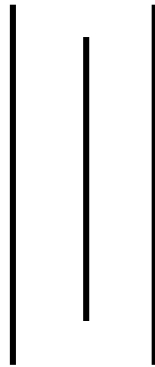


**A STUDY ON THE FINANCIAL PERFORMANCE OF  
JOINT VENTURE BANKS IN NEPAL  
(A Comparative Study of Nepal Bangladesh Bank Limited  
and Himalayan Bank Limited)**

**Submitted by  
Radha Thapa  
Shanker Dev Campus  
TU Registration No.: 7-1-240-916-96  
Roll No.1271/061  
Second Year Exam Roll No.6003**

**A Thesis Submitted to:  
Office of the Dean  
Faculty of Management  
Tribhuvan University**



**In Partial fulfilment for the requirements of the Degree of  
Master of Business Studies (M.B.S)**

**Kathmandu, Nepal  
March 2011**

## **RECOMMENDATION**

This is to certify that the thesis

Submitted by  
**RADHA THAPA**

*Entitled*

**A STUDY ON THE FINANCIAL PERFORMANCE OF  
JOINT VENTURE BANKS IN NEPAL  
(A Comparative Study of Nepal Bangladesh Bank Limited  
and Himalayan Bank Limited)**

has been prepared and approved by this Department in the prescribed format of  
the Faculty of Management. This thesis is forwarded for examination.

.....  
Mrs. Ruchila Pandey  
(Supervisor)

.....  
Prof. Bishweshor Man Shrestha  
(Research Chief)

.....  
Prof. Dr. Kamal Deep Dhakal  
(Campus Chief)

## VIVA-VOCE SHEET

We have conducted the viva-voce examination of the thesis submitted by

**RADHA THAPA**

*Entitled*

**A STUDY ON THE FINANCIAL PERFORMANCE OF  
JOINT VENTURE BANKS IN NEPAL  
(A Comparative Study of Nepal Bangladesh Bank Limited  
and Himalayan Bank Limited)**

and found the thesis to be the original work of the student and written according to the prescribed format. We recommend the thesis to be accepted as partial fulfilment of the requirement for the degree of  
*Master of Business Studies (M.B.S.)*

Viva-Voce Committee

Head, Research Department	.....
Member (Thesis Supervisor)	.....
Member (External Expert)	.....

## DECLARATION

I hereby declare that the research work entitled “**A STUDY ON THE FINANCIAL PERFORMANCE OF JOINT VENTURE BANKS IN NEPAL (A Comparative Study of Nepal Bangladesh Bank Limited and Himalayan Bank Limited)**” submitted to Shanker Dev Campus, Faculty of Management, Tribhuvan University, is my original work done in the form of the partial fulfilment of the requirement for the Master’s Degree in Business Study (M.B.S.) under the supervision of **Mrs. Ruchila Pandey**, Asso Professor of Shanker Dev Campus.

Date: .....

.....  
**RADHA THAPA**  
**Researcher**  
**TU Regd. No: 7-1-240-916-96**  
**Roll No. 1271/061**

## **Acknowledgement**

This Thesis entitled **“A STUDY ON THE FINANCIAL PERFORMANCE OF JOINT VENTURE BANKS IN NEPAL (A Comparative Study of Nepal Bangladesh Bank Limited and Himalayan Bank Limited)”** has been prepared in the form as requested by Faculty of Management, T.U. for the partial fulfilment Degree of Master of Business Studies (M.B.S.).

I wish to express my sincere gratitude to my respected supervisor Mrs. Ruchila Pandey, Asso Professor of Shanker Dev Campus, Kathmandu, Nepal for her valuable guidance, suggestion and continuous support for the completion of this thesis.

I would like to offer my profound gratitude to all honourable teachers as well as staff of Shanker Dev Campus, All Staff of NBBL and HBL are also heartily acknowledged for providing all relevant data and necessary information.

Last but not the least I appreciate the effort of my families, especially my sister for their valuable suggestion and support. Also I offer my special thanks to all those who have given their courteous attention to my needs.

Radha Thapa

# TABLE OF CONTENTS

**Recommendation**

**Viva-Voce Sheet**

**Declaration**

**Acknowledgement**

**Table of Contents**

**List of Tables**

**List of Figures**

**Abbreviations**

<b>CHAPTER – I</b> .....	12
<b>INTRODUCTION</b> .....	12
1.1 Background of the Study .....	12
1.2 Evolution and history of Commercial Banks .....	13
1.3 Concept of Financial performance .....	15
1.4 Meaning of Banks .....	16
1.5 Concept of Bank .....	17
1.6 Development of Commercial banks in Nepal .....	18
1.7 Meaning of the Joint Venture Banks .....	20
1.7.1 Profile of Banks .....	21
1.8 Focus of the Study .....	23
1.9 Statement of Problem.....	24
1.10 Objectives of the Study .....	25
1.11 Significance of the Study .....	25
1.12 Limitation of the Study .....	26
1.13 Research Methodology .....	27
1.14 Design of the study .....	27
<b>CHAPTER – II</b> .....	29
<b>REVIEW OF LITERATURE</b> .....	29
2.1 Conceptual Framework.....	29
2.1.1 Meaning of Commercial banks .....	31
2.1.2 Functions of Commercial banks .....	33
2.1.3 Role of commercial banks in developing countries .....	36

2.2 Review of Related Studies .....	37
2.2.1 Review of Journals/articles .....	37
<b>CHAPTER – III .....</b>	<b>44</b>
<b>RESEARCH METHODOLOGY .....</b>	<b>44</b>
3.1 Research Design.....	45
3.2 Population and Sample .....	46
3.3 Source of data .....	46
3.4 Period Covered.....	46
3.5 Method of data analysis .....	47
3.6 Tools and Techniques of analysis .....	47
3.6.1 Financial tools.....	47
3.6.1.1 Ratio Analysis .....	47
3.6.1.2 Classification and their brief introduction of Ratio Analysis .....	48
3.6.2 Statistical Tools.....	59
3.6.2.1.Arithmetic Mean (X).....	59
3.6.2.2 Standard Deviation (S.D.).....	59
3.6.2.3 The coefficient of variation (C.V.) .....	59
3.6.2.4 Hypothesis Test, F-Test (ANOVA Test) .....	60
<b>CHAPTER – IV.....</b>	<b>63</b>
<b>PRESENTATION AND ANALYSIS OF DATA .....</b>	<b>63</b>
4.1 Financial ratio analysis .....	63
4.1.1 Liquidity Ratios .....	63
4.1.1.1 Current Ratio.....	63
4.1.1.2 Cash and Bank Balance to Total Deposit Ratio.....	65
4.1.2 Activity Ratio.....	67
4.1.2.1 Loans and Advances to Total Deposit Ratio.....	67
4.1.2.2 Investment to Total Deposits Ratio.....	68
4.1.3 CAPITAL STRUCTURE/LEVERAGE RATIOS.....	70
4.1.3.1 Total Debts to Total Assets Ratio .....	70
4.1.3.2 Total Debt to Total Equity Ratio .....	72
4.1.3.3 Interest Coverage Ratio.....	73
4.1.4 PROFITABILITY RATIOS .....	75
4.1.4.1 Net profit to Total Assets Ratio .....	75
4.1.4.2 Net profit to Net worth (Shareholder’s Equity) Ratio (ROSE).....	76

4.1.4.3 Net profit to Total Deposit Ratio .....	78
4.1.4.4 Interest Earned to Total Assets Ratio.....	79
4.1.4.5 Net Profit Margin Ratio .....	81
4.1.5 INCOME AND EXPENDITURE ANALYSIS.....	82
4.1.6 OTHER RATIOS .....	88
4.1.6.1 Return on Investment Ratio .....	88
4.1.6.2 Earning Per Share (EPS).....	89
4.1.6.3 Dividend per share (DPS) .....	90
4.2 Statistical Tools.....	91
4.2.1 Hypothesis test (One-way ANOVA test) for Liquidity Position .....	91
4.2.2 Hypothesis test for Activity Turnover Position .....	93
4.2.3 Hypothesis test for Investment by Total Deposit Ratio .....	95
4.2.4 Hypothesis test for Capital Structure/Leverage Ratio .....	97
4.2.5 Hypothesis test for Profitability Ratio .....	99
4.2.6 Hypothesis test for Earning Per Share .....	101
4.3 MAJOR FINDINGS .....	103
<b>CHAPTER – V .....</b>	<b>106</b>
<b>SUMMARY, CONCLUSION AND RECOMMENDATION.....</b>	<b>106</b>
5.1 SUMMARY .....	106
5.2 CONCLUSION.....	107
5.3 RECOMMENDATIONS .....	109

## **BIBLIOGRAPHY**

## **APPENDIX**



## LIST OT TABLES

4.1 Current Ratio.....	64
4.2 Cash and Bank Balance to Total Deposit Ratio (in Percentage) .....	66
4.3 Loans and Advances to Total Deposit Ratio (in Percentage) .....	67
4.4 Investment to Total Deposit Ratio (in Percentage).....	69
4.5 Total Debt to Total Assets Ratio (in Percentage) .....	71
4.6 Total Debt to Total Equity Ratio (in Percentage) .....	72
4.7 Interest Coverage Ratio (in Percentage) .....	74
4.8 Net Profit to Total Assets Ratio (in Percentage).....	75
4.9 Net Profit to Net worth (Shareholder's Equity) Ratio (in Percentage) .....	77
4.10 Net Profit to Total Deposit Ratio (in Percentage).....	78
4.11 Total Interest Earned to Total Assets Ratio (in Percentage).....	80
4.12 Net Profit Margin Ratio (in percentage) .....	81
4.13 Total Income (in Percentage).....	84
4.14 Operation Expenses (in Percentage) .....	87
4.15 Return on Investment Ratio (in Percentage) .....	88
4.16 Earning per share .....	90
4.17 Dividend per share .....	91

## LIST OF FIGURES

4.1 Current Ratio.....	64
4.2 Cash and Bank Balance to Total Deposit Ratio (in Percentage) .....	66
4.3 Loans and Advances to Total Deposit Ratio (in Percentage) .....	67
4.4 Investment to Total Deposit Ratio (in Percentage).....	69
4.5 Total Debt to Total Assets Ratio (in Percentage) .....	71
4.6 Total Debt to Total Equity Ratio (in Percentage) .....	72
4.7 Interest Coverage Ratio (in Percentage) .....	74
4.8 Net Profit to Total Assets Ratio (in Percentage).....	75
4.9 Net Profit to Net worth (Shareholder's Equity) Ratio (in Percentage).....	77
4.10 Net Profit to Total Deposit Ratio (in Percentage).....	78
4.11 Total Interest Earned to Total Assets Ratio (in Percentage).....	80
4.12 Net Profit Margin Ratio (in percentage) .....	81
4.13 Total Income (in Percentage).....	84
4.14 Operation Expenses (in Percentage) .....	87
4.15 Return on Investment Ratio (in Percentage).....	88
4.16 Earning per share .....	90
4.17 Dividend per share .....	91

## **ABBREVIATIONS**

ATM	=	Automated Teller Machine
ABBS	=	Any Branch Banking Service
ADB	=	Agriculture Development Bank
BS	=	Bikram Sambath
C.V.	=	Coefficient of Variation
DPS	=	Dividend Per Share
EPS	=	Earning Per Share
EBL	=	Everest Bank Limited
EBIT	=	Earning Before Interest and Tax
GDP	=	Gross Deposit Ratio
HBL	=	Himalayan Bank Limited
JVBs	=	Joint Venture Banks
NRB	=	Nepal Rastra Bank
NBL	=	Nepal Bank Limited
NIDC	=	Nepal Industrial Development Corporation
NBBL	=	Nepal Bangladesh Bank Limited
NIBL	=	Nepal Investment Bank Limited
NPAT	=	Net Profit after Tax
RBB	=	Rastriya Banijya Bank
ROI	=	Return on Investment
SCBNL	=	Standard Chartered Bank Limited
S.D.	=	Standard Deviation

