, trade and business by investing the saving collected as deposits from the public. They render various other services to their customers facilitating to improve their economic and social life. They are the most important instruments for the country's development. Therefore, a competitive and reliable banking system is essential to every country to develop.

The word 'investment' connotes the investment of income, saving or other collected funds. Investment is possible only when there is adequate saving. If all the incomes are

consumed now for fulfilling basic needs, then there is nothing to investment. Therefore, both the saving and investment are interrelated. A distinction is often made between investments and saving, saving is defined as foregone consumption; investment is restricted to real investment of the sort that increases national output in the futures. It is always true that all people want to invest their money in the most profitable opportunities for good return, but there is always risk associated with it.

Francis (1983) states, "Investing involves making a current commitment of funds in order to obtain an uncertain future return. It is a risky business that demands information. To process information effectively and select the best investment requires goals that are clear cut and realistic. In simple term investment is making a current commitment of funds that is expected to generate additional money in future. Nevertheless, in the broadest sense it means the sacrifice of current rupees for future rupees that take place at present and certain time." Similarly, Sharpe (1986) defines "Investment in the actual sense refers to the sacrifice of current dollars for future dollars". Investment involves two attributes, time and risk. The sacrifice takes place in the present and is certain. The reward comes later, if at all and the magnitude of which is uncertain. In some cases, the element of time predominates (for example, call option on common stock). In yet others, both time and risk play a dominant role (for example, share of common stock).

Therefore, it can be said that investment is concerned with the management of the investor's wealth. Funds to be invested come from trade assets already owned, borrowed money, and saving or foregone consumption. By foregoing consumption today and investing the saving, investors expect to enhance their future consumption possibilities, i.e. they are invested to increase wealth.

Investors also seek to manage their wealth effectively by obtaining the most profit while protecting it from inflation, taxes and other factors. Thus investment policies are the strategies of finding out the answers of where to invest? How much to invest? When to invest? However, there are no specific rules regarding investment policy of a bank and thus it has to keep increasing the safety and liquidity of its resources to meet

the potential demand of its customers. Since the objective of profitability conflicts with those of safety and liquidity, the wise investment policy is to strike a judicious balance between them. Therefore, a bank has to lay down its investment policy in such a manner to ensure the safety and liquidity of its funds and at the same time maximizing its profits.

Investment promotes economic growth and contributes to a nation's wealth. When people deposit money in the saving account of a bank, the bank may invest by lending the funds to various entrepreneurs' business firms. These firms in return may invest the money in new establishments to enhance their production. In addition to borrowing from banks, most companies issue stocks and bonds that they sell to investors to raise capital needed for business expansion. Government also issues bonds to obtain funds to invest in major projects of national interests, such as the construction of dams, roads, irrigation, educational institutions, etc. Nepal Rastra Bank on behalf of the Government of Nepal issues bonds, treasury bills to finance the long-term and short-term needs of the government. All such investments by individuals, firms and government involve getting an expected future benefit. As a result of which, investment helps in raising the living status of common citizen of the nation.

1.2 Brief Profile of Sample Companies

Two sample companies have been taken to conduct the study. A brief description of sample companies viz. Himalayan Bank Ltd and Nepal SBI Bank Limited has been presented below.

a) Nepal SBI Bank Limited

Nepal SBI Bank Limited was established in 1993, under the company Act. It is a foreign joint venture bank and the foreign partner is State Bank of India, holding the 55% of equity share of Nepal SBI Bank Limited, is managing the Bank under joint venture and technical services agreement signed between it and Nepalese promoters. There are 32 branches of Nepal SBI Bank Limited at present in operation. Authorized capital and paid-up capital of Nepal SBI Bank Limited is Rs.200 crores and Rs.131.76

crores respectively and current number of staffs is 325. Fifty five percent of the total share capital of the Bank is held by the SBI, fifteen percent is held by the Employees Provident Fund and thirty percent is held by the general public. The business hour for public is from 10 a.m. to 3 p.m. from Sunday to Thursday and up to 1 p.m. on Friday. Besides this, the bank provides 365 days banking and also evening counter deposit facility with fixed hours in some of its branches. Nepal SBI Ltd provides following products and services.

- i. Deposit Products
- ii. Loans
- iii. Remittance
- iv. Card Services
- v. Internet Banking

b) Himalayan Bank Limited

Himalayan Bank was established in 1993 in joint venture with Habib Bank Limited of Pakistan. This is the first Joint venture Bank managed by Nepalese Chief Executives. There are 24 branches of HBL in operation with 14 branches outside the valley and the rest inside the Kathmandu valley including a Card Center. Himalayan Bank Limited provides SMS banking, internet banking as well as “Any branch banking facility” to its customers. It also provides Evening counter facility to its customers. Himalayan Bank Limited provides following products and services.

- i. Deposit Products
- ii. Loans
- iii. International Banking(LC)
- iv. Remittance
- v. Safe Deposit Lockers
- vi. Card Services
- vii. SMS Banking
- viii. Internet Banking

1.3 Statement of the Problem

The main economic goal of developing countries is to accelerate the present growth rate. Although most of the developing countries are predominantly agricultural; industrial development is crying need of these countries for their economic development and investment is the dominant factor for it. But rate of investment in Nepal is very low. The main cause behind it is political instability, low investor confidences, lack of knowledge on Investment management, lack of improved prospectus to investors, restriction on foreign portfolio investment of Nepal, lack of efficient capital market and slow privatization process.

After the restoration of democracy, the first elected government in 1991 adopted liberalized and market-oriented economic policies followed by liberalization in the financial sector and its reforms. As a consequence, many commercial banks, development banks, financial institutions, financial cooperative societies and NGOs operating in micro finance have mushroomed in the country. There are substantial numbers of commercial banks, development banks and other financial institution that is operating to assist the process of economic development of the country.

All commercial banks play vital role in the mobilization of financial resources by accepting deposits from the public and providing loans and advances to industrial and trading organizations, and as such they gear up the development of business in the country. The economic development of the country thus depends on the volume of investments made by the commercial banks. However, due to the growing competitions among the commercial banks themselves and with other financial institutions they seem to be unable to enhance their investments vis-à-vis the large amount of deposits raised from the public. In other words, commercial banks seem to be unable to formulate and implement strategic investment policy to invest their funds. Meanwhile, they are also facing some criticism that these banks serves only richer community of limited urban areas and not the poor communities in the vast rural areas of the country, and thus they do not seem to be able to invest their funds in vast areas of the country. Their investment policies generally seem to be guided by the philosophy of “be less risky and high liquid”. Therefore, all banks and financial

institutions tap the same market for their investment of funds, which is really a risky as well as less profitable affair. They have to redesign their investment policy and strategy to explore new markets for investment.

Effective utilization of fund is possible only through the formulation and implementation of sound investment policy and strategy of these banks. Due to the lack of formulation of sound investment policy and strategy of commercial banks, these banks seem to be fallen in the trap of risk. They seem to be failed to make proper analysis of various types of risk such as financial risk, interest rate risk, liquidity risk, business risk, and so on.

Besides, it seems that the most of Nepalese commercial banks have not formulated their investment policy in an organized manner. They simply seem to be relying the instructions and guidelines issued by Nepal Rastra Bank. It seems that they do not have clear view of their investment policy. Commercial banks seem to have prompted to invest their funds in limited areas for higher profits. This may be regarded as very risky affair, which may lead them to lose profits as well as their investment. Although profit is important, however, the investment must be safe in the first place and then profitability. Therefore, the formulation of an appropriate investment policy is a must in all the commercial banks, joint venture and other financial institutions.

Financial system of Nepal is still in its preliminary stage of development. Small and fast growing financial sector comprises of commercial banks and other financial institutions like development banks, finance companies, cooperatives, insurance etc. So, for development of financial services in the country is uneven commercial bank are more emphasized to be making loan in short term basis against movable merchandise. There is less interest to invest on long-term project because they are much more safety minded. Therefore, they follow conservative loan policy, which is based on strong security.

The present study has sought to answer the following research questions about the selected joint venture banks:

- What is the relationship between investment and loans and advances with total deposits and total net profit?
- Does the investment decision affect the total earning of the bank?
- Are the available funds properly utilized?
- What are the trends of their deposits, loans and advances, investment and net profits?

1.4 Objectives of the Study

The main objective of this study is to assess the investment policy of Himalayan Bank Ltd and Nepal SBI Bank Ltd. The specific objectives of this study are as follows.

1. To analyze the trend of investment, deposit, loan and advances and net profit of sample commercial banks.
2. To identify investment sector of Himalayan Bank and Nepal SBI Bank
3. To evaluate the liquidity, assets management efficiency, profitability and risk position and growth of Himalayan Bank in comparison to that of Nepal SBI Bank.
4. To study the relationship between investments, deposits, loan and advances and net profit of the sample commercial banks.
5. To provide valuable recommendations on the basis of finding of the analysis for future studies and development.

1.5 Significance of the Study

A sound investment policy of a bank is such that its funds are distributed on different types of assets with good profitability on the one hand and provide maximum safety and security to the depositors and banks on the other hand. So the investment policy of commercial banks should be in accordance with the spirit of the economic advancement of the people and also called it as the life-blood of any financial institution because only deposit collection carries no meaning, there should a proper policy of investment also. If it is utilized in a proper investment then only better return

and sustainability is possible. Therefore, to this significance on account this study on behalf of the firm's investment policy and its relationship is justified as a specified subject matter.

Nepal is one of the least developed countries with poorest economic condition of the world. As the financial services industry becomes more complex, the financial information is more difficult to understand. Quality governance is impossible without effective analysis and evaluation of financial information. In the context of Nepal, there are less availability of research work, articles and journals in investment policy of commercial banks and their financial institutions. The study will certainly help to the management of the concerned banks to improve their performance and would help them to take corrective actions. Thus, this study lies mainly in filling a research gap on the study of investment policy of commercial banks. The study is basically confined to reviewing the investment policy of commercial banks in the five years periods.

This study is expected to definitely provide a useful feedback to the policy makers of commercial banks of Nepal and also to the government and the NRB in formulating appropriate strategies for the improvement in the financial performance. This study is also expected to be beneficial for the related persons in the field of investment and institution. And also help to find out the causes of failure and success of the bank by using the various financial and statistical tools. This research reports helps to gain and share some practical knowledge of banking and management of the commercial banks in the perspective of improving financial performance.

Similarly, depositors can take decision to deposit on their money, also useful to more people and organization such as trade creditors, investors, academicians, general public, stockbrokers etc. It will prove to be an important value for the entire individual interested in commerce and banking field.

1.7 Limitations of the Study

The limitations of the study are as follows:

1. The scope of the study is limited within the frame work of investment policy only
2. The study intends to explore only five years analysis i.e. from fiscal year 2003/04 to 2007/08 and its comparative study
3. Since the study is fully based on the secondary data collected from various sources, their relevancy will depend upon the authenticity of the publishers
4. Only two joint venture banks are selected for the study, which are HBL and NSBL
5. This study deals with limited financial and statistical tools. Hence, the drawbacks and weakness of those tools are the limitations of the study as well.

1.7 Organization of the Study

This study has been presented in the following order;

Chapter - I: Introduction

This is the very first segment of the study. This chapter consists of general background of the study, focus of study, statement of the problem, objectives of the study, significance of the study, limitations of the study and organization of the study. A brief profile of sample companies has also been given.

Chapter - II: Review of Literature

The second chapter, Review of Literature, reviews of available relevant studies. It includes the conceptual review and review of the related books, journals and the published and unpublished research works as well as thesis in separate segments to show what types of studies were made in this field and what conclusions were drawn by the previous researchers.

Chapter - III: Research Methodology

The chapter contains research design, sources of data, population and sample, method of data collection and analysis. Various financial and statistical tools are defined which have been used in the analysis of data.

Chapter - IV: Data Presentation and Analysis

This chapter is the heart of study which consists of presentation and analysis of data and major findings of the study. Analysis has been done as per described in chapter 3 and the calculated results have been presented in a tabulated form and graphical presentation has also been made along with the interpretation of the calculated figures.

Chapter - V: Summary, Conclusion and Recommendations

The fifth and last chapter lists the summary and conclusions, and offers recommendations and suggestions based on the analysis and interpretation of the data. Bibliography and appendices are also included at the end.

CHAPTER - II

REVIEW OF LITERATURE

The purpose of this chapter is to review the relevant literature regarding the investment policy of commercial banks in Nepal so as to formulate the appropriate research problem, hypotheses and the research gap between the previous research studies and the present study. Such a review has been made from various sources of literature available in different libraries, documentation centre, Nepal Stock Exchange Ltd., other information bureaus and the concerned commercial banks' websites. This chapter first presents the conceptual review, review of articles, research papers and previous research studies relevant to this study, and the research gap.

2.2 Conceptual Framework

Conceptual review of various different literature provided by different authors, research scholars, practitioners, etc. have been presented in the following sections:

The term 'bank' derives from the Latin 'Bancus', which refers to the bench on which the bankers would receipts money and his records. Some persons trace its origin to the French 'Benqee' or to the Italian 'Benca', which means a bench for keeping lending and exchanging of money or coins in the market place by moneylenders moneychangers. With the gradual development of bank, its functions are also increasing. It only dealt with the exchanges of money in its preliminary phase, but later it started accepting deposits from the public against interest and providing them in the form of loans to the needy persons were the basic functions defined. Today, however, banks cover wide range of activities. The Bank of Venice", the first public banking institution was established in Italy in 1157 A.D. Subsequently, "Bank of Barcelona" of Spain, the world's second bank was established in 1401 A.D., and "Bank of Geneva" of Switzerland was established in 1407 A.D. "Bank of Amsterdam" The Netherlands was set up in 1609 A.D. was among the very popular commercial banks in the world. The Bank of 'Hindustan', regarded as India's first commercial bank, was established in 1770. As so in 1694 A.D., "The Bank of England" was established, which changed the

process of establishing the banking institutions remarkably. This was a big landmark in the history of banking development. The idea of commercial banks was rapidly spread to all over the world only after the establishment of this bank.

In course of time, banks are among the most important financial institutions in the economy and essential business in thousands of local town and cities. In this context, there is much confusion about exactly what a bank is? Certainly, banks must be identified by the functions they perform in the economy. However, the word bank is generally used to denote a certain kind of trading in money, which mainly consists the exchanging of money, the lending of money, the depositing of money and the transmitting of money.

Due to the rapid modernization and industrialization of the world, banking institutions have been indispensable for the resource mobilization and all round development of the country as they are important to individuals and institutions such as the public, businesses, organizations, government and other institutions. It provides resources for economic development that maintains economic confidence of various segments and expands credit to people. The bank accumulates surplus money form the public, who cannot use the money at the time and lends to those who are in need of that to use for productive purposes. It refers to any institution that deals in money. However, today banks are established for specific purpose such as commercial bank, industrial bank, merchant bank, development bank, rural bank, and so on. When the bank lends the loan to the customers for earning interest, the bank draw the money from institution or individual or people pay the interest amount by the certain interest rate. There are different types of bank focus on different types of service to their customers although the basic principle is sane i.e. mobilize idle resources from productive sectors to the growth of trade, industry and commerce. Today, banks in different countries render various different services to the people for strengthening the whole country's economy.

Legislative environment has significant impact on the commercial banks established, their mobilization and utilization of resources. All the commercial banks have to

conform to the legislative provisions specified in the commercial bank act 2031 and the rules and regulation formulated to facilitate the smooth running of commercial banks.

Compulsory Cash Reserve Ratio (CRR) and Refinancing

Under the provision in Nepal Rastra Bank, (NRB) Act 2002, the NRB has formulated and implemented five annual monetary policies so far. The focus of monetary policy has been to insure price, external and financial sector stability so as to create the environment supportive for high and sustainable economic growth. NRB issues new monetary policy on July 23, 2007 for fiscal year 2007/08 (Monetary Policy; 2007: 10).

The provisions under this policy are as follows:

- i. The compulsory cash reserve ratio (CRR) has been kept unchanged at minimum 5 percent on account.
- ii. The bank rate has been kept unchanged at 6.25 percent. This rate has been used to impose penalty on the amount of shortfall if any commercial bank fails to maintain the CRR.
- iii. The refinance rate on export credit in Nepalese currency has been lowered by 1 percentage point to 2.5 percent from 3.5 percent. The refinance rate to rural development banks however has been kept unchanged at 3.5 percent.
- iv. The sick industries refinance rate has been kept unchanged at 1.5percent.
- v. The sick industry refinance facility of Rs. 2.0 billion has been continuing for 2007/08 as well. The sick industry refinance facility has been put in place since 2002/03.
- vi. NRB will continue the refinance facility of Rs. 500million, similar to sick industry refinance, on the loans used by dalits indigenous, backward, madeshi, and marginalized group as defined by the GON and on the loans used for foreign employment with objectives of providing relief to these sections of society and promoting foreign employment.
- vii. In the context of commercial banks providing substantial amount of short -term credit to the development banks and finance companies, the penal rate has been

increased from 1.5 percent to 2 percent to check the misused of standing liquidity facility (SLF).

Policy Guidelines on the Establishment of the Commercial banks

Under the act of bank and financial institution 2063 NRB issue new policy to establishment of bank and financial institution on 2063/03/29 and timely changed on 2063/12/13 as follows: (Banking Khabar Patra, 2007: 1)

1. Paid up Capital: To establish a commercial bank of national level the paid up capital must be at Rs. 2000 million.
2. Share Capital: In general, the share of commercial banks will be available for the promotes (70 percent) and general public (30 percent). To operation joint venture of the foreign banks and financial institution could have a maximum of 85 percent to minimum 20 percent share investment on the commercial banks of national level. In order to provide adequate opportunity for investment to the Nepali promoters in national level banks, only 15 percent of total share capital will be made available to general public on the condition that the foreign bank and financial institutions are going to acquire more than 50 percent of the total share. Within 15 percent the bank and financial institution put off provision 5 percent for its staff.
3. Banks already in operation: Banks that is already in operation and those who have already acquired letter of intent before the enforcement of these provisions have to bring their capital level within seven years, i.e. by 30Ashad 2070, as per the recently declared provision.
4. Legal procedure: Banks to be established with foreign promoters' participation have also to be registered fulfilling all the legal processes prescribed by the prevalent Nepal laws.
5. Promoter's share payment procedures: Of the total committed sharer capital, the promoters has to deposit in NRB an amount equal to 5 percent along with the application and another 45 percent at the time of receiving the letter of intent on a interest fee basis. The bank should put into operation within one year of receiving the letter of intent. The promoters have to pay fully the remaining balance of committed total share capital before the bank comes into operation. Normally, within 4 months from the date of filling of the application, NRB should give its decision on the establishment of the bank whether it is in favor or against it. If it

declines to issue license, it has to inform in writing with reasons to the concerned body.

6. Promoters' qualification and experience: Action on the application from promoters will not be initiated if it is proved that their collateral has been put on auction by the bank and financial institution as a result of non-payment of loans in the past, who have not cleared such loans or those in the black list of the Credit Information Bureau and 3 years have not elapsed from the date of the removal of their name from such list. The application will be deemed automatically cancelled irrespective of it being on any stage of process for license issuance if the above events are proved. Of the total promoters, one – third should be at least a graduate of Tribhuvan University or recognized institutions with major in economics or accountancy, finance, law, banking or statistics. Likewise, one-fourth promoters should have the work experience of bank or financial institution or similar nature.
7. Promoters' share: Promoter Group's share can be disposed or transferred only on the condition that the bank has been brought in operation, the share allotted to the general public has been floated in the market and after completion of 3 years from the date it has been registered in the Stock Exchange. But before the disposal of such shares it is mandatory to get approval from NRB. The share allotted to general public has to be issued and sold within 3 years from the date the bank cannot issue bonus shares or declare and distribute dividends, shareholders of the promoters group and their family members cannot have access to loans or facilities from the same institution.
7. Disqualify from becoming director: An individual who is already serving as a director in one of the bank or financial institutions licensed by NRB cannot be considered eligible to become the director in other banks or financial institutions. Also, stock brokers, market makers and also an individual and institution involved as an auditor of the bank and institutions carrying on financial transactions cannot be a director.
8. Investment: One person, family, firm, invest maximum 15 percent of a firm and 1 percent of another firm.
9. Promoter: No more than one promoter from one family in one firm.

2.1.1 Banking in Nepal

The history of organized banking in Nepal is not very old. In the past, however, indigenous individuals, wealthy agriculturists, lenders, merchants and traders conducted some banking activities along with their other business occupations. These activities were fragmented and mostly localized. The creation of "Kaushi Tosha Khana" as a banking agency during the regime of King Prithvi Narayan Shah could be regarded as first step towards development of banking in Nepal. However, the establishment of "Tejarath Adda" around 1877 A.D., during the Prime Ministership of Ronoddip Singh to provide credit facilities to public at a very concessional rate of interest could be regarded as a primer foundation of modern banking in Nepal. The Tejarath Adda was set up to provide credit; it did not accept deposits from the public. Therefore, the concept of saving was loan existence in Nepal until the establishment of the first ever commercial bank, i.e. "Nepal Bank Limited" under the Nepal Bank Act, 1937 with Rs. 10 million Authorized Capital. Thereafter, the then government felt the need for a central bank and established "Nepal Rastra Bank (NRB) as the central bank of the country under the Nepal Rastra Bank Act 1956 A.D. in 1956 A.D. It played important role in the monetization and the development of banking sector in the country. Likewise, due to the increasing popularity of the banking functions and rising needs of banking operations in different areas of the country, NRB suggested for the establishment of another commercial bank and in 1966 A.D., Rastriya Banijya Bank was established as a fully government-owned commercial bank whose branches are scattered all over country.

Apart from the commercial banks, NRB also initiated the incorporation of some development banks in the country. As a result, Nepal Industrial Development Corporation was established in 1959 A.D. and Agricultural Development Bank established in 1976 A.D. After the then government adopted the liberalization and privatization economic policy during 1980s, Nepal welcomed the foreign banks to operate joint venture banks in the country. Consequently, Nepal Arab Bank Ltd. (NABIL) was the first joint venture bank established in 1984 A.D., a joint venture of United Arab Emirates Bank. Then two other banks Nepal Indosuez Bank Ltd. with

Indosuez Bank of France and Nepal Grindlays Bank Ltd. with Grindlays Banks of London were established in 1986 A.D., but recently these banks' name have been changed as Nepal Investment Bank Ltd. and Standard Chartered Bank Nepal Ltd. respectively. And other commercial banks, development banks and financial institutions are continued to establish and are contributing to the economy and the banking sector in Nepal.

After the restoration of democracy in Nepal in 1990 A.D., the government took a liberal policy in the banking sector. As an open policy of the government to get permission to invest in banking sector from private and foreign investors under Commercial Bank Act. 1975 A.D. (2031 B.S.), different private banks were provided permission to establish with the joint venture of other countries. Nowadays, there are 26 commercial banks operating in the Nepalese financial market along with 9 joint venture with foreign investors, 20 development banks and 5 rural development banks, 57 finance companies, 44 NGOs and 116 post office saving banks are operating in Nepal. The open and liberal policy in the financial sector has helped in establishing many commercial banks and financial institutions in the country.

2.1.2 The Commercial Bank

The most important kind of banks is the commercial bank. Besides it is the most common kind of Bank with which almost every one of us comes so often in contact. As its very epithet suggests this bank has its connection with the commercial class of people. It collects their floating capital and finances, the temporary needs of commercial transaction. Its deposits are purely demand obligation and hence it is by nature quite incompetent to offer any long-term accommodation. It has, rather need a rule amongst this class of bank not to grant permanent loan and provide capital for investment purpose. Nor does it furnish the whole fixed capital for trading purposes but it supplies as much as is occasionally needed for carrying on business or making investment in it. It has to distinguish between a genuine borrower and speculative investor as well.

Commercial banks deal with other people's money. They have to find ways of keeping their assets liquid so that they could meet the demands of their customers. In their anxiety to make profit, the banks cannot afford to lock up their funds in assets, which are not easily realizable. The depositor's confidence could be secured only if the bank is able to meet the demand for cash promptly and fully. The banker has to keep adequate cash for this purpose. Cash is an idle asset and hence the banker cannot afford to keep a large portion of his assets in the form of cash. Cash brings no income to the bank. Therefore, the banker has to distribute his assets in such a way that they can have adequate profits without sacrificing liquidity.

The commercial banks in Nepal are one of the two components in financial sector basically known as the banking sector component. The other component, nonbanking sector, includes co-operative, regional rural development banks, development banks, financial companies and NGOs. Banks play predominant role in under developed economy in many ways as they promote capital formation by developing banking habit of people and collection saving. People have mobilized them in productive channels. Thus, their role in the economic development is to remove the deficiency of capital by stimulating saving and investment. Commercial bank in current year presents a new picture - a picture of innovation in practice of wider horizon and of new enterprises. The most remarkable diversification of banking function is increasing participation in medium- and long-term financial industries and other sectors; so, they are not only financial institution of finance agricultural and industry and other economic activities but are more than financial institution in the sense that they help saving create deposits and make the subsequent distribution of such accumulated funds.

Commercial Bank Act 2031 B.S of Nepal has defined that,"A commercial bank is one which exchanges money, deposits money, accepts deposits, grant loans and performs commercial banking functions and which is not a bank meant for co-operative, agriculture, industries or for such specific purpose." (Commercial Bank Act, 2031 B.S)

This Act has laid emphasis on the function of commercial bank while defining it. Commercial banks provide short-term debts necessary for trade and commerce. They take deposits from the public and grant loans in different forms. They purchase and discount bills for exchange, promissory notes and exchange foreign currency. They discharge various functions on the behalf of their customers provided that they are paid for their services.

Optimal investment decision plays a vital role in every organization. Financial activities are necessary for the economic development of the country and commercial banking is the heart of financial system. The sound knowledge of investment is a must especially for the commercial banks and other financial institutions, because this subject is relevant for all surrounding that mobilize funds in different sectors in view of return.

As it is concerned to the commercial banks and other financial institutions, they must mobilize (i.e., investment on different sectors) their collections (deposits) and other funds towards the profitable, secured and marketable sectors so that they remain in profit. For this purpose, these banks and financial institutions should gather sufficient information about the firm (client) which is supposed to be invested. This information includes financial background, nature of business as well as its ability to repay the loan back. These all information should be gathered from the viewpoint of security.

2.1.2.1 Functions of Commercial Banks

The commercial banks in every nation of the world have key role in the pursuit of attaining the goal of rapid economic development. Commercial banks are the heart of financial sector, which occupy important place in the framework of the economy. They hold deposits of the people, government and business units. They make funds available through their lending and investing activities to borrowers like individual, business and government sector. Therefore, as they provide capital for the development of the industry, trade, business and services they contribute large portion on the economic growth of the nation commercial banks make sound investment in various sectors of

the economy, which boost the quality of investment as well as achieves, its own objectives of profit maximization. Thus, well-formulated and sound investment policies- coordinated and planned efforts accelerate the pace of economic growth.

Commercial banking as we have seen grew but of the need for a safe place of deposit when the people of London entrusted their savings to the goldsmiths. It did not take much time for them to realize that the business could be made profitable by re-lending what was receives, provided it could be returned before it was required. Gradually, they learnt that the daily payments were more than counter balanced by the daily receipts and hence there was no necessity of this stipulation. It is obvious that borrowing and lending are two leading functions of banking business. There are a few other functions as well which are now performed by these banks. They include the following:

1. Receiving Deposits

Deposits are received under different heads of accounts, the most important of which is the current account, others being the fixed deposit account, the saving bank account, the home safe account, etc. The first deposits received were, however, under fixed deposit account but "the goldsmith found by experience that they could take deposits withdrawal not at a fixed future date, if such deposits were on a large scale, a sufficient proportion of them would always be left untouched for a certain period to enable the holder to lend up to something like that proportion. These have become the foundation of the 'current account' on which the depositor can draw at his will".

2. Lending Money

The second major function of a commercial bank is to lending of money, which it receives by way of deposits. Direct loans and advances are given to\ all types of persons against the personal security of the borrowers of against the security of movable and immovable properties. Loans are granted by banks in four forms i.e. overdrafts, cash credit, direct loans and discounting bills of exchange.

3. Agency Functions

Bankers also act as agents of their customers in various ways. They collect and pay their cheques, bills, promissory notes, coupons, dividend warrants, subscriptions, rents, income tax, insurance premium and other periodical receipts and payments. They purchase and sell on their behalf shares, stocks, debentures and bonds; etc, on the stock exchanges, and other valuables in other markets. They also act as administrators, trustees, executors and attorneys.

4. Miscellaneous Functions

Under miscellaneous functions may be included a number of functions performed by the bankers.

- They receive their customers' valuables ornaments and jewels, documents and deeds, etc. for safe custody and also act as their referee.
- They also make confidential enquiries about the creditworthiness of a prospective customer to enable their customers to enter into important business dealings with them.
- They issue letters of credit of various kinds and bank drafts to their customers for the transfer of money from one place to another.

2.1.3 Concept of Investment

Investment is a present sacrifice for the sake of future benefits. Therefore, investment always involves risk. Present decision about selecting the best alternatives should always take the future risk into consideration. The few alternatives of investment in the past have now expanded into hundreds. Hence, the complexity of investment has also been increasing day by day. To select the best alternative and to construct an efficient portfolio, a wise analysis and decision is required. Before making any decision on investment we must be well informed about the factors, which affect investment. Investment decision related with saving, capital formation, capital market, risk involve with it, return, inflation etc.

The banks are such types of institutions, which deal with money and substitute for money. They deal with deposit, credit and credit instruments. Good circulation of credit is very much important for financial institutions and banks. Unsteady and unevenly flow of credit harms the economy and the profitability of the commercial banks. Thus to collect fund and utilize it in good investments is the prime objective of commercial banks. Diverse and safe investment of fund is the question of stability and existence of the bank. Nowadays, the financial institutions are viewed as catalyst in the process of the economic growth. The mobilization of domestic resources is one of the key factors in the economic development of a country.

Banking industry has acquired a key position in mobilizing resources for finance and social economic development of the country. No function is more important to the economy and it constitutes than financing. "Bank assists both the flow of goods and service from the products to the consumers and financial activities of the government. Banking provides the country with a monetary system of payment and it is important part of the financial system, which makes loans to maintain and increase the level of consumption and production in the economy" (American Institute of Banking, 1972: 1162).