# CHAPTER – I

## INTRODUCTION

### 1.1 Background of the Study

Industrial development is an obligation for any nation in its all-round development and for the industrialisation, economic activities are the must as its infrastructure. Such economic activities are expected to be performed by an institution under the policy of the state, therefore institutionalisation of the economic activities is essential for the usual development of the state. But in Nepal we have a short history of such institutions that performed economic activities. Before 1842 B.S. the local 'gold smith' and 'money lender' participated in general type of economic activities by collecting valuable metals from the public. Gradually, it evolved as 'TEJARATHA ADDA' under the primership of Ranodeep Sing in 1993 B.S. Bhusal, Lekhnath. "Nepal Rastra Bank Annual Report" (Kathmandu Nepal Rastra Bank 14 Baisakh 2055, p.41). This was the first institution to carry the economic activities and banking system. On the course of the development of economic institutions Nepal Bank Limited was established as the first Commercial Bank of Nepal under the Nepal Bank Act 1994' in 1994 B.S. After this, Nepal entered into the institutionalised system of modern banking with the establishment of the bank which has been contributing to manage the financial resources to maintain the infrastructure for the development of nation. The base of the economic development of a nation is impossible without the development in agriculture, industry, trade and commerce. Government has established the Nepal Rastra Bank as the Central Bank, in 14<sup>th</sup> of Baisakh 2013 B.S. This bank deserves the power to establish any commercial bank and to direct the activities of other banks in accordance with the 'Nepal Rastra Bank act 2012'.

Financial infrastructure of an economy consists of financial intermediation, financial institution and financial markets. Financial institutions are the economy which plays a role of catalysts in the progress of economic growth of the country. The present structure of financial institutions is based on the foundation laid by commercial bank.

Nepalese banking history begins from the establishment of NBL in 1994B.S in non-government sector. The establishment of NRB was from the form of Central bank in 2013B.S as a significant plus dimension in the development of banking sector.

Nepali financial sector, especially the banking sector, has undergone drastic changes in the past one and half decade. The opening of the financial market to foreign JVBs in the mid 80s evading the monopoly of the two state owned banks (one fully and other partially) namely Rastriya Banijya bank and Nepal Bank limited is a notable step after which a number of private and foreign affiliated banks still continue to hold over 50% share in total domestic banking transaction.

The role of commercial bank was seriously considered in the growth and development of national economy, as a result they grew rapidly in number. Although, commercial banks are especially concerned with the development of commercial sector of the country they provide banking facilities to public such as deposit collection, lending over draft facilities, share issue, agency services, investment and general utility services.

Banking institutions are largely responsible for collecting household saving in terms of different types of deposits and regulating them in the society by lending them in different sectors of the economy. This sector has now reached even to the most remote areas of the country. By lending their resources in small-scale industries under intensive banking programme, the banks have contributed towards the economic growth of the country.

## **1.2 Evolution and history of Commercial Banks**

The modern banking institutions has a very recent origin in Nepal, some crude bank operation were known to have been practiced even in the ancient time. Effect of Indian currency is too much in the early stages of banking development. Indian currency is circulated throughout the country. It is not possible to give correct chronological history in view of the fact that no authentic historical record is available in respect of banking. It can be inferred from references in the history of Nepal regarding rebuilding of Kathmandu in 723 A.D. by Gunakama Deva from the borrowing and that of Tankadhari action of introduction of Nepalese Sambat. Some 57 years thereafter to mark the repayment of all debts that money lending have been prevalent long before that. NRB Bank Samachar Annually Publication (Anniversary Publication, 43<sup>rd</sup> Baisakh, 2055. p.71)

Money lending business is done by Tankadhari during the ruling of Jayasthiti Malla in the 14<sup>th</sup> century. He classified the people in 64 classes on the basis of their occupations. Tankadhari is one of them who occupy money lending and commercial business activities. Money lending business particularly for financing the foreign trade with Tibet became quite popular during the Mallas. If we go through the Nepalese history we find Nepalese participation in foreign trade with Tibet. The money lenders at that time advanced for commercial transaction against personal security. The farmers also used to borrow money from such money lenders.

There were certain practices in this business such as to charge rate of interest and other extra dues on loans advanced or to purchase the standing crops at a very low price in consideration of partial repayment and so on. The money lenders don't accept deposits from the people but only want to advance their own money. Thus sources of funds were very limited and money lenders have monopoly on such business activities.

On the history of banking development of Nepal Y.P. Pant says, "The history of banking and currency in the country becomes definite only from the 15<sup>th</sup> century that is in the Lichhivi period when the first coins were minted with the advance of the 7<sup>th</sup> century coins of red copper started to be used for exchange purpose. Later on during 12<sup>th</sup> century in the works of various reforms measures initiated by the rulers particularly during the Malla's period stated the inspiration of the kings name and dates of the coin". Pant, Y.P.Op.cit.,p.94

Further steps were taken on this ground "Ranodip Singh (1877 – 1875) established Tejarath Adda in Kathmandu. Tejarath Adda was governmental financial institution supplying credit to people at 5 percent rate of interest against security gold silver and ornaments." Pant, Y.P.Op.cit.,p.95 and government servants can also take loans from the Tejarath Adda against the personal security. During the time of Chandra Samsher (1901 – 1929) credit facilities of the Tejarath Adda were extended to some other parts of country by opening its branches. At the time the value of loan for consumption purpose was large and to control various rate of interest ranging from 35 percent to 75 percent and also to curb unfair practices on the part of the money lenders. On this ground Y.P. Pant says, "In the overall government of banking system in Nepal the Tejarath Adda may be regarded as the father of modern banking institutions and for quite a long time it rendered good services to the government, as well as to the general public. The institution adopted one of the elementary functions of the granting

loan against gold silver and other collateral securities which probably was not considered to be a function falling within the competence of banking. Ibrd. P.96. Thus, the Tejarath Adda was well developed financial institution at the time. For the protection of poor farmers other measures were also taken, these measures rendered the money lenders powerless to file suit against their debtors even in the case of default. Shrestha, H.P. “An Introduction to Nepalese Economy” (Ratna Pustak Bhandar. 1974, p.221). Slowly, by taking all these things into account in the year 1938 A.D. a semi government bank was established to remove the inconveniences caused to the people and hindrances in the economic government of country due to absence of modern banking system known as Nepal Bank Limited and was incorporated under the Nepal Bank Act 1937. The bank’s 51% of shares are held by Government of Nepal and 49% by private individual. Its authorised capital was Rs. 10,000,000 at the time of establishment.

A controlling banking institution was needed in Nepal which would operate monetary policy in the country. Accordingly, the NRB was incorporated on April 26, 1956 under NRB act 1955 with a capital of 10 million fully subscribed by Government of Nepal. All directors and governors are appointed by the government. It is the central bank which has power to issue notes to control credit for the overall economic development of the country.

In the year 1956 another government owned commercial bank named RBB was established under the RBB Act 2021 B.S. to fulfil the growing demand of economic for capital and other essential resources. It co-operates to NRB to maintain its activities. RBB is a commercial bank which is fully owned by the government. A number of other financial institutions also emerged in the country such as NIDC (1959), the Provident Fund Corporation (1962), ADB 1968, Insurance Corporation, 2024.

### **1.3 Concept of Financial performance**

According to Paudel N.P. (2053), traditionally, banks act as financial intermediaries to channel funds from surplus units to deficit units. Unlike other non-banking financial companies, commercial banks do not product any physical goods. They produce loans to facilitate trade transactions. Analysis of banks financial statement is different from threat of other companies due to the special nature of assets and liabilities. Paudel N.P., 2053, (P:64-69) A subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. This term is also used as a general measure of a firm’s overall

financial health over a given period of time. There are many different ways to measure financial performance such as taking into account revenue from operations, operating income or cash flow from operations can be used, as well as total unit sales. Furthermore, the analyst or investor may wish to look deeper into financial statements and seek out margin growth rates or any declining debt.

Balance sheet, profit and loss account and the accompanying notes are the most widely aspects of financial statements of the bank. The bank's balance sheet includes financial claim such as liabilities in the form of deposit and assets in the form of loans.

John N Myer has more lucidly stated, "The financial statement provides a summary of the accounts of a business firm, the balance sheet reflecting the assets, liabilities and capital as of a certain date and the income statement showing the results of operations during a certain period". John J.Hampton. "Financial Decision Making". (Prentice Hall of India, New Delhi. 1981 p.631). Evidently financial statements consists of income statements and balance sheet.

#### **1.4 Meaning of Banks**

The bank means an institution which deals with money. A bank performs several financial, monetary and economic activities which are very essential for economic development of any country. "A bank is a person, firm or company, having a place of business where creditors are opened by the deposit or collection of money or currency subject to be paid or remitted upon draft, cheque or order or where money is advanced or loaned on stocks, bonds, bullion and bills of exchange and promising notes are received for discount and sale." Upadhyaya, G.B. and Tiwari, N.R. "Principle of Money and Banking in Nepal" (Rastra Pustak Bhandar, 1982, p.167). Broadly speaking, bank draws surplus money from the people who are not using it at present and are hoarding for future and supplies loan to those who are in position to use it for productive purpose. Modern banks can be considered as the evolvement from the ancient goldsmith, money lenders, today different types of financial institutions are established with different purposes.

Banks give different types of services to people i.e. collect deposit from the public, grant loans to those investor who want to invest in business, industry and other sectors, overdraft, letter of credit, discounting bills, promissory notes, selling of shares to general public etc.



Modern commercial bank makes the economy always alive and smart to run and maintain day to day commercial, economic and banking transactions. In short, banking transactions help a country to develop its economy swiftly. If there were systematic and scientific programs for economic development Nepal would have developed its economy as much as those countries which have developed the whole economy and circle of the underdevelopment might have been, perhaps, narrowed down. Commercial banks provide a number of facilities and can serve an important contribution to develop different sectors of the economy by accumulating the money scattered in small amounts in the country to formulate capital for circulation and distribution to needy sectors. In fact, the commercial banks are expected to run on the commercial principles. They are guided by the business motive. Earning of the profit is therefore, the primary objectives of these banks.

### **1.5 Concept of Bank**

Bank is a financial institution which plays a very significant role in the economic development of the country. It is an institution which performs the indispensable task of intermediating between two individuals and institutions in order to raise funds and then lending those funds to individuals and institutions. It facilitates the growth of trade and industry and other sector of the national economy. It is a resource for economic development, which maintains the self confidence of society and extends credits to the people.

The bank operates in the modern and competitive business environment. So it's very difficult to illustrate any absolute definition of bank.

Different economists have offered different definitions such as:

According to Crowther, "The bankers business is to take the debts of other people to offer his own in exchange, and there by create money".

Kent defines "A bank is an organisation whose principal operations and concerned with the accumulation of the temporarily idle money of the general public for the purpose of advancing to others for expenditure".

Banks are in general recognized as traders in money which take deposits, provide loans and other banking related services. It may define as "an institution for receiving, lending,

exchanging and safe guarding money and, in some case, issuing notes and transacting other financial business.” Random House Dictionary of the English Language (New York: Random House, 1973)

The business in banking is to collect funds from community and to extend credit (making loans) to people for useful purpose. Banks have played a pivotal role in moving money from lenders to borrowers. Banking is a profit seeking business not a community charity. As profit seekers, it is expected to pay dividends and otherwise add to the wealth of its shareholders. Robert O. Edmister, Financial Institutions (New York: McGraw-Hill Book company, 1980 pp.73-74).