Generally, investment means to flow cash in different sector with profit motive. In a broad sense, however, investment means to sacrifice current rupee in the present and certain for the future purpose rupees, which comes later and is uncertain. The concept of investment and profitability mentioned by different authors in their books and paper are summarized in the paragraphs that follow:

Baidya (1997) has given his view on sound investment policy. He has said that, "A sound investment policy of a bank is such that its funds are distributed on different types of assets with good profitability on the one hand and provides maximum safety and security to the depositors and bank on the other hand, Moreover risk in banking sectors trends to be concentrated in the loan portfolio. When a bank gets into serious financial trouble its problem usually spring from significant amounts of loan that have

become uncollectible due to mismanagement, illegal manipulation of loan misguided lending policy or unexpected economic downturn. So the bank investment policy must be such that it is sound and prudent in order to protect public funds."

Chandler (1973) says in this regard, "A banker seeks optimum combination of earning liquidity and safety, while formulating investment policy." Emphasizing the importance of investment policy puts the importance of investment policy in this way, "Lending is essence of commercial banking, and consequently the formulation and the implementation of sound policies are among the most important responsibilities of bank director's and management. Well conceives lending function effectively and minimize the risk inherent in any extension of credit". He further adds, the formulation of sound lending policies for all bank should have adequate and careful consideration over community needs, size of loan portfolio, character of loan, credit worthiness of borrower and assets pledged to security borrowing interest rate.

Cheney and Mosses (1995) are concerned with the objective of investment and indicate that the risk is in proportion with the degree of returns. They write, "The investment objective is to increase systematically the individual wealth, defined as assets minus liabilities. The higher level of desired wealth, the higher must be received. An investor seeking higher return must be willing to face higher level of risk"

According to Jones (1991) "Investment is the commitment of funds to one or more assets that will be held over some future time period. Investment is concerned with managing an investor's wealth, which is the sum of current income and present value of all future incomes".

In the words of Valla and Tutesa (1983) "There are basically three concepts of investment.

- Economic investment that is an economist's definition of investment,
- Investment in a more general or extended sense, which is used by 'the man on the street', and

- The sense in which we are going to be very much interested namely financial investment".

They further maintain, "Banks are those institutions which accepts deposit from the public and in turn provide credit to trade, business and industry that directly makes a remarkable impact on the economic development of a country. To collect fund and collect as a good investment is very risky job. *Ad hoc* investment decision leads the bank out of the business thereby drawn the economic growth of a country. Hence, sound investment policy is another secret of a successful bank"

In view of Chone (1997), "Investment has many factors. It may involve putting money into bond treasury bills, or notes or common stocks, or paintings of real estate, or mortgage or oil ventures, or cattle or the theater. It may involve specially in bull markets or selling short in bear markets. It may involve options, straddles, rights, warrants, convertibles, margin, gold, silver, mutual funds, money market funds, index funds and result in accumulation of wealth or dissipation of resources diversity and challenge characterize the field. For the able or lucky, the rewards may be substantial. For the unformed results can be disastrous".

Sharpe and Gorden (1999) define investment in this way: "Investment in its broadest sense, means the sacrifice of certain present value for (possible uncertain) future value". In the view of Sharpe and Gorden, the investment is the venture that the return is uncertain. Therefore, they have presented their view in the books that bank should look for the safe and less risky investment.

Pandey (1999) defines in this way, "In investment decision expenditure and benefits should be measured in cash. In investment analysis, cash flows are more important than accounting profit. It may also be pointed out that investment decision affects the firm's value. The firm's value will increase if investments are profitable and add to the shareholders wealth. Thus, investment should be evaluated on the basis of a criterion, which is compatible with the objectives of the shareholder's fund maximization.

Investments will add to the shareholder's wealth if it yields benefit in excess on the minimum benefit as per the opportunity cost of capital".

In the words of Singh and Singh (1983), "The investment (credit) policies of bank are conditioned, to great extent, by the national policy framework; every banker has to apply his own judgment for arriving at a credit decision, keeping of course his banker's credit policy also in mind". As per the above definition, government and central bank have to make a sound policy about the investment policies of commercial banks.

They further state, "The field of investment is more challenging as it offers relatively greater scope to bank or for judgment and discretion in selecting their loan portfolio. But this higher degree of freedom in the field of credit management is also accompanied by greater risk. Particularly, during recent years, the credit function has become more complex".

Shrestha (1995) in her book "Portfolio behavior of commercial bank in Nepal" holds that "The commercial banks fulfill the credit needs of various sectors and the lending policy of commercial bank is based on profit maximizing of the institution as well as the economic enhancement of country".

Radhaswami (1979) says that a bank must strike a balance sheet between liquidity, profitability and safety. "The secret of successful bank is to distribute resource between the various forms of assets in such a way as to get a sound balance between liquidity and profitability so that there is cash (on hand quickly realizable) to meet every claim and at the same time, enough income for the bank to pay its way and earn profits for its shareholders".

From the above definitions and views of various authors it is clear that an investment means to trade, a known rupee amount today for some expected future stream of payments or benefits. That will exceed the current outlay by an amount that will compensate the investor for the time the fund are committed for the expected change in prices during the period of uncertainty involve in expected future cash flows. Thus,

investment is the most important function of commercial banks. Therefore, a bank has to be very cautious while investing funds in various sectors. The success of a bank heavily depends upon the proper management of its investable funds.

Investment management of bank is guided by the investment policy adopted by the bank. Investment policies can be varied from bank to bank. Few banks accept higher risk on investment and other is more conservative for their investment decision. The investment policy of the bank helps the investment function of the bank, which makes the investment efficient and profitable by minimizing the inherent risk. Therefore, that an investment word is attached to economics risks and returns theory of future result (Frank and Reily, 1986:92).

The basic factors that will determine the objectives of a bank's investment policy are its income and its liquidity needs, and management's willingness to trade liquidity for greater income opportunities and vice-versa, which means accepting greater or lesser degrees of risk. Formulation of investment policy must give cognizance to the entire risk exposure that bank management is willing to assume as well as the risk carried by the securities that comprise the investment account. One of the acceptable methods of reducing risk in the investment portfolio of a commercial bank is by diversification, a basic and important rule of any investment policy.

Risks cannot be completely avoided by diversification, but they can be reduced. A commercial bank is most concerned with quality and maturity diversification to minimize the risk. A statement of investment policy should designate the person responsible for handling the investment program. This is fundamental to the efficient operation of an investment portfolio, in that "too many cooks may spoil the stew". Since the board of directors is responsible for the proper investment of the bank's funds, periodic reports regarding the investment portfolio should be prepared for the board's use in evaluating investment management and establishing investment policy. The investment policy of a bank should be reviewed occasionally and modified as economic conditions change.

2.1.4 Principles of Sound Investment Policy of Banks

The commercial banks are inspired with the goal of earning profit. There are many reasons for having profit as their goal. A bank is like a legal person where shareholders are the owners of the bank, the board of directors is the agent of the bank that operates the bank. There are many employees who were appointed to run the banks and to run the banks, it needs a great amount of expenses, whether it is direct or indirect, there is continuous expense in the bank. The main aim of any person or institution to invest the money in the bank is to earn more profit only. There is only one bank i.e. central bank which is established without the aim of gaining profits. Other banks are inspired with the objective of earning profit and helping the economic development and finally to take the social responsibility. They should have the ability to use the policy of banking investment and to implement it much more carefully otherwise a bank may be unsuccessful in its goal (Bhandari, 2003:126).

Without investment, a bank cannot gain profit. The bank cannot be successful until it gains profit. Therefore after the establishments of bank it collects much deposit, get the deposits from the current, saving and fixed deposit account. In this way, the bank apart from the amount deposited from such accounts, collects the capital by selling its shares. The bank can take loans thus; a great capital fund is formed in the bank from different sources. It is not better to keep such capital fund inactive. The bank should be able to clear the policy of its investment by making a deep study on the subject that which sector would be the more trust worthy and dependable to invest the amount collected in the bank. If the bank applies following investment policies or principles it can be successful in its goal.

The guiding principles of sound investment are as follows:

2.1.4.1 Liquidity

Liquidity means the whole stock in the economy. In the case of Nepal the money in use, the money in the accounts of current, saving and fixed period and the money in margin account refer to liquidity. The liquid property means cash stock of the

commercial banks, the amount of short term, current account and short-term government and business security and the Treasury bill. A bank should not forget the principle of liquidity while it is following its investment policy. The commercial banks are considered to be as financial mediators. They have liability to deposit and also quick deliver of the money at the time when depositors asked. For this purpose, the bank should deep adequate liquid fund. And also they should gain profit by utilizing the deposit as a loan and advances. If bank cannot keep their promises such as cannot return the deposits at the time of demand then it may loose the customer and their trust. And if adequate liquid fund is kept, then they can return the deposits as per the demand but such bank cannot run for a long time. In a same way, if they invest the whole deposit as loan and advances, they cannot give it at the time of demand by the depositors. So, the commercial banks try to maintain the liquidity and profit together. It is a great challenge for the manager of the bank.

The commercial banks should attract their customer to deposit because a deposit is called raw materials of banking, without which bank cannot run. It is important thing in which sectors the amount of each deposit is to be invested. There is no interest in current account but as it has to give payment immediately, plenty of liquidity is necessary for it. From the viewpoint of property, loan and advances are more income generating sectors but they are less liquid able. The amount would not be recovered at the time of want. Similarly keeping more money in the bank is very more liquid able, but does not generate income to the bank. The quantity of liquidity is less for investment so maintenance of coordination between the property and the liquidity properly to provide loan and to invest it is the success of the commercial banks. The Central bank pays attention to this reality to give direction on liquidity to the commercial banks.

2.1.4.2 Profitability

The main objective of any commercial bank is to earn profit. The bank should follow the objective by focusing it on the sectors in which it can earn much profit. The investments or granting loan and advances by the bank is highly influenced by profit

margin. The bank should not keep its means and materials inactive; it should keep on investing the means and materials in appropriate and safe area. The bank can gain much profit from the safe and long-term investment. But there is less liquidity in such investment. It may lose the investment in the sector where profit is not gained. Where there is more risk, there is more profit. But sometimes it may create a situation where the bank should face the great economic loss. So, the profit and liquidity are the two opposite principles. If the bank pays its attention only for profit, the liquidity becomes less, and if it pays its attention towards liquidity then it cannot be a loan-term investment and cannot get profit. So, it should be maintained. The profit of the bank estimates interest rate and the bank charge. So, the bank should always think to apply an appropriate investment policy in such sector from which can earn much.

2.1.4.3 Safety

Safety would be the major guiding principal of a bank, so far as its advances and investment are concerned, because the very existence of a bank depends on the safety of its outstanding, which should never therefore be sacrificed to the profit earning capacity of its advances. A bank should pay special emphasis on safety. Why people are encouraging to deposit their valuable ornaments, jewellery, important document, and money in the bank for the sake of safety. So, if the invested area is unsafe, it isn't good sign for the bank. So, the bank should pay much emphasis on the principles of safety, to follow the investment policy. There will be no doubt of loss whether it is great or little if the bank has not invested in a safe sector. The bank should think it with much sensibility. To invest in an unsafe sector with the hope of gaining much profit is to accept the security of low quality. To invest large loan against less securities by receiving commission, to invest in new places without care, observation and to flow the loan-term loan including these all various reasons will make unsafe of the banks investment. They should be avoided as much as they can. There will be no loss, if the banks invest in profitable sector. So, the bank should seriously study whether they are as a possibility of investment or not. It should invest in a safe sector. If the property held as security is ruined, a security is low in standard or low valued and if there is no possibility of sale of the security, the bank suffer from loss. Therefore, the bank should

follow the principle of safety, short-term loan and invest in profitable sector. In such conditions there will be no possibility of loss. The secured sectors mean the securities of the domestic and foreign company's share debentures and government bonds, etc.

2.1.4.4 Diversification

The principle of diversification means, the banking policy of investing the money in the various sectors. The bank should not follow the policy of investment only in one or two sectors. If it follows such policy, then its investment policy will not be successful one. The bank should invest only after the studying and analyzing the different sectors of different alternatives to earn more profit from little investment. If it invests in many sectors it becomes successful to keep it in balance. There will be less profit from investment of some sector and there will be maximum profit from some another sector. And there may be loss too in some sector. On the whole a bank should be able to be a competent. If it happens, the banking transaction does not go up and down. It can run the bank comfortably and smoothly. In the case of earning profit, the bank should follow the policy of investing various fields. So, there is a statement: "A bank should not lay all its egg in the same basket." By following this principles, on the basis of gold, silver, diamond, development bond, shares of company, debentures, goods. Imports and export, bills and other appropriate securities, the bank has to move a head of their investment policy. The banks always get success in their working capacity from such investment and the bank becomes successful in its goal.

2.1.4.5 Marketability

A bank should adopt the principle of marketability in investment policy. In certain way, the bank moves its investment of flows loan against security. To invest the money, the bank should follow the policy of taking the security of high quality as far as possible, the market if Nepal is small, in such market in order to livingness to its banking transaction, a bank should flow its loan by taking first class securities. The bank should keep in mind, the main principle of marketability while doing investment. And the goods which are taken as securities will be saleable in the market or not? Can the loan be recovered by selling it in the market or not? The bank should adopt the

investment policy by paying attention to the different aspects; it should be study how the market will evaluate the goods which is taken as security. The bank should not invest money by taking the securities of goods, which are not saleable in the market and though they are sold but not fetch the reasonable price, and there is no value of such things. As far as possible the bank should take such goods which can be keep safely and freshly in the market and the loan will be recovered like gold, silver, diamond, company's shares certificates, debentures, development bond and other similar types of securities of immovable property like house, land cannot be sold in time. Therefore, if the bank provides loan by taking reasonable goods as security, then make sure that they are easily saleable in the market and the bank feels secured as well.

2.2 Review of Previous Studies

2.2.1 Review of Articles

In this section, attempt has been made to review some relevant articles in different economic/finance journals, The World Bank Bulletins, dissertation papers, magazines, newspapers, websites and other related literature.

According to Yadav Pant (2007), in "Info Himalayan" wrote that a bank is a service-oriented institution, which provides many kinds of services for its customer, all of which are equally important. Moreover, the quality of services should be up to the mark to meet the customer's requirement. Customers are the key players for a service organization, without whom such organization can ever exist.

Pradhan and Yadav (2007) wrote in "Economic Journal of Nepal", saving is income not consumed. It is one the important and perhaps the chief sources of Investment. In developing countries about 45% of the incremental saving is invested domestically, while in developed countries about 75% of the incremental saving is invested domestically. This suggests that capital is more mobile in developing countries than in developed countries. Saving are of great significance in a country's development.

While saving results in high economic growth rate, rapid development leads in turn high savings. Nepal's saving rate is lower as to other developing countries, however, even to achieve 5 to 6 percent economic growth rate, more than 25 percent annual Investment of GDP is considered necessary. As the country's current domestic saving are about 14% the economic resources are short by nearly 11% in proportion of the GDP. The situation is such that huge portion of Investment has still to be made with external resources. The amount of saving of a typical household in Nepal is small because of the people have limited opportunities for Investment. They prefer to spend saving on commodities rather than on financial assets. This restricts the process of financial intermediation, which might otherwise bring benefits such as reduction of Investment risk and increase in liquidity. When capital is highly mobile international, saving from abroad can also finance the Investment needed at home. When capital is not mobile internationally, saving from abroad will limit investment at home.

Wherever there is Investment there must be Capital formation. The development of an economy requires expansion of productive activities, which in turn is the result of the capital formation, which is the capital stock of the country. The change in the capital stock of the country is known as Investment. Therefore Capital formation is closely related to investment. Investment generally takes two forms:

- i. Financial Investment and
- ii. Physical Investment

Physical Investment related to real Investment in the economy or industry, which is known as capital formation. Capital formation shows the change in gross fixed assets of productive units of manufacturing industries. Capital formation refers to the creation of physical productive facilities such as building tools, equipment and roads. The process of adding to the amount of stock of the real assets produces growth in the economy. It means increasing a country's stock of real capital. It implies additions to the existing supply of capital goods in a country. It represents an additional of new capital stock to existing stock after deducting depreciation, damage and other physical

deterioration of the existing capital stock. Economic progress in country depends upon its rate of capital formation. Hence, a key factor in the development of an economy is the mobilization of domestic resources. In the process of capital formation, the capacity to save by certain classes of people and institution becomes quite important. These people have varied asset-preferences, which change from time to time. The need of entrepreneurs who actually use savings for productive purpose also varies over time.

Shrestha (2006) has presented a short scenario of investment management from his article "Portfolio management in commercial bank, theory and practice".

He has stressed in the following issues, in case of investors having lower income, portfolio management may be limited to small saving incomes. But on the other hand, portfolio management means to invest funds in various schemes of mutual funds like deposits, shares and debentures for the investors with surplus income. Therefore, portfolio management becomes very important both for an individual as well as for institutional investors. Large investors would like to select a best mix of investment assets and subject to the following aspects.

- Higher return which is comparable with alternative opportunities available according to the risk class of investor.
- Good liquidity with adequate safety on investment.
- Certain capital gains.
- Maximum tax concession.
- Flexible investment.
- Economic and efficient investment.

In the view of these aspects, investor's are expected to develop the following strategy.

- Do not hold any single security; try to have a portfolio of different securities.
- Do not put all the eggs in one basket i.e to have a diversified investment.
- Choose such a portfolio of securities, which ensures maximum return with minimum risk or lower return with added objective wealth maximization.

In order to prepare structure and modus operandi of effective portfolio management, Mr. Shrestha has presented the following approaches to be adopted.

- To find out the investing assets (generally securities) having scope for better returns depending upon individual characteristics like age, health need deposition liquidity and tax liquidity etc.
- To find out the risk of securities depending upon the attitude of investor towards risk.
- To develop alternative investment strategies for selecting of better portfolio which will ensure a trade off between risk and return so as to attain the primary objective of wealth maximization at lowest risk.
- To identify variety of securities for investment to refuse volatility of returns and risk.

Shrestha has presented two types of investment analysis techniques one is fundamental analysis and another is technical analysis. And this analysis technique is necessary to consider any securities such as equity, debenture or bonds and other money and capital market instruments. He has stressed the requirements of skilled manpower, research and analysis team and proper management information system (MIS) in any commercial bank to get success in portfolio management and customer's confidence. At last, Shrestha has put out the following remarks:

- For the survival of every bank it has to be depends upon its own financial health and various activities.
- Portfolio manager of investment management methodology have to reflect.
- High standard in order to develop and expand the portfolio management activities successfully and have to give their clients the benefits of global strength, local insight and prudent philosophy.
- To always earn superior return, a portfolio manager has to enhance the opportunity for each investor (client) with disciplined and systematic approve to the selection of appropriate countries, financial assets and the management of various risk.

- The Nepalese banks having greater network and access to national and international capital market have to go for portfolio management activities.
- The increment of their fee based income as well as to enrich the client based and to contribute in national economy.

Sharma (2006) with the title of 'Banking the future on competition' wrote in Business age that the commercial banks are establishing and operating mostly in urban areas. From his studies he found that: - Commercial banks are establishing and providing their service in urban area only. They don't have interest to establish in rural areas. Only the branch of Nepal Bank Ltd and Rastriya Banijya Bank Ltd. are running in those sectors.

- They have maximum tax concession.
- They don't properly analyze the credit system.

He found that due to the lack of Investment avenues, banks are tempted to invest without proper credit appraisal and personal guarantee, whose negatives side effects would show colors only after four or five years.

Shrestha (1998) in her article, "Lending operation of commercial banks of Nepal and its impact on GDP" has presented the objectives to make and analysis of contribution of commercial banks lending to the Gross Domestic Product (GDP) of Nepal. She has set hypothesis that there has been positive impact of lending of commercial banks to the GDP. In research methodology, she has considered GDP as the dependant variable and various sectors of lending viz. Agriculture, Industrial, Commercial, Service and general and social sectors as independent variables. A multiple regression technique has been applied to analyze the contribution.

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

financial performance of commercial banks using both descriptive and diagnostic approach. In her study, she has concluded the following points:

- The structures of commercial banks shows that bank invest on the average 75% of their total deposit on the government securities and the resources.
- The analysis of resources position of commercial banks showed quit high percentage of deposit as cash reserve.
- Return ratio of all the banks show that most of the time foreign banks have higher risk of Nepalese banks.
- The debt equity ratios of commercial banks are more then 100% in the most of the period under study period. It led to conclude that the commercial banks are highly leveraged and highly risk. Joint venture banks had higher capital adequacy ratio but has been dealing everyday.
- Income of analysis of the management achievement foreign banks has comparatively higher total management achievement index.

Thus comparing all the banks through the time period financial condition and performance are better in joint venture banks than local banks.

2.2.2 Review of Research Papers

There are not many research papers or articles published on the investment policy of commercial banks in Nepal. In the context of Nepal, there is a need of research of investments in commercial banks and financial institutions as their routine work. And some of the author who did research on relevant topic (investment policy) is given below:

Pradhan, (1992) in one of the research papers entitled “Financial Management and Practices in Nepal” has inquired about financial functions, sources and types of financing, financing decisions involving debt effect of change in taxes on capital structure, financial distress, dealing with banks and dividend policy. The major findings of the study related to financial management are presented below:

- Bank and retained earnings are the two must widely use financing sources.

- The enterprises have a definite performance for bank loans at a lower level of debts.
- Generally, there is no definite time to borrow and issue stocks, that is, majorities of respondents are unable to predict when interest rate will low or go up or are unable to predict when the stock will go down or up.
- Most enterprises do not borrow from one bank only and they do switch over between banks whichever offer most attractive interest rates.
- Most enterprises find that banks are flexible in interest rates as per their convenience.

To sum up, it can be said that out of numerous studies in the capital market in Nepal, this study is established itself as a milestone and an outstanding one.

Dr. Shrestha (1993) in her research paper entitled “Investment planning of commercial banks in Nepal”, has made remarkable efforts to examine the investment planning of commercial banks in Nepal. Based on her study, she concludes that bank portfolio (loans and investment) of commercial banks has been influenced by the variable securities rates. Investment planning of commercial banks in Nepal is directly traced to fiscal policy of the government and heavy regulatory procedure of Nepal Rastra Bank. Therefore, the investments are not made in professional manner. Investment planning and operation of commercial banks in Nepal has not been found satisfactory in terms of profitability, liquidity, safety, productivity and social responsibility. To overcome this problem, she has suggested that “...commercial banks should take their investment function with proper business attitude and should perform lending and investment operation efficiently with proper analysis of the projects”.

2.2.3 Review of Thesis

A number of researchers who conducted their research study on the investment policy of commercial banks. The following are the review of those studies:

Dhakal (2008) conducted a study on "Investment Policy of Commercial Banks in Nepal" with the objectives that are as follows:

- To find out the relationships between total investments, loan and advances, deposit, net profit and outside assets.
- To identify the investment priority sectors of sampled commercial banks.
- To assess the impact of investment on profitability.
- To analyze and forecast the trend and structure of deposit utilization and its projection for five years of commercial banks.
- To provide suggestions and possible guidelines to improve investment policy and its problems.

The study was conducted based on the primary and secondary data. The research findings of the study were the following:

- The liquidity position of Everest Bank Ltd. (EBL) was comparatively better than that of Nabil Bank Ltd. (NABIL) and Bank of Kathmandu Ltd. (BOK). All the three banks had met the normal standard current asset ratio to meet the short-term obligations of their customers.
- EBL had invested the most in Government Securities, followed by BOK and NABIL. BOK had mobilized a huge sum its funds to earn the profit.
- From the analysis of assets management ratio, EBL was in better position than NABIL and BOK.
- The loans and advances to total deposit ratio, loan and advances to total working fund ratio of EBL lied in between those of NABIL and BOK.
- EBL had invested the highest portion of its total working fund on government securities as compared to NABIL and BOK. Investment on shares and debentures to total working fund ratio was higher in BOK. Overall analysis of profitability ratios showed that EBL was on an average profitable in comparison to other bank i.e. NABIL and BOK.
- The return on loan and advances ratio and return on assets of EBL was lowest of all. The degree of risk was average on EBL. EBL had shown its good performance by increasing earnings by providing loan to clients.

- The trend of the total investment, total deposit, loan and advances and net profit of EBL showed better position than that of NABIL and BOK.

Maharjan (2008) conducted a study on “Investment Analysis of Commercial Banks in Nepal (A Case Study of Nepal Investment Bank, Himalayan Bank, Nepal SBI Bank, Everest Bank and Bank of Kathmandu” with the following objectives:

- To study and analyze percentage of Investment made by selected commercial banks in total Investment made by commercial banks.
- To analyze Investment trend and their projection for next five years of selected commercial banks.
- To identify Investment sector of selected commercial banks.
- To study the relationship between Investment and Deposit of the banks.
- To make the suggestion, recommendation of the study.

The study was conducted on the basis secondary data. The research findings of the study were as follows:

- Mean ratio of HBL’s investment to total commercial banks investment is 9.96% which is extremely higher than that of other banks to total commercial banks. The portion of HBL’s investment is increasing every year in the total investment of Commercial banks.
- NSBIBL had invested most of there fund in government securities than other banks. Likewise EBL, BoKL, HBL and NIBL. HBL, EBL and NIBL had started to invest in other sector from FY 2062. All the banks had invested fewer funds to share and capital of other company.
- The mean ratio of investment on government securities to total assets ratio of NSBIBL is 20.45% which is higher than other banks NSBI uses most of its fund from deposit on investment and loan and advances and less on share and debentures.
- NIBL has used its maximum fund on share and debenture of other companies than other banks. And the mean ratio of total investment to total assets ratio of NIBL is 24.6% which is greater than other banks. Similarly BoKL has fewer ratios than other banks.

- From the growth ratio analysis, it seems that all the banks are increasing their investment, deposit and loan and advance, whatsoever, the growth ratio of NIBL is highest amongst all in terms of investment, deposit and loan and advance.
- From Multiple regression analysis, in case of HBL, NIBL, EBL, BoKL and NSBI, profit is highest when investment plus loan and advance is changed, deposit is constant and it is lowest when investment plus loan and advance is constant, deposit is changed except NSBI. In case of NSBI, profit is lowest when deposit is constant , Investment plus loan & advance is changed.
- The test of hypothesis shows that there is significant difference between two mean i.e investment plus loan and advance to total deposit of HBL and NIBL, investment plus loan and advance to total deposit of EBL and NSBIBL and investment plus loan and advance to total deposit of EBL and BoKL.
- From correlation analysis, it is clear that total investment and total deposit of all five banks has positive relation.
- Total investment of five banks is also in increasing trend. The estimated investment of HBL is higher than that of other banks and that of BoKL is less than other banks.

Basnet (2008) conducted a study on “Investment Policy of Commercial Bank (a comparative study of Nabil Bank Ltd &Himalayan Bank Ltd.)with the objectives that are as follow:

- To examine the fund mobilization fund and investment policy of HBL and NABIL selected for the study.
- To assess the liquidity, profitability, risk positions in asset management of these commercial Banks.
- To evaluate the growth ratios of loan and advances, total investment with respect to growth rates of total deposits and net profit of these banks.
- To find out the relationship between the banks’ total deposits and loans and advances, total deposit and total investment and total outside assets and net profit.

- To examine, interpret and forecast the trend of their deposits and loan and advances, investment and net profit.

The study was conducted on the basis of primary and secondary data. The research findings of the study were as follows:

- The liquidity position of HBL is better than NABIL HBL is more stable and consistent and able to meet the daily cash requirement of their customers.
- NABIL has made lesser investment in government securities as it has injected more funds on other productive sectors.
- NABIL is strong in terms of mobilization of its total deposit as loan and advances when compared to HBL.
- The mean ratio of total investment to total deposits of HBL is higher than that of NABIL and variability of HBL is also lowest which shows stability. NABIL's variability of ratio is highest which indicates high instability in terms of total investment and HBL's utilization of total deposit, as investment is better than NABIL.
- From the analysis the mean ratio of return on total working fund ratio of NABIL is greater than that of HBL which shows that NABIL is successful in utilization of its working fund for profit generating activities.
- NABIL has more uniformity on earning return form loan and advances or it has been more successful in maintaining its higher return on loan and advances.
- The mean ratio of total interest earned to total outside assets of NABIL is slightly higher than that of HBL which shows that it has been successful in earning higher amount of interest on its outside assets in comparison to HBL.
- HBL has higher credit risk in comparison to NABIL.
- The mean of capital risk ratio of NABIL is higher than that of HBL. It indicates that NABIL is successful to attract the deposit and inter bank funds, which help to increase the volume of profit.
- HBL has been successful in collecting deposit over the six year period whereas the performance of NABIL to grant loan and advances is better in compared to HBL.

- HBL is successful to take higher investment policy but NABIL has maintained better profit than HBL.
- The coefficient of correlation analysis between different variables of NABIL and HBL revealed HBL has mobilized its deposits in better way for profit generating activities as well as capable to earn net profit mobilizing its outside asset.
- From the trend analysis, it is found that the deposits collection of HBL is better than the NABIL. The loan and advances of both banks are in fluctuating trend whereas the total investments of both banks are in increasing trend. Similarly, the net profit of NABIL is in fluctuating trend while the net profit of HBL is in increasing trend.
- By the testing of hypothesis it is found that there is no significance difference between mean ratios of total investment to total deposit , loan and advances to total deposits, investment on government securities to current assets ratios , loan and advances to current assets ratio and total interest earned to total outside ratio of NABIL and HBL while there is a significance difference between mean ratios of total investment to total deposit of NABIL and HBL.
- On the analyzing the primary data collected from the respondents regarding the investment policy of the banks, it revealed that the banks follow standard formats while formulating the investment policy of the banks and implementation of the investment policy is higher as they maintain close monitoring and tight control.
- Banks are able to collect the deposits from the public for investment policy. If not, they launch different kinds and types of schemes to attract depositors for acquiring funds.