The Banking system in more developed financial systems of the world is segregated into three parts:

- a) Central Bank
- b) Commercial Bank
- c) Financial institution

In the Nepalese context, now a days three types of Banking are performing their activities in different sectors. They are Central Bank (Nepal Rastra Bank), Commercial Banks and Development Banks. Commercial banking are either operating fully in the public sector (Rastriya Banijya Bank) or the joint sector (Nepal Bank Limited) or being operated under joint ventures with foreign banks with private participation.

## **1.6 Development of Commercial banks in Nepal**

During the Lichhabi period, King Gunakamdev had borrowed money from rich people to build the city of Kathmandu in 780 B.S. then, Jayasthiti Malla one of the famous king of Malla dynasty in Nepal, who had ruled this country in 11<sup>th</sup> century divided in people in 64 castes on the basis of profession. Among 64 castes there were merchants by name of “Tankadhari” Who used to perform the lending and borrowing functions.

During the Rana primership of Ranodeep Singh “TEJARATHNA ADDA” was established to provide loan facilities for government staff and general public under the collateral of gold and silver in the term of 5 percent interest. On the whole, it was not viewed as a bank. The

banking function were carried out by money lenders known as “Marwari Merchant”

### **Origin and Growth of Bank in Nepal**

Fourth Stage	Origin of Modern Bank
Third Stage	Origin of Rastriya Banijya Bank
Second Stage	Origin of Nepal Rastra Bank
First Stage	Origin of Nepal Bank Limited
Preliminary stage	Traditional Bankers

Source: Hridaya Singh & Sherjang Khadka, "Banking principle, legislation & practice  
(Kathamandu: Nabin Prakashan, 2056)

There was a political change in 2007 B.S. and solid important event took place in 2012 because central Nepal Rastra Bank was established in 2012, with one crore of authorised capital. Besides the control banking functions, it has heavy burden to develop the whole economy such as giving timely direction to all the financial institutions, to help an industry by mobilising the capital, to issue debenture and share, to promote the banking habit and transactions and to fix the exchange with foreign currency.

The general development of commercial banks moved in parallel with the economic liberalisation policy of the government that caused the operation of commercial banks in increasing number. The financial policy of the government welcomed the establishment of Joint Venture Banks. Such sorts of commercial banks are established under the 'Commercial Bank Act, 2031 and are registered with the recommendation of the Nepal Rastra Bank and the same bank is eligible legally to issue the patent for the financial transactions of the banks. The Nepal bank limited and the Nepal Rastra Bank are only the commercial banks established before 2041 B.S. But the 'Nepal Arab Bank' is the 1<sup>st</sup> Joint Venture in Nepal. More commercial banks are in operation after the restoration of democracy and due to the liberal economic policy of the government and the number of commercial banks has reached Twenty six. The banks have their objectives to serve in financial sector with the margin of profit in spite of its main objectives of making profit. It bears some positive aspects, if the positive dimensions of such banks are implied in Nepalese banking system, the related sides will be benefited.

## 1.7 Meaning of the Joint Venture Banks

“When two or more independent firms mutually decide to participate in a business venture, contribute to the total equity or more or less capital and establish a new organization, it is known as a joint venture.” Janch Lawrence & Glueck William F. “Business Policy and Strategic Management”. 5<sup>th</sup> Ed. (McGraw Hill Book Company, 1988 p.232).

In global perspective Joint Venture Banks are made of trading through the partnership among nations and also a form of negotiation between the various groups of industrialists, traders and mercantile to achieve mutual exchange of goods and services for sharing comparative advantage in their contribution. “A joint venture is the joining of forces between two or more enterprises for the purpose of carrying out specific operations.

Firms within a country as well as operated indifferent countries may participate in a venture, though instance of Joint Venture happen to be more common firm in different countries. A number of Joint Ventures within the country were controlling, influencing or reducing competition and or influencing suppliers. Generally, Joint Ventures between two or more companies within a country may take place for one or more of these reasons, enable new technology, reduce high risk into Joint Venture, smaller firms joining hands may be able to compute with large organization.

Some positive aspects of Joint Venture Banks:-

- ) Increase in highly skilled personnel with modern banking technology
- ) Commercialisation of domestic technologies
- ) Efficient modern banking service
- ) Advanced management skills
- ) An international network of bank branches
- ) Import of technology not available in the country

Source: Surendra Man Pradhan, Nepal Rastra Bank Annual Report, (Kathmandu: Nepal Rastra Bank, 14 Baisakh, 2053), p.11

After Nepal has adopted the policy of economic liberalisation as in other developed countries, it has felt need of sound competition in banking sector for the economic upliftment. Keeping

the aim, in mind, Government of Nepal has followed the strategy to establish banking companies to Joint Venture with the foreign banks importing the high foreign banking techniques in the kingdom.

### **1.7.1 Profile of Banks**

#### **Nepal Bangladesh Bank Limited (NBBL)**

Nepal Bangladesh Bank Limited (NBBL) is the 6<sup>th</sup> Joint Venture Commercial Bank in Nepal. It was established in 23 Jestha 2051 (June 06, 1994) under the company act 1964. The bank was started with an authorised capital of Rs. 240 million, paid up capital of Rs. 60 million only.

The shareholding pattern of Nepal Bangladesh Bank is:

The Joint Venture Partner, IFIC Bank Limited holds 50%

Local promoters hold 20%

General public holds 30%

The prime objective of this bank is to render the banking services to different sectors like Industries, Traders, Businessman, Priority sector, Small entrepreneurs and weaker section of the society and every other people who need banking services. NBBL is providing full-fledged commercial banking services to its clients. Besides accepting deposits in various forms, following facilities and services are made available by the Bank:

- ) Consortium Finance
- ) Working Capital Loan
- ) Term Loan
- ) Demand Loan
- ) Hire Purchase Loan
- ) Education Loan
- ) Housing Loan
- ) Trade Finance
- ) Letter of Credit
- ) Bank Guarantee
- ) Bills Purchase
- ) Remittance Services all over the world

- ) Locker facility
- ) Automated Teller Machine (ATM) facility
- ) Any Branch Banking Service (ABBS) facility
- ) SMS Banking
- ) E-Banking

**Himalayan Bank Limited (HBL):**

Himalayan Bank Limited is a fourth Joint Venture Commercial Bank with Habib Bank Limited of Pakistan. It was established in Magh 1, 2049 (1993) under the company act 1964. Its head office is situated in Tridevi Marg, Thamel, Kathmandu. It was started with an authorised capital of Rs. 240 million, issued capital of Rs. 120 million and paid-up capital of Rs, 60 million only.

Now, the following ownership are as follows:

Promoter shareholders	:	51 percent
Habib Bank Limited, Pakistan	:	20 percent
Financial Institution	:	14 percent
Nepali Public Shareholders	:	15 percent

HBL is basically a commercial bank with maximum shareholding by the Nepalese private sector, like other commercial banks in Nepal.

Despite the cut-throat competition in the Nepalese Banking Sector, Himalayan Bank has been able to maintain a lead in the primary banking activities-Loan and Deposits. Himalayan Bank was the first commercial bank to install an ATM in 1995. Products such as Premium Savings account, HBL Proprietary Card and Millionaire Deposit scheme besides services such as ATMs and Tele-banking were first introduced by HBL. Other financial institutions in the country have been following the lead by introducing similar products and services. Therefore, HBL stand for the innovations that bring about in this country to help Customers besides modernizing the banking sector.

All branches of HBL are integrated into Globus (developed by Temenos), the single banking software where the Bank has made substantial investments. This has helped the bank provide services like ‘Any Branch Banking facility, Internet Banking and SMS banking. HBL very

recently introduced several new products and Services. Following facilities and services are made available by the Bank:

- ) Millionaire Deposit Scheme
- ) Small Business Enterprises Loan
- ) Pre-paid Visa Card
- ) International Travel Quota Credit Card
- ) Consumer finance through Credit Card etc.
- ) Fee payment facility

HBL has developed exclusive and proprietary online money transfer software-HimalRemit by deputing their own staff with technical tie-ups with local exchange houses and banks, in the Middle East and Gulf region, HBL is the biggest inward remittance handling Bank in Nepal. All this only reflects that HBL has an outside-in rather than inside-out approach where Customer's needs and wants stand first.

### **1.8 Focus of the Study**

In Nepal, commercial banking with the establishment of "Nepal Bank Limited" (NBL) under the Nepal bank act 1993 B.S. The authorised capital contributed by the government was 51% and remaining 49% by public. NBL was established in 1994 B.S. It has public cum government contribution. In 2022 B.S. the government solely established Rastriya Banijya Bank under its Banijya Bank Act 2021 B.S. with the purpose of enhancing agricultural development. Agriculture Development bank was established under the ADB/N Act 2023 B.S. ADB/N provides banking services in some of urban areas of Nepal as that of other commercial banks. Long after the establishment of above mentioned commercial banks HMG/N formulated policy to establish JVBs so as to provide modern banking facilities, and adopted economic liberalisation policy and commercial bank act 2031 B.S, was amended for providing modern banking services.

The Increasing no. of banks in Nepal can play an effective role in mobilizing scattered household saving and putting them into productive channels. So empirical analysis indicate that banks have been involving in overall economic development of the country.

## 1.9 Statement of Problem

Establishment of Joint Venture Banks has continued in response to the economic liberalisation policies of the government. The tendency to concentrate these banks only in urban areas like Kathmandu, Biratnagar etc. has raised certain questions. This state of affairs cannot contribute much to the socio-economic development of the country where 90 percent of population live in rural areas and 81 percent of population depend upon agriculture. These Joint Venture Banks are reluctant to extend their operation in rural areas. Despite the circular of Nepal Rastra Bank, the central bank of the country, regarding compulsory investment of 10 percent of their total investments in the rural areas, but these banks are inclined to pay fines rather than directing their resources to such less profitable sector. This problem remains to be solved, so that even the small investor in the rural areas will benefit from the services of such banks. Moreover, even the existing branches of the commercial banks in the rural areas do not seem to have been able to mobilise the local resources effectively.

This study basically focuses our attention to reveal the struggle and success achieved there from by the Joint Venture Banks namely NBBL and HBL. Commercial banks main motive is to make profit by providing quality service to the customers. In Nepal, the profitability rate, operating expenses, dividend contribution among the shareholders etc. have been found inconsistent. This study will figure out that though they had invested the same amount of authorised capital in the initial year but saw the different earning capacity. The problem of the study will ultimately find out the reasons about the difference in financial performance between NBBL and HBL.

Thus, the study attempts to figure out the efficiency and weakness of NBBL and HBL. Attempts are also being made to figure out the problem by analysing the following questions:

- ) How far have NBBL and HBL been able to convert the mobilised resources into investments?
- ) How effectively these banks are managing their liquidity, assets, capital structure etc?
- ) To what extent these banks have been able to raise their profitability?
- ) Based on the above questions, which bank has faced more financial risks?



### **1.10 Objectives of the Study**

The basic objective of this study is to make comparative analysis of the financial performance of two Joint Venture Banks, NBBL and HBL and to recommend suggestions for the improvement. More specially, objectives are as follows:

- ) To examine financial performance in relation to these two Joint Venture Banks.
- ) To analyse and compare the financial strengths and weakness of these banks.
- ) Suggestions to improve the financial performance of NBBL and HBL

### **1.11 Significance of the Study**

Different parties remain under influence from any of the business firm directly or indirectly. The performance of the economic activities affects the economic condition of the state and financial condition of the firm is to be kept under consideration to form economic policy of the state. Banking sectors has been one of the major contributors to national economy by providing various services to the general public, enabling to boost the GDP.

All investors invest their fund on share for the purpose of getting greater returns. For getting their purpose, the firms always maximise the value of the firm. Different investors invest their funds in Joint Venture Banks and simultaneously they take a more acute interest in the economic condition of the institutions i.e. debtors for interest, shareholders and government for dividend, top management for remuneration so on that cause to maximise the value of the firm.

The study has multi-dimensional significance:

- (i) The study enlightens the shareholders about the financial condition at their respective banks. This allows them to have a comparative retrospect whether their fund was better authorised or not.
- (ii) The study also compels the management of respective banks for self assessment of what they have done in the past and guides them in their future plans and programs
- (iii) The financial agencies, stock exchanges and stock traders are also interested in the performance of the banks as well as the customers, depositors and debtors, who can objectively identify the better than to deal within terms of profitability, safety and liquidity

- (iv) Policy makers at the macro level that is government and Nepal Rastra Bank will also benefit regarding the formulation of further policies with regard to economic development through banking institutions

### **1.12 Limitation of the Study**

Although this study will try to cover the most of the important sectors. In the context of Nepal, data problem is major problem for study. There is considerable place for arguing about its accuracy and reliability. There are many limitations, which weaken the generalisation e.g. inadequate coverage of financial sector, time periods taken and other variables.

Besides these the study has the following limitations:

- ) Among the various Joint Venture Banks, the study focuses on Nepal Bangladesh Bank Limited and Himalayan Bank Limited and does not cover other financial aspects.
- ) This analysis is mainly based on published secondary data by the banks to interpret result emerging from decision. Consequently, the results depend on the credibility and reliability of annual reports of the selected banks.
- ) Time factor is major limitation of this study, because this study is completed within a short span of time. This study is based only on the financial report of the firm covering the period 2004\05 to 2008\09.
- ) The study focuses only on the financial performance and does not cover other financial aspects.
- ) This study has not paid attention towards the funds flow and cash flow patterns.
- ) As partial fulfilment of MBS programme

### **1.13 Research Methodology**

This study will consider the secondary historical data. The methods of analysis and research methodology will depend upon the data available. The research design is less descriptive but more perspective.

Research methodology is the way to solve research problem systematically. Therefore research methodology is the research methods on techniques to be used throughout the entire study. On the other words, research methodology is the process of arriving at the solution of the problem through planned and systematic dealing with collection, analysis and interpretation of the fact and figure.

In order to achieve the objectives of the study, the following research methodology is followed which includes research design, source and types of data, data gathering instruments and procedures and tools for analysis.

### **1.14 Design of the study**

The study has been organized into five chapters

- Chapter I : Introduction
- Chapter II : Review of Literature
- Chapter III : Research Methodology
- Chapter IV : Presentation and Analysis of Data
- Chapter V : Summary, Conclusion and Recommendation

#### **Chapter One**

Chapter one, deals with the general background of the study with the subject matter of the study. This chapter consists the statement of the problem, focus of the study, objectives of the study, needs and importance of the study, limitation of the study, research methodology and plan of the study.

#### **Chapter Two**

Chapter two deals conceptual framework mainly includes the concept of commercial banks. Evolution, role and functions of commercial banks, objectives and role of JVBs, concept of

financial statement, financial statement analysis, meaning of ratio analysis trend analysis and brief introduction of Nepal Bangladesh Bank Limited and Himalayan Bank Limited.

It also deals with review of literature. It includes review of major empirical works relating to the financial performance and other related articles.

### **Chapter Three**

Chapter three deals with research methodology adopted to achieve the objectives of the study research questions. It consists of the research design, data collection and procedure period covered, sources of data, population and sample method of analysis.

### **Chapter Four**

Chapter four deals with presentation and analysis of relevant data and information through a definite course of research methodology. This chapter will be key chapter for the analysis of different ratios and presentation of trend analysis depending on the data.

### **Chapter Five**

Lastly, chapter five, summarises the whole study and states main findings, issues, gaps and offers recommendation for the improvement in future to the related banks and interested groups. Bibliography, appendixes and a vita sheet have also been incorporated at the end of the study.

## CHAPTER – II

### REVIEW OF LITERATURE

Review of Literature comprises upon the existing literature and research related to the present study with a view to find out what had already been studied. According to Wolf and Pant, (1996:31-44) the objective of review of literature is to

- ) Establish a point of departure for future research
- ) Avoid investigating problems that have already been definitely answered
- ) To reveal area of needed research
- ) Every possible effort has been made in order to incorporate all the knowledge and information available in libraries, related periodicals and magazines, official and unofficial publications of the banks concerned etc.

This chapter has been divided into two parts:

- a) Conceptual framework
- b) Review of Related Studies

#### **2.1 Conceptual Framework**

##### **Finance**

Finance is the set of activities dealing with the management of funds. More specifically, it is the decision of collection and use of funds. It is a branch of economics that studies the management of money and other assets.

Finance is also the science and art of determining if the funds of an organisation are being used properly. Through financial analysis, companies and businesses can take decisions and corrective actions towards the sources of income and the expenses and investments that need to be made in order to stay competitive.

##### **Financial Performance**

Financial analysis is the process of identifying the financial strength and weaknesses of the firm by properly establishing relationship between the items of the Balance sheet and Profit and Loss account I.M.Pandey, Financial Management (New Delhi: Vikas Publishing House 199,

p.109). All the organisations are directly influenced by the financial policies in their growth and development.

Financial performance is the main indicator of the success or failure of the enterprise. There are different group who look for the financial performance of the enterprise such as shareholders, managers, creditors, investors, customers, tax authorities etc.

Stockholders are concerned with the present and expected future earning and the stability of the earning as well as the valuation with the earning of other enterprises. Management of the enterprise is concerned in all aspect of financial analysis to frame sound financial management system and to bring internal control. Trade Creditors are interested to evaluate and analyse the liquidity position of the enterprise to serve their short terms claim so all the concerned groups are interested directly or indirectly about the financial performance of the firm. The performance is evaluated by establishing the relationship between the components of the Balance sheet and Profit and Loss account.

It should be remembered that unlike other non-banking financial companies, commercial bank does not produce any physical goods. They produce loan and financial innovations to facilitate trade and transaction. Because of special role they play in the economy, the concerned authorities heavily regulate them. Analysis of Banks financial statements is different than other companies due to the special nature of assets and liabilities structure of the Banking industry N.P.Paudel, Financial statement Analysis: An approach to evaluate bank's performance (KTM: NRB Samachar 1997, p.63).

Balance sheet, profit and loss account and the accompanying notes are the most widely used aspects of financial statements of a Bank.

A bank must maintain adequate liquidity to meet a wide range of contingencies. If bank fails to maintain adequate liquidity, it faces many difficulties. On the other hand, if it maintains excess liquidity it may have retained earnings to the point where it can be built up the capital needed to hold its relative position in the banking structure. Excess liquidity is the loss income. A bank must maintain adequate cash and bank balance to meet day to day operations as well as for remote contingencies. It measures the extent to which it can oblige its short terms obligations.

Commercial banks including foreign joint venture banks, seem to be doing pretty well in mobilizing deposits and the extent of loans and advances of these banks are also expanding. It seems that the bank loans are sufficient to meet the demand of various emerging industries and banks are found to have been directed to their resources even towards non traditional sectors.

So we can conclude that financial performance as nothing but the process of evaluating the relationship between component parts of financial statement to draw better understanding of a firm's position and performance.

### **2.1.1 Meaning of Commercial banks**

Commercial banks are the purveyor of finance for trade and industry and play a vital role in the economic and financial life of the country. Banks are the effective tools to collect savings and mobilise them. In other words, they receive deposits, evaluate big amount of resources and invest in different sectors of the economy. It is difficult to see how in the absence of banks, could small savings of the people be mobilised or even made possible.

Accordingly, they have established special institutions to mobilise their resources of capital and to channel them into productive sectors of the economy. Pant. Y.P. "Problem of Fiscal and Monetary policy, A case study of Nepal" (Sahayogi Prakashan Kathmandu, 1970, P.27).

In any plan of economic development capital occupies a position of crucial and strategic importance. No economic development of sizable magnitude is possible unless there is an adequate degree of capital formation in the country. In developing countries like Nepal, lack of capital is not a severe problem for effective mobilisation and utilisation of available resources.

Here, the role of banks primarily consists of the utilisation of deposits and providing credit. In other words, the banks in such countries have very important role to play in accumulating scattered resources and diverting such resources into productive channels. On the other hand, obviously, they pull all the scattered savings that are idle or otherwise would have been wasted in unproductive consumption like marriage, gambling, festivals, social economic etc. and they channel them in productive investments or the other. As Nepal, like most of the developing countries suffer from almost complete lack of capital market, both the

commercial banks and non-banking financial institutions consequently have a special role to play in the long process of growth. In principle, they should undertake the responsibility for activating the increasing flow of personal savings so that the amounts of hoarded wealth are diverted from unproductive to productive uses. Pant Y.P. "Banking & Economic Development" (Nepal Rastra Bank, Kathmandu, 1971, p.14).

Commercial banks provide different services for the economic development of a nation. In the absence of this kind of services provided by these banks, the development of various sectors of the economy will not be possible. The whole community derives benefit from the banks in different ways. It facilitates the commerce of the country. In addition to the acceptance of deposits, lending and investing they provide multiple services including accepting travellers cheque and underwriting, purchase and sale of securities, government bonds for customers, buy and sale of foreign exchange, the issuance of commercial letter of credit, supply of timely credit, market information, providing remittance facilities and so on.

Commercial banking in current period presents an altogether new picture – a picture of innovation in practice of wider horizon and of a new enterprise. In this case, the most remarkable diversification of banking function is increasing participation in medium term financing of industries and other sectors. So they are not only financial institutions of finance, agriculture and industry and other economic activities but are more than financial institutions in the sense that they help saving create deposits and make the subsequent distribution of such accumulated funds. Bank deposit is the main source of bank fund on which the size and volume of bank loan and investment depends. The greater the volume of bank deposit, the greater would be the loans and investments made. It is through the varying rates of interest on deposit a commercial bank can increase or decrease the volume of bank deposit. If bank can offer attractive interest, the deposit will be high and vice-versa.

Commercial banks are the heart of financial system of the country as they hold deposits of millions of people, government and business units in their different accounts make funds available through their lending and invest on activities to borrower's business firms and governments. Thus, they are custodian which undertakes to accept the deposits of one person, give loan to the other in the form of loans and advances. Banks and social institutions have social responsibility of collecting deposit or savings effectively from the community and of



diverting the individuals fund to the most productive channel to promote efficiently and employment in the economy instead of speculative channel.

Another significant help the banks render is towards the development of trade of the country. Due to the land locked nature and other transportation and geographical difficulties, the foreign trade of Nepal is very weak. To eliminate this weakness and satisfy the growing diversification foreign trade, banks have been spreading their branches within the country and expanding close contact with many important banks of foreign countries and neighbouring countries. In addition banks are helping the exporter and importer by providing the facilities of draft, letter of credit etc.

The above picture shows that in an under developed countries like Nepal, commercial banks through various services and functions have contributed to the economic upliftment of the country. It cannot be denied that without the development of commercial banks in the country the four wheels of economic development like agriculture, industry, trade and commerce would be paralysed and the economy as a whole would remain stagnant. Nepal like any other under developed countries has been facing the problem of accelerating the pace of economic development. The commercial banks have been operating to provide all modern banking services and facilities. They have been performing their roles to the best of their capacity.

### **2.1.2 Functions of Commercial banks**

Commercial banks are the important type of financial institution for the nation in terms of aggregate assets. The main objective of the commercial banks is to primarily hold deposits and mobilise idle resources from unproductive sectors to the growth of trade, industry and commerce with the objective of securing profits for its shareholders. They pool together the savings of the community and arrange for their productive use. In fact banking sector is considered as the backbone for economic development of the country.