Shrestha (2007) conducted a study on "A Comparative Analysis on investment performance of commercial banks in Nepal" with the following objectives:

- To analyze the investment activities and fund mobilization with respect to fund based on-balance sheet transactions and fee based off-balance sheet transactions
- To study the asset utilization system, profitability and risk position of commercial banks under study
- To assess the deposit utilization trends and its projection for the future

- To evaluate the growth ratios of loan and advance and total investment and respective growth rate of total deposit and net profit
- To appraise the suggestion on the basis of findings for further growth of the banks under study

The study was conducted on the basis of secondary data. The research findings of the study were as follows:

- The liquidity position of NIBL was stronger than NABIL and HBL. At the same time, liquidity position of NIBL was highly fluctuating, which showed that NIBL bore higher risk than other two banks.
- NIBL had the least investment in Government Securities, which considered the least risky asset.
- From the analysis of assets, management ratio of NIBL in comparison to NABIL and HBL was more successful regarding asset management and deposit mobilization.
- NIBL's investment on shares and debentures was high in comparison to the other two banks but its performance regarding total investment has been very poor.
- In the profitability analysis, none of the three banks' profitability position was clearly better. However, NABIL was slightly better profitability. Therefore, their profitability ratios were in moderate position.
- From the risk point of view, NABIL and NIBL were facing higher risk than HBL, but the risk level of all three banks seemed almost the same.
- From the analysis of growth ratios, NIBL's collection of deposit, granting of loans and advances and net profit were better but in terms of investment, HBL is better.
- The coefficient of correlation analysis between different variables of NABIL, NIBL and HBL revealed that NABIL was weaker regarding mobilization of deposits as loans and advances and NIBL was performing extremely well regarding earning profits from outside assets.

- From the trend analysis study, it was found that all banks were mobilizing their total deposits into loans and advances in increasing trend, which was the indication of efficient mobilization.

Regmi (2006) conducted "A Comparative Study on Investment Policy of Everest Bank and Himalayan Bank Limited" with the objectives as given below:

- To find out the relationship between total investments, deposits, loans and advances, net profit and assets and compare them.
- To evaluate the liquidity, asset management, efficiency, profitability and risk portion of EBL and HBL.
- To analyze the deposit utilization trend and its projection for five years of HBL and EBL
- To provide package of a workable suggestions and possible guidelines to improve investment policies.

The study was carried out the basis of secondary data. The research findings of the study were:

- The liquidity position of EBL was comparatively better than HBL. EBL had the highest cash and bank balance to total deposit ratio, cash and bank balance to current assets ratio than that of HBL.
- Both EBL and HBL had almost same pattern of investment on government securities, but fluctuating ratios showed the unstable policy of investment.
- EBL has higher loan and advances to current assets ratio and successful in deposit collection as well. The assets management ratios of both banks are satisfactory.
- Both bank EBL and HBL had provided its most portion of deposit as loan and advances. Moreover, EBL had invested its more portions as loan and advances, in case of investment in other sectors, HBL had adopted diversified investment policy. EBL invested its working fund in government securities and other companies share and debentures than that of HBL; So HBL was less effective in comparison to EBL.

- In profitability analysis, HBL had maintained high profit margin regarding profitability position. HBL was more successful to generate income through loan and advances and operating income and it had earned more from total outside assets and total working fund.
- From the study, it was concluded that profitability of HBL was better than that of EBL.
- From the risk point of view, HBL had borne lower liquidity risk and credit risk in comparison to EBL regarding various aspects of banking activities. It could be said that HBL had followed a stable liquidity policy justified by lower coefficient of variation.

Joshi (2005) conducted a study on "Investment Policy of Commercial Banks in Nepal: A Comparative Study of Everest Bank Limited with NABIL Bank Limited and Bank of Kathmandu" with the objectives that are as follows:

- To discuss fund mobilization and investment policy of EBL, NABIL and BOK Ltd.
- To evaluate the liquidity, efficiency and profitability and risk position
- To evaluate the growth ratios of loan and advances, total investments with other financial variables.
- To analyze the trend of deposits utilization towards total investment and loan and advances
- To conduct hypothetical test to find whether there is significant difference between the various important ratios of EBL, NABIL and BOK.

The secondary data were used to conduct the study. The research findings of the study were:

- The liquidity position of the EBL was better than NABIL and BOK. EBL had the highest cash and bank balance to total deposits and cash and bank balance to current assets ratio. NABIL had the lowest liquidity position.
- EBL had good deposit collection and made enough investment on Government Securities, but it maintained a moderate investment policy on loans and advances.

- From the analysis of assets management or activity ratio, it was concluded that EBL was average, or in between NABIL and BOK. The total investment of EBL was in between the other two banks. In the study, loans and advances to total deposit was higher in BOK, but total investment to total deposit was higher in NABIL.
- Investment on shares and debentures to total working fund ratio was higher in BOK. However, the coefficient of variation was higher in EBL.
- In analysis of profitability, total interest earned to total outside assets of EBL is lowest at all. However, overall analysis of profitability ratios showed that EBL was an average in comparison to other compared banks i.e., NABIL and BOK.
- From the viewpoint of risk ratio, EBL had higher capital risk ratio, but average of credit risk ratio of NABIL and BOK.

Pandit (2004) has conducted on "Investment Policy Analysis of Joint Venture Banks with Special Reference to Nepal SBI Bank, Bank of Kathmandu and Everest Bank Limited" with the following objectives:

- To evaluate whether the liquidity management assets management, efficiency, profitability position, risk position and investment practices of Nepal SBI Bank, BOK and EBL.
- To find out the relationship between deposit and total investment, deposit and loan and advances and net profit and outside assets.

The study used secondary data for its conduction. The research findings of the study were as follows:

- Liquidity position of SBI Bank was slightly good as compared to BOK and EBL. However, the liquidity positions of the banks under study were not so satisfactory. Therefore, banks should improve their liquidity position to meet their current obligations.
- The study of assets management ratio showed that SBI Bank was not in a better position regarding its on balance sheet activities.

- The profitability position of SBI was not as good as of other banks. Risk ratio of BOK was the highest and the capital risk ratio of EBL was the highest of all. It indicated that BOK and EBL must be careful about risk.
- Growth ratio of SBI and BOK had not successful to increase their source of funds. EBL had succeeded to maintain its higher growth rate of total deposit.
- Trend analysis of total deposits, loan and advances, total investment and net profit and projection of the next 5 years of SBI, BOK and EBL revealed that SBI had increasing trend values in total deposit, total investment and loan and advances of BOK and EBL had an increasing trend value of all types of trend analysis.

Shrestha (2004) conducted a study on "Nepal Rastra Bank Guidelines on Investment Policy of Commercial Banks in Nepal (A Case Study of Nepal Investment Bank LTD)" with objectives presented below:

- To highlight the NRB directives regarding investment policy (loan, advances and investment).
- To analyze the liquidity of NIBL.
- To find out the relationship between total deposit and loan and advances, total deposit and total investment.
- To make the trend value analysis of deposit utilization and its projection for next five years.
- To find out whether NRB guidelines are actually being implemented.

The study was conducted on the basis of secondary data. The main findings of the study were as follows:

- The bank was in good liquidity position to meet the daily cash requirements as it maintained the average cash and bank balance in respect to total deposit.
- The performance of NIBL regarding deposit collection, granting loan and advances and investment was quite satisfactory but did not seem to follow a definite policy.

- NABIL had not efficiently utilized its equity capital; hence, return on equity was not satisfactory because of the lack of around investment policy for mobilization of its equity capital.
- Interest earned to total operating income of NIBL was high. However, bank failed to maintain net profit.
- The analysis of coefficient of correlation showed that there was positive and significant relation between total deposits and loan and advances and current assets and current liabilities and loan loss provision and loans and advances, but there was negative and no significant relationship between outside assets and net profit.
- Trend analysis and projection for next five year of total deposits, loan and advances, investment and net profits were in increasing trend.

While reviewing the books and articles and past studies, it is found that banks are not just the storehouse of the country's wealth but are the reservoirs of resources necessary for economic development and employment generation. There are still different obstacles in the effective operation of the commercial banks in Nepal. Therefore these obstacles should be eradicated for the economic development of Nepal.

The review of above relevant literature helps to better understand the Investment policy of Commercial banks and its main drawbacks and problems. On the basis of feedback derived from the literature review further analysis of the study had been under track.

2.3 Research Gap

Investment in different sectors is made on the basis of the directives and instructions of Nepal Rastra Bank as well as the investment policy and guidelines of the concerned commercial bank itself. Commercial banks should follow these directives and circulars. Furthermore, their own investment guidelines and policies should be in line with NRB directives and circulars. Therefore, the up to date study over the change of

time frame has been a major concern for the researcher, concerned organization as well as the banking industry as a whole.

This study covers the more recent financial data, NRB guidelines and instructions than those of studies previously conducted. Portfolio management is the major part of the bank's investment policy and it is the major concern of stakeholders to know the portfolio behaviors of the bank. To reduce the default risk of credit, there should be the optimum diversification of loan and advance. This study puts its effort to find out the proportion to total loan and advances of the bank disbursed to different sectors of economy and analysis the diversification of its investment.

Not much more research study has been conducted in this topic. A very few study based on only one bank has been conducted before 2003, but this study is based on comparative analysis of two joint venture listed commercial banks namely NSBI and HBL starting from financial year 2003/04 to 2007/08. So, this research work is very much centered to identify responsible causes, to analyze them and recommend improvement measures for the betterment of the banks under study and to analyze the investment position of the two leading banks.

CHAPTER - III

RESEARCH METHODOLOGY

3.1 Introduction

Research methodology refers to the various sequential steps to be adopted by a researcher

in studying a problem with certain objectives in view. In order to achieve the objective of the study, certain method of research has to be used. Research methodology describes the methods and process applied in the entire subject of the study. This chapter is, therefore, devoted to describe the methods used for carrying out the research and attempts to have an insight into the Investments policy adopted by Himalayan Bank Ltd. and Nepal SBI Bank. The following methodology has been followed to conduct the present study.

3.2 Research Design

A research design is purely and simply the framework or plan for a study that guides the collection and analysis of data. Research design is the plan, structure and strategy of investigation conceived so as to obtain answer to research question and to control variances. A true research design is basically concerned with various steps to collect the data for analysis and draw a relevant conclusion. It is the arrangement of conditions for collection and analysis of data that aims to combine relevance to the research purpose with economy in procedure.

To achieve the objective of the study, descriptive and analytical research design has been used. Some financial and statistical tools have been applied to examine facts and description techniques have been adopted to evaluate investments policy of Nepal SBI Bank Ltd. and Himalayan Bank Ltd.

3.5 Population and Sample

Since new commercial banks are being incorporated every year, the number of commercial banks in Nepal has been increasing rapidly. Some have already been

started and others are in the process of starting their business, however, there are 26 commercial banks functioning all over the country at present and most of their stocks are traded actively in the stocks market. Although there are 26 commercial banks operating in Nepal at present, only two banks, Himalayan Bank Ltd. and Nepal SBI Bank have been selected for the study and their data related to investments performance have been comparatively studied.

3.6 Nature and Sources of Data

Mainly, the study is conducted on the basis of the secondary data. The data required for the analysis are directly obtained from the balance sheet and the P/L account of the concerned bank's annual reports. Supplementary data and information are collected from the number of institutions and regulating authorities like NRB, Economic Survey and national planning commission etc. All the secondary data are compiled, processed and tabulated in the time series as per the need and objectives.

Likewise, various data and information are collected from the economic journals, periodicals, bulletins, magazines and other published and unpublished reports and documents from various sources.

3.5 Data Presentation and Analysis Techniques

The data presentation and analysis are focal part of the study. A number of financial and statistical tools are used to analyze the collected data and to achieve the objectives of the study. The analysis of the data has been done according to pattern of data available. Because of limited time and resources, simple analytical statistical tools such as graph, percentage, Karl Pearson's coefficient of correlation, regression analysis and the technique of least square are adopted in this study. In the same way, some useful financial tools such as ratio analysis and trend analysis have also been used for financial analysis. The data extracted from annual reports, financial statements and other available information are processed and tabulated in various tables and charts under different headings according to their nature.

3.6 Tools for Analysis

Financial as well as the statistical tools are used to make the analysis more convenient, reliable and authentic. Their ratios, percentages, mean, standard deviations and coefficients of variations are then calculated and presented in the tables. To study the relationship between two or more variables, correlation coefficients are also calculated. 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.

3.6.1 Financial Tools

Financial ratios have been calculated to ascertain the financial condition of the firm. Financial tools have been used to examine the financial strength and weakness of bank. It is the relationship between financial variables contained in the financial statements (i.e., balance sheet, profit and loss account and income statements). There are several financial to spot out the financial strength and weakness of the firm. There are several financial tools, which could be applied in order to analyze the investment policy of commercial banks. The financial tools used in this study are as follows: Liquidity Ratio, Activity Ratio, Profitability Ratio, Risk Ratio and Growth Ratio.

A. Liquidity Ratio

Liquidity ratio measures the ability of the firms to meet its current obligations. In fact, analysis of liquidity needs the preparation of cash budgets, cash and fund but liquidity ratios, by establishing a relationship between cash and other current assets to current obligations, provide a guide measure of liquidity. Liquidity is measured by the speed with which a bank's asset can be converted into cash to meet deposit withdrawal and other current obligations.

Liquidity of any business organization is directly related to working capital or current assets and current liabilities of that organization. A high degree of liquidity shows inability of proper utilization of funds whereas the lack of liquidity shows the signal of poor credit worthiness loss of creditors confidence or even in legal tangles resulting in the closure of the company. Therefore, commercial banks need liquidity to meet loan demand and deposit withdrawals. Without good liquidity, bank is not able to operate its

function. To measure the bank's solvency position or ability meet its short-term obligation, various liquidity ratios are calculated.

The followings ratios are evaluated under liquidity ratios:

i. Current Ratio

The currents ratio is the ratio of total currents assets and currents liabilities. It shows the relationship between currents assets and currents liabilities.

Mathematically it is represented as:

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

Where,

Currents assets include cash and bank balance, money at call or short-term notice, loans and advance, investments in government securities and other interest receivables and miscellaneous currents assets where as currents liabilities include deposit and other accounts of short-term loan, bills payable, tax provision, staff bonus, dividend payable and miscellaneous currents liabilities.

The widely accepted standard currents ratio is 2:1 but accurate standard depends on circumstance in case of seasonal business ratio.

ii. Cash and Bank Balance to Total Deposit Ratio (Cash Reserve Ratio)

This ratio is computed by dividing cash and bank balance by total deposits. This can be stated as,

$$\text{Cash Reserve Ratio} = \frac{\text{Cash and Bank Balance}}{\text{Total Deposits}}$$

Where,

Cash and bank balance includes cash on hand, foreign cash on hand, cheques and other cash items, balance with domestic bank and balance held abroad. The total deposit consists of currents deposit, savings deposits, fixed deposits, money at calls and short notice and other deposits.

iii. Cash and Bank Balance to Current Assets Ratio

This ratio is computed by dividing cash and bank balance by currents assets

We can state it as:

$$\text{Cash and Bank Balance to Current Assets Ratio} = \frac{\text{Cash and Bank Balance}}{\text{Currents Assets}}$$

iv. Investments on Governments Securities to Currents Assets

An investment on government securities includes Treasury bill and development bonds etc. The ratio can be computed by dividing investments on government securities by current assets. This can be mentioned as:

$$\begin{aligned} & \text{Investments on Governments Securities to Currents Assets} \\ = & \frac{\text{Investment s on Government s Securities}}{\text{Total Currents Assets}} \end{aligned}$$

B. Assets Managements Ratios (Activity Ratios)

Assets managements or activity or turnover ratios are employed to evaluate the efficiency with which the firm manages and utilize its assets. They indicate the speed with which assets are being converted or turned over. Thus, these ratios are used to measure the bank's ability to utilize their available resources.

i. Loan and Advances to Total Deposit Ratio

This ratio can be calculated by dividing loan and advances by total deposits.

This ratio can be stated as:

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

ii. Total Investments to Total Deposit Ratio

This ratio can be calculated by dividing loans and advance by total deposits.

Mathematically:

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

Where,

A total investment includes investments in government securities, investments in debentures and bonds, share in subsidiary companies, shares in other companies and other investments.

iii. Total OBS Operation to Loan and Advances Ratio

This ratio can be calculated by dividing total off the balance sheet items by loans and advance. Mathematically:

$$\text{Total OBS Operation to Loan and Advances Ratio} = \frac{\text{Total OBS Operation}}{\text{Loan and Advances}}$$

iv. Loan Loss Ratio

This ratio can be calculated by dividing Loan loss provision by loans and advance.. Mathematically:

$$\text{Loan Loss Ratio} = \frac{\text{Loan Loss Provision}}{\text{Loan and Advances}}$$

C. Profitability Ratios

Profit is only appeared when there is positive difference between total revenues and total cost over a certain period of time. Profitability ratios are very helpful to measures the overall efficiency of operations of firm. It is a true indication of the financial performance of each and every business organizations. Here profitability ratios are calculated and evaluated in terms of the relationship between net profit and assets.

The followings ratios are taken into accounts under this heading.

i. Return on Loan and Advance Ratio

When net profit is divided by loan and advances the ratio is called return on loan and advances.

Mathematically it is presented as:

$$\text{Return on Loan and Advance Ratio} = \frac{\text{Net Profit}}{\text{Loan and Advances}}$$

ii. Return on Total Assets Ratio

This ratio is calculated by dividing net profit by total assets.

This can be stated as:

$$\text{Return on Total Assets Ratio} = \frac{\text{Net Profit}}{\text{Total Assets}}$$

The numerator indicates with portion of income left to the internal equities after all costs, charges have been deducted

iii. Return on Equity Ratio

This ratio can be calculated by dividing net profit by total equity. Mathematically:

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

iv. Total Interest Earned to Total Outside Assets Ratio

This ratio is calculated by dividing total assets earned by total outside assets and can be stated as:

$$\text{Total Interest Earned to Total Outside Assets Ratio} = \frac{\text{Total Interest Earned}}{\text{Total Outside Assets}}$$

The denominator includes loan and advance and all types of investment. The numerator comprises total interest income from loans, advance, cash credit, overdraft, government securities, inter bank and other investments.

v. Total Interest Earned to Total Operating Income Ratio

This ratio is calculated by dividing total interest earned by total operating income. This can be stated as:

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

vi. Total Interest Paid to Total Deposit Ratio

When total interest paid is divided by total deposit, total interest paid to total deposit is produced.

This ratio can be stated as:

$$\text{Total Interest Paid to Total Deposit Ratio} = \frac{\text{Total Interest Paid}}{\text{Total Deposit}}$$

Where,

Total interest paid includes, total expenses on deposit liabilities, loan and advance (borrowing) and other deposits.

D. Risk Ratio

Risk taking is the prime business of bank's investment managements. It increases effectiveness and profitability of the bank. These ratios indicate the amount of risk associated with the various banking operations, when ultimately influences the bank investment policy.

The followings ratios are evaluated under this topic:

i. Credit Risk Ratio

Credit risk ratios measures the possibility that loan will not be repaid or that investment will deteriorate in quality or go into default with consequent loss to the bank by definition, credit risk ratio is expressed as the percentage of non-performing loan to total loan and advances. Here, dividing total loan and advance by total assets derives this ratio. This can be stated as:

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

ii. Capital Risk Ratio

The capital risk ratio of a bank indicates how much assets values may decline before the position of depositors and other creditors jeopardize. The capital risk is directly related to the return on equity (ROE). Higher the ratio, lower is the capital risk. This ratio is computed by dividing capital (Paid up capital + reserves) by risk-weighted assets as computed under BASLE committee's Formula this can be mentioned as:

$$\text{Capital Risk Ratio} = \frac{\text{Capital (Paid up + Reserves)}}{\text{Risk Weigh ted Assets (RWA)}}$$

E. Growth Ratios

Growth ratios are directly related to the fund mobilization on investments managements of a commercial bank. Growth ratio represents how well the commercial bank is maintaining its economic position.

The followings ratios come under above the headings:

- Growth ratio of total deposit
- Growth ratio of loan and advances
- Growth ratio of total investments and
- Growth ratio of net profit

3.6.2 Statistical Tools

Statistical tools help to find out the trends of financial position of the bank and to analyze the relationship between variables that helps banks to make appropriate investment policy regarding to profit maximization and deposit collection, fund utilization through providing loan and advances or investment on other companies. In this study, statistical tools such as coefficient of correlation between different variables, trend analysis of important variables have been used for analyzing and interpreting the financial data. The basis of statistical analysis related to this study is discussed below:

A. Arithmetic Mean

The mean or average value is a single value within the range of the data that is used to represent all the values in the series. Since an average is somewhere within the range of the data, it is also called a measure of central value. Average value is obtained by adding together all the terms and by dividing this total by the number of items. The formula is given below:

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

Where,

\bar{X} = Arithmetic average

$\sum X$ = Sum of values of all items, and

N = Number of term

B. Standard Deviation

The standard deviation is the measure that is most often used to describe variability in data distributions. It can be thought of as a rough measure of the average amount by which observations deviate on either side of the mean. Denoted by Greek letter σ {read as sigma}, standard deviation is extremely useful for judging the representatives of the mean.

$$\text{Standard deviation is represented as: S.D. } (\sigma) = \frac{\sqrt{\sum (X - \bar{X})^2}}{\sqrt{N}}$$

Where,

\bar{X} = Arithmetic average

σ = Standard deviation

N = Number of items

C. Covariance

The covariance is the ratio of standard deviation to the mean for a given sample used to measure spread. It can also be thought of as the measure of relative risk. The larger the coefficient of variation, the greater is the risk relative to the average.

Mathematically,

$$\text{C.V.} = \frac{\sigma}{\bar{X}}$$

Where,

C.V = Covariance

σ = Standard deviation and

\bar{X} = Arithmetic average

D. Coefficient of Correlation Analysis (r)

“Correlation it is the statistical tools that we can use to describes the degree to which one variable in linearly related to another.” (Richard I Levin and David S. Rubin, Statistics for managements (New Delhi: Prentice Hall of India Pvt. Ltd. 1991; 505).

The coefficient of correlation measures the degree of relationship between two sets of sigma. Among the various methods of finding out coefficients of correlation, Karl

Pearson's method is applied in the study. The result of co-efficient of correlation is always between +1 or -1. When $r = +1$, it means there is perfect relationship between two variables and vice versa. When $r = 0$. It means there is no relationship between two variables.

The Pearson's formula is: -

$$r = \frac{\sum XY}{\sqrt{\sum X^2} \sqrt{\sum Y^2}}$$

E. Coefficient of Determination (R^2)

The coefficient of determination is a measure of the degree of linear association or correlation between two variables one of which happens to be independent and other being dependent variable. In other words coefficient of determination measures the percentage total variation independent variables explained by independent variables. Zero to one is the ranging measurement of this coefficient of multiple determinations. If R^2 is equal to 0.75, which indicates that the independent variables used in, regression model explained 75% of the total variation in the dependent variable. If the regression line is a perfect estimator R^2 will be equal to +1, when there is no correlation the value of R^2 is zero.

F. Probable Error of Coefficient of Correlation(r)

The probable error is a measure of as certainty the reliability of the value of a Person's coefficient of correlation. If the probable error is added to and subtract from the coefficient of correlation, it would gives two such limits within which we can reasonably accept the value of coefficient of correlation to vary. The formula for finding out the probable error of the Karl Pearson's coefficient of correlation is:

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

Where,

$P.E(r)$ = probable error of coefficient of correlation.

r = Coefficient of correlation.

n = No. of pairs observation.

If $r < 6 P.E(r)$, the value of 'r' is not significant no matter how high r value. i.e. there is no evidence of correlation between the variables.

If $r > 6 P.E(r)$, the value of r is significant, i.e. correlation is significant.

G. Trend Analysis (The Least-Square Method)

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

For the calculation of the "line of best fit" following equations should be kept in mind.

$$Y_c = a + bx$$

Where,

Y_c = the estimated value of 'Y' for given value of x obtained from the line of regression of Y on x.

a = "Y-intercept" or mean of 'Y' value.

b = Slope of trend line or rate of change.

x = the variable in times series analysis represents time.

There are two normal equations estimating for 'a' and 'b' are;

$$\Sigma Y = na + b\Sigma x \dots\dots\dots (i)$$

$$\Sigma XY = a\Sigma x + b\Sigma x^2 \dots\dots\dots (ii)$$

Since, $\Sigma x = 0$

Then the above equation becomes,

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

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

The term best fit interpreted in accordance with the principle of least square which consist in minimizing the sum of the square residual or errors of estimate i.e. the deviations between the given observed value of the variables and their corresponding estimated values as given by the line of best fit.

The following trend value analyses for the next five years i.e. till 2013 have been used in this study.

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

CHAPTER - IV

DATA PRESENTATION AND ANALYSIS

The chapter four consists of two segments. The first segment of the chapter deals with presentation and analysis of data collected from various sources while the second part deals with major findings of the study.

4.5 Analysis of Investment Sectors

The investment of sample banks i.e. HBL and NSBI in different sectors such as HMG securities, Nepal Rastra Bank bonds, shares; debentures and other investments have been presented in the following tables and analyzed accordingly.

Table 4.1
Investments Pattern of Himalayan Bank Ltd

Sectors/Year	HMG Securities (in '000)	%	Nepal Rastra Bank Bonds (in '000)	%	Share, Debentures and Bonds (in '000)	%	Other Investments (in '000)	%
2003/04	3431729	36.93	-	-	34266	0.37	5828108	62.70
2004/05	5469729	46.78	-	-	39909	0.34	6182704	52.88
2005/06	5144313	47.24	-	-	39908	0.37	5706151	52.39
2006/07	6454873	54.60	-	-	73424	0.62	5294687	44.78
2007/08	7471668	56.01	-	-	89558	0.67	5778951	43.32
\bar{X}		48.31		-		0.47	6182704	51.22
S.D.		109.09		-		1.11		115.56
CV		2.26		-		2.33		2.26

(Source: Annual Report of HBL and NSBI from 2003/04 to 2007/08)

Figure 4.1

Investments Pattern of Himalayan Bank Ltd

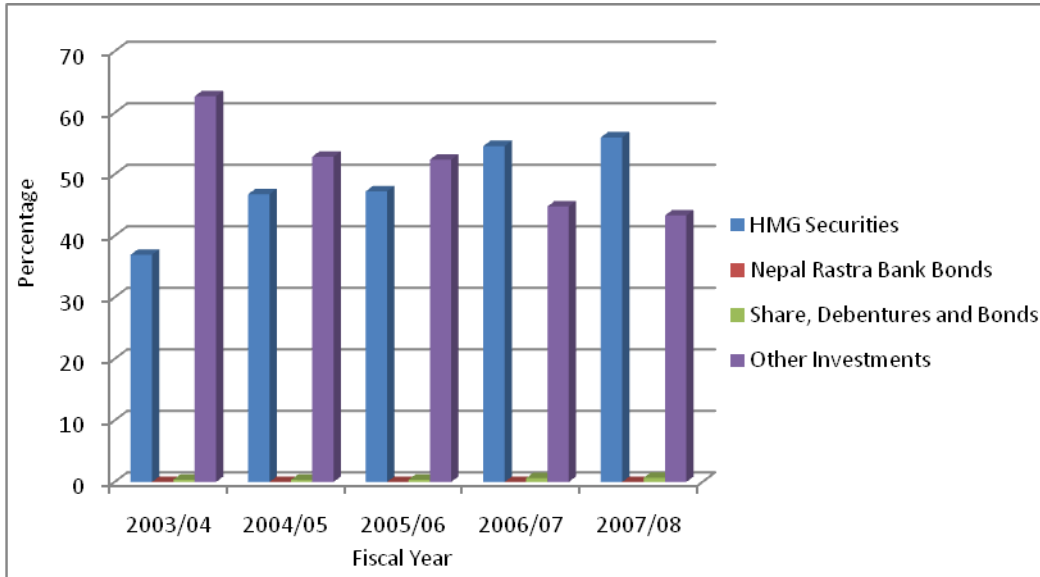


Table 4.2

Investments Pattern of Nepal SBI Bank Ltd

Sectors/ Year	HMG Securities (in '000)	%	Nepal Rastra Bank Bonds (in '000)	%	Share, Debentures and Bonds (in '000)	%	Other Investments (in '000)	%
2003/04	1889635	99.06	-	-	17886	0.94	-	-
2004/05	2588141	99.25	-	-	19539	0.75	-	-
2005/06	3591773	95.54	-	-	19539	0.52	148200	3.94
2006/07	2345580	88.20	-	-	31939	1.20	281934	10.60
2007/08	3035554	98.27	-	-	32822	1.06	20512	0.67
\bar{X}		96.06				0.89		3.04
S.D.		215.01				2.07		11.33
CV		2.24				2.31		3.73

(Source: Annual Report of HBL and NSBI from 2003/04 to 2007/08)

Figure 4.2
Investments Pattern of Nepal SBI Bank Ltd

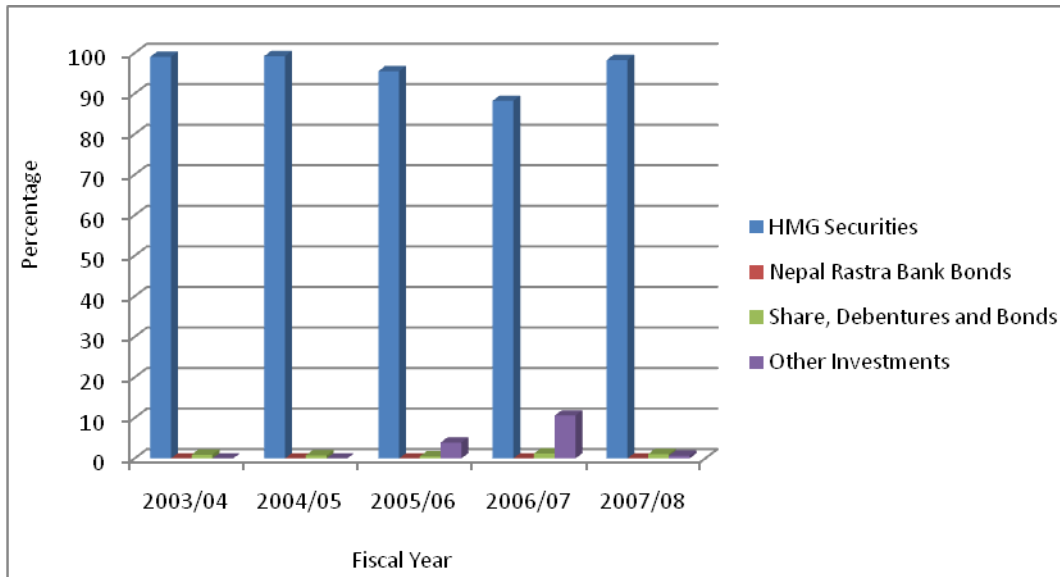


Table 4.1 and figure 4.1 represent the investments pattern of HBL whereas table no. 4.2 and figure 4.2 explain the investments pattern of NSBI. Similarly, the mean ratios, standard deviation and covariance of investments in HMG securities, Nepal Rastra Bank Bonds, Shares, debentures and other investments from fiscal year 2003/04 to fiscal year 2007/08 have also been calculated and presented in the above tables. The investment by NSBI in HMG securities and shares, debentures and bonds is higher than HBL whereas other investments are lower in comparison to HBL. Both the banks have not invested in Nepal Rastra bank bonds. NSBI has high investments in HMG securities while HBL has invested more in other sectors regardless of HMG securities.

As per table no. 4.1, HBL has invested Rs. 3432 million in HMG securities, Rs. 34 million in shares, debentures and bonds and Rs. 5828 million in other sectors in the year 2003/04. The share in HMG securities has gradually increased each year reaching up to Rs. 7472 million in the year 2007/08 which was more than double than that of the year 2003/04. It seems that the bank is increasing its investment in HMG securities as they are risk free than other sectors. Similarly, the investment in share, debenture and bonds shows an increasing trend in the overall period starting from Rs. 34 million in the

year 2003/04 reaching up to Rs. 90 million in the year 2007/08. Similarly, investment in other sectors that included certificates of deposit, mutual funds, foreign bank deposits, local bank deposits, deposits with Nepal Rastra Bank, and so on is decreasing year by year marking up to Rs. 5779 million in the year 2007/08.

When analyzing the investment pattern of NSBI, it revealed that it gave the highest priority to the investment Government Securities followed by other investments, and shares and debentures during the period of the study. The table shows that the bank has invested maximum amount in HMG securities of its total investment. The share in HMG securities is fluctuating over the study period starting from Rs. 1890 million in the year 2003/04 and ending up to Rs. 3036 million in the year 2007/08 marking highest in the year 2004/05 i.e. Rs. 2588 million. Similarly, the share in shares, debentures and bonds is also fluctuating over the study period. It is Rs. 18 million, Rs. 19 million, Rs. 19 million, Rs. 32 million and Rs. 33 million in the year 2003/04, 2004/05, 2005/06, 2006/07 and 2007/08 respectively. Regarding other investments, NSBI has not invested anything in the first two years of the study period. The investment in the year 2005/06 was Rs. 148 million which drastically increased to Rs. 282 million and then there was a sharp decline in the year 2007/08 which remained at Rs. 21 million.

4.6 Financial Analysis

4.6.1 Analysis of Liquidity Position

Liquidity position of a bank can be identified with the help of liquidity ratios. Liquidity ratios measure the ability of the firm to meet its current obligations. Difference between current assets and current liabilities is known as working capital, which provides liquidity in business organizations. A commercial bank must maintain a fair liquidity position to satisfy the credit needs of the community, to meet demands for deposit withdrawals, pay matured obligations in time and convert non-cash into cash to satisfy immediate needs without loss to the bank and without consequential impact on long-run profitability of the bank.

Current Ratio

The calculation of current ratio is based on a simple comparison between current assets and current liabilities. This is the broad measure of liquidity of the bank. The standard of current ratio for banking companies is 2:1, which means the bank has to maintain total currents double of its total current liabilities.

Current ratios of NABIL and HBL, and their means, standard deviations and coefficients of variation during the period of study between 2001/2002 and 2006/2007 are presented in Table 4.3.

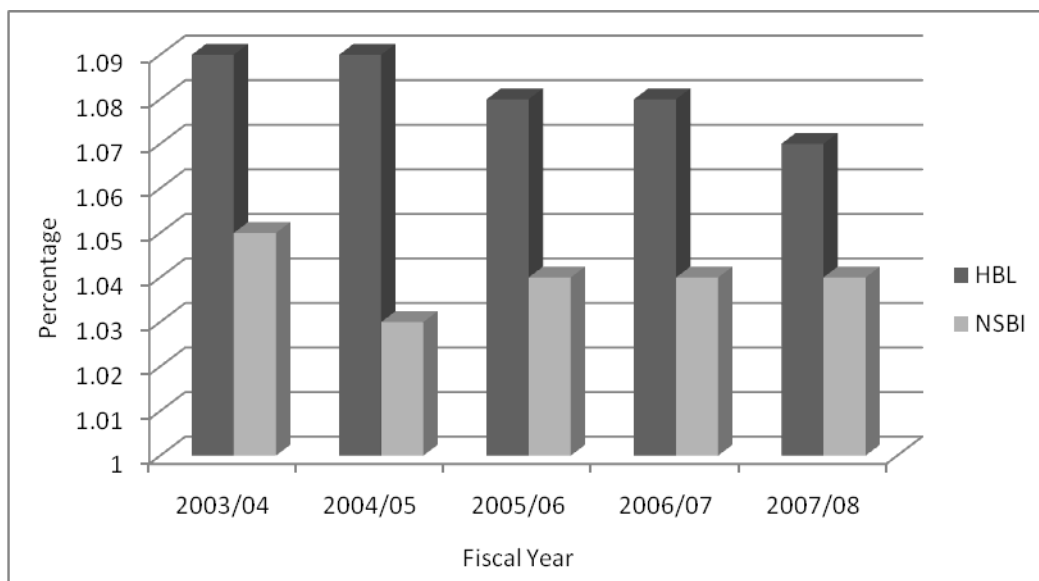
Table 4.3
Current Ratio of HBL and NSBI

(In times)

Banks	Fiscal Year					Mean	S.D.	C.V. %
	2003/04	2004/05	2005/06	2006/07	2007/08			
HBL	1.09	1.09	1.08	1.08	1.07	1.08	0.01	0.5
NSBI	1.05	1.03	1.04	1.04	1.04	1.04	0.01	0.81

(Source: Annual Report of HBL and NSBI from 2003/04 to 2007/08)

Figure 4.3
Current Ratio of HBL and NSBI



In the above table, current ratios from fiscal year 2003/04 to 2007/08 of HBL and NSBI are presented (Details in Appendix 1). Similarly, a chart is also presented for a quick view of trend of current ratio. The above table reveals that the total current assets of both banks exceed the total current liabilities. This indicates both banks are capable of discharging their current obligations during the study period.

Current ratio of HBL shows a decreasing trend and so does NSBI's. The current ratio of NSBI has decreased in the second year; however, it has increased in the third year and maintained constancy. Both the banks have maintained the current ratio higher than the standard of 1:1 in all the fiscal years. HBL has maintained a higher ratio in comparison to NSBI. Both have maintained the same level of SD. The CV of HBL is comparatively lower than that of NSBI. It shows that the current ratios of HBL are more homogeneous than that of NSBI.

Cash and Bank Balance to Total Deposit Ratio (Cash Reserve Ratio)

The ratio between the cash and bank balance and total deposits measures the ability of bank to meet the banks immediate funds to cover their current margin, call margin and saving deposits. Higher the ratio, the greater will be the ability to meet sudden demand of deposit. However, a very high ratio is not desirable since banks have to pay interest on deposits. This will also maximize the cost of fund to the bank. The total deposits include current, saving and fixed deposits as well as call money deposits and certificate of deposits. Table 4.4 shows the cash and bank balance to total deposits ratio of NABIL and HBL

Table 4.4

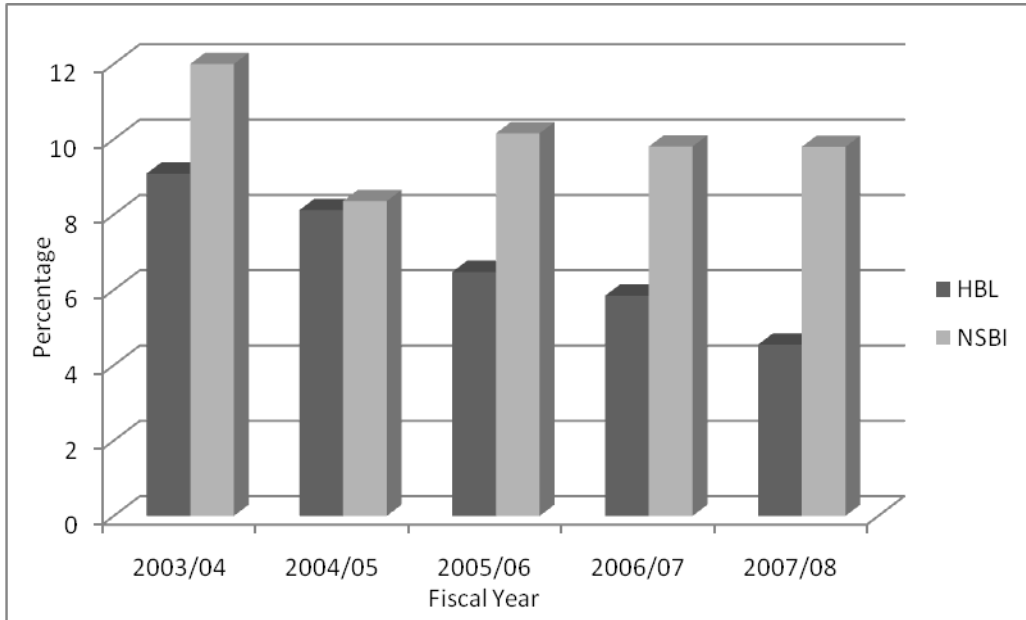
Cash and Bank Balance to Total Deposit Ratio of HBL and NSBI (%)

Banks	Fiscal Year					Mean	S.D.	C.V. %
	2003/04	2004/05	2005/06	2006/07	2007/08			
HBL	9.09	8.12	6.48	5.85	4.55	6.82	1.62	23.71
NSBI	12	8.36	10.16	9.81	9.8	10.03	1.17	11.65

(Source: Annual Report of HBL and NSBI from 2003/04 to 2007/08)

Figure 4.4

Cash and Bank Balance to Total Deposit Ratio of HBL and NSBI



In the above table, cash reserve ratio from fiscal year 2003/04 to 2007/08 of HBL and NSBI is presented (Details in Appendix 2) and a chart is also presented.

Cash reserve ratio of HBL reveals a decreasing trend. It shows that the bank is able to efficiently utilize its resources in the later periods. However, it also can't be neglected that the bank is heading towards the operational risks. The ratio of NSBI is showing a fluctuating trend. The CRR is decreased in the second year while showing an increase in the third year and again declining in the fourth year. The CRR of HBL is found tremendously declining over the study period with higher operational risks in comparison to NSBI. It also shows that HBL is well capable of utilizing the available resources to maximum extent and operating in high riskier way in meeting the demand of depositors at any point of time.

NSBI has maintained a higher cash reserve ratio than of HBL. This states a better liquidity position of the bank than that of HBL. The co-efficient of variance of NSBI is

lower than that of HBL, which shows that the ratios of NSBI are more stable and constant than that of NSBI and HBL has less cash reserves.

Cash and Bank Balance to Current Assets Ratio

This ratio shows the banks’ liquidity position in terms of the most liquid assets i.e. cash and bank balance. A high cash and bank balance to current ratio indicates high proportion of the most liquid assets in total current assets. This further indicates the banks’ ability to meet daily cash payments for the requirement of their depositors. However, much higher of this ratio is not preferred as the bank has to pay interest on deposits and will increase the cost of fund that might impair their profitability. Likewise, lower of this ratio is detrimental to the bank, as the bank will have hard times to make the payments against the cheques presented by customers. Therefore, bank has to strike a balance of cash and bank balance, which is just adequate for the customers demand against deposit when required, and less interest payable against the cash deposit.

Table 4.5 shows the cash and bank balance to total current assets of NABIL and HBL, and their means, standard deviations and coefficient of variation during FY 2003/04 to 2007/08.

Table 4.5

Cash and Bank Balance to Current Assets Ratio of HBL and NSBI (%)

Banks	Fiscal Year					Mean	S.D.	C.V. %
	2003/04	2004/05	2005/06	2006/07	2007/08			
HBL	7.87	7.05	5.72	5.21	4.01	5.97	1.36	22.8
NSBI	10.92	7.49	8.79	8.26	7.97	8.69	1.19	13.76

(Source: Annual Report of HBL and NSBI from 2003/04 to 2007/08)

Figure 4.5

Cash and Bank Balance to Current Assets Ratio of HBL and NSBI

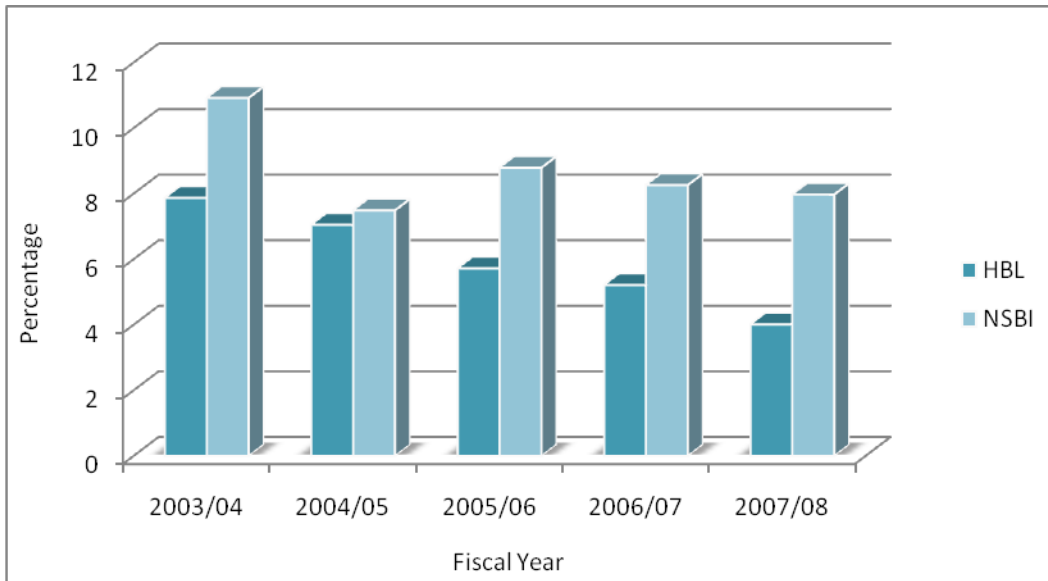


Table 4.5 represents the cash and bank balance to current assets ratio of HBL and NSBI from fiscal year 2003/04 to 2007/08(details in appendix 3) and the figure shows the trend of the ratio over the fiscal years.

The cash and bank balance to current assets ratio of both the banks are better as they show their ability to manage the deposit withdrawal from the customers. The ratio of HBL is decreasing while that of NSBI is fluctuating. The ratio of NSBI on an average is higher than that of HBL, which indicates that the liquidity position of NSBI is better in this regard. The coefficient of variance of NSBI i.e. 13.76% is also lower than HBL i.e. 22.8%. This shows that the position of NSBI is more stable and consistent than HBL.

The cash and bank balance to current assets ratio of both the banks are more or less consistent; however, NSBI has maintained a higher ratio, which depicts that the bank is capable to make quick payments of its deposits. But it doesn't necessarily mean that it has mobilized its fund in profitable sector. On contrary, HBL may have mobilized its fund more productively.

Investments on Government Securities to Current Assets Ratio

The commercial banks mostly invest its funds collected in various government securities issued by government because they consider them most liquid, that is, they can realize cash at short notice and without much loss in capital invested. And also such securities would serve as the basis for loan from the central bank at the bank rate. The government securities are the safest place to invest the funds. They can be easily sold in the market or they can be converted into the cash in other ways. But they are not so much liquid as cash and bank balance. Here an effort is made to examine the position of a bank's total assets that is invested on different government securities. This ratio is very important to know the extent of which the banks are successful in mobilizing their total working fund on different types of government securities to maximize the income. All the deposits of the bank should not be utilized in loan and advances and other credit from security and liquidity point of view. Therefore, to some extent, commercial banks seem to be interested to utilize their deposits by purchasing government securities. A high ratio indicates better mobilization of fund as Investment on government securities and vice-versa.

This ratio is calculated by dividing Investment on government securities by current assets. The following table shows the ratios of Investment on government securities to current assets ratio of HBL and NSBI.

Table 4.6

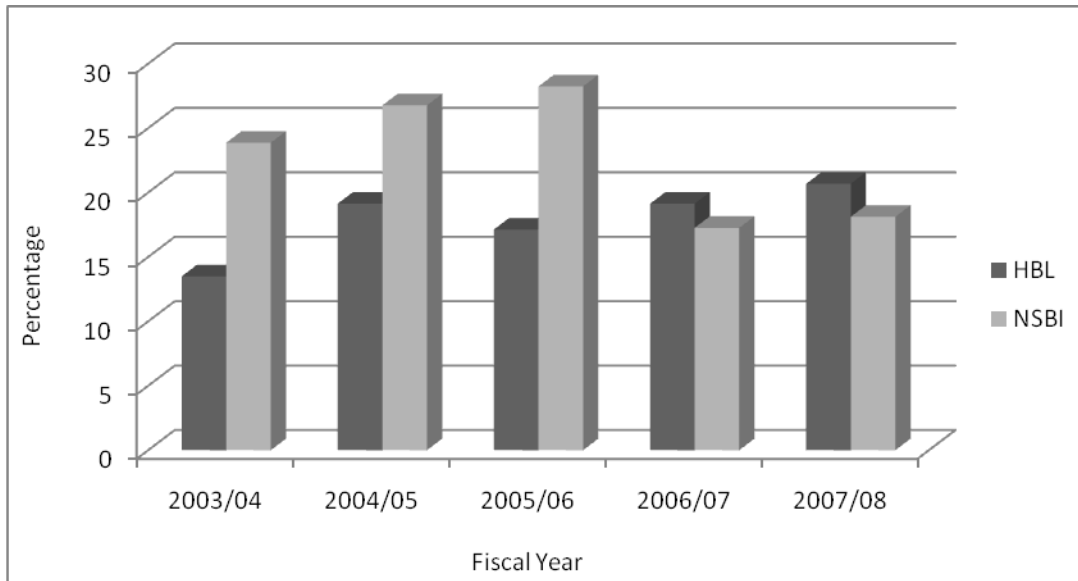
Investments on Government Securities to Current Assets Ratio of HBL and NSBI (%)

Banks	Fiscal Year					Mean	S.D.	C.V. %
	2003/04	2004/05	2005/06	2006/07	2007/08			
HBL	13.49	19.14	17.13	19.13	20.68	17.91	2.48	13.85
NSBI	23.87	26.77	28.24	17.26	18.12	22.83	4.47	19.6

(Source: Annual Report of HBL and NSBI from 2003/04 to 2007/08)

Figure 4.6

Investments on Government Securities to Current Assets Ratio of HBL and NSBI



In the above table, investments in government securities to current assets ratio of HBL and NSBI are presented from fiscal year 2003/04 to 2007/08(detail in appendix 4) and a figure is also presented.

It is clear from the study that both banks have invested in the government securities. The ratio of investment by HBL is fluctuating and lesser in comparison to NSBI; however, the increase in the investment in the year 2007/08 is 20.68%, which is an increase of 7.19% from the first year. Similarly, the ratio of investment by NSBI is increasing in the first three years with 28.24%, the highest in the year 2005/06 with a decrease in the fourth year and then a slight increase in the fifth year. There has been a decrease in the ratio of investment from the first year till the last year by 5.75%.

On an average, NSBI has maintained a higher ratio of investments in the government securities than that of HBL. It means that NSBI has invested higher portion of current assets in government securities than HBL. Coefficient of variance of HBL is found to be lower than NSBI, which represents that HBL is more consistent in investment of

current assets in government sectors whereas NSBI is less consistent in maintaining the ratio.

4.6.2 Analysis of Assets Management

Assets management is another important aspect of a commercial bank’s investment policies. Unless its assets are properly and judiciously managed, it cannot have the full benefits of its investment policies. In order to assess the effectiveness of the assets management of the selected commercial joint venture banks, a number of ratios have been calculated and presented below.

Loan and Advance to Total Deposit Ratio

This ratio measures the extent to which the banks are successful to mobilize their total deposits on loan and advances for profit generation. Therefore, the higher the ratio, the better is the mobilization of total deposits in terms of loan and advances. However, higher the ratio the better only from the point of view of liquidity, as the loans and advances are not as liquid as cash and bank balance.

Table 4.7

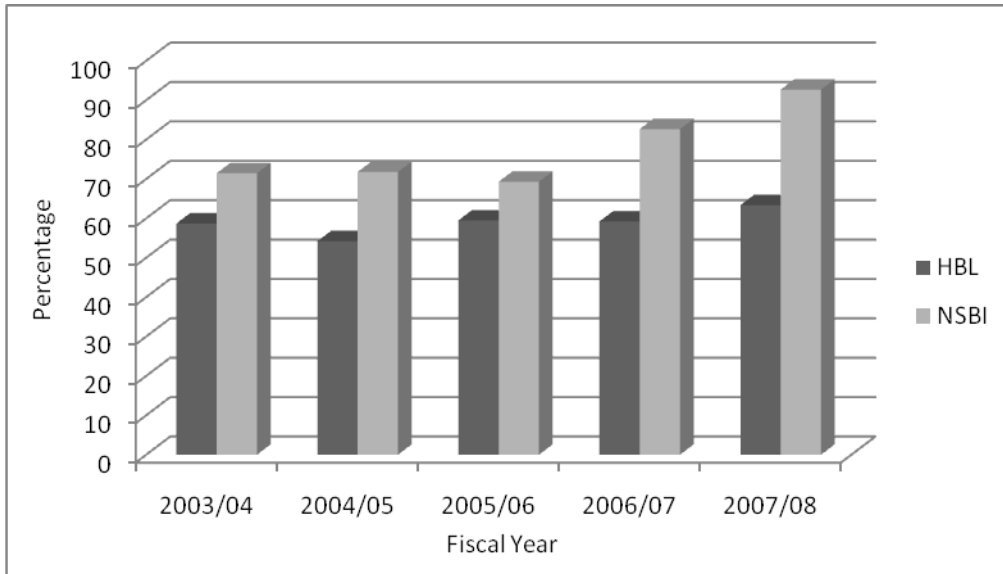
Loan and Advances to Total Deposit Ratio of HBL and NSBI (%)

Banks	Fiscal Year					Mean	S.D.	C.V. %
	2003/04	2004/05	2005/06	2006/07	2007/08			
HBL	58.70	54.21	59.50	59.22	63.37	59	2.91	4.94
NSBI	71.46	71.80	69.32	82.66	92.70	77.59	8.87	11.43

(Source: Annual Report of HBL and NSBI from 2003/04 to 2007/08)

Figure 4.7

Loan and Advances to Total Deposit Ratio of HBL and NSBI (%)



The table 4.7 shows the loan and advance to total deposit ratio of HBL and NSBI of five fiscal years starting from 2003/04 to 2007/08 (detail in appendix 5). Similarly, a figure is also presented to show the trend of the ratio.

The table shows that there has been a fluctuating trend in the ratio of HBL and NSBI ranging from 58.7% to 63.37% and 71.46% to 92.7% respectively. The table also shows that the ratio of loan and advance to total deposit ratio of HBL is more or less consistent in the third and fourth fiscal year and so is with NSBI in the first two years. NSBI has maintained a higher ratio than HBL on an average. It reveals that NSBI has utilized more deposit into loan and advance in comparison to HBL and also shows that NSBI has strong position regarding the mobilization of total deposit on loan and advance and acquiring higher profit as compared to HBL.

The coefficient of variance of HBL is 4.94% which is very low than that of NSBI which is 11.43%. It depicts that the loan and advance of HBL is more stable and consistent than that of NSBI. Maintaining a high ratio in terms of mobilization of deposit is good but it cannot be regarded as good from the point of view of liquidity as the loan and advance is not liquid as cash and bank balance. HBL might have utilized high portion of deposit in various investments or cash and bank balance.

Total Investments to Total Deposit Ratio

This ratio measures the extent to which the banks are able to mobilize their deposits in investments in various securities and other investments. Higher ratio indicates the success in mobilizing deposits in securities and vice versa. This ratio can be computed by dividing the total investment by total amount of deposits collections. The table 4.8 shows the ratio of total investment to total deposits of HBL and NSBI from the fiscal year 2003/04 to 2007/08, where total investments include investment on government securities, debentures and bonds, shares in subsidiary companies, shares in other companies and other investments.

Table 4.8

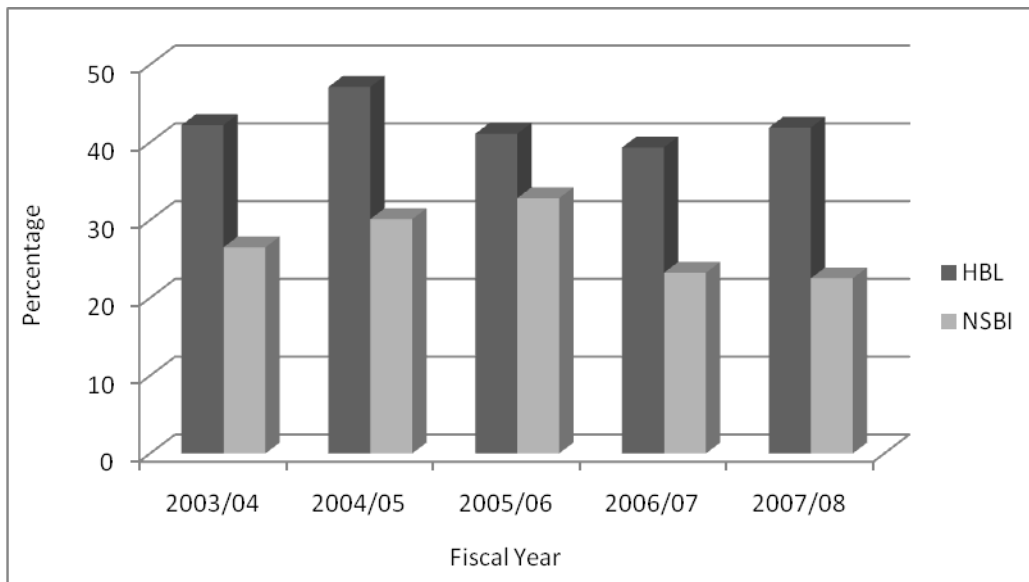
Total Investments to Total Deposit Ratio of HBL and NSBI (%)

Banks	Fiscal Year					Mean	S.D.	C.V. %
	2003/04	2004/05	2005/06	2006/07	2007/08			
HBL	42.22	47.12	41.10	39.35	41.89	42.35	2.59	6.12
NSBI	26.50	30.13	32.82	23.24	22.52	27.04	3.95	14.62

(Source: Annual Report of HBL and NSBI from 2003/04 to 2007/08)

Figure 4.8

Total Investments to Total Deposit Ratio of HBL and NSBI



In the above table, total investments in to total deposit ratio of HBL and NSBI are presented (detail in appendix 6) and a figure is also presented to show a trend of the calculated ratio.

The ratio of investment to total deposit of both the banks are fluctuating, however, the ratio of HBL is higher than that of NSBI. HBL has maintained highest ratio in the year 2004/05 whereas the highest ratio of NSBI is in the year 2005/06 which is 32.82%. Considering the average, HBL has higher average than NSBI which shows that HBL has invested higher amount of the total deposits in securities and shares than NSBI. NSBI has lower percentage of total deposit in securities and shares which indicates that

the bank is able to invest in more profitable sectors besides investing in lower return sector.

The coefficient of variance of HBL is lower than that of NSBI which depicts the consistency of the bank in maintaining the ratio throughout the period.

Total OBS Operation to Loan and Advances Ratio

This ratio measures the extent to which the banks are able to mobilize their off-the-balance sheet items on loan and advances for the generation of profit. This ratio can be computed by dividing the total OBS operation by loan and advances. Table 4.9 shows the total OBS operation to loan and advances of HBL and NSBI, and their means, standard deviations and coefficient of variation during FY 2003/04 to 2007/08.

Table 4.9

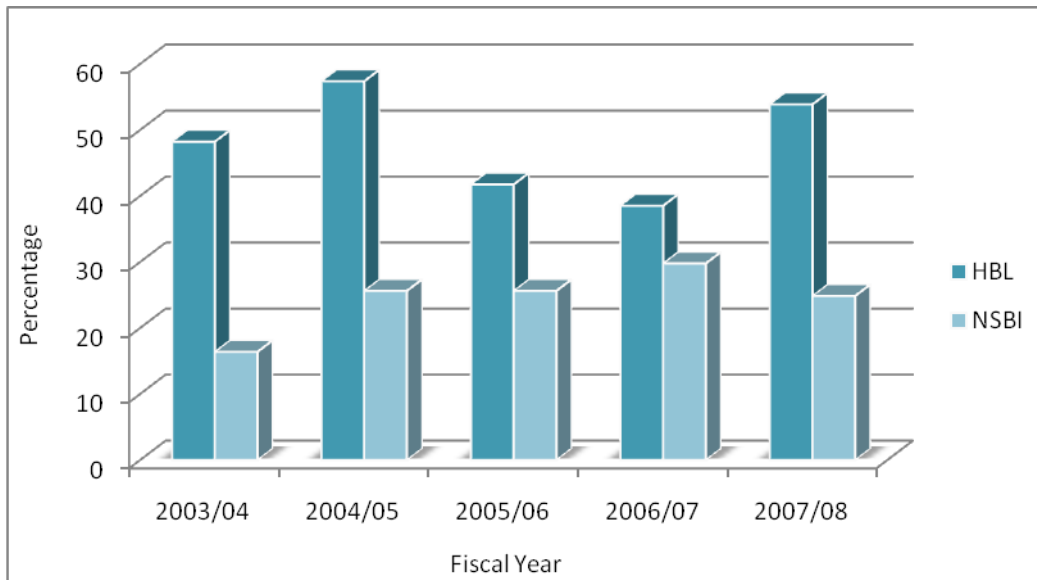
Total OBS Operation to Loan and Advances Ratio of HBL and NSBI (%)

Banks	Fiscal Year					Mean	S.D.	C.V. %
	2003/04	2004/05	2005/06	2006/07	2007/08			
HBL	48.22	57.38	41.74	38.52	53.88	47.95	7.10	14.80
NSBI	16.39	25.63	25.62	29.78	24.86	24.46	4.39	17.94

(Source: Annual Report of HBL and NSBI from 2003/04 to 2007/08)

Figure 4.9

Total OBS Operation to Loan and Advances Ratio of HBL and NSBI



The table no. 4.9 shows the total OBS operation to loan and advances ratio of HBL and NSBI of five fiscal years starting from 2003/04 to 2007/08 (detail in appendix 7) and the chart shows the trend of the ratio over the mentioned fiscal years.