The major functions of commercial bank are explained in brief:

#### **a) Accepting deposit**

One of the major functions of commercial bank is to accept deposit from the Public. The commercial bank not only protects but also provides the depositors a convenient method

for transferring funds through the use of cheques. Deposits are of various types: Demand deposits, Saving deposits and fixed deposits.

**b) Advancing Loan**

Commercial banks second major function is to provide loans and advances from the money, which it receives by way of deposits. Loans and advances are given to all types of persons against the personal security of the borrowers or against the security of movable and immovable property and assets. Loans are granted by banks in form of overdrafts, cash credit, direct loans and discounting bill of exchange.

**c) Payment Mechanism**

Payment mechanism or the transfer of funds is one of the important functions performed by commercial banks and it is increasing in greater pace by the use of cheques and credit cards. Moreover, bank credit card can be used to withdraw cash from a depositor's account, make deposits and loan payment and transfer funds between a depositor's saving account.

**d) Pooling of Nation in Saving**

Commercial banks perform vital services to all sector of the economy by providing facilities for the pooling of national saving and making them available for economically and socially desirable purposes. The saver is rewarded by the payment of interest on his saving. These pooled funds are made available to businessmen who may use them for the expansion of their productivity capacity and to consumers for such items as housing and consumer goods.

**e) Extension of credit**

The major function of commercial banks is the extension of credit to its valued clients. Bank lending is very important to the economy as it makes possible for the financing of agriculture, commercial and individual activities of the country. Moreover, the provision of bank credit provides for the smooth operation of government such as capital improvements for building of school and hospitals, construction of high ways, dams and for the nation defence.

**f) Facilities for financing foreign trade**

The other primary function of commercial banks is making arrangement for the amount of foreign exchange needed by business organisation to pay in the foreign country. Bank provides more satisfactory guarantee to an individual or firms by issuing commercial letter of credit, drafts, telegraphic transfer and accepting traveller's letter or credit or travellers cheques.

**g) Trust Services**

Increased incomes have made possible for the accumulation of wealth which in turn has contributed to the growth of the trust services of commercial banks. Trust department serve as trustees in connection with bond issues and as transfer agents and register for corporation. They may also administer sinking funds and perform other related activities associates with the issuance and redemption of bonds and stocks.

**h) Safe keeping of valuables**

The safekeeping of valuables is one of the oldest services provided by commercial banks. The protection of valuables falls into two areas or a department of a bank. Safe deposit boxes and safe keeping. Safe deposit boxes are made available to customer on a rental basis that may be useful for keeping securities, deeds, insurance policies and personnel valuable items. On the other hand, safekeeping differs from safe deposit box services in that the bank has custody of the valuables and acts as an agent for the customer.

**i) Technology**

From the very beginning, the commercial bank has been providing with latest technology and the bank is fully determined to offer quality services to its valued clients. The bank provides tele-banking facilities which enables the clients to get information as well as statement of accounts, inquiry of interest rate, foreign exchange rates, even placing order for fresh cheque book of ones account as when required simply by dialling the telephone number.

### **2.1.3 Role of commercial banks in developing countries**

Financial institutions constitute an important component of modern economic scenario. Their economic contribution lies in their role as intermediaries between ultimate savers-households, enterprises and government and the borrowing economic units in need of external finance. Financial intermediaries facilitate the transfer of funds from the former to the latter. In these days, the modern banking institutions have been experienced as the most necessary financial institutions to accelerate the notion of the economic growth in all spheres of the economy and to maintain the daily business of economic life in the country.

On the other hand, the basic problem of developing countries is the problem of economic development. By economic development, we generally mean the development of the leading sectors of the economy like agriculture, industry, trade and commerce etc. The development of these sectors requires a regular supply of finance. Finance serves as fuel for providing energy to move the tempo of economic development and commercial banks serve as reservoir for supplying and controlling the steam of that fuel. So, the importance and contribution of commercial banks, as of the components of financial institutions towards the economic development of a country is immense. Hence, it is clear that the banks are extremely useful and indispensable for a modern community. Banks are the custodian and industrial activities and upon the prudence of their administration depend on the economic well-being of the nation. Obviously, a sound banking system is a support for the economic development of the country. It is widely been accepted that the economic activities of a country are greatly influenced by the development of a sound banking system. There is no step to its business, where the banks have no influence. In the present context so called developed countries also have fostered their economic development with the help of their banking system. It is thus, evident that banks play a vital role in economic development of under developed economies like Nepal.

Banks play a predominant role in under-developed economy in many ways as they promote capital formalities by developing banking habit of people and collecting saving from people and mobilise them in productive channels. Thus, their role in the economic development is to remove the deficiency of capital by stimulating savings and investments. In this concern, banks perform two important functions. First, they attract depositors by offering attractive rates of interest thus converting savings which otherwise would have remained an inactive

capital and secondly, they distribute these savings through loans among enterprises which are connected with economic development.

## **2.2 Review of Related Studies**

### **2.2.1 Review of Journals/articles**

A number of articles and research works have been published and conducted about commercial banks and JVBs but here are some related articles which are reviewed.

Likewise, **Sharma Murari R** (1988) wrote an article, *“Joint Venture Bank in Nepal” Co-existing or crowding out.*” In his words “It would be definitely unwise for Nepal not to let the JVBs operate in the country and not to take advantage of them as additional means of resources mobilisation as well as harbinger of new era in banking. But it will certainly be unfortunate for the country to develop the JVBs and the cost of the domestic banks. So far one should admit frankly no different treatment has been extended to the domestic and JVBs atleast from the government side, which is commendable. If the Government keeps on the stance of treating the domestic and JVBs, equally deposit the latter’s bargaining strength and if the JVBs also show their alacrity to come forward to share the trails and tribulations of this poor country, both types of banks will coalesce and co-exist, complementing each other and contributing to the nation’s accelerated development. On the contrary, if the JVBs use their straight against trading into the cumber some path of development along with the domestic banks and the government. They will eventually crowd out the domestic banks from the more profitable urban areas and lucrative urban sectors unless remedying by the determination of the government”. Sharma. Murari. R.. "Joint Venture Banks in Nepal Co-existing or Growing out". 352<sup>nd</sup> Issue. (Prashan. Nepal Government Year. 1988, pp.31-42).

**Manohar Krishna Shrestha** (2047) in his article *“Commercial Banks Comparative Performance Evaluation”*, concludes that JVBs are new, operationally more efficient, having superior performance comparison with local banks. Better performance of JVBs is due to their sophisticated technology, modern banking method and skill. Their better performance is also due to the government’s branching policy in rural areas and financing peers. Local banks are efficient in rural sector. Despite having number of deficiency local banks have to face growing constraints of socio-economic political system on one hand spectrum and that of issues and challenges of JVBs commanding significant banking business on other spectrum".

Shrestha. M.K.. "Commercial Bank Comparative Performance Evaluation". (Karmachari Sanchaya Kosh. Kathmandu. 2047. pp.41-54).

**Bajracharya, Ratna R** (2047) in his article, "*Rastriya Banijya Bank. A comparative performance study*", conclude that deposit growth at commercial banks is not consistent indigenous banks and better in mobilise, but they are not much efficient in credit expansion. Credit deposit ratio is better in JVBs. Nonperforming loan is greater in designer banks but profitability is greater in JVBs. Local banks are forced to open and continue their branches at the rural areas but JVBs are reluctant but ready to pay fines for not doing so". Bajracharya. Ratna R.. "Rastriya Banijya Bank A Comparative Performance Study". (Rajat Jayanti Smarika. RBB. Kathmandu. 2047, pp.125-133).

**Bhagat Bista** (2048), "*Nepal Ma Aadhunik Banking Byabastha*", has made an attempt to highlight some of the important factors which have contributed to the efficiency and performance of JVBs. He concluded that the establishment of JVBs a decade ago marks the beginning of modern banking era in Nepal. The JVBs have brought in many new banking techniques such as computerisation, hypothecation, consortium, finance and modern fee based activities into the economy". Bista. Bhagat. "Nepal Ma Aadunik Byabastha". (Indu Chhapakhana. Kupondol. Lalitpur. 2048 B.S.)

**R.W.Metcalf and P.H.Tatar** say that "Financial performance analysis is a process of evaluating the relationship between component parts of a financial statement to obtain a better understanding of a firm's position and performance."

**Khan and Jain** have defined that "The ratio analysis is defined as the systematic use of ratio to interpret the financial performance so that the strength and weakness of firm as well as its historical performance and current financial condition can be determined."

### **2.2.2 Review of Thesis**

This review provides a comparative perspective to evaluate and interpret the significance of one's finding, literatures relating to financial performance of JVBs are reviewed.

**Deoja, Surendra (2001)** has conducted study on "*A comparative study of the financial performance between Nepal SBI Bank Ltd (NSBIBL) and Nepal Bangladesh Bank Ltd*

(NBBL)” analysed different ratio of NSBIBL and NBBL for the period of five years till fiscal year 2000 and found that in some cases the liquidity position of NBBL is higher where as in some cases the ratio of NSBIBL higher. It concludes that liquidity position of these two banks is sound. NBBL has better utilisation of resource in income generating activity than NSBIBL. They are in decreasing trends while interest earned to total assets and return or net worth ratio of NBBL is better than NSBIBL. It seems overall profitability position of NBBL is better than NSBIBL and both banks are highly leveraged.

**Oli, Jhalak Bdr** (2002) conducted study entitled “*A comparative study of the financial performance of Himalayan Bank Limited (HBL), Nepal SBI Bank Limited (NSBIBL) and Nepal Bangladesh Bank (NBBL)*” concludes that the liquidity position of two JVBs i.e. NSBIBL and NBBL are always above than standard and HBL is below the standard. Total debt with respect to shareholders fund and total assets are slightly higher for HBL than NSBIBL and NBBL. The researcher has found from the analysis that NBBL has been successfully utilising their total deposits in terms of extending loans and advances for profit generating purpose in comparison to NSBIBL and HBL. It has also concluded that net profit to total assets ratio in case of HBL is found better in performing by utilising overall resources but the generated profit is found lower for the overall resources in three JVBs.

**Joshi, Archana** (2002) conducted a study on “*A Comparative study on Financial performance of Nepal SBI Bank Limited and Nepal Bangladesh Bank Limited*” concludes that:

- ) The average current ratio of Nepal SBI Bank is greater than that of NBBL. Therefore the liquidity position is in normal.
- ) NBBL has better turnover than Nepal SBI Bank in terms of loans and advances to total deposit ratio. Thus NBBL has better utilised its resources in income generating activities than Nepal SBI Bank which definitely leads to increase in income and thus making an increased profit for the organisation. Despite the fluctuating trend in the ratio of cash and bank balance to total deposit Nepal SBI bank is more efficient than NBBL in cash management i.e. it is more able to keep more cash balance against its various deposits.
- ) NBBL profitability ratio seems better than Nepal SBI Bank. NBBL seems to tackle their investors more efficiently.

NBBL seems to be more successful in mobilising its customers saving in much more productive sectors. NBBL has slightly riskier debt financing position in comparison to Nepal SBI Bank.