The above table reveals that the ratio of HBL and NSBI are fluctuating though there is an increase in the ratio of both the banks in the last year than in the fiscal year 2003/04. The ratio of HBL in the first year is 48.22%, and 57.38%, 41.74%, 38.52% and 53.88% in the second, third, fourth and fifth years respectively. Similarly, the ratio of NSBI in the five years are 16.39%, 25.63%, 25.62%, 29.78% and 24.86% in the first, second, third, fourth and fifth years respectively.

On an average, the ratio of HBL is higher than that of NSBI and the coefficient of variance between the ratios of HBL is comparatively lower than that of NSBI which shows that the ratios of HBL are more stable than NSBI's.

Loan Loss Ratio

The loan loss ratio is used to define the quality of banks' assets and how well it protects itself from losses caused by problematic loans. Loan loss ratio can be computed by dividing loan loss provision by loan and advances. Loan loss provision is

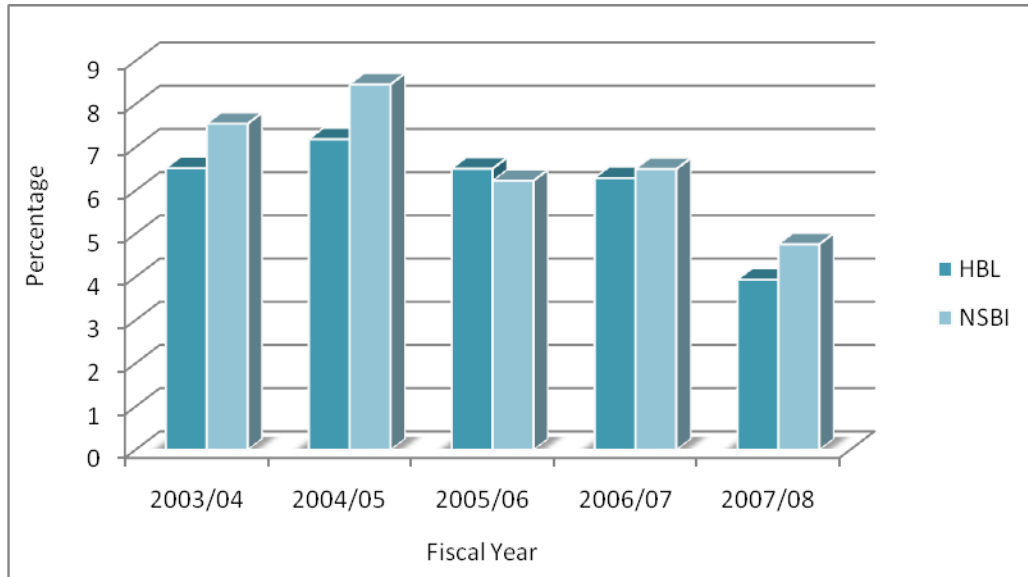
a non-cash expense for banks to account for future losses on loan defaults. . The higher this ratio is, the better the bank is handling itself in regards to loans.

Table 4.10
Loan Loss Ratio of HBL and NSBI (%)

Banks	Fiscal Year					Mean	S.D.	C.V. %
	2003/04	2004/05	2005/06	2006/07	2007/08			
HBL	6.52	7.19	6.51	6.29	3.94	6.09	1.12	18.33
NSBI	7.55	8.46	6.23	6.50	4.76	6.70	1.25	18.70

(Source: Annual Report of HBL and NSBI from 2003/04 to 2007/08)

Figure 4.10
Loan Loss Ratio of HBL and NSBI



The above table represents the loan loss ratio of HBL and NSBI of five fiscal years starting from 2003/04 to 2007/08(detail in appendix 8) and the figure shows the trend of loan loss ratio.

As per the above table, the loan loss ratios of both the banks show a fluctuating trend. The ratio of HBL in the first year is 6.52% and increased in the second year then again a decline in the third, fourth and fifth year, and 3.94% being the lowest. Similarly, the ratio of NSBI is highest in the second year with 8.46% and lowest in the fifth year. The ratio of NSBI is higher than HBL on an average. It states that the position of NSBI is poorer than HBL in this regard. The coefficient of variance of loan loss ratio of NSBI is 18.70% which is greater than that of HBL of 18.33% which reveals that the loan loss ratio of NSBI are more inconsistent. It can be concluded that the performance of NSBI in terms of recovery of loan is weaker in comparison to HBL due to higher loan loss ratio. Similarly, NSBI doesn't have stability in making provision for loan loss throughout the study period while HBL is more stable in making provision for loan loss.

4.6.3 Analysis of Profitability Position

Profit is the difference between total revenue and total expenses over a period of time. Profit is the end result of a commercial bank operations and it will have no future of it if it fails to make sufficient profits. Therefore, one of the important objectives of the commercial bank is to earn profits, as all stakeholders such as stockholders, management, and creditors of the bank expect the bank has to earn reasonable return. In addition, the bank's efficiency is also measured in terms of its profit and profitability. In order to measure the profitability of the selected banks, profitability ratios have be calculated and analyzed, as they indicate the banks have won public acceptance of their service even in an intense competitive situation and earned profits. In this study, the profitability ratios are computed on the basis of profits of banks vis-à-vis their investment. To measure and analyze of profitability of NSBI and HBL following ratios have been computed and presented

Return on Loan and Advance Ratio

Return on loan and advances ratio measures how efficiently the banks have utilized their resources to earn good return on loans and advances provided. Put it another way,

it measures the earning capacity of commercial banks on its deposits used in the form of loans and advances.

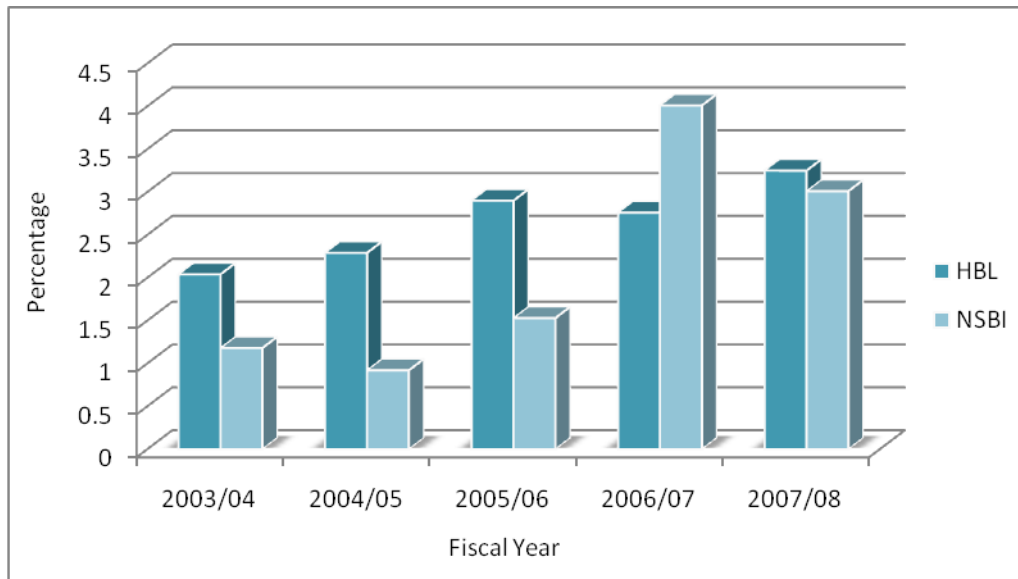
Table 4.11 shows the return on loans and advances of HBL and NSBI during the fiscal year 2003/04 and 2007/08. Mostly loans and advances include loan cash credit, overdraft, bills purchased and discounted.

Table 4.11
Return on Loan and Advance Ratio of HBL and NSBI (%)

Banks	Fiscal Year					Mean	S.D.	C.V. %
	2003/04	2004/05	2005/06	2006/07	2007/08			
HBL	2.04	2.29	2.90	2.76	3.25	2.63	0.41	15.50
NSBI	1.18	0.92	1.53	4.01	3.01	2.13	1.18	55.53

(Source: Annual Report of HBL and NSBI from 2003/04 to 2007/08)

Figure 4.11
Return on Loan and Advance Ratio of HBL and NSBI



The above table represents the return on loan and advance ratio of HBL and NSBI from fiscal year 2003/04 to 2007/08(details in appendix 9). Similarly, figure no.4.11 indicates the trend of this ratio over the mentioned period.

The ratios of both the banks are fluctuating while HBL has higher return on loan and advance ratio than NSBI. The ratio of HBL has increased from fiscal year 2003/04 to 2004/05 and 2005/06 with a slight decrease in 2006/07 i.e. from 2.90% to 2.76% and again an increase in the last year maintaining a ratio of 3.25%. The ratios of NSBI have decreased from 1.18% to 0.92% in the second year which is below 1%. Then, it has gained a rise in the third and fourth year, 4.01% being the highest and again a decline in the fifth year by 1%. The ratio of HBL is higher than that of NSBI and the coefficient of variance of HBL is lower than that of NSBI. It depicts that the return on loan and advances of HBL are more consistent throughout the study period than NSBI, however, the ratios of both the banks are not satisfactory.

Return on Total Assets Ratio

This ratio measures the profit earning capacity by utilizing available resources of banks. In the present study, this ratio is calculated and analyzed to measure the profitability of all financial resources invested in the bank's assets. A high ratio usually indicates the efficiency and utilization of its overall resources, and vice versa. This ratio is computed by dividing net profit by total assets.

Table 4.12

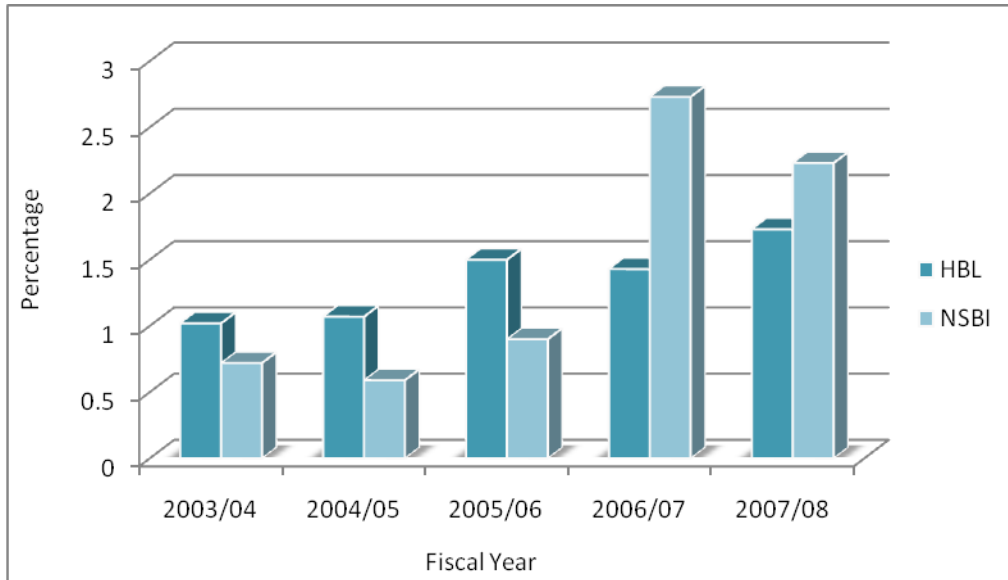
Return on Total Assets Ratio of HBL and NSBI (%)

Banks	Fiscal Year					Mean	S.D.	C.V. %
	2003/04	2004/05	2005/06	2006/07	2007/08			
HBL	1.02	1.07	1.50	1.43	1.73	1.35	0.27	19.78
NSBI	0.72	0.59	0.90	2.73	2.23	1.43	0.87	60.85

(Source: Annual Report of HBL and NSBI from 2003/04 to 2007/08)

Figure 4.12

Return on Total Assets Ratio of HBL and NSBI



The above table represents the return on total assets ratio of HBL and NSBI of five fiscal years starting from 2003/04 to 2007/08 (detail in appendix 10) and a figure is also presented to give a quick view of the ratio from FY 2003/04 to 2007/08.

The ratios of HBL show an increasing trend while the ratios of NSBI are a bit fluctuating than HBL. The ratio of HBL has increased from 1.02% to 1.07% and 1.50% in the second and third year respectively. It has a slight decline in the third year by 0.7% and again maintained up to 1.73% in the year 2007/08. Similarly, the ratio of NSBI has decreased from 0.72% to 0.59% in the second year and again increased up to 0.90% in the third year. The ratio has been highest in the year 2006/07 i.e. 2.73% and again declined by 0.50% in the year 2007/08.

On an average, the return on total assets ratio of NSBI is higher than HBL which indicates that the position of bank is good to some extent in this regard. Considering the coefficient of variance, NSBI's is 60.85% which is higher than HBL of 19.78%. This states that HBL has been able to maintain a stable and consistent return on total assets in comparison to NSBI.

Return on Equity Ratio

Return on equity ratio measures the rate of return on the ownership interest or shareholders' equity of the common stock owners. It measures a firm's efficiency at generating profits from every unit of shareholders' equity. ROE shows how well a company uses investment funds to generate earnings growth. This ratio is computed by dividing Net profit by total equity. Total equity or shareholder's equity is calculated as net assets or assets minus liabilities.

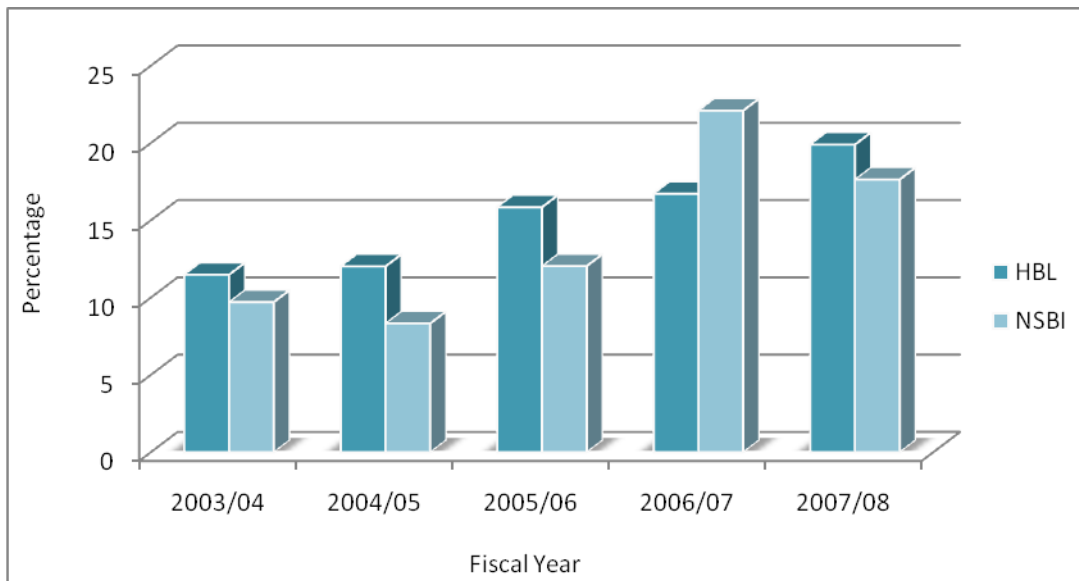
Table 4.13
Return on Equity Ratio of HBL and NSBI (%)

Banks	Fiscal Year					Mean	S.D.	C.V. %
	2003/04	2004/05	2005/06	2006/07	2007/08			
HBL	11.48	12.02	15.85	16.72	19.90	15.19	3.13	20.59
NSBI	9.71	8.33	12.04	22.1	17.64	13.96	5.16	36.97

(Source: Annual Report of HBL and NSBI from 2003/04 to 2007/08)

Figure 4.13

Return on Equity Ratio of HBL and NSBI



The above table and figure represent the return on equity ratio of HBL and NSBI of five fiscal years starting from 2003/04 to 2007/08(detail in appendix 11).

After studying the above table, it is clear that the return on equity ratios of HBL is increasing while those of NSBI are fluctuating. The ratios of HBL are 11.48%, 12.02%, 15.85%, 16.72% and 19.90% in the first, second, third, fourth and fifth year respectively. The ratio of NSBI has decreased in the second year from 9.71% to 8.33%. It has then increased to 12.04% in the third year and again a tremendous increase in the year 2006/07 resulting with a decline to 17.64% in the year 2007/08. The average ratio of return on equity of HSBI is lower than that of HBL while the coefficient of variance of ratio of NSBI is 36.97%, which is higher than that of HBL of 20.59%.

The study shows that HBL has higher return ratio, which indicates that the bank has efficiently utilized its equity capital and is more consistent in the utilization of its equity capital than NSBI.

Total Interest Earned to Total outside Assets Ratio

This ratio measures the capacity of the firms for earning interest on total outside assets. Outside assets represent the assets that are owned by a firm but lie outside the domain of the firm's area. This include loan and advance and all types of investment Total interest earned comprises total interest income from loans, advance, cash credit, overdraft, government securities, inter bank and other investments. This ratio is calculated by dividing total interest earned by total outside assets.

Table 4.14

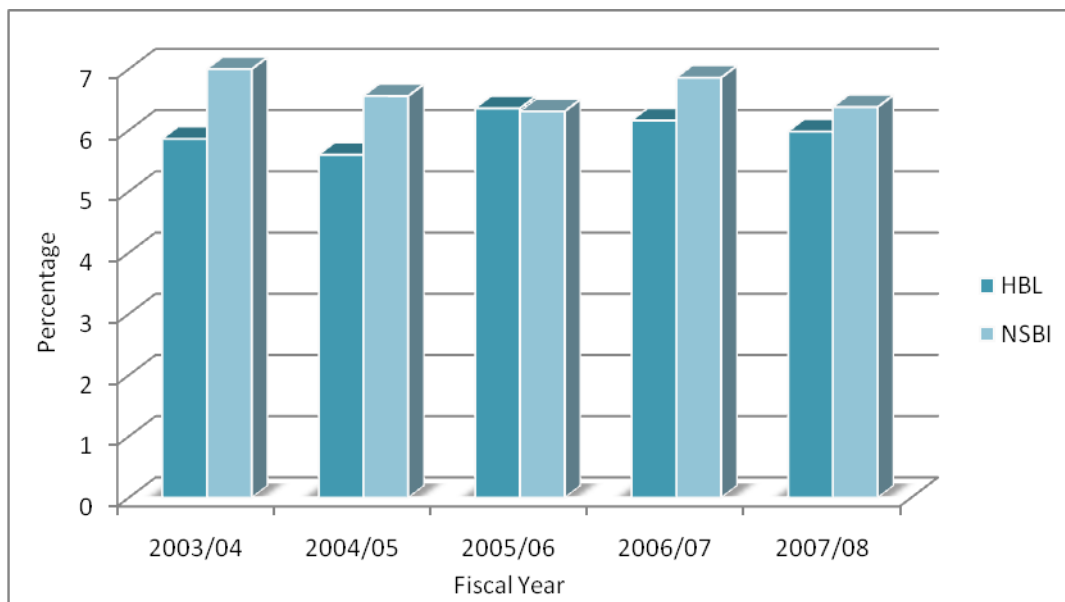
Total Interest Earned to Total Outside Assets Ratio of HBL and NSBI (%)

Banks	Fiscal Year					Mean	S.D.	C.V. %
	2003/04	2004/05	2005/06	2006/07	2007/08			
HBL	5.86	5.60	6.36	6.16	5.98	6.07	0.17	2.82
NSBI	7	6.56	6.31	6.86	6.38	6.62	0.27	4.05

(Source: Annual Report of HBL and NSBI from 2003/04 to 2007/08)

Figure 4.14

Total Interest Earned to Total Outside Assets Ratio of HBL and NSBI



The above table exhibits the total interest earned to total outside ratio of HBL and NSBI and the figure shows the trend of the ratio of five fiscal years starting from 2003/04 to 2007/08(detail in appendix 12).

The ratio of HBL is fluctuating while that of NSBI is decreasing. The table reveals that the ratio of HBL has followed a decreasing trend from the fiscal year 2003/04 to fiscal year 2004/05 from 5.86% to 5.60% respectively but in the year 2005/06, the ratio increased up to 6.36%. It again declined in the year 2006/07 and 2007/08 maintaining a ratio of 6.16% and 5.98% respectively. The ratio of NSBI has continuously decreased from 7% in the fiscal year 2003/04 to 6.31% in the year 2005/06. It again rose to 6.86% in the fiscal year 2006/07 with a decline of 0.48% in 2007/08.

On the average, the total interest earned to total outside ratio of NSBI is higher than that of HBL which depicts that the bank is able to earn interest from outside assets in comparison to HBL. The coefficient of variance of ratio of NSBI is 4.05% which is higher than that of HBL of 2.82%. It means the condition of HBL is more stable while NSBI has better position with respect to the income earned from total outside assets.

Total Interest Earned to Total Operating Income Ratio

This ratio measures the capacity of the firms for earning interest on total operating income. Total operating income is the difference between operating revenues and operating expenses. Total interest earned comprises total interest income from loans, advance, cash credit, overdraft, government securities, inter bank and other investments. This ratio is calculated by dividing total interest earned by total operating income.

The following table shows the total interest earned to total operating income ratio of HBL and NSBI of five fiscal years starting from 2003/04 to 2007/08(detail in appendix 13). The figure below shows the trend of the ratio over the same fiscal years.

Table 4.15

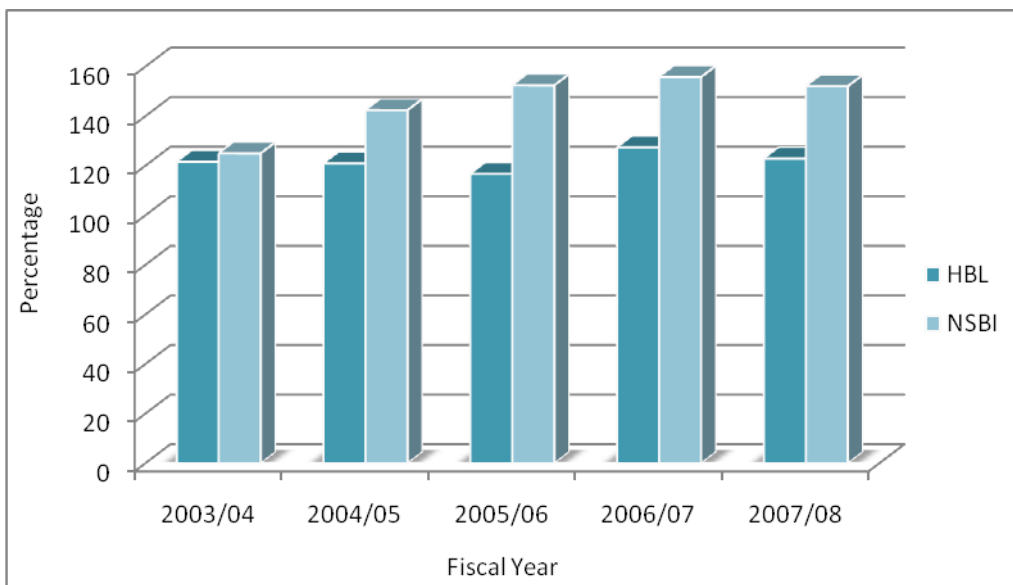
Total Interest Earned to Total Operating Income Ratio of HBL and NSBI (%)

Banks	Fiscal Year					Mean	S.D.	C.V. %
	2003/04	2004/05	2005/06	2006/07	2007/08			
HBL	121.58	120.95	116.72	127.43	122.92	121.92	3.45	28.98
NSBI	125	142.41	152.45	155.78	152.1	145.55	11.2	8.93

(Source: Annual Report of HBL and NSBI from 2003/04 to 2007/08)

Figure 4.15

Total Interest Earned to Total Operating Income Ratio of HBL and NSBI



The ratio of NSBI shows an increasing trend from the fiscal year 2003/04 to 2006/07 from 125% to 155.78% but it has slightly declined in the year 2007/08 resulting up to 152.1%. Similarly, the ratio of HBL has declined from 121.58% in the fiscal year 2003/04 to 116.72% in the year 2005/07. It has again rose up to 127.43% in the fourth year resulting a decline in the year 2007/08 and marking 122.92%. The average ratio of HBL is 121.92%, which lower than NSBI. The coefficient of variance ratio of HBL is comparatively higher than NSBI. This indicates that the total interest earned to total operating income ratio of HBL is highly variable. The ratio of NSBI is stable and consistent. It is also clear that NSBI has better position regarding the mobilization of

interest bearing assets. However, the magnitude of interest income in total income of both the banks is high i.e. more than 70%, though the investment has more risk.

Total Interest Paid to Total Deposit Ratio

This ratio measures the percentage of total interest expenses and its interest on fixed deposits, call deposits, saving deposits and interest on borrowing. A high ratio indicates higher interest expenses on total deposits and vice versa. This ratio is computed by dividing total interest paid to total deposit.

Table 4.16

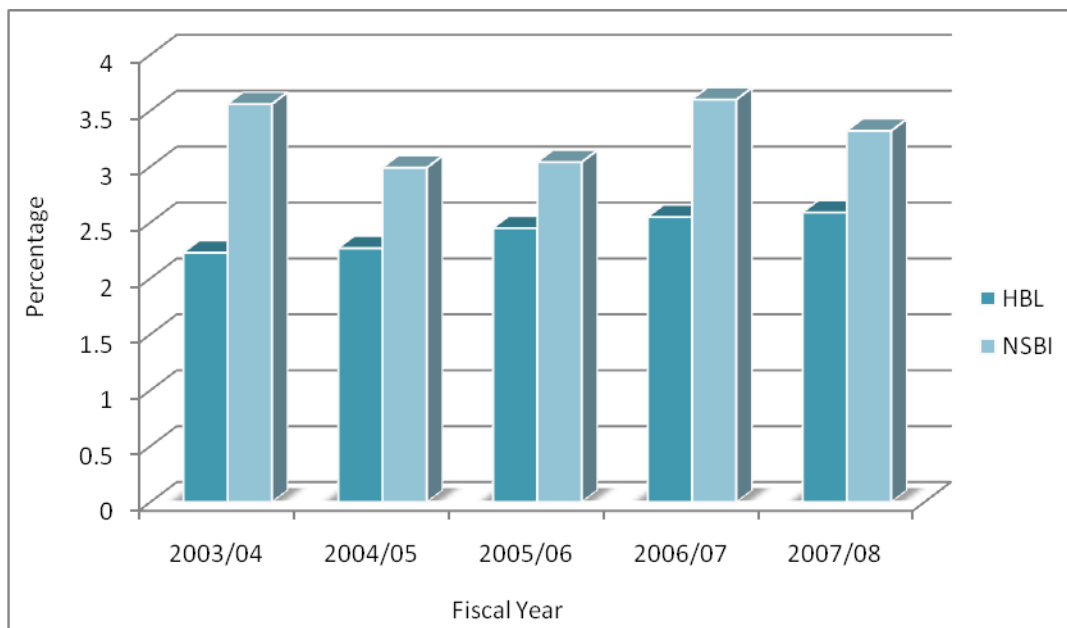
Total Interest Paid to Total Deposit Ratio of HBL and NSBI (%)

Banks	Fiscal Year					Mean	S.D.	C.V. %
	2003/04	2004/05	2005/06	2006/07	2007/08			
HBL	2.23	2.27	2.45	2.55	2.59	2.42	0.14	5.97
NSBI	3.56	2.99	3.04	3.60	3.32	3.3	0.25	7.68

(Source: Annual Report of HBL and NSBI from 2003/04 to 2007/08)

Figure 4.16

Total Interest Paid to Total Deposit Ratio of HBL and NSBI



The above table shows the total interest paid to total deposit ratio of HBL and NSBI from 2003/04 to 2007/08(detail in appendix 14). The figure 4.16 shows the trend of the ratio over the same fiscal years.

The ratios of HBL show an increasing trend in its ratios whereas the ratios of NSBI are fluctuating in the whole period. The ratio of HBL has increased from 2.23% in the fiscal year 2003/04 to 2.59% in the fiscal year 2007/08. In the same manner, the ratio of NSBI has decreased from 3.56% to 2.99% from the fiscal year 2003/04 to 2004/05. In the year 2005/06, it has again risen to 3.04% and 3.60% in the year 2006/07. But in the year 2007/08, it has declined to 3.32%. The average ratio of NSBI is greater than HBL which means that NSBI has paid higher interest on total deposits than HBL which shows the position of NSBI is not so good in comparison to HBL. The CV ratio of HBL is also lower than NSBI which shows the stability of the bank in paying interest on total deposit.

4.6.4 Analysis of Risk

Risk means variations in actual returns on investment than expected. There is a positive relationship between risk and return, viz. higher the risk, higher the return and vice versa. Therefore, a bank has to take high risk, if it expects high return on its investment. Thus, the banks have to face the challenge posed by the presence of risk in investment. This ratio examines the degree of risk involved in the banks' investment and other financial operations. Through the following ratios, efforts have been made to measure the banks' level of risk during the period of study.

Credit Risk Ratio

Credit risk ratio helps to check the profitability of loan non-payment or the possibility of loan to go into default or it is also said that it measures the risk behind making investment or granting loan. The ratio is calculated by dividing the total loans and advances by the total assets of the bank and is expressed in percentage.

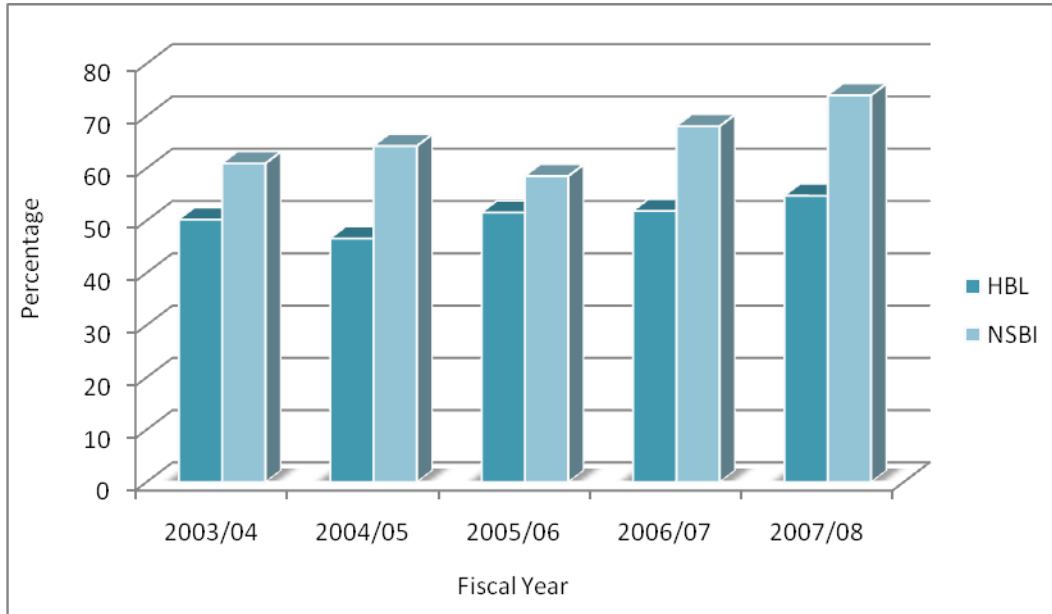
Table 4.17
Credit Risk Ratio of HBL and NSBI (%)

Banks	Fiscal Year					Mean	S.D.	C.V. %
	2003/04	2004/05	2005/06	2006/07	2007/08			
HBL	50.21	46.59	51.54	51.85	54.75	50.99	2.65	5.20
NSBI	60.94	64.27	58.51	68.05	73.97	65.15	5.46	8.38

(Source: Annual Report of HBL and NSBI from 2003/04 to 2007/08)

Figure 4.17

Credit Risk Ratio of HBL and NSBI



The above table shows the credit risk ratio of HBL and NSBI of five fiscal years starting from 2003/04 to 2007/08 (detail in appendix 15) and the figure shows the trend of the ratio over the mentioned years.

The above table exhibits the ratio of HBL that has fluctuated in the first three fiscal years and increased in the last two fiscal years ranging from 50.21% in the first year to 54.75% in the last fiscal year over the study period. The ratio of NSBI is fluctuating over the five fiscal years ranging from 60.94% in the first fiscal year to 73.97% in the fiscal year 2007/08 over the study period. The mean ratio of NSBI is higher than HBL which means that NSBI has higher credit risk in comparison to HBL. The coefficient of variance ratio of NSBI is also higher than that of HBL which indicates towards the unstable credit policy of NSBI as compared to HBL.

Capital Risk Ratio

Capital risk ratio measures banks ability to attract deposits and inter bank funds. It also determines the level of profit a bank can earn it. Bank chooses to take high capital risk and it will not be higher and vice versa. Therefore, a bank must maintain adequate

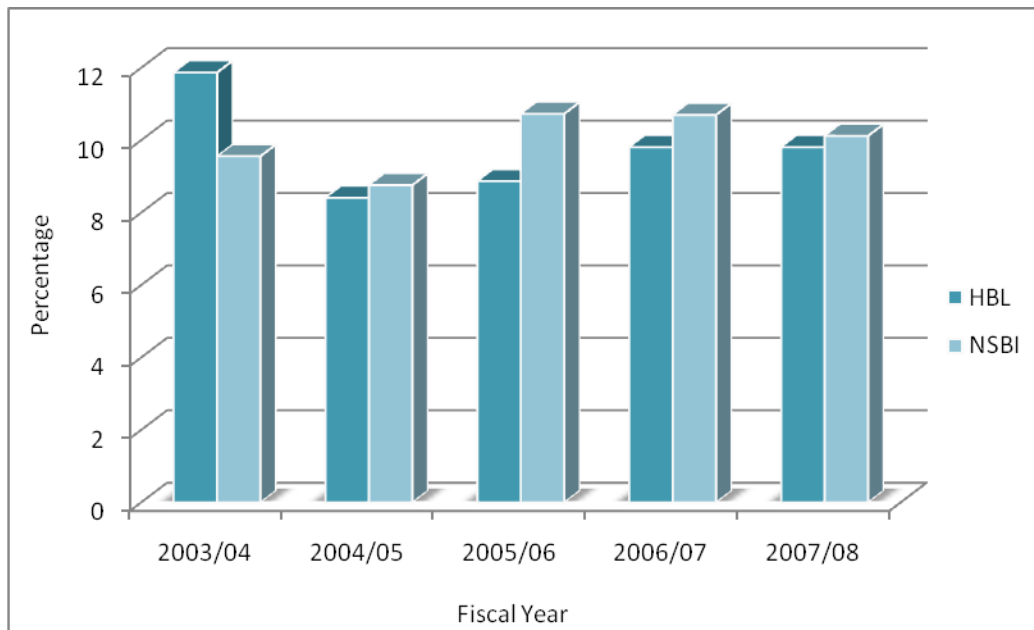
capital in relation to the nature and condition of its assets, its deposits liabilities and other corporate responsibilities.

Table 4.18
Capital Risk Ratio of HBL and NSBI (%)

Banks	Fiscal Year					Mean	S.D.	C.V. %
	2003/04	2004/05	2005/06	2006/07	2007/08			
HBL	11.87	8.41	8.87	9.81	9.81	9.75	1.19	12.18
NSBI	9.56	8.76	10.73	10.7	10.12	9.97	0.74	7.47

(Source: Annual Report of HBL and NSBI from 2003/04 to 2007/08)

Figure 4.18
Capital Risk Ratio of HBL and NSBI



The above table and figure show the capital risk ratio of HBL and NSBI of five fiscal years starting from 2003/04 to 2007/08 (detail in appendix 16).

The capital risk ratio of HBL is 11.87% in the fiscal year 2003/04. It has decreased in the FY 2004/05 to 8.41% and again increased to 8.87% in FY 2005/06. The capital risk ratio in the year 2006/07 and 2007/08 are consistent marking up to 9.81%. Regarding the capital risk ratio of NSBI, the ratio has decreased in the fiscal year 2004/05

to 8.76% from the FY 2003/04 of 9.56%. In the third and fourth year, the ratio is more or less consistent and has decreased in the year 2007/08 reaching 10.12%.

On the average, the capital risk ratio of NSBI is slightly higher than that of HBL which indicates that HBL has slightly higher capital risks than NSBI. The coefficient of variance of ratio of HBL is higher than that of NSBI which means the degree of capital risk in HBL is riskier than NSBI.

4.6.5 Growth Analysis

A firm seeks not only to survive by generating profits, but also to achieve growth. A growing firm is, therefore, regarded as a successful firm in the end. Therefore, in order to assess the success or potential for achieving success in the end, it is essential to analyze the growth that the bank has achieved in terms of deposits it has received, loans and advances it has provided, investments it has made, and its profitability. Here those growth ratios are analyzed and interpreted which are directly related to the fund mobilization and Investment management of a commercial bank. The high ratio generally indicated better performance of a bank and vice-versa.

Growth Ratio of Total Deposit

The bank collects its deposit from public. The growth ratio of deposits represent whether the banks had been able to increase its deposit collection or not.

Table 4.19
Growth Ratio of Total Deposit of HBL and NSBI in Rupees

(Rs. In '000')

Banks	Fiscal Year					Growth Ratio (%)
	2003/04	2004/05	2005/06	2006/07	2007/08	
HBL	22010333	24814012	26490852	30048418	31842789	9.67
NSBI	7198327	8654774	11002041	11445286	13715395	17.49

(Source: Annual Report of HBL and NSBI from 2003/04 to 2007/08)

Table 4.20

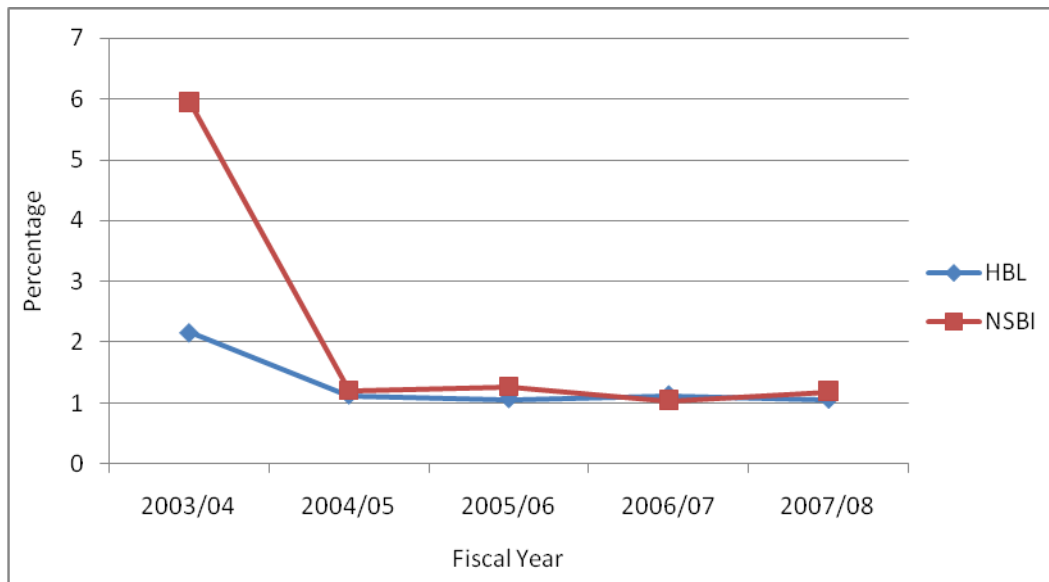
Growth Ratio of Total Deposit of HBL and NSBI in Percentage

Banks	Fiscal Year					Growth Ratio
	2003/04	2004/05	2005/06	2006/07	2007/08	
HBL	2.16	1.13	1.07	1.13	1.06	9.67
NSBI	5.96	1.20	1.27	1.04	1.19	17.49

(Note: The ratio for the year 2003/04 has been driven by taking in the figures for the year 2002/03)

Figure4.19

Total Deposits



Growth ratio of total deposit of HBL and NSBI from fiscal year 2003/04 to 2007/08 is presented in the above tables. Similarly, a graph is also prepared to perceive the growth rate of total deposits of both banks.

The growth ratio of HBL in the five years is 9.67% which is lower than the growth rate of NSBI i.e. 17.49%. It indicates that the performance of NSBI to collect deposit is much better year by year in comparison to HBL. As per the above chart, the growth ratio of both HBL and NSBI is in increasing trend; however, the growth ratio of HBL is lesser than NSBI.

Growth Ratio of Loan and Advance

Loan and Advances growth ratio shows whether the banks are increasing its loan and advances or decreasing.

Table 4.21

Growth Ratio of Loan and Advance of HBL and NSBI in Rupees

(Rs. In '000')

Banks	Fiscal Year					Growth Ratio (%)
	2003/04	2004/05	2005/06	2006/07	2007/08	
HBL	12919631	13451168	15761977	17793724	20179613	11.79
NSBI	5143662	6213878	7626736	9460451	12713698	25.39

(Source: Annual Report of HBL and NSBI from 2003/04 to 2007/08)

Table 4.22

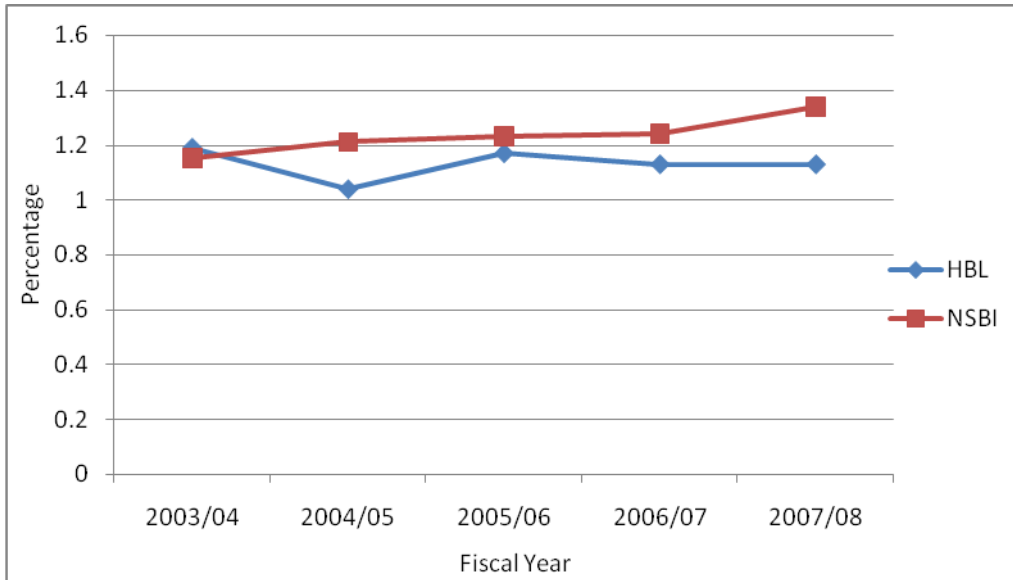
Growth Ratio of Loan and Advance of HBL and NSBI in Percentage

Banks	Fiscal Year					Growth Ratio
	2003/04	2004/05	2005/06	2006/07	2007/08	
HBL	1.19	1.04	1.17	1.13	1.13	11.79
NSBI	1.15	1.21	1.23	1.24	1.34	25.39

(Note: The ratio for the year 2003/04 has been driven by taking in the figures for the year 2002/03)

Figure 4.20

Loan and Advance



In the above table, growth ratio of loan and advances of HBL and NSBI is presented from fiscal year 2003/04 to 2007/08. Similarly, a graph is also prepared to observe the growth rate of loan and advances of both banks.

The above tables figure out that the growth ratio of loan and an advance of HBL is lower than NSBI. The growth ratio of HBL is 11.79% whereas that of NSBI is 25.39%. This depicts that the state of HBL to grant loan and advances is not as good as NSBI; however, the trend is increasing for both the banks.

Growth Ratio of Total Investment

This ratio shows whether the sample bank increased the Total Investment or decreased the Investment.

Table 4.23

Growth Ratio of Total Investments of HBL and NSBI in Rupees

(Rs. In '000')

Banks	Fiscal Year					Growth Ratio (%)
	2003/04	2004/05	2005/06	2006/07	2007/08	
HBL	9292103	11692342	10889031	11822985	13340177	9.46
NSBI	1907520	2607680	3610775	2659453	3088887	12.81

(Source: Annual Report of HBL and NSBI from 2003/04 to 2007/08)

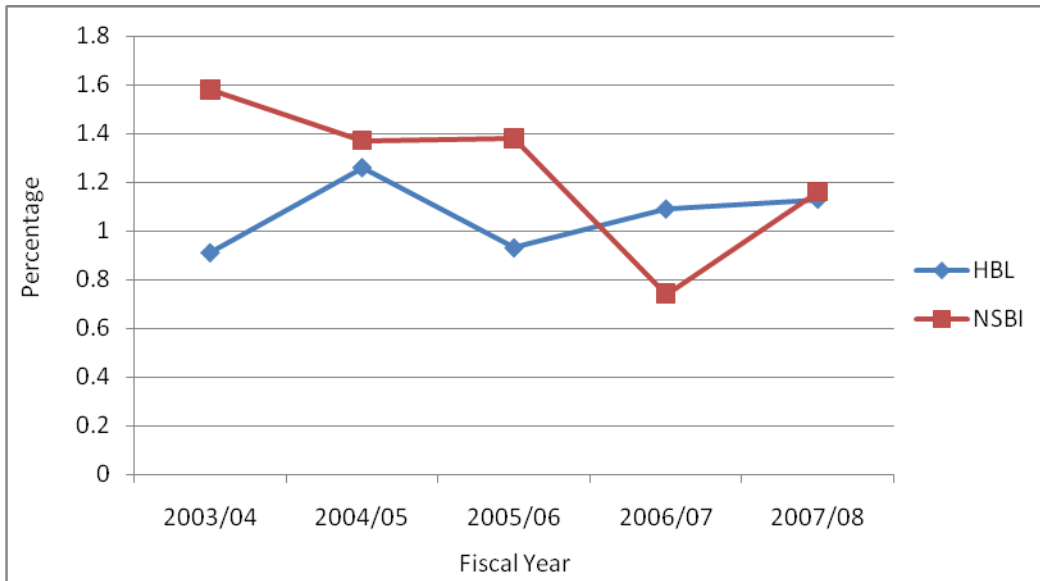
Table 4.24

Growth Ratio of Total Investments of HBL and NSBI in Percentage

Banks	Fiscal Year					Growth Ratio
	2003/04	2004/05	2005/06	2006/07	2007/08	
HBL	0.91	1.26	0.93	1.09	1.13	9.46
NSBI	1.58	1.37	1.38	0.74	1.16	12.81

(Note: The ratio for the year 2003/04 has been driven by taking in the figures for the year 2002/03)

Figure 4.21
Total Investments



In the above table, growth ratio of total investments of HBL and NSBI is presented from fiscal year 2003/04 to 2007/08. Similarly, a graph is also prepared to perceive the growth rate of total investments of both banks.

The above tables show that the growth ratio of total investments of NSBI is higher than that of HBL. The ratio of HBL is 9.46% whereas that of NSBI is 12.81%. The growth ratio of both banks is fluctuating as it is clearly shown in the above figure. Both banks should try to improve the growth rate in an increasing trend in order to increase the net profit.

Growth Ratio of Net Profit

This ratio shows whether the sample bank increased or decreased the net profit over the period of study.

Table 4.25

Growth Ratio of Net Profit of HBL and NSBI in Rupees

(Rs. In '000')

Banks	Fiscal Year					Growth Ratio (%)
	2003/04	2004/05	2005/06	2006/07	2007/08	
HBL	263052	308277	457458	491822	635869	24.69
NSBI	60851	57386	117001	379049	382837	68.37

(Source: Annual Report of HBL and NSBI from 2003/04 to 2007/08)

Table 4.26

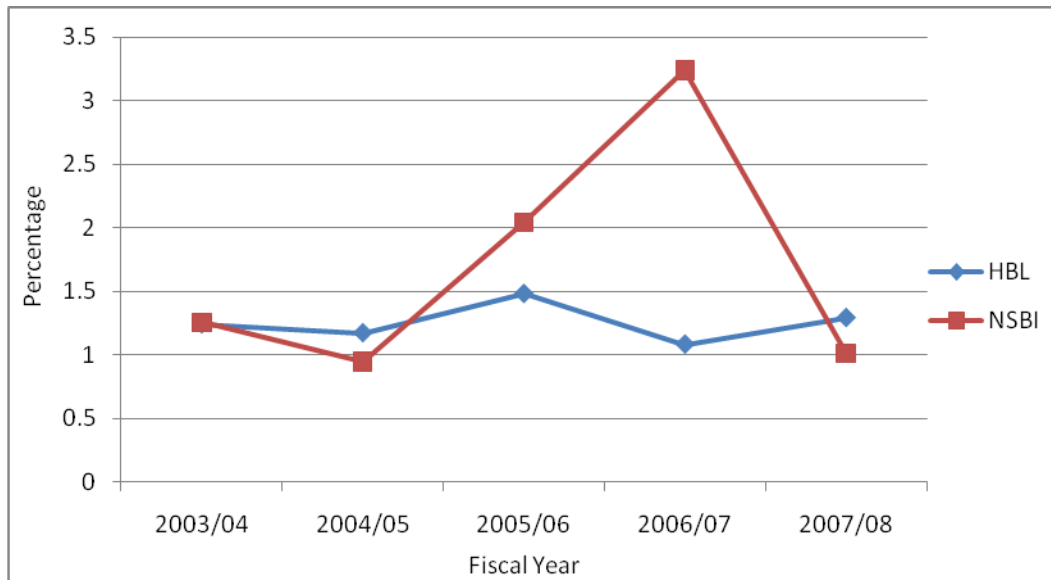
Growth Ratio of Net Profit of HBL and NSBI in Percentage

Banks	Fiscal Year					Growth Ratio
	2003/04	2004/05	2005/06	2006/07	2007/08	
HBL	1.24	1.17	1.48	1.08	1.29	24.69
NSBI	1.25	0.94	2.04	3.24	1.01	68.37

(Note: The ratio for the year 2003/04 has been driven by taking in the figures for the year 2002/03)

Figure 4.22

Net Profit



Growth ratio of Net profit of HBL and NSBI from fiscal year 2003/04 to 2007/08 is presented in the above tables. Similarly, a graph is also prepared to perceive the growth rate of net profit of both banks.

The above tables figure out that the growth ratio of net profit of HBL is lower than NSBI. The growth ratio of HBL is 24.69% whereas that of NSBI is 68.37%. The growth ratio of HBL is not satisfactory even if the rate is increasing. NSBI has a better position than HBL comparing the growth ratio of net profit. This NSBI's state of increasing net profit is far better than that of HBL over the study period.

4.7 Statistical Analysis

Statistical tools help to find out the trend of financial position of the bank and to analyze the relationship between variables that helps banks to make appropriate investment policy regarding to profit maximization and deposit collection, fund mobilization through providing loan and advances or investment on other company. In this study, statistical tools such as coefficient of correlation between different variable and also hypothesis test have been used for analyzing and interpreting the financial data.

4.7.1 Correlation Analysis

Correlation analysis means the relationship between two variables where the changes in known as coordination. The degree of relationship between the variables under consideration is measured through the correlation analysis. It is the technique used in measuring the closeness of the relationship between the variables. To measure the correlation between the total deposits and total investments, co-efficient of determination is calculated in the study.

Correlation between Total Deposits and Total Investments

The co-efficient between total deposit and total investment measures the degree of relation between the respective variables. In the correlation analysis, total deposit is independent variable while the total investment is a dependent variable.

Table 4.27

Correlation between Total deposit and Total Investment of HBL and NSBI

Banks	Correlation (r)	r^2	P.E (r)	6 P.E.	Relationship
HBL	0.8901	0.7923	0.06264	0.3759	Insignificant
NSBI	0.7018	0.4925	0.1531	0.9186	Insignificant

Correlation between total deposits and total investment of HBL and NSBI are presented in the above table. (Details in appendix 17)

In the above table, we can see that the correlation coefficient between total deposits and total investment of HBI and NSBI are 0.8901 and 0.7018 respectively. So, there is positively perfect correlation between total deposit and total investment of both the banks. In order to measure the degree of change on dependent variable (investment) due to a change on independent variable (deposit), value of co-efficient of determination is calculated. The value of co-efficient of determination of HBL is 0.9180 which means 91.80% Investment is depend on deposit and 8.20% investment decision depends on other variables. Similarly, the value of co-efficient of determination of NSBI is 0.7164 which means 71.64% Investment is depend on deposit and rest investment decision depends on other variables.

Similarly, probable error (P.E.) is 0.06264 and 0.1531 of HBL and NSBI respectively and 6 P.E. is 0.3759 and 0.9186 of HBL and NSBI respectively. Since r is less than 6 P.E, the relationship between these two variables is insignificant.

Correlation between Loan and Advances and Net Profit

The coefficient of correlation between loan and advances and net profit measures the degree of relationship between these two variables. In this analysis, loan and advances is independent variable (X) and net profit is dependent variable(Y).

Table 4.28

Correlation between Loan and Advances and Net Profit of HBL and NSBI

Banks	Correlation (r)	r ²	P.E (r)	6 P.E.	Relationship
HBL	0.9864	0.9864	0.0082	0.04903	Insignificant
NSBI	0.9051	0.8192	0.05454	0.3272	Insignificant

In the above table, correlation between loan and advances and net profit of HBL and NSBI are presented. (Details in appendix 18)

In the above table, we can see that the correlation coefficient between loan and advances and net profit of HBL and NSBI are 0.9864 and 0.9051 respectively. So, there is positively perfect correlation between loan and advances and net profit of both the banks. In order to measure the degree of change on dependent variable (net profit) due to a change on independent variable (loan and advances), value of co-efficient of determination is calculated. The value of co-efficient of determination of HBL is 0.9864 which means 91.64% net profit is depend on loan and advances and 8.36% depends on other variables. Similarly, the value of co-efficient of determination of NSBI is 0.8192 which means 81.92% net profit is depend on loan and advances and 18.08% depends on other variables.

Similarly, probable error (P.E.) is 0.0082 and 0.05454 of HBL and NSBI respectively and 6 P.E. is 0.04903 and 0.3272 of HBL and NSBI respectively. Since r is less than 6 P.E, the relationship between these two variables is insignificant.

Correlation between Total Deposits and Net Profit

The coefficient of correlation between total deposits and net profit measures the degree of relationship between these two variables. In this analysis, a total deposit is independent variable (X) and net profit is dependent variable(Y).

Table 4.29

Correlation between Total Deposits and Net Profit of HBL and NSBI

Banks	Correlation (r)	r ²	P.E (r)	6 P.E.	Relationship
HBL	0.9581	0.9180	0.0247	0.1485	Insignificant
NSBI	0.8464	0.7164	0.8555	0.5133	Significant

In the above table, correlation between total deposits and net profit of HBL and NSBI are presented (Details in appendix 19).

In the above table, we can see that the correlation coefficient between total deposit and net profit of HBL and NSBI are 0.9581 and 0.8464 respectively. So, there is positive correlation between total deposits and net profit of both the banks. In order to measure the degree of change on dependent variable (net profit) due to a change on independent variable (total deposits), value of co-efficient of determination is calculated. On the basis of co-efficient of determination, it is found that when there is a change in total deposits, it brings 91.80% change in net profit of HBL due to total deposit and rest due to other variables. Similarly, when there is a change in total deposits, it brings 71.64% change in net profit of NSBI due to total deposit and 28.36% due to other variables.

Similarly, probable error (P.E.) is 0.0247 and 0.8555 of HBL and NSBI respectively and 6 P.E. is 0.1485 and 0.5133 of HBL and NSBI respectively. Since r of HBL is less than 6 P.E, the relationship between these two variables is insignificant while the relationship between the two variables of NSBI is significant as the r is greater than 6 P.E.

Correlation between Total Investments and Net Profit

The coefficient of correlation between total investments and net profit measures the degree of relationship between these two variables. In this analysis, total investment is independent variable (X) and net profit is dependent variable(Y).

Table 4.30

Correlation between Total Investments and Net Profit of HBL and NSBI

Banks	Correlation (r)	r ²	P.E (r)	6 P.E.	Relationship
HBL	0.8227	0.6769	0.0975	0.5848	Insignificant
NSBI	0.2644	0.0699	0.2806	1.6833	Insignificant

Correlation between total investment and net profit of HBL and NSBI are presented in the above table. (Details in appendix 20)

In the above table, we can see that the correlation coefficient between total investment and net profit of HBL and NSBI are 0.8227 and 0.2644 respectively. So, there is positive correlation between total investment and net profit of both the banks. In order to measure the degree of change on dependent variable (net profit) due to a change on independent variable (investment), value of co-efficient of determination is calculated. On the basis of co-efficient of determination, it is found that when there is a change in total investment, it brings 67.69% change in net profit of HBL due to total investment and 32.31% due to other variables. Similarly, it is found that when there is a change in total investment, it brings 6.99% change in net profit of NSBI due to total investment and rest due to other variables.

Similarly, probable error (P.E.) is 0.0975 and 0.2806 of HBL and NSBI respectively and 6 P.E. is 0.5848 and 1.6833 of HBL and NSBI respectively. Since r is less than 6 P.E, the relationship between these two variables is insignificant.

Correlation between Total Investments and Loan and Advance

The coefficient of correlation between total investments and loan and advance measures the degree of relationship between these two variables. In this analysis, total investment is independent variable (X) and loan and advance is dependent variable(Y).

Table 4.31

Correlation between Total Investments and Loan and Advance of HBL and NSBI

Banks	Correlation (r)	r ²	P.E (r)	6 P.E.	Relationship
HBL	0.8229	0.6772	0.0974	0.5843	Insignificant
NSBI	0.5017	0.2527	0.2257	1.3544	Insignificant

Correlation between total investment and loan and advance of HBL and NSBI are presented in the above table. (Details in appendix 20)

In the above table, we can see that the correlation coefficient between total investment and loan and advance of HBL and NSBI are 0.8229 and 0.5017 respectively. So, there is positive correlation between total investment and loan and advance of both the banks. In order to measure the degree of change on dependent variable (loan and advance) due to a change on independent variable (investment), value of co-efficient of determination is calculated. On the basis of co-efficient of determination, it is found that when there is a change in total investment, it brings 67.72% change in loan and advance of HBL due to total investment and 32.28% due to other variables. Similarly, it is found that when there is a change in total investment, it brings 50.17% change in loan and advance of NSBI due to total investment and rest due to other variables.

Similarly, probable error (P.E.) is 0.0974 and 0.2257 of HBL and NSBI respectively and 6 P.E. is 0.5843 and 1.3544 of HBL and NSBI respectively. Since r is less than 6 P.E, the relationship between these two variables is insignificant.

Correlation between Total Deposits and Loan and Advance

The coefficient of correlation between total deposits and loan and advance measures the degree of relationship between these two variables. In this analysis, a total deposit is independent variable (X) and loan and advance is dependent variable(Y).