**Maharjan Sunil** (2006) conducted a study on “*Financial performance of commercial banks with respect to Himalayan Bank Limited, Nepal Investment Bank Limited and Everest Bank Limited*” concluded that:

- ) From Liquidity point of view, EBL found to be comparatively better than sample banks because HBL and NIBL have aggressive working policy.
- ) EBL found to be comparatively best in mobilising its assets and deposits in profitable sectors in terms of loan and advances, investment in Government securities and shares and debentures.
- ) From Profitability point of view, NIBL found to be better because they play lower interest rate for debt fund and earn higher interest by mobilising its deposit and assets to different productive and profitable sectors.
- ) EBL have highest positive growth rate of net profit among sample banks. The growth rate of earning per share is negative in HBL and positive in NIBL and EBL. Among them EBL have highest positive growth in Earning per share since they have highest growth of net profit.
- ) All sample banks have a positive relation between the deposit and loan and advances and investment, which shows by the correlation between the deposits and investment and loan and advances and investment. Even though all sample banks have positive correlation between the investment and net profit, EBL and NIBL have a perfect positive correlation between the investment and net profit than HBL. Thus EBL and NIBL is able to earn a net profit from investment and loan and advances.

**Upreti Pramod** (2007) conducted “*A Comparative study of financial performance of commercial banks with reference to Nepal Investment Bank, Himalayan Bank, Standard Chartered Bank and Everest Bank*” and the major findings of the study are:

- ) The current ratio of NIBL and EBL is greater than 1 and other banks like HBL and SCBNL is less than 1.
- ) The cash and bank balance of EBL and NIBL with respect to total deposit are less liquidity, which serve its depositor on time.



- ) None of the banks have enough cash balance with respects to current assets but EBL and NIBL seems to be in better positions than other sample banks. EBL seems to be holding more idle cash in hand than other banks.
- ) In terms of loan and advances against total deposit, EBL has used more percentage of its total deposits and is ahead of all the sample banks. SCBNL is the best bank in reducing its non-banking assets among the sample banks.
- ) Among the sample banks, HBL has the lowest ratio and EBL has not mobilised its assets into profit generating projects. SCBNL has been successful in earning more net profit by the proper use of its available assets. HBL has not mobilised its deposits into profit generating project and SCBNL with highest ratio has been successful in earning more net profit by the proper use of its available deposits than others.
- ) There is significance relationship between total deposit and total investment, interest earned and operating profit but in case of EPS and DPS and net profit and net worth there is no significant relationship.

**Shrestha, Kamal Deep** (2009) has conducted study entitled “*A comparative study on financial performance of Everest Bank Limited and Himalayan Bank Limited*” concludes that:

- ) The liquidity position of the banks in terms of current ratio shows that the ratios of both banks EBL and HBL are below standard (i.e. 2:1) where as HBL’s average ratio is lower than EBL. The liquidity position in terms of current assets to current liabilities of EBL is better than HBL. So HBL has better short-term solvency position than EBL.
- ) The liquidity position of cash and bank balance to deposit ratio (except fixed deposit) of HBL is higher than that of HBL. So HBL has sufficient cash and bank balance than that of EBL.
- ) The activity turnover of EBL in terms of loan and advances to total deposit ratio is better than that of HBL. So EBL has been successful in utilising their deposit in terms of loan and advances for profit generating purpose than HBL.
- ) HBL has higher Loan and advances to fixed deposit ratio than EBL. HBL is utilising the collected resources in the form of deposits much more efficiently which definitely increases the profit of the organisation.
- ) The turn over position in terms of loan and advances to saving deposit EBL is greater than HBL.

- ) The capital structure position in terms of total debt to shareholder's equity ratio of EBL is lower than that of HBL.
- ) Profitability in terms of net profit to total assets ratio, net profit to total deposit ratio, return to net worth (shareholder's equity), return on net worth ratio and net profit margin ratio, EBL's average ratio is always greater than that of HBL. Thus EBL is getting good return from its investment.

**Yadav, Bijay Kumar** (2009) has conducted study on “*A comparative study on the financial performance of Commercial Banks of Nepal (with reference to Standard Chartered, NABIL and Nepal Investment Bank)*” and the major findings of the study are:

- ) The current ratio of NIBL is highest than SCBNL and NABIL.
- ) All the sampled banks are in position to pay the debt as the cash and bank balance to total deposit ratio.
- ) On the basis of fixed deposit to total deposit, and saving deposit to total deposit, it can be concluded that the liquidity position of NIBL was strongest than that of SCBNL and NIBL.
- ) On the basis of interest expenses to total deposit ratio, it can be concluded that SCBNL was more efficient in controlling cost than others.
- ) The loans and advances to total deposit ratio indicated that NABIL was most efficient in utilising the deposit collected in disbursing loans and advances. However, SCBNL remained most successful in mobilising the fixed deposit collection in loans and advances. In contrast, NIBL showed its efficiency in mobilising the total assets in loans and advances.
- ) On the basis of debt equity and debt assets ratio, the total assets of NIBL was most risky than that of SCBNL and NABIL as NIBL financed highest proportion of the total assets through debt financing.

**Maleku, Chanda** (2009) conducted a study on “*Financial performance of Nepal Bangladesh Bank Limited and Himalayan Bank Limited*” and major findings of the study are:

- ) In terms of current ratio both the banks are below than the normal standard but HBL is slightly better than NBBL. HBL The average ratio of HBL is higher than NBBL i.e.  $1.17\% > 1.12\%$ . The C.V. of NBBL is higher than HBL which indicates that NBBL is riskier and there are fluctuations in the ratios of NBBL.

- J The liquidity position of cash and bank balance to deposit ratio (except fixed deposit) of HBL is higher than that of NBBL (i.e.  $100\% > 8.57\%$ ) so it is concluded that HBL has sufficient cash and bank balance to deposit except fixed deposits than that of NBBL.
- J The activity turnover of NBBL in terms of loans and advances to total deposit ratio is better than that of HBL. NBBL has been successful in utilising their deposit in terms of loan and advances for profit generating purpose than compared to HBL.
- J The capital structure position in terms of total debt to shareholder's equity ratio of NBBL is higher than that of HBL. The average of total debt to shareholder's equity ratio implies that the proportion of outsiders claim, in the total capitalisation is higher in NBBL. Thus NBBL has more risky capital structure than HBL.

## **Research Gap**

Several research's are available bearing the same topic "A case study on the financial performance of Joint ventures banks" but this study tries to analyse the financial performance of the two leading banks i.e. Nepal Bangladesh Bank Limited and Himalayan Bank Limited taking into account the relevant data and information for the period 2004\05 to 2008\09 because Financial analysis is the major function of every commercial bank for evaluating the financial performance. Therefore it is the major concern of stakeholders to know the financial situation of the bank and every year the financial performance changes according to the environment of the country i.e. Nepal Rastra Bank's policy and guidelines changes from time to time. Hence, this study fulfils the prevailing research gap about in depth analysis of the financial performance which is the major concern of the shareholders and stakeholders. This research work will help to acquire knowledge regarding tools and technique used and provides an extra knowledge to the further researchers who are going to study in the topics related to the financial performance of commercial bank.

## CHAPTER – III

### RESEARCH METHODOLOGY

Research methodology indicates the methods and processes employed in the entire aspects of the study. It refers to the various subsequent steps to be adopted by a researcher in studying a problem with certain objectives in a view. So, it is the method, steps, and guidelines, which are to be followed in analysis and it is a way of presenting the collected data with meaningful analysis.

This section highlights the methodology adopted in the process of present study. It also focuses about sources and limitations of the data, which are used in the present study. Research methodology is a way for systematically solving the research problem (Kothari, 1990).

Research Methodology refers to the various steps that are generally adopted by a researcher in studying his research problem along with logic behind it. Thus, research methodology is a systematic and organizes effort to investigate a specific problem that needs a solution (Wolf and Plant: 1999).The main objective of the study is based on primary and secondary data.

The methodology consists of:

- ) Research Design
- ) The Selection of Sample
- ) Source of Data
- ) Coverage of the Data
- ) Method of data analysis
- ) Tools and techniques of data analysis

The research methodology is the process of arriving to the solution of the problem through planned and systematic dealing with the collection, analysis and interpretation of fact and figure. Research is a systematic method of finding out solution to a problem whereas research methodology refers to the various sequential steps to adopt by a researcher in studying a problem with certain objectives in view. Kothari . C.R.. "Research Methodology. Method and Technology". (New Delhi. Wiley Easter Pvt. 1989, p.19). To find out such solution of problems various statistical and financial tools and techniques are applied according to the nature of

phenomena. In order to accomplish the objectives of this study I have designed research methodology on the basis of secondary data by using financial and the statistical tools useful to my study. This present comparative study has been undertaken to evaluate the financial performance of two JVBs in Nepal one is NEPAL BANGLADESH BANK LIMITED and another is HIMALAYAN BANK LIMITED. The financial statements of last five years, from the fiscal year 2004\05 to 2008\2009 have been examined to their financial performance study. This study is mainly based on the secondary data that have been first processed and analysed comparatively. This study is exploratory as well as analytical one.

The rationale behind the study is to analyse, examine and compute financial performance of NBBL and HBL. For this purpose of achieving the objectives the detailed research methodology used are highlighted in this chapter.

### **3.1 Research Design**

In simple language, planning for research is research design. Research Design is a conceptual framework within which a research is conducted. It helps the researcher to enable him/her to keep track of action and to know whether he/she is moving the right direction to achieve his goal.

Kothari (2000), states that research design is a plan, structure and strategy of investigation concerned so as to obtain answer to researcher question and to control variance. This research is based on the analytical and descriptive design as well.

"A research design is the agreement of condition for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure" (Bhurtel; 2002:43).

" In other words, research design is the plan structure and strategy of investigation conceived so as to obtain answer to research questions and to control variances" (Kerlinger; 1978:300). This analysis is based on certain research design keeping on objective of study in mind. This research design is guideline studying profound ways of research ability.

The first step of the study is to collect necessary information and data concerning the NBBL and HBL. Especially balance sheet and other reports published so far will be used for the study. In this study, analytical type of research design will be followed. Analytical research design will be used for clearing the situation on the basis of presented data and facts. Further judgemental sampling was followed in order to choose NBBL and HBL among the available JVBs in Nepal. Moreover, the selection of NBBL and HBL is also based on the advice of experts of relevant field, guide and my own interest.

The data is carefully studied and analysed systematically under specific major reading so as to meet the objective of the study. On the other hand, the accumulated data is explored and tabulated systematically.

### **3.2 Population and Sample**

Nowadays, a number of commercial banks are emerging rapidly. Out of these commercial banks, one is fully government owned and another one is partially owned by the government. Rests are foreign Joint Venture with foreign banks. For my study NBBL and HBL have been selected as the sample units which they are also JVBs.

### **3.3 Source of data**

The data and information in this study are collected from both primary and secondary source to achieve real and factual result. For this research, all the possible and useful data as far as possible have been collected. The various required data for the study is collected from the concerned publication. For the purpose of the study, annual reports of NBBL and HBL, Bulletin and other publication like Nepal Rastra Bank Samachar, other supportive data necessary for the purpose is collected from the internal source of NBBL and HBL.

### **3.4 Period Covered**

The period covered by the study in five year from fiscal year 2004\05 to 2008\2009. Data are taken from related banks and the analysis is basically made on the basis of these 5 years data.

### **3.5 Method of data analysis**

This study basically uses the secondary data which were firstly collected and tabulated into a separate form systematically. The data are tabulated according to subject. The financial ratios are widely used for the analysis and interpretation of the performance of the selected sample. Simple statistical analysis such as average and percentage are calculated wherever necessary and they are presented and analysed in descriptive way. The graph charts are also presented to interpret visually the finding of the study.

### **3.6 Tools and Techniques of analysis**

The data collected and processed have been analysed using financial and statistical tools and techniques such as different ratios, simple average, standard deviation, coefficient variation.

#### **3.6.1 Financial tools**

Among the different financial tools, the following ratios have been used to analyse the financial performance of NBBL and HBL:

- (a) Liquidity Ratio
- (b) Activity Ratio
- (c) Capital Structure/Leverage Ratio
- (d) Profitability Ratio
- (e) Other Ratio

##### **3.6.1.1 Ratio Analysis**

“Ratio refers to the numerical or quantitative relationship between two items or variable. A ratio is calculated by dividing one item of the relationship other”. Khan. M.Y. Jain. P.K. Op. eit.. p. 77. It is also defined as “the indicated quotient of two mathematic expression and as the relationship between two or more things”. Webster’s “New Collegiate Dictionary”. 8<sup>th</sup> Edition (Spring Field. Mass G & C Mernan. 1975, p.1958). Ratio analysis refers to the numerical or quantitative relationship between two items or variables either from balance sheet or from income statement or from both statements. As a tool of financial analysis, ratio can be expressed in terms of percentage, fraction ‘r’ a stated comparison between numbers. The primary purpose of ratio is to point out areas of further investigation. Ratio analysis is a major tool in interpretation and evaluation of financial statement.

Ratio analysis stands for the process of determining and presenting the relationship of items and groups of items in the financial statement. According to Vane Horne "to evaluate the financial condition and performance of a firm the financial analyst needs certain yardsticks. The yardstick frequently used is a ratio or index relating to pieces of financial data to each other". Vane Horne. James C.. Op. eit.. p.758. Ratio analysis is a powerful and important tool and techniques of financial analysis which helps in identifying the financial health of the organisation. In other words, Ratio analysis helps to analyse to make qualitative judgement about the firm's financial position as well as performance.

An experience and skilled analysts is also important for ratio analysis which can provide a meaningful understanding for the performance and financial position of a firm. Although ratio analysis is widely in use but no one ratio gives the entire picture of the firm. Ratios are only means but not an end so, it should always be kept in mind that ratios are only tool in analysing financial statement and not conclusive ends in themselves". S. Winton Korn and Thomas Road. "Accounting for Management Planning and Decision Making" (John Wiley and Sons. Inc. New York. 1969, p.148).

### **3.6.1.2 Classification and their brief introduction of Ratio Analysis**

Ratio may be classified in number of ways keeping the particular purpose. According to Vane Horne "different type of ratios are used in day to day, generally four types of ratios namely liquidity, leverage, turnover and profitability ratios are used in analysis in the financial position of a company". Vane Horne, James C.Op. eit.. p.760. Financial ratios can be grouped into five types that is liquidity ratio debt ratio, profitability ratio, coverage ratio and market value ratio". Lawrence D. Scals & Hally Charles W.. "Introduction to Financial Management". 2<sup>nd</sup> Edition. (McGraw Hill. Book Company. New York, p.398). In that issue, Weston and Bringham say, "it is useful to classify ratio into six fundamental types. They are liquidity ratio, leverage ratio, activity ratio, profitability ratio, grown ratio and valuation ratio". Weston. J. Fred & Bringham. F.Eugne. Op. eit.. p.138

But, the researcher gives brief introduction of useful ratio only for the study which is as follows:



**(i) Liquidity ratio**

Liquidity ratio refers to the ability of a business firm to pay its short-term obligation as and when they fall due for payment. In this regard, R.S.Pradhan express, "liquidity refers to nearness to cash. The nearer an investment is to cash the lower is to its rate of return. The larger size of current assets is associated with high liquidity and low profitability and vice versa, inadequate liquidity may lead a corporation to delay payments, sell assets or obtain temporary financing on unfavourable terms". Pradhan. Radhe Shyam. "Public Corporations of Nepal" A Study of Financial Ratios (National Book Organisation. New Delhi. 1986, pp. 13-14).

In this connection, Gitman says, "liquidity is a firm's ability to satisfy its short-term obligation as they come due". Gitman. I.J. Op. eit.. 96. It refers to the solvency of the firm's overall financial position. Liquidity ratios which measures the firm's ability to meet its maturing short term obligation. Kothari extremely support the statement and he says "liquidity ratios measuring the ability of the firm to meet its maturing obligations". Kothari. C.R. "Research Methodology Method & Technology". (New Delhi. Eastern Pvt.. 1989, p.486). Liquidity ratio is the relationship between current assets and current liabilities. These ratios are calculated to judge the financial position of the firm, from long term as well as short term solvency point of view. It is also known as financial ratio.

"The liquidity ratios measure the ability of a firm to meet its short term obligations and reflect the short term financial strength/solvency of a firm. The ratios which indicate the liquidity of a firm are net working capital, current ratios, acid test quick ratio, super quick ratio and turnover ratios". Khan. M.Y. and Jain. P.K.. Op. eit.. pp. 118-119. If the firm is unable to meet its short term obligation due to lack of sufficient liquidity, it will give the result of bad credit ratings, loss of creditor's confidence. High liquidity also gives bad result as low profitability, unnecessary tied up of fund in current assets, which become ideal so there must be a proper balance between the degree of liquidity.

The following are the types of some important liquidity ratio and a brief introduction is also given

- (a) Current Ratio
- (b) Cash and bank balance to total deposits

### **(a) Current Ratio**

One of the most general and most frequently used ratio is the current ratio. It is also known as working capital ratio. "The current ratio is computed by dividing current assets by current liabilities. Current assets normally include cash, marketable securities, accounts receivable and inventories. Current liabilities consist of accounts payable, short term notes payable, current maturities, long term debt, accrued income and other accrued expenses". Brigham. p.139.

L.J.Gitman supports the statement and says, "Current ratio is a measure of liquidity calculated by dividing the firm's current assets by current liabilities". Gitman. I.J. Op. eit.. p.96. It is calculated by the following formula.

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

The higher the current ratio, the larger the amount of rupees available. The more the firm's ability to meet current obligation and the greater the safety of funds for short term creditors. Although there is no hard and fast rule conventionally a current ratio 2 : 1 is considered satisfactory". Khan. M.Y. and Jain. P.K.. Op. eit.. p.121.

In other words current assets should be twice of current liabilities. The logic underlying the conventional rule is that realisation of the assets become 50 percent in the value in such situation a firm can meet its obligations. If the ratio is less than two then difficulty may be experienced in the payment of current liabilities and day to day operations of the firm may suffer. If the ratio is higher than two, it is indication of idle funds.

### **(b) Cash and Bank Balance to Total Deposits Ratio**

This ratio indicates the ability of banks immediate funds to cover their current margin calls and saving deposits. A high ratio represents the greater ability to cover their deposits and vice versa. A higher ratio is advantageous as it provides cushion for non fixed deposits. However too high ratio is disadvantageous as capital is laid up in the unproductive assets i.e. cash and bank balance.

Cash and bank balance to total deposit ratio can be computed using the following formula.

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

**(ii) Activity Ratio**

Activity ratio measures how effectively the company employs the resources as its command. To analyse the activities ratio, loans and advances to total deposit ratio and Investment to total deposit ratio are selected. “An activity ratio may be defined as a test of the relationship between loans and advances and the total deposits”. Khan. M.Y.. Jain and P.K.. "Financial Management". (Tara McGraw Hill Publishing Co. Ltd.. New Delhi. 1990, p.117). In other words the activity ratio represents the intensity with which the firm uses its deposits amounts. It is related with measuring the efficiency in invested management, as well as deposit policy. In Scall and Haley’s word, “activity ratios indicate how effectively the firm is using its assets or deposit amounts". Scall. I.D. Haley. C.W. "Introduction to Financial Management" 6<sup>th</sup> edition. (McGraw Hill. International Education. New York, p.385). The greater the role of turn over or conversion the more efficient the utilisation or management.

Activity ratios are intended to measure the effectiveness to employment of the resources in a business concern. Through these ratios, it’s known whether the funds employed have been used efficiently in the business activities or not. The following are the ratios employed to analyse the activities of the concerned Joint Venture Banks.

(a) Loans and Advances to Total Deposits Ratio

(b) Investment to Total Deposit Ratio

**(a) Loans and Advances to Total Deposit Ratio**

This ratio assess to what extent, the banks are able to utilise the depositor’s funds to earn profit by providing loans and advances. It is computed dividing the total amounts of loans and advances by total deposited funds. A high ratio represents the greater efficiency to utilise funds or proper utilisation of funds provided by the outsider’s (i.e. total deposits) and vice versa.

The formula used to compute this ratio is:

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

### **(b) Investment to Total Deposit Ratio**

Investment implies those amounts of fund which are granted as loans, advances, purchase of shares, purchase of bills of exchange, purchase of treasury bills and securities. Also total deposit implies those amounts which are received from its valuable depositors. These amounts are available in different accounts i.e. saving, current fixed accounts.

Basically, in this study return on shareholder's equity examines how much amount of investment has been made over total deposits. It also assesses the company's financing policy. If they do not have good financing policy then they cannot earn good return. Here, computations of investment by total deposits have been used to calculate to:

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

A high ratio indicates bank's efficiency in investing its deposits. On the other hand, a low ratio indicates bank's inability to put its deposits into lending, although it may help to maintain a sound liquidity position.

### **(iii) Capital Structure/Leverage Ratios**

Leverage refers the employment of an assets or sources of funds for which the firm has to pay a fixed cost or fixed return. Debt involves the payment of a stated rate of investment. So leverage is also known as debt. The term leverage may be defined as the use of that sources of fund in the business for which the firm has to pay fixed charges irrespective to the earning of the firm. Leverage ratios show how much of a firm's fund are financed by debt and equity. In other words, leverage ratios are the ratios between equity capital and debt capital. The ratio is related with the capital structure. So these are called capital structure ratios. These are also known as debt ratios.

"The debt ratio measures the proportion of total assets provided by the firm's creditors".  
Gitman. I.J. Op. eit.. p.103. According to Weston and Bringham "Leverage ratios which

measure the extent to which the firm has been financed by debt". The ratios are calculated to measure the financial risk and the firm's ability of using debt for the benefit of shareholders. According to Khan and Jain, "The capital structure ratios may be defined as financial ratios which throw light on the long term solvency of a firm as reflected in its ability to assure the long term creditor with regard to periodic payment of interest during the period of loan and repayment of principal on maturing in predetermined instalment at due dates". Khan . M.Y. and Jain. P.K.. Op. eit. p.130. Leverage ratio show the proportion of financing by owners and creditors which is very essential for long term solvency.

In practice, leverage ratio is approached in two ways. The first approach examines the balance sheet ratio and calculates what proportion the borrowed capital occupies in the capital structure. The other approach measures the risk of debt by the income statement ratio is to calculate the number of times fixed charges are covered by operating profits.

A brief introduction of these ratios are as follows:

- (a) Total Debt to Total Assets Ratio
- (b) Total Debt to Total Equity Ratio
- (c) Interest Coverage Ratio

**(a) Total Debt to Total Assets Ratio**

The ratio of total debts to total assets ratio shows the extent of debt financing on the total assets and measures the financial security of the outsiders. Generally, creditors prefer a low debt ratio as it provides sufficient cushion against losses in the event of liquidation. The owners, however, prefer a high debt ratio because that signifies their earnings on the one hand enables them to maintain their concentrated control over the corporation on the other.

Total debts to total assets ratio is calculated by using the following formula.

$$\text{Total Debts to Total Assets Ratio} = \frac{\text{Total Debts}}{\text{Total Assets}}$$

Total debt includes short terms and long terms loans and deposits, similarly total assets include all the assets of right hand side of the balance sheet.

### **(b) Total Debt to Total Equity Ratio**

The relationship between creditors fund and owners fund is a popular measure of the long term financial solvency of a firm, the relationship is shown by the debt-equity ratio. This ratio indicates the relative claims of borrower and owners against the firm's assets. It is also known as total debt to total equity ratio. "The total debt equity ratio indicates the relationship between the long term funds provided by creditors and those provided by the firm's owners". Gitman. L.J. Op. eit.. p.103. According to Vane Horne, the debt to net worth ratio is computed by simply dividing total debt of the firm (excluding current liabilities) by shareholders equity". Vane Horne. James. C. Op. eit. p.767.

The ratio is calculated by the following formula:

$$\text{Debt Equity Ratio} = \frac{\text{Total Debt}}{\text{Total Shareholder's Equity}}$$

### **(c) Interest Coverage Ratio**

The interest coverage ratio is one of the most conventional coverage ratios, which measures the debt servicing capacity of an institution. This ratio reveals how many times the interest charges are covered by the EBIT out of which they will be paid. In other words, it indicates the extent to which a fall in EBIT is tolerable in the sense that the ability of the institutions to service its debt would not be adversely affected. From the point of view of the creditors, the larger the interest coverage ratio, the greater the ability of the firm to handle fixed charge liabilities and the more assured the payment of interest to the creditors. However, too high ratio may imply unused debt capacity. In contrast a low rate is a danger signal that the firm is using excessive debt and does not have the ability to offer assured payment of interest to the creditors. The interest coverage ratio can be computed by using following formula:

$$\text{Interest Coverage Ratio} = \frac{\text{Total EBIT}}{\text{Total interest}}$$

Here, EBIT denotes earnings before interest and taxes. Similarly, interest denotes all the interest payable on both the deposits and borrowing.

#### **(iv) Profitability Ratio**

Profit is essential to survive in any business field for its successful operation and future expansion and growth. "Profitability is a measure of efficiency and the search for it provides an incentive to achieve efficiency".<sup>22</sup> Khan. M.Y. and Jain. P.K.. Op. eit.. p.136. The ratio measure management's overall effectiveness as the returns generated on investment. It is also a control measure of the earning power of a firm as well as operating efficiency. Profitability ratios are designed to provide answer to such as Is the profit earned by the firm adequate? What rate of return does it present? What is the rate of profit for various divisions and segment of the firm? What is the earning per share? What amount was paid in dividend? What is the rate of return to equity holders? and so on". Khan. M.Y. and Jain. P.K.. Op. eit.. p.137.

Profitability ratios essentially relate to the profit earned by a firm during a particular period to various parameters like sales, shareholders equity, capital employed and total assets. In this regard W/B say "Profitability is net result of a large number of policies and decisions. The ratio examined thus reveals some interesting things about the way the firm operates but the profitability ratio give final answer about how effectively the firm is being managed". Weston. J. Fred and Brigham. F.Eugne. Op. eit.. p.145. "The profitability ratios are calculated to measure the operative efficiency of the company. Besides management of the company, creditors and owners are also interested in the profitability ratio of the firm". Pandey. I.M.. p.116. According to Vane Horne "profitability ratio are of two types, those showing profitability in relation to sales and those showing profitability in relation to investment. Through profitability ratios the lenders and investors want to decide whether to invest in particular business or not. Some of the important profitability ratios used are as follows:

- (a) Net profit to Total Assets Ratio
- (b) Net profit to Net worth (Shareholder's Equity) Ratio
- (c) Net profit to Total Deposits Ratio
- (d) Interest Earned to Total Assets Ratio
- (e) Net Profit Margin Ratio

#### **(a) Net profit to Total Assets Ratio**

The ratio judge the effectiveness in using the 'pool' of funds which is useful to measure the profitability of all the financial resources invested in the firm's assets.

The ratio of Net profit to total assets is calculated by dividing net profits after tax by total assets.

$$\text{Net Profit to Total Assets Ratio} = \frac{\text{Total Net Profit after tax}}{\text{Total Assets}}$$

**(b) Net profit to Net Worth (Shareholder's Equity) Ratio**

Return of shareholder equity ratio measures the return on owner's funds. The ratio indicates how well the firm has used the resources of owners. It is also called return on equity and return on proprietor's funds. It is calculated by dividing earning available to common shareholder by shareholder's equity. The statement can be express as the following formula:

$$\text{Return on Shareholder's Equity Ratio} = \frac{\text{Total NPAT}}{\text{Total Sharehodlder's Equity}}$$

It shows the extent to which profitability objective is being achieved. The higher the ratio is better it is and vice versa.

**(c) Net profit to Total Deposit Ratio**

The net profit to total deposit ratio enables to evaluate what extent the management has been able to mobilise and utilise the deposits furthermore and also to identify overall performance as well as its success to generate profit. It is a must to analyse this ratio in order to see whether the institution is well efficient or not in mobilising it's total deposits so that correct action could be taken. The net profit to total deposit ratio can be calculated by using the following formula.

$$\text{Net Profit to Total Deposit Ratio} = \frac{\text{Total NPAT}}{\text{Total deposits}}$$

NPAT (Net profit after tax) denotes net profit before appropriation. Similarly, total deposits include current deposits, saving deposits, fixed deposits, call deposits and other deposits. Generally, higher ratio signifies better utilisation of deposits and vice versa.

Since, the capital structure of the firm strongly affects its profitability, it is suitable to analyse net profit to total deposit ratio. As the major functions of these banks is to



mobilise and invest the deposits, the higher ratio represent efficient in this regards.

**(d) Interest Earned to Total Assets Ratio**

Interest earned to total assets ratio measures the percentage of interest earned in relation to total assets of the banks. The ratio signifies the mobilisation of its assets in interest generating purposes.

Since JVBs are principally covered with the mobilisation of their resources, the ratio plays a significant role in evaluating their efficiency in earning interests. Banks usually earn interest through the provision of loans, advances, over draft and investments in various securities, which are major sources of income for the banks.

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

A high ratio reflects the better efficiency in utilising the resources in interest generating sectors and vice versa.

**(e) Net Profit Margin Ratio**

Net profit is obtained when operating expenses, interest and taxes are subtracted from the gross profit. So the net profit margin ratio is measured by dividing profit after tax by total gross earning.

$$\text{Net Profit Margin} = \frac{\text{Profit after Tax}}{\text{Gross Earning}}$$

**(v) Income and Expenditure Analysis**

In profit and loss account of company, there are so many items in debit and credit side. In this analysis, here, we are specifically concerned with what percentage of operating income/profit and operating expenses are computed to find out how much percentage of operating income and expenditures are made in these two Joint Venture Banks respectively.

**(vi) Other Ratios**

The other ratios can be calculated as follows:

Investors contemplating to invest in a bank would be eager to know the investment potentiality of the bank before taking final decision. Under this topic the following ratios are calculated.

- (a) Return on Investment (ROI)
- (b) Earning Per Share (EPS)
- (c) Dividend Per Share (DPS)

**(a) Return on Investment**

The conventional approach of calculating return on investment is dividing NPAT by investment. It can be stated as:

$$\text{ROI} = \frac{\text{NPAT}}{\text{Investment}}$$

**(b) Earning Per Share**

Shareholders are concerned about the earnings that will eventually be available to pay them dividends of that are used to expand their interest in the firm because the firm retains the earnings. These earnings may be expressed on a per share basis. Earnings per share is calculated by dividing net income available to the common shareholders by the total number of common share outstanding.

Earning per share is calculated by using the following formula

$$\text{Earning Per Share} = \frac{\text{Total NPAT}}{\text{Total no.of Outstanding Common Share}}$$

**(c) Dividend Per Share**

Dividend per share is evaluated to know percentage of the dividend that the shareholders receive in relation to the paid up value of the shares. Dividend per share is that portion of net profit which is allocated to shareholder as their return in terms of cash. Usually shareholders expect high percentage of dividend. The dividend per share implies what the owners are theoretical entitled to get from company. Dividend per share is that portion of earning after tax that cash amount is allocated to shareholders as dividend against the total number of ordinary share outstanding.

Dividend per share can be calculated by using the following formula

$$\text{Dividend Per Share} = \frac{\text{Total NPAT}}{\text{Total no.of Outstanding Common Share}}$$

### 3.6.2 Statistical Tools

The following statistical tools are selected for the comparative financial study of NBBL and HBL:

#### 3.6.2.1.Arithmetic Mean ( $\bar{X}$ )

Arithmetic mean of a given set of observation is the sum divided by the number of observations. In general  $X_1, X_2, \dots, X_n$  be the n values of the variable than their arithmetic mean is denoted by  $\bar{x}$  mean is defined by:

$$\bar{X} = \frac{(X_1 + X_2 + \dots + X_n)}{N}$$

#### 3.6.2.2 Standard Deviation (S.D.)

Standard deviation, usually denoted by the letter (small sigma) of the greek letter. It is defined as the positive square root of the arithmetic mean of the squares of the deviations of the given observations from their arithmetic mean.

$$\text{Standard deviation } (\sigma) = \sqrt{\frac{\sum (X - \bar{X})^2}{n - 1}}$$

#### 3.6.2.3 The coefficient of variation (C.V.)

The coefficient of variation is the relative measure of dispersion, comparable across distribution, which is defined as the ratio of the standard deviation to the mean expressed in percent. Levin. Richard. I and David S. Rubin. "Statistics for Management" Fifth Ed. (Prentice Hall India Pvt. Ltd. New Delhi. 1994, p.114).

In symbol,

$$\text{C.V.} = \frac{\text{S.D.}}{\bar{X}} \times 100$$

### 3.6.2.4 Hypothesis Test, F-Test (ANOVA Test)

For the validity of the F-Test in ANOVA the following assumptions are made

- ) The population for each sample must be normally distributed with same mean and variance
- ) All sample observations must be randomly related and independent
- ) Various treatment and environmental effects are additive in nature

ANOVA is mainly carried out as under:

- (i) One-way classification
- (ii) Two-way classification

#### **ANOVA in one-way classification:**

A designed one-factor experiments in which subject of experiments units are randomly assigned to groups or levels of a single factor are called one-way completely randomized design models. In other words, under one-way classification, the influence of only one factor is considered at a time and we may conduct the experiment through number of sample studies. There are following step of one way ANOVA.

#### **Step-1: Formulation of null and alternative hypothesis**

Ho:  $\mu_1 = \mu_2$ , that is; means of NBBL and HBL are equal. In other words, there is no significant difference between means of NBBL and HBL.

H1:  $\mu_1 \neq \mu_2$ , that is; mean (average) of NBBL and HBL is not equal or there is significance difference between mean (average) of NBBL an HBL.

#### **Step – 2: Computation of Test Statistics**

Under the null Hypothesis Ho, the one way ANOVA, F-Test statistic is,

$$F = \frac{MSC}{MSE}$$

Where, MSC means sum of square between column or (samples), and MSE means sum of square due to error (i.e. within samples)

**Step – 3: Calculation of Required Item**

) Grand Total (T) =  $x_1 + x_2 + \dots + x_n$

) Total no.of observation (N) =  $n_1 + n_2 + \dots + n_n$

) Correlation factor (C.F.) =  $\frac{T^2}{N}$

) Sum of squares due to column (SSC)

$$SSC = \frac{(x_1)^2}{N_1} + \frac{(x_2)^2}{N_2} + \dots + \frac{(x_n)^2}{N_n} - C.F.$$

) Sum of squares due to total (SST)

$$SST = x_1^2 + x_2^2 + \dots + x_n^2 - C.F$$

) Sum of squares due to error (SSE)

$$SSE = SST - SSC$$

) Preparation of ANOVA Table

**One way ANOVA Table**

Source of Variations	Sum of Squares	Degree of Freedom	Mean Sum of Square (MSS)	F-Ratio
Between sample or columns	SSC	C – 1	MSC = SSC/C-1	
Within samples (due to error)	SSE	N – C = N-1- (C-1)	MSE = SSE/N-C	F = MSC/MSE
Total	SST	N - 1		

**Step -4: Obtain the tabulated value of F for**

(C – 1, N – C) degree of freedom at a = 5% level