Table 4.32

Correlation between Total Deposits and Loan and Advance of HBL and NSBI

Banks	Correlation (r)	r ²	P.E (r)	6 P.E.	Relationship
HBL	0.9748	0.9502	0.015	0.0901	Insignificant
NSBI	0.9645	0.9303	0.021	0.1261	Insignificant

In the above table, correlation between total deposits and loan and advance of HBL and NSBI are presented (Details in appendix 20).

In the above table, we can see that the correlation coefficient between total deposit and loan and advance of HBL and NSBI are 0.9748 and 0.9645 respectively. So, there is positive correlation between total deposits and loan and advance of both the banks. In order to measure the degree of change on dependent variable (loan and advance) due to a change on independent variable (total deposits), value of co-efficient of determination is calculated. On the basis of co-efficient of determination, it is found that when there is a change in total deposits, it brings 97.48% change in net profit of HBL due to total deposit and rest due to other variables. Similarly, when there is a change in total deposits, it brings 96.45% change in net profit of NSBI due to total deposit and 3.55% due to other variables.

Similarly, probable error (P.E.) is 0.015 and 0.021 of HBL and NSBI respectively and 6 P.E. is 0.0901 and 0.1261 of HBL and NSBI respectively. Since r of both banks is less than 6 P.E, the relationship between these two variables of both banks is insignificant.

4.3.2 Trend Analysis

In this section, an attempt has been made to analyze and interpret the trend of deposits, loans and advances, investments and net profits of HBL and NSBI to forecast them for next five years period. The following trend value analysis has been used in the study.

Trend Analysis of Total Deposits

Under this topic an attempt is made to analyze the trend of deposits of HBL and NSBI and forecast the trend for next 5 years. The following table shows the trend values of total deposits of HBL and NSBI for five years from FY 2003/04 to 2007/08 and forecasted the same till FY 2012/2013.

Table 4.33

Trend Values of Total Deposits of HBL and NSBI

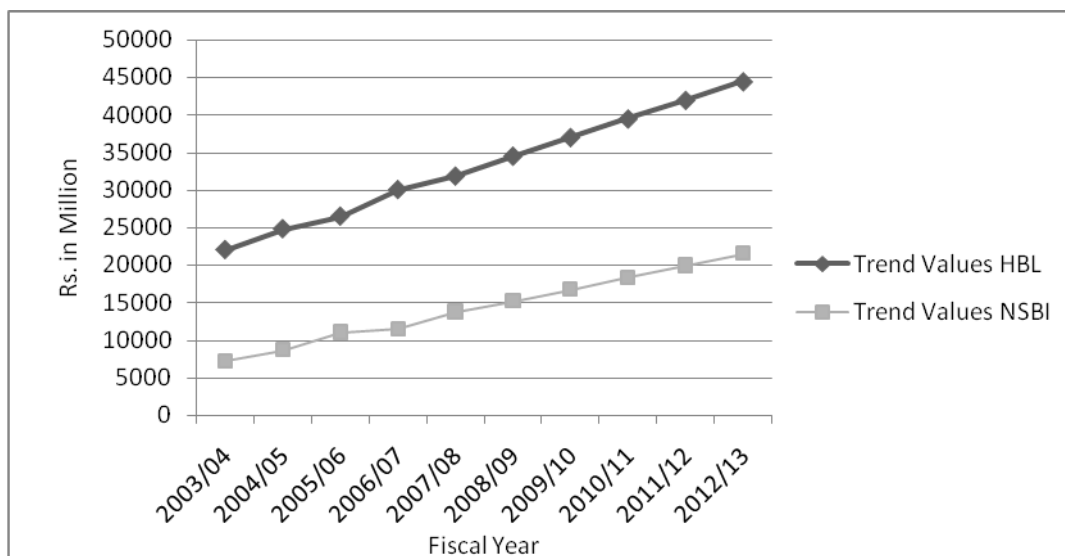
(Rs. in million)

Fiscal Year	Trend Values HBL	Trend Values NSBI
2003/04	22010	7198
2004/05	24814	8655
2005/06	26491	11002
2006/07	30048	11445
2007/08	31843	13715
2008/09	34511.2	15150.2
2009/10	37001.2	16732.6
2010/11	39491.2	18315
2011/12	41981.2	19897.4
2012/13	44471.2	21479.8

When analyzing the above table, it is clear that the total deposits of HBL and NSBI are in increasing trend. Other things remaining constant, the total deposits of HBL and NSBI in FY 2012/2013 will be Rs. 44471.2 and Rs. 21479.8 respectively. From the above trend analysis, it is found that the deposits collection position of HBL is better than NSBI (Details in Appendix 19).

Figure 4.23

Trend values of Total Deposits of HBL and NSBI



Trend Analysis of Total Investments

Under this topic an attempt is made to analyze the trend of investments of HBL and NSBI and forecast the trend for next 5 years. The following table shows the trend values of total investments of HBL and NSBI for five years from FY 2003/04 to 2007/08 and forecasted the same till FY 2012/2013.

Table 4.34

Trend Values of Total Investments of HBL and NSBI

(Rs. in million)

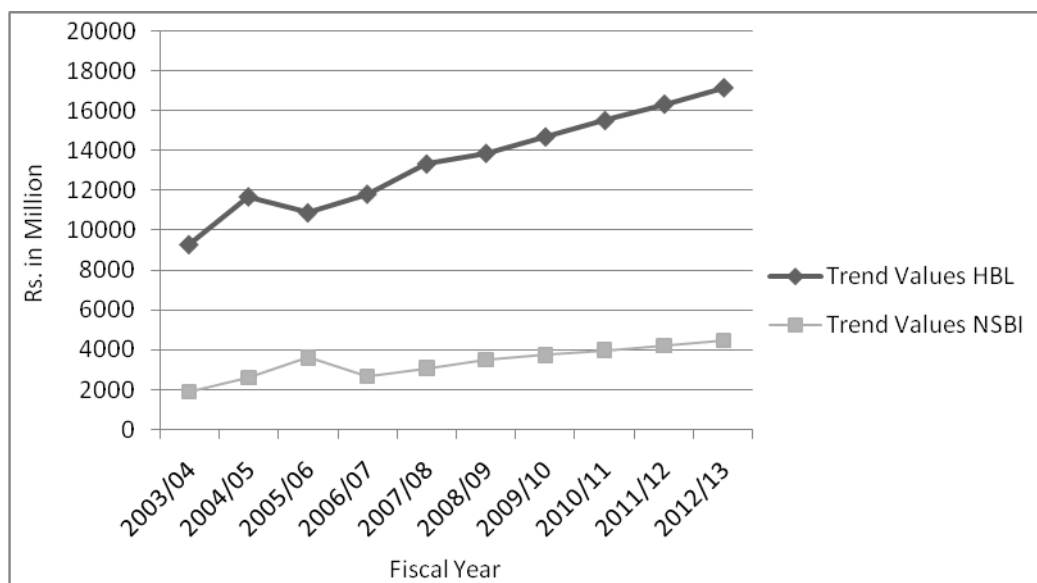
Fiscal Year	Trend Values HBL	Trend Values NSBI
2003/04	9292	1908
2004/05	11692	2608
2005/06	10889	3611
2006/07	11823	2659
2007/08	13340	3089
2008/09	13875.3	3498.9
2009/10	14698	3740.2
2010/11	15520.7	3981.5
2011/12	16343.4	4222.8
2012/13	17166.1	4464.1

When analyzing the above table, it is clear that the total investments of both HBL and NSBI are in fluctuating trend. Other things remaining constant, the total investments of HBL and NSBI in FY 2012/2013 will be Rs. 17166.1 and Rs. 4464.1 respectively.

From the above trend analysis, it is found that the total investments position of HBL is better than NSBI. (See Details in Appendix 19)

Figure 4.24

Trend values of Total Investments of HBL and NSBI



Trend Analysis of Loan and Advances

Under this topic an attempt is made to analyze the trend of loan and advances of HBL and NSBI and forecast the trend for next 5 years. The following table shows the trend values of loan and advances of HBL and NSBI for five years from FY 2003/04 to 2007/08 and forecasted the same till FY 2012/2013.

Table 4.35

Trend Values of Total Investments of HBL and NSBI

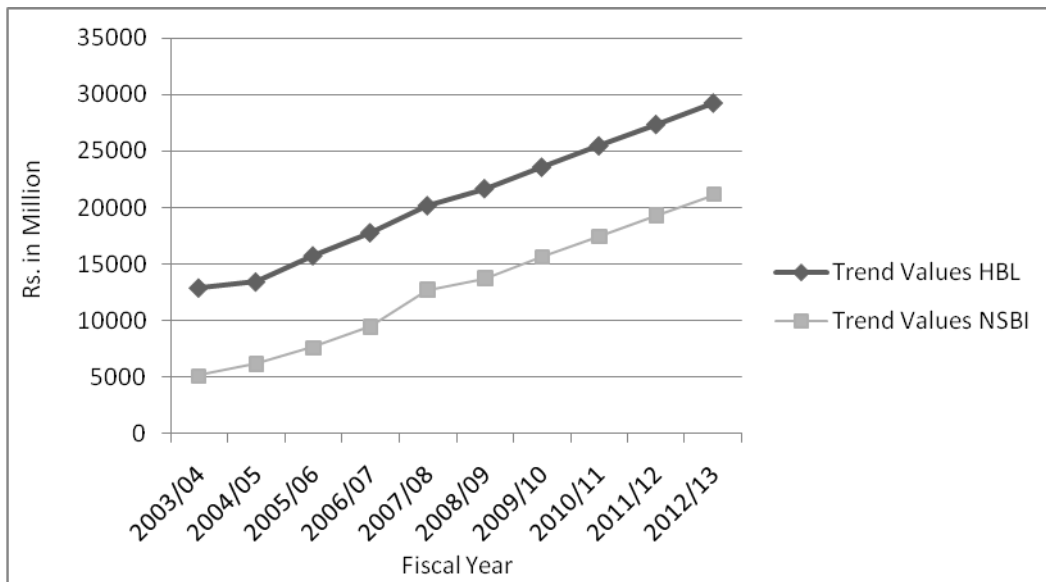
(Rs. in million)

Fiscal Year	Trend Values HBL	Trend Values NSBI
2003/04	12920	5144
2004/05	13451	6214
2005/06	15762	7627
2006/07	17794	9460
2007/08	20180	12714
2008/09	21680.3	13747.6
2009/10	23566.6	15586.2
2010/11	25452.9	17424.8
2011/12	27339.2	19263.4
2012/13	29225.5	21102

When analyzing the above table, it is clear that the loan and advances of both HBL and NSBI are in increasing trend. Other things remaining constant, the loan and advances of HBL and NSBI in FY 2012/2013 will be Rs. 29225.5 and Rs. 21102 respectively. From the above trend analysis, it is found of HBL has mobilized loan and advances well than NSBI. (See Details in Appendix 19)

Figure 4.25

Trend values of Loan and Advances of HBL and NSBI



Trend Analysis of Net Profit

Under this topic an attempt is made to analyze the trend of net profit of HBL and NSBI and forecast the trend for next 5 years. The following table shows the trend values of net profit of HBL and NSBI for five years from FY 2003/04 to 2007/08 and forecasted the same till FY 2012/2013.

Table 4.36

Trend Values of Net Profit of HBL and NSBI

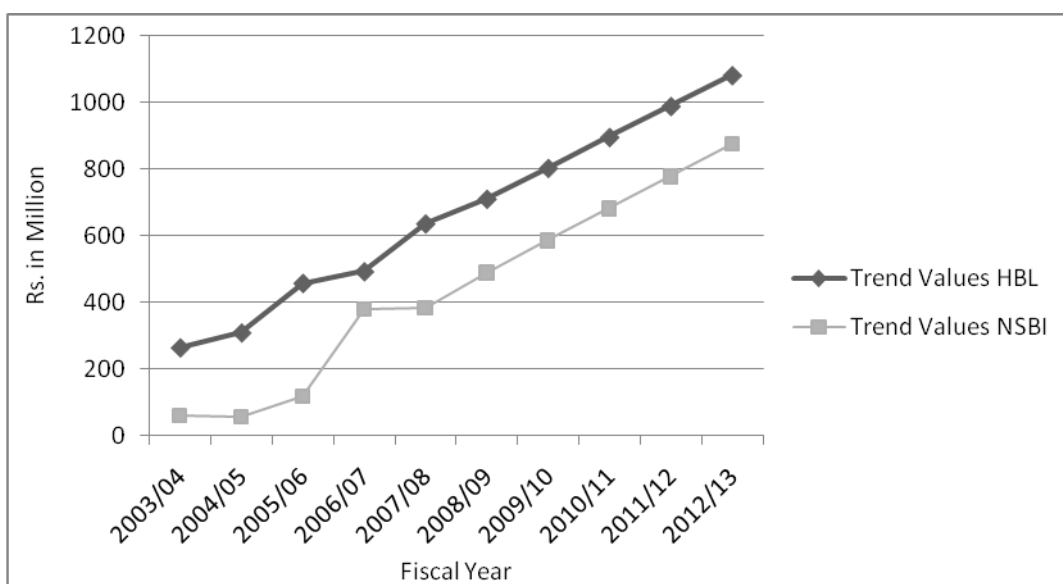
(Rs. in million)

Fiscal Year	Trend Values HBL	Trend Values NSBI
2003/04	263	61
2004/05	308	57
2005/06	457	117
2006/07	492	379
2007/08	636	383
2008/09	710.2	489.2
2009/10	803.2	585.8
2010/11	896.2	682.4
2011/12	989.2	779
2012/13	1082.2	875.6

When analyzing the above table, it is clear that the net profits of both HBL and NSBI are in increasing trend. Other things remaining constant, the net profit of HBL and NSBI in FY 2012/2013 will be Rs. 1082.2 and Rs. 875.6 respectively. From the above trend analysis, it is found of HBL is in better position in terms of net profit than NSBI. (See Details in Appendix 19)

Figure 4.26

Trend values of Net Profit of HBL and NSBI



4.8 Major Findings

The major findings of this study are as summarized as follows:

- Investment of HBL and NSBI reveals that HBL has invested its major portion in other investments such as foreign banks, local banks, etc whereas NSBI has invested maximum percentage in HMG securities. Investment of HBL is lower than NSBI in shares, debentures and bonds. Both the banks have not invested in Nepal Rastra Bank Bonds over the study period.
- The mean currents ratio of HBL is higher than NSBI. It means that HBL has maintained higher liquidity whereas NSBI has maintained lower liquidity and higher risks in comparison to HBL.
- NSBI has maintained a higher cash reserve ratio than of HBL. NSBI possesses higher ability to meet its deposits than that of HBL The co-efficient of variance of NSBI is lower than that of HBL which shows that the ratios of NSBI are more stable and constant than that of HBL.
- The average ratio of cash and bank balance to current assets ratio of NSBI is greater than HBL which indicates that NSBI is in a better position to maintain its cash andbank balance to meet its daily requirements to make the payments on customers deposit withdrawals.
- The mean ratio of investment on government securities to current assets of HBL is lower than NSBI and the variability of NSBI is higher than HBL. It states the poor position of HBL in investment on government securities but more consistent in its investment than NSBI.
- The mean ratio of loan and advances to total deposit of NSBI is higher than HBL but the consistency in the ratio is lower than that of HBL. It concludes that NSBI has strong position regarding the mobilization of total deposit on loan and advance than HBL.
- The ratio of investment to total deposit of HBL is higher than that of NSBI whereas the ratios of NSBI are more variable than HBL. This shows that HBL has invested higher amount of the total deposits in securities and shares than NSBI.

- The mean ratio of OBS operation to loan and advances of NSBI is lower as well as highly variable than that of HBL. HBL is more consistent in maintaining the ratios over the study period.
- NSBI has maintained a higher ratio of loan loss in comparison to HBL. It can be concluded that the performance of NSBI in terms of recovery of loan is weaker in comparison to HBL due to higher loan loss ratio.
- The mean ratio of return on loan and advance of HBL is higher than that of NSBI and the return on loan and advances of HBL are more consistent than NSBI.
- The return on total assets ratio of NSBI is higher than HBL on an average, which indicates that the position of bank is better than HBL; however, HBL has been able to maintain a stable and consistent return on total assets in comparison to NSBI.
- The average ratio of return on equity of HBL is higher than that of NSBI while the coefficient of variance of ratio of NSBI is higher than that of HBL. HBL has higher return ratio which indicates that the bank has efficiently utilized its equity capital and is more consistent in the utilization of its equity capital than NSBI.
- The mean ratio of total interest earned to total outside assets of NSBI is higher than that of HBL which depicts that NSBI has better position with respect to the income earned from total outside assets. But the condition of HBL is more stable than NSBI.
- The ratio of total interest earned to total operating income of HBL is lower as well as highly variable than NSBI. It is clear that NSBI has better and stable position regarding the mobilization of interest bearing assets than HBL. However, the magnitude of interest income in total income of both the banks is high i.e. more than 70%, though the investment has more risk than fee based activities.
- The average ratio of total interest paid to total deposit ratio of NSBI is greater than HBL which means that NSBI has paid higher interest on total deposits than HBL. This reveals that the position of NSBI is not so good in comparison to HBL but there is stability of the bank in paying interest on total deposit.

- The mean credit risk ratio and the CV ratio of NSBI is higher than HBL which means that NSBI has higher credit risk in comparison to HBL as well as unstable credit policy in comparison to HBL.
- The average capital risk ratio of NSBI is slightly higher than that of HBL which indicates that HBL has slightly higher capital risks than NSBI. The degree of capital risk in HBL is also slightly riskier than NSBI.
- The growth ratio of NSBI is higher than that of HBL. The growth ratio of total deposits of HBL is 9.67% whereas of NSBI is 17.49% which indicates that the performance of NSBI to collect deposit is much better year by year in comparison to HBL.
- The growth ratio of loan and an advance of HBL is lower than NSBI. The growth ratio of HBL is 11.79% whereas that of NSBI is 25.39%. This depicts that the state of HBL to grant loan and advances is not as good as NSBI; however, analysis shows that the trend is increasing for both the banks.
- The growth ratio of total investments of NSBI is higher than that of HBL. The ratio of HBL is 9.46% whereas that of NSBI is 12.81%. The growth ratio of both banks is fluctuating.
- The growth ratio of net profit of HBL is lower than NSBI. The growth ratio of HBL is 24.69% whereas that of NSBI is 68.37%. NSBI has a better position of increasing net profit and much satisfying growth ratio than HBL over the study period.
- Coefficient of correlation analysis between total deposits and total investments of HBL and NSBI shows that there is positively perfect correlation between total deposit and total investment of both HBL and NSBI. When there is a change in total deposit, it brings 79.23% change in total investment of HBL and 49.25% change in total investment of NSBI. The relationship between these two variables is insignificant.
- Coefficient of correlation analysis between HBL and NSBI shows that there is positively perfect correlation between loan and advances and net profit of both the banks. When there is a change in loan and advances, it brings 97.29% change in net profit of HBL and 81.92% change in net profit of NSBI. In this analysis also, r

is less than 6 P.E which shows that the relationship between these two variables is insignificant.

- Coefficient of correlation analysis between HBL and NSBI shows that there is positive correlation between total deposits and net profit of both the banks. When there is a change in total deposits, it brings 91.80% change in net profit of HBL and 71.64% change in net profit of NSBI. The relationship between these two variables of HBL is insignificant while the relationship between the two variables of NSBI is significant as the r is greater than 6 P.E.
- Coefficient of correlation analysis between HBL and NSBI shows that there is positive correlation between total investment and net profit of both the banks. On the basis of co-efficient of determination, it is found that when there is a change in total investment, it brings 67.69% change in net profit of HBL and 6.99% change in net profit of NSBI. The relationship between these two variables is insignificant.
- Coefficient of correlation analysis between HBL and NSBI shows that there is positive correlation between total investment and loan and advance of both the banks. On the basis of co-efficient of determination, it is found that when there is a change in total investment, it brings 67.72% change in loan and advance of HBL and 50.17% change in loan and advance of NSBI. The relationship between these two variables is insignificant.
- Coefficient of correlation analysis between HBL and NSBI shows that there is positive correlation between total deposit and loan and advance of both the banks. On the basis of co-efficient of determination, it is found that when there is a change in total deposit, it brings 97.48% change in net profit of HBL and 96.45% change in net profit of NSBI. The relationship between these two variables is insignificant.
- From the trend analysis, it is clear that the total deposits of HBL and NSBI are in increasing trend, however, it is found that the deposits collection position of HBL is better than NSBI.

- The trend of total investments of both HBL and NSBI are in fluctuating trend. From the trend analysis, it is found that the total investments position of HBL is better than NSBI.
- The loan and advances of both HBL and NSBI are in increasing trend. From the trend analysis, it is found of HBL has mobilized loan and advances well than NSBI.
- The trend of net profits of both HBL and NSBI are increasing, however, it is found that HBL is in better position in terms of net profit than NSBI.

CHAPTER - V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter presents the summary of the study, conclusions derived from the analysis of data and their interpretation and recommendations offered for the improvement of the investment policies of the banks under study. Thus, the chapter is divided into three sections. The first section of this chapter focuses on summarizing the whole study; the second section draws conclusions from the analysis of data and interpretation of the results thereof; and the third section offers recommendations for improvement of the investment policy of the concerned bank.

5.1 Summary

A sound investment policy is very essential in a nation's economy for economical as well as financial growth of a country. Commercial banks play an important role for the economic development of the country as they provide finance for the development of industry, trade and business by investing the saving collected as deposits from public. They render their various services to the customers facilitating their economic and their social life. They are the most important ingredients for integrated and speedy development of a country. So, nowadays-financial institutions are viewed as catalyst in the process of the economic growth and effective mobilization of domestic resources. Investment operation of commercial banks is a risky affair. It is the most important factor for the shareholders and bank management. For this, commercial banks have to pay due consideration while formulating their investment policy. A healthy development of any commercial bank depends upon its investment policy. The word investment conceptualized the investment of income, saving or other collected fund. It is a well known fact that an investment is only possible where there is adequate saving. If all the incomes and saving are consumed to the problem of hand and mouth and to other basic needs, then there is no existence of investment. So both saving and investment are interrelated. It is concerned with the management of an investor's wealth, which is the sum of current income and present values of all future incomes to be invested come form assets already owned borrowed money and saving or foregoes

consumption by the investors. The main objective of their investment is to secure financial benefit in future. Anyway the goal of investment is the maximization of owners' economic welfare.

Although several banks have been established in the country within short period of time, stable, strong and appropriate investment policy has not been followed by the commercial banks to sufficient return. They have not been able to utilize their funds more effectively and productively. Thus, proper utilization of the resources has become more relevant and current issue for the banks. The directions and guidance provided by Nepal Rastra Bank are the major policy statements for the Nepalese commercial banks. However, a long term and published policy about their operation is not found even in the joint venture banks. Commercial bank in current year, present a new picture, a picture of innovation practice of wider horizon and new enterprises. The most remarkable diversification of banking function is increasing participation in medium and-long term financial industries and other sector. Therefore, they are not only financial institutions of finance agriculture and industry and other economic activities, but are more than financial institution in the sense that they help saving create deposits and make the subsequent distribution of such accumulated funds. The primary objective of these joint venture banks is always to earn profit by investing or granting loan and advances to people associated with trade, business and industry, etc. That means they are required to mobilize their sources properly to acquire profit. How well a bank manages its investment has a great deal to do with the economic health of the country because the bank loans support the growth of new business and trade empowering the economic activities of the country. The income and profit of the bank depends upon its lending procedure, lending policy and investment of its fund in different securities. The greater the credit created by the bank, the higher will be the profitability. A sound lending and investment policy is not significant for the promotion of commercial savings of a backward country like Nepal.

The main concentration of the study is to diagnose the investment policy of NSBI and HBL to suggest measures to improve the investment policy of the banks. An effort has

been made to analyze investment trend, deposit trend, loan and advances and net profit and their projection of ten years Himalayan Bank and Nepal SBI Bank and also to identify investment sector of Himalayan Bank and Nepal SBI Bank .Similarly, an attempt has also been made to evaluate the liquidity, assets management efficiency, profitability and risk position and growth of Himalayan Bank in comparison to that of Nepal SBI Bank as well as to study the relationship between investments, deposits, loan and advances and net profit of the banks.

The study is based on the secondary data from FY 2003/2004 to 2007/2008. The data required for the analysis are directly obtained from the balance sheet and the P/L account of the concerned bank's annual reports. Likewise, various data and information are collected from the economic journals, periodicals, bulletins, magazines and other published and unpublished reports and documents as well as the websites of concerned banks.

Two joint venture banks Himalayan Bank Limited and Nepal SBI Bank have been taken for the conduction of study among 26 commercial banks. Himalayan Bank was established in 1993 in joint venture with Habib Bank Limited of Pakistan. This is the first Joint venture Bank managed by Nepalese Chief Executives. There are 24 branches of HBL in operation with 14 branches outside the valley and the rest inside the Kathmandu valley including a Card Center. Nepal SBI Bank Limited was established in 1993, under the company Act. It is also a foreign joint venture bank and the foreign partner is State Bank of India, holding the 50% of equity share of Nepal SBI Bank Limited, is managing the Bank under joint venture and technical services agreement signed between it and Nepalese promoters. There are 32 branches of Nepal SBI Bank Limited in operation. Both banks have many common products such as deposit, loan, remittance, card services, internet banking etc.

Financial as well as statistical tools have been deployed in order to analyze and interpret the data and information. Under financial analysis, various financial ratios related to the investment function of commercial banks i.e. liquidity ratio, assets

management ratio, activity ratio, profitability ratio, risk ratio and growth ratio have been analyzed and interpreted. Under statistical analysis, some relevant tools i.e. mean, standard deviation, coefficient of correlation, coefficient of determination, trend analysis have been used for the analysis and interpretation of data. This analysis gives clear picture of the performance of the bank with regard to its investment operation.

5.2 Conclusion

After study and analysis of given data it is concluded that NSBI has invested maximum percentage in HMG securities while HBL has invested its major portion in other investments such as foreign banks, local banks, etc .NSBI started to invest in other sectors since fiscal year 2005/06. Investment of HBL is lower than NSBI in shares, debentures and bonds. Both the banks have not invested in Nepal Rastra Bank Bonds over the study period. Considering liquidity ratios, the mean currents ratio of HBL is higher than NSBI. Similarly, NSBI has maintained a higher average in cash reserve, cash and bank balance to current assets and investment on government securities to current assets. NSBI is in a better position to maintain its cash and bank balance and investing in government securities while the position of HBL is more consistent in maintaining the ratios than NSBI.

While analyzing the assets management ratios, it was found that NSBI has strong position regarding the mobilization of total deposit on loan and advance than HBL. The mean ratio of OBS operation to loan and advances of NSBI is lower as well as highly variable than that of HBL It was also found that HBL has invested higher amount of the total deposits in securities and shares than NSBI while the performance of NSBI in terms of recovery of loan is weaker in comparison to HBL due to higher loan loss ratio. The mean ratio of return on loan and advance of HBL is higher than that of NSBI. The position of NSBI is better than HBL in earning good return on total assets; however, HBL has been able to maintain a stable and consistent return on total assets in comparison to NSBI. HBL is efficient and more consistent in the utilization of its equity capital than NSBI. NSBI has better position with respect to the income earned from total outside assets and also it has better and stable position regarding the

mobilization of interest bearing assets than HBL but it has paid higher interest on total deposits than HBL.

When a firm wants to bear risk, the profitability and effectiveness of the firm increase. As per the analysis of risk ratio, NSBI has higher credit risk as well as unstable credit policy in comparison to HBL and the degree of capital risk in HBL is also slightly riskier than NSBI.

From the trend analysis, it is concluded that clear that the trend of total deposits, loan and advances and net profit of HBL are increasing whereas the trend of total investments have been fluctuating .Similarly, the trend of total investments of NSBI has also been fluctuating while the trend of total deposits, loan and advances and net profit are following an increasing trend. It is also found that the deposits collection position, total investments position and net profit position of HBL is better than NSBI. HBL has also mobilized the loan and advances better than NSBI.

From the statistical analysis of financial data of both the banks, it is found that there is positive correlation between the total deposits and total investments, loan and advances and net profit, total deposits and net profit, total investment and net profit, total investment and loan and advance as well as total deposit and loan and advance of both HBL and NSBI. HBL's 91.80% investment is dependent on deposit and 8.20% investment decision depends on other variables and NSBI's 71.64% investment is dependent on deposit The relationship between these two variables of both banks is insignificant. HBL's 91.64% net profit is depending on loan and advances and 8.36% depends on other variables. NSBI's 81.92% net profit is depending on loan and advances and 18.08% depends on other variables. The relationship between these two variables of both banks is insignificant. Similarly, when there is a change in total deposits, it brings 91.80% change in net profit of HBL due to total deposit and rest due to other variables and when there is a change in total deposits, it brings 71.64% change in net profit of NSBI due to total deposit and 28.36% due to other variables. The relationship between these two variables of HBL is insignificant while the relationship

between the two variables of NSBI is significant. HBL's 67.69% change in net profit is due to total investment and 32.31% due to other variables and NSBI's 6.99% change in net profit of NSBI due to total investment only. The relationship between these two variables of both banks is insignificant. Likewise, when there is a change in total investment, it brings 67.72% change in loan and advance of HBL due to total investment and 32.28% due to other variables. Similarly, it is found that when there is a change in total investment, it brings 50.17% change in loan and advances of NSBI due to total investment and rest due to other variables. The relationship between these two variables of both banks is insignificant. In the same way, HBL's 97.48% change in net profit is due to total deposit and rest due to other variables and NSBI's 96.45% change in net profit is due to total deposit and 3.55% due to other variables. The relationship between these two variables of both banks is insignificant.

5.3 Recommendations

On the basis of analysis, findings and conclusion, following recommendations can be made.

- It is found from the study that HBL is not investing much in HMG securities as compared to NSBI. Government securities are the safest medium of investment and are free of risk as well as liquid which can be easily sold in the market. Therefore, HBL is recommended to draw attention to increase investment in government securities which helps to utilize funds into income generating assets as well as minimizes risk and also help to maintain optimal level of liquidity.
- Liquidity position of NSBI is not good as compared to HBL. Hence, the bank is advised to increase its liquidity position as liquidity position is used to judge the ability of bank to meet its short-term liabilities that are likely to mature in the short period.
- It is recommended to HBL to improve the efficiency in utilizing the deposits in loan and advances for generating the profit. NSBI should try to maintain the current position.
- Negligence in administering the assets could be the cause of liquidity crisis in the bank and one of the major reasons for failure. Since the performance of NSBI in

terms of recovery of loan is weaker in comparison to HBL, it is suggested that the bank should pay more attention while granting loan and advance.

- Return on equity ratio of NSBI is in fluctuating trend over the study period which is not a good financial indicator. It indicates that the bank is not properly managed and hence it should find out the reasons behind it.
- Both banks should try to improve the growth rate of total investments in an increasing trend in order to increase the net profit.
- In the light of growth competition in the banking sectors, the business of the banks should be customer oriented. It should focus not only towards big clients but also towards small clients.
- The banks should involve in different kinds of social and community development activities. It should make corporate social responsibility its integral objective in this growing competition among the banks.
- Both banks are recommended to formulate and implement sound and effective financial and non-financial strategies to minimize their operational expenses to meet the required level of profitability.
- The banks should fulfill some social obligations by extending their resources to rural areas and promoting the development of poor and disadvantaged group. In order to do so, they should open their branches in the remote areas with the objective of providing cheaper banking services. The minimum amount to open an account and interest rate for credits should be reduced.
- Both banks should maintain a sound portfolio management to attain maximum yield with minimum risk.

BIBLIOGRAPHY

Books

- Agrawal, G.R. (2002). *Dynamics of Business Environment in Nepal*. Kathmandu: M.K. Publishers and Distributors.
- Baidya, S. (1997). *Banking Management*. Kathmandu: Monitor Nepal. Bhandari, D.R. (2003). *Banking and Insurance Principle and Practices*. Kathmandu: Ayush Publications.
- Bajaracharya, B.C. (2056), *Business Statistics and Mathematics*, Kathmandu: M.K. Publisher and Distributors Bhotahity.
- Bhandari, D.R. (2003). *Principle and Practice of Banking and Insurance*.
- Bhattra, R. (2005). *Investments Theory and Practice*. (2nd Edition). Kathmandu: Buddha Academic Publisher and Distributors Pvt. Ltd.
- Dahal, B. & Dahal, S. (2002). *A Handbook of Banking*. Kathmandu: Asmita Books and Stationary.
- Dangol, R.M. (2000). *Accounting of Financial Analysis and Planning*. Kathmandu: Taleju Prakashan.
- Gautam, D.K. (2002). *Business Policy on Strategic Management*. Kathmandu: Pratibha Prakashan.
- Gupta, S.C. (1992). *Fundamental Statistic*. Bombay: Himalayan Publication House.
- Joshi, S. (2058). *Economic Policy Analysis*. Kathmandu: Taleju Prakashan.
- Kothari, C.R. (1994). *Quantitative Techniques*. New Delhi: Vikas Publishing House Pvt. Ltd.
- Pandey, I.M. (1992). *Financial Management*. New Delhi: Vikas Publishing House Pvt. Ltd.
- Radhaswamy M. & Vasudevan, S.V. (1979). *A Text Book of Banking*. (2nd Edition). New Delhi: S Chand and Company Ltd.
- Sharpe, W.F., Alexander, G.J., & Bailey, J.V., (2000). *Investment*. (4th Edition). New Delhi: Prentice-Hall of India Pvt. Ltd.
- Singh, M.L. (1998). *Understanding Research Methodology*. Kathmandu: M. Singh Publication.

- Singh, P. (1994). *Investment Management*. Bombay: Himalayan Publishing House.
- Singh, S.P. & Singh, S. (1983). *Financial Analysis for Credit Management in Banks*. New Delhi: Vikash Publishing House Ltd.
- Valla, V.K. (1983). *Investment Management Securities Analysis and Portfolio Management*. New Delhi: S. Chand and Co. Ltd.
- Wolf, H.K. and Pant, P.R. (1999). *A Handbook of Social Science Research and Thesis Writing*. Kathmandu: Buddha Academic Enterprises Pvt. Ltd.

Articles, Journals, Research Papers and Official Publications

- Bajracharya, B.B. (1991). Monetary Policy and Deposit Mobilization in Nepal. *Rajat Jayanti Smarika*. Kathmandu: Rastra Banijya Bank.
- Bajracharya, B.B. (1991). Monetary Policy and Deposit Mobilization in Nepal. *Rajat Jayanti Smarika*. Kathmandu: Rastra Banijya Bank.
- Banking and Financial Statistic (Mid –July, 2007). Kathmandu: Nepal Rastra Bank.
- Banking Khabar Patra (March-April, 2007). Kathmandu: Nepal Rastra Bank, No. 60
- Clemens, J.H. (1963). *Bank Lending*. London: Surop Publication Ltd.
- Crosse, H.D. (1963). *Management Policies for Commercial Banks*. New Jersey: Prentice Hall Inc.
- Dali, I. (1974). *Commercial Banking in Nepal*. Kathmandu.
- Dali, I. (1974). *Commercial Banking in Nepal*. Kathmandu.
- Diana M.N. (1994). *Banking Institution in Developing Markets*. USA: World Bank Publication.
- Edward, W.R., Edward, K.G., Richard V.C. & Richard, K.S. (1980). *Commercial Banking*. New Jersey: Prentice Hall, Inc.
- Francis, J.C. (1990). *Management of Investments*. New York: McGraw Hill Series.
- Gitman, L.J. and Jochnk (1990). *Fundamentals of Investing*. New York: Harper and Row Publisher.
- Grolier Incorporated (1984). *The Encyclopedia Americana*. Vol. 3.
- Himalayan Bank Ltd. (2064/65). *Annual Report*. Kathmandu.
- Monetary Policy (2007/08) Kathmandu: Nepal Rastra Bank.

- Nepal Rastra Bank (2064, Baishka 14). *52nd Anniversary*. Kathmandu: Nepal Rastra Bank.
- Nepal SBI Bank Ltd. (2064/65). *Annual Report*. Kathmandu.
- Pantha, Y. (May-June, 2007). *Info Himalayan*. Bimonthly Newsletter.
- Pradhan R.S., & Yadav, M.P. (2007,Oct- Dec). *The Economic Journal of Nepal*. A quarterly Publication of the Central Department of Economic, T.U. Kirtipur, Kathmandu.
- Pradhan, S.B. (1996). Deposit Mobilization: Its Problem and Prospects. *Nepal Bank Patrika. Baisakh Masanta Edition*. Kathmandu: Nepal Bank Limited.
- Reily, F.K. (1991). *Investment*. Japan: The Dryden Press, CBS Publishing Japan Ltd.
- Sharma, B. (2006). Banking the future on Competition. *Business Age*.
- Sharpe, F.W. Alexander J.G. (1996). *Investments*. New Delhi: Prentice Hall of India Pvt. Ltd.
- Shrestha, S. (1998). “*Leading Operation of Commercial Bank of Nepal and its impact on GDP*” the Business Voice of Nepal, (The Special Issue of Banijya Sanar) T.U. Kirtipur.
- Shrestha, S.R. (1998). Portfolio Management in Commercial Bank, Theory and Practice. *Nepal Bank Patrika, Baisakh Masanta Edition*. Kathmandu: Nepal Bank Limited.
- The American Bankers Association (1999). *Principles of Bank Operations*. New York: ABS.
- Valla, V.K. (1983). *Investment Management, Securities Analysis and Portfolio Management*. New Delhi: S. Chand and Co. Ltd.
- Van Horne, J.C. (1998). *Financial Management and Policy. (10th Edition)*. New Delhi: Prentice Hall of India.

Thesis

- Basnet, M. (2008). *Investment Policy of Commercial Bank(A Comparative Study of Nabil Bank Ltd & Himalayan Bank Ltd.)*. An Unpublished Master’s Degree Thesis, Shanker Dev Campus, T.U.

- Dhakal, S. (2008). *Investment Policy of Commercial Bank in Nepal*. An Unpublished Master's Degree Thesis, Shanker Dev Campus, T.U.
- Joshi, J. (2005). *Investment Policy of Commercial Bank in Nepal: A comparative study of Everest Bank Limited with Nabil Bank Limited and Bank of Kathmandu Limited*. An Unpublished Master's Degree Thesis, Shanker Dev Campus, T.U.
- Maharjan, S. (2008). *Investment Analysis Of Commercial Banks in Nepal (A Case Study of Nepal Investment Bank, Himalayan Bank, Nepal SBI Bank, Everest Bank and Bank of Kathmandu)*. An Unpublished Master's Degree Thesis, Shanker Dev Campus, T.U.
- Pandit, K. (2004). *Investment Policy Analysis of Joint Venture Banks with Special Reference to Nepal SBI Bank, Bank of Kathmandu and Everest Bank Limited*. An Unpublished Master's Degree Thesis, Shanker Dev Campus, T.U.
- Regmi, G. (2006). *A Comparative Study on Investment Policy of Everest Bank Ltd and Himalayan Bank Ltd*. An Unpublished Master's Degree Thesis, Shanker Dev Campus, T.U.
- Shrestha, S. (2004). *A Study on Nepal Rastra Bank Guidelines on Investment Policy of Commercial Bank in Nepal (A Case Study of Nepal Investment Bank Ltd.)*. An Unpublished Master's Degree Thesis, Shanker Dev Campus, T.U.
- Shrestha, S. (2007). *A Comparative Analysis on Investment Performance of Commercial Bank in Nepal*, An Unpublished Master's Degree Thesis, Shanker Dev Campus, T.U.

Websites

www.hbl.com.np

www.nepalsbi.com.np

www.nrb.org.np

APPENDICES

Appendix 1 Current Ratio (in times)

HBL

In Rs '000'

Fiscal Year	Current Assets	Current Liabilities	Ratio(Times)
2003/04	25430144	23437859	1.09
2004/05	28575521	26302948	1.09
2005/06	30038983	27694215	1.08
2006/07	33740808	31372641	1.08
2007/08	36134968	33662540	1.07

NSBI

In Rs
'000'

Fiscal Year	Current Assets	Current Liabilities	Ratio(Times)
2003/04	7915610	7515267	1.05
2004/05	9668418	9412675	1.03
2005/06	12718872	12238316	1.04
2006/07	13592594	13116024	1.04
2007/08	16849559	16170336	1.04

Appendix 2

Cash and Bank Balance to Total Deposit (Cash Reserve Ratio)

HBL

In Rs '000'

Fiscal Year	Cash and Bank Balance	Total Deposit	Ratio (%)
2003/04	2001184	22010333	9.09
2004/05	2014471	24814012	8.12
2005/06	1717352	26490852	6.48
2006/07	1757341	30048418	5.85
2007/08	1448143	31842789	4.55

NSBI

In Rs '000'

Fiscal Year	Cash and Bank Balance	Total Deposit	Ratio (%)
2003/04	864416	7198327	12.01
2004/05	723744	8654774	8.36
2005/06	1118157	11002041	10.16
2006/07	1122690	11445286	9.81
2007/08	1342960	13715395	9.79

Appendix 3

Cash and Bank Balance to Current Assets Ratio

HBL

In Rs '000'

Fiscal Year	Cash and Bank Balance	Current Assets	Ratio (%)
2003/04	2001184	25430144	7.87
2004/05	2014471	28575521	7.05
2005/06	1717352	30038983	5.72
2006/07	1757341	33740808	5.21
2007/08	1448143	36134968	4.01

NSBI

In Rs '000'

Fiscal Year	Cash and Bank Balance	Current Assets	Ratio (%)
2003/04	864416	7915610	10.92
2004/05	723744	9668418	7.49
2005/06	1118157	12718872	8.79
2006/07	1122690	13592594	8.26
2007/08	1342960	16849559	7.97

Appendix 4

Investment on Government Securities to Current Assets Ratio

HBL

In Rs '000'

Fiscal Year	Investment on Government Securities	Current Assets	Ratio (%)
2003/04	3431728	25430144	13.49
2004/05	5469728	28575521	19.14
2005/06	5144312	30038983	17.13
2006/07	6454873	33740808	19.13
2007/08	7471668	36134968	20.68

NSBI

In Rs '000'

Fiscal Year	Investment on Government Securities	Current Assets	Ratio (%)
2003/04	1889634	7915610	23.87
2004/05	2588141	9668418	26.77
2005/06	3591773	12718872	28.24
2006/07	2345580	13592594	17.26
2007/08	3035554	16849559	18.02

Appendix 5

Loan and Advances to Total Deposit Ratio

HBL

In Rs '000'

Fiscal Year	Loan And Advances	Total Deposit	Ratio (%)
2003/04	12919631	22010333	58.70
2004/05	13451168	24814012	54.21
2005/06	15761977	26490852	59.50
2006/07	17793724	30048418	59.22
2007/08	20179613	31842789	63.37

NSBI

In Rs '000'

Fiscal Year	Loan And Advances	Total Deposit	Ratio (%)
2003/04	5143662	7198327	71.46
2004/05	6213878	8654774	71.80
2005/06	7626736	11002041	69.32
2006/07	9460451	11445286	82.66
2007/08	12713698	13715395	92.70

Appendix 6

Total Investment to Total Deposit Ratio

HBL

In Rs '000'

Fiscal Year	Total Investment	Total Deposit	Ratio (%)
2003/04	9292103	22010333	42.22
2004/05	11692342	24814012	47.12
2005/06	10889031	26490852	41.10
2006/07	11822985	30048418	39.35
2007/08	13340177	31842789	41.89

NSBI

In Rs '000'

Fiscal Year	Total Investment	Total Deposit	Ratio (%)
2003/04	1907520	7198327	26.50
2004/05	2607680	8654774	30.13
2005/06	3610775	11002041	32.82
2006/07	2659453	11445286	23.24
2007/08	3088887	13715395	22.52

Appendix 7

Total OBS Operation to Loan and Advance Ratio

HBL

In Rs '000'

Fiscal Year	Total OBS Operation	Loan and Advance	Ratio (%)
2003/04	6229899	12919631	48.22
2004/05	7718747	13451168	57.38
2005/06	6579109	15761977	41.74
2006/07	6853636	17793724	38.52
2007/08	10871940	20179613	53.88

NSBI

In Rs '000'

Fiscal Year	Total OBS Operation	Loan and Advance	Ratio (%)
2003/04	843164	5143662	16.39
2004/05	1592669	6213878	25.63
2005/06	1953928	7626736	25.62
2006/07	2817299	9460451	29.78
2007/08	3160602	12713698	24.86

Appendix 8
Loan Loss Ratio

HBL

In Rs '000'

Fiscal Year	Loan Loss Provision	Loan And Advances	Ratio (%)
2003/04	842750	12919631	6.52
2004/05	967761	13451168	7.19
2005/06	1026647	15761977	6.51
2006/07	1119417	17793724	6.29
2007/08	795727	20179613	3.94

NSBI

In Rs '000'

Fiscal Year	Loan Loss Provision	Loan And Advances	Ratio (%)
2003/04	388171	5143662	7.55
2004/05	525468	6213878	8.46
2005/06	475090	7626736	6.23
2006/07	614720	9460451	6.50
2007/08	604601	12713698	4.76

Appendix 9

Return on Loan and Advances Ratio

HBL

In Rs '000'

Fiscal Year	Net Profit	Loan And Advances	Ratio (%)
2003/04	263052	12919631	2.04
2004/05	308277	13451168	2.29
2005/06	457458	15761977	2.90
2006/07	491822	17793724	2.76
2007/08	635869	20179613	3.15

NSBI

In Rs '000'

Fiscal Year	Net Profit	Loan And Advances	Ratio (%)
2003/04	60851	5143662	1.18
2004/05	57386	6213878	0.92
2005/06	117001	7626736	1.53
2006/07	379049	9460451	4.01
2007/08	382837	12713698	3.01

Appendix 10
Return on Total Assets Ratio

HBL

In Rs '000'

Fiscal Year	Net Profit	Total Assets	Ratio (%)
2003/04	263052	25729787	1.02
2004/05	308277	28871343	1.07
2005/06	457458	30579808	1.50
2006/07	491822	34314868	1.43
2007/08	635869	36858006	1.73

NSBI

In Rs '000'

Fiscal Year	Net Profit	Total Assets	Ratio (%)
2003/04	60851	8440405	0.72
2004/05	57386	9668418	0.59
2005/06	117001	13035839	0.90
2006/07	379049	13901201	2.73
2007/08	382837	17187446	2.23

Appendix 11
Return on Total Equity Ratio

HBL

In Rs '000'

Fiscal Year	Net Profit	Equity	Ratio (%)
2003/04	263052	2291928	11.48
2004/05	308277	2568395	12
2005/06	457458	2885593	15.85
2006/07	491822	2942226	16.72
2007/08	635869	3195466	19.90

NSBI

In Rs '000'

Fiscal Year	Net Profit	Equity	Ratio (%)
2003/04	60851	626683	9.71
2004/05	57386	688907	8.33
2005/06	117001	971769	12.04
2006/07	379049	1715154	22.10
2007/08	382837	2170278	17.64

Appendix 12

Total Interest Earned to Total outside Assets Ratio

HBL

In Rs '000'

Fiscal Year	Total Interest Earned	Total Outside Assets	Ratio (%)
2003/04	1245895	21243971	5.86
2004/05	1446468	24116861	5.60
2005/06	1626473	25581591	6.36
2006/07	1775583	28820982	6.16
2007/08	1963647	32837697	5.98

NSBI

In Rs '000'

Fiscal Year	Total Interest Earned	Total Outside Assets	Ratio (%)
2003/04	493598	7051182	7
2004/05	578372	8821588	6.56
2005/06	708718	11237511	6.31
2006/07	831117	12119904	6.86
2007/08	970513	15202585	6.38

Appendix 13

Total Interest Earned to Total Operating Income Ratio

HBL

In Rs '000'

Fiscal Year	Total Interest Earned	Total operating income	Ratio (%)
2003/04	1245895	1024776	121.58
2004/05	1446468	1195922	120.95
2005/06	1626473	1393535	116.72
2006/07	1775583	1393362	127.43
2007/08	1963647	1597495	122.92

NSBI

In Rs '000'

Fiscal Year	Total Interest Earned	Total operating income	Ratio (%)
2003/04	493598	394867	125
2004/05	578372	406142	142.41
2005/06	708718	464899	152.45
2006/07	831117	533511	155.78
2007/08	970513	638059	152.10

Appendix 14
Total Interest Paid to Total Deposit Ratio

HBL

In Rs '000'

Fiscal Year	Total Interest Paid	Total Deposit	Ratio (%)
2003/04	491543	22010333	2.23
2004/05	562964	24814012	2.27
2005/06	648842	26490852	2.45
2006/07	767411	30048418	2.55
2007/08	823745	31842789	2.59

NSBI

In Rs '000'

Fiscal Year	Total Interest Paid	Total Deposit	Ratio (%)
2003/04	255919	7198327	3.56
2004/05	258430	8654774	2.99
2005/06	334770	11002041	3.04
2006/07	412262	11445286	3.60
2007/08	454918	13715395	3.32

Appendix 15
Credit Risk Ratio

HBL

In Rs '000'

Fiscal Year	Total loan and advances	Total Working fund	Ratio (%)
2003/04	12919631	25729787	50.21
2004/05	13451168	28871343	46.59
2005/06	15761977	30579808	51.54
2006/07	17793724	34314868	51.85
2007/08	20179613	36858006	54.75

NSBI

In Rs '000'

Fiscal Year	Total loan and advances	Total Working fund	Ratio (%)
2003/04	5143662	8440405	60.94
2004/05	6213878	9668418	64.27
2005/06	7626736	13035839	58.51
2006/07	9460451	13901201	68.05
2007/08	12713698	17187446	73.97

Appendix 16
Capital Risk Ratio

HBL

In Rs '000'

Fiscal Year	Capital	Risk Weighted Assets	Ratio (%)
2003/04	2001184	16860638	11.87
2004/05	1541746	18321720	8.41
2005/06	1766176	19918325	8.87
2006/07	2146500	21889713	9.81
2007/08	2512992	25624467	9.81

NSBI

In Rs '000'

Fiscal Year	Capital	Risk Weighted Assets	Ratio (%)
2003/04	626637	6551967	9.56
2004/05	689013	7869616	8.76
2005/06	982374	9159271	10.73
2006/07	1163291	10873279	10.70
2007/08	1414645	13975708	10.12

Appendix 17

Calculation of Correlation between Total Deposit and Total Investment of HBL

X= Total Deposit Y=Total Investment

Rs. In 'Million'

Fiscal Years	X	Y	$x(X - \bar{X})$	x^2	$y(Y - \bar{Y})$	y^2	$x y$
2003/04	22010	9292	-5031.2	25312973.44	-2115.2	4474071.04	10641994.24
2004/05	24814	11692	-2227.2	4960419.84	284.8	81111.04	-634306.56
2005/06	26491	10889	-550.2	302720.04	-518.2	268531.24	285113.64
2006/07	30048	11823	3006.8	9040846.24	415.8	172889.64	1250227.44
2007/08	31843	13340	4801.8	23057283.24	1932.8	3735715.84	9280919.04
	$\Sigma X =$ 135206	$\Sigma Y =$ 57036		$\Sigma x^2 =$ 62674242.8		$\Sigma y^2 =$ 8732318.8	$\Sigma x y =$ 20823947.8

Here,

$$\bar{X} = \frac{\Sigma X}{N} = \frac{35206}{5} = 27041.2$$

$$\bar{Y} = \frac{\Sigma Y}{N} = \frac{57036}{5} = 11407.2$$

We Know,

$$\text{Correlation (r)} = \frac{\Sigma XY}{\sqrt{\Sigma X^2} \sqrt{\Sigma Y^2}} = \frac{20823947.8}{\sqrt{62674242.8} \times \sqrt{20823947.8}} = 0.8901$$

$$\text{Coefficient of determination} = r^2 = 0.8901^2 = 0.7923$$

Calculation of P.E.

$$\text{P.E. (r)} = 0.6745 \times \frac{(1-r^2)}{\sqrt{n}} = 0.6745 \times \frac{1-0.7923}{\sqrt{5}} = 0.06264$$

$$6 \text{ P.E.} = 6 \times 0.06264 = 0.3759$$

Appendix 18

Calculation of Correlation between Total Deposit and Total Investment of NSBI

X= Total Deposit Y=Total Investment

Rs. In 'Million'

Fiscal Years	X	Y	x(X- \bar{X})	x ²	y(Y- \bar{Y})	y ²	x y
2003/04	7198	1908	-3205	10272025	-867	751689	2778735
2004/05	8655	2608	-1748	3055504	-167	27889	291916
2005/06	11002	3611	599	358801	836	698896	500764
2006/07	11445	2659	1042	1085764	-116	13456	-120872
2007/08	13715	3089	3312	10969344	314	98596	1039968
	$\sum X =$ 52015	$\sum Y =$ 13875		$\sum x^2 =$ 25741438		$\sum y^2 =$ 1590526	$\sum x y =$ 4490511

Here,

$$\bar{X} = \frac{\sum X}{N} = \frac{52015}{5} = 10403$$

$$\bar{Y} = \frac{\sum Y}{N} = \frac{13875}{5} = 2775$$

We Know,

$$\text{Correlation (r)} = \frac{\sum XY}{\sqrt{\sum X^2} \sqrt{\sum Y^2}} = \frac{4490511}{\sqrt{25741438} \times \sqrt{1590526}} = 0.7018$$

$$\text{Coefficient of determination} = r^2 = 0.7018^2 = 0.4925$$

Calculation of P.E.

$$\text{P.E. (r)} = 0.6745 \times \frac{(1-r^2)}{\sqrt{n}} = 0.6745 \times \frac{1-0.4925}{\sqrt{5}} = 0.1531$$

$$6 \text{ P.E.} = 6 \times 0.1531 = 0.9186$$

Appendix 19

Calculation of Correlation between Loan and Advances and Net Profit of HBL

X= Loan and advances

Y=Net Profit

Rs. In 'Million'

Fiscal Years	X	Y	$x(X - \bar{X})$	x^2	$y(Y - \bar{Y})$	y^2	$x y$
2003/04	12920	263	-3101.4	9618681.96	-168.2	28291.24	521655.48
2004/05	13451	308	-2570.4	6606956.16	-123.2	15178.24	316673.28
2005/06	15762	457	-259.4	67288.36	25.8	665.64	-6692.52
2006/07	17794	492	1772.6	3142110.76	60.8	3696.64	107774.08
2007/08	20180	636	4158.6	17293953.96	204.8	41943.04	851681.28
	$\sum X = 80107$	$\sum Y = 2156$		$\sum x^2 = 36728991.2$		$\sum y^2 = 89774.8$	$\sum x y = 1791091.6$

Here,

$$\bar{X} = \frac{\sum X}{N} = \frac{80107}{5} = 16021.4$$

$$\bar{Y} = \frac{\sum Y}{N} = \frac{2156}{5} = 431.2$$

We Know,

$$\text{Correlation (r)} = \frac{\sum XY}{\sqrt{\sum X^2} \sqrt{\sum Y^2}} = \frac{1791091.6}{\sqrt{36728891.2} \times \sqrt{89774.8}} = 0.9864$$

$$\text{Coefficient of determination} = r^2 = 0.9864^2 = 0.9729$$

Calculation of P.E.

$$\text{P.E. (r)} = 0.6745 \times \frac{(1-r^2)}{\sqrt{n}} = 0.6745 \times \frac{1-0.9729}{\sqrt{5}} = 0.0082$$

$$6 \text{ P.E.} = 6 \times 0.0082 = 0.04903$$

Appendix 20

Calculation of Correlation between Loan and Advances and Net Profit of NSBI

X= Loan and advances Y=Net profit

Rs. In 'Million'

Fiscal Years	X	Y	$x(X - \bar{X})$	x^2	$y(Y - \bar{Y})$	y^2	$x y$
2003/04	5144	61	-3087.8	9534508.84	-138.4	19154.56	427351.52
2004/05	6214	57	-2017.8	4071516.84	-142.4	20277.76	287334.72
2005/06	7627	117	-604.8	365783.04	-82.4	6789.76	49835.52
2006/07	9460	379	1228.2	1508475.24	179.6	32256.16	220584.72
2007/08	12714	383	4482.2	20090116.84	183.6	33708.96	822931.92
	$\sum X = 41159$	$\sum Y = 997$		$\sum x^2 = 35570400.8$		$\sum y^2 = 112187.2$	$\sum x y = 1808038.4$

Here,

$$\bar{X} = \frac{\sum X}{N} = \frac{41159}{5} = 8231.8$$

$$\bar{Y} = \frac{\sum Y}{N} = \frac{997}{5} = 199.4$$

We Know,

$$\text{Correlation (r)} = \frac{\sum XY}{\sqrt{\sum X^2} \sqrt{\sum Y^2}} = \frac{1808038.4}{\sqrt{35570400.8} \times \sqrt{112187.2}} = 0.9051$$

$$\text{Coefficient of determination} = r^2 = 0.9051^2 = 0.8192$$

Calculation of P.E.

$$\text{P.E. (r)} = 0.6745 \times \frac{(1-r^2)}{\sqrt{n}} = 0.6745 \times \frac{1-0.8192}{\sqrt{5}} = 0.05454$$

$$6 \text{ P.E.} = 6 \times 0.05454 = 0.3272$$

Correlation between of total investment and loan and advance and total deposits and loan and advance are also calculated according to the above formula and fed in the corresponding tables.

Appendix 21
Growth Ratios
Sample Calculation of Growth Rate

Growth Ratio of Total Deposit

(Rs. In '000')

Banks	Fiscal Year					Growth Ratio (%)
	2003/04	2004/05	2005/06	2006/07	2007/08	
HBL	22010333	24814012	26490852	30048418	31842789	9.67
NSBI	7198327	8654774	11002041	11445286	13715395	17.49

Growth can be calculated as follows:

Here,

D_n = Total deposit in nth year

D_o = Total deposit in initial year

g = growth rate

n = number of year

Calculation of growth rate of HBL

We have,

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

$$D_{2007/2008} = D_{2003/2004} (1+g)^{5-1}$$

$$31842789 = 22010333 (1+g)^4$$

$$(1+g)^4 = 1.4467$$

$$1+g = 1.4467^{1/4}$$

$$1+g = 1.0967$$

$$g = 9.67\%$$

Calculation of growth rate of NSBI

We have,

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

$$D_{2007/2008} = D_{2003/2004} (1+g)^{5-1}$$

$$13715395 = 7198327 (1+g)^4$$

$$(1+g)^4 = 1.9054$$

$$1+g = 1.9054^{1/4}$$

$$1+g = 1.1749$$

$$g = 17.49\%$$

Growth rate of total investment, total loans and advances and total net profit are also calculated according to the above formula and fed in the corresponding tables.

Appendix 22
Trend Analysis

Sample calculation of Trend Analysis
Trend Analysis of Total Deposits of HBL

(Rs. In Million)

Fiscal years	Total Deposit (y)	x =t-2006	x ²	xy	y _c =a+bx
2003/04	22010	-2	4	-44020	22061.2
2004/05	24814	-1	1	-24814	24551.2
2005/06	26491	0	0	0	27041.2
2006/07	30048	1	1	30048	29531.2
2007/08	31843	2	4	63686	32021.2
	Σy=135206		Σ x ² = 10	Σxy=24900	

N=5

$$a = \frac{\sum y}{N} = \frac{135206}{5} = 27041.2$$

$$b = \frac{\sum xy}{\sum x^2} = \frac{24900}{10} = 2490$$

Trend Value of Total Deposits of HBL (2008/09-2012/13)

Year	x	y _c = a+bx
2008/09	3	34511.2
2009/10	4	37001.2
2010/11	5	39491.2
2011/12	6	41981.2
2012/13	7	44471.2

The equation of the straight line trend is $y_c = a+bx$

$$y_c = 27041.2 + 2490x$$

Trend Analysis of total deposit of NSBI, total investment, total loan and advances and total net profit of both banks are calculated and fed in the corresponding tables according to the above formula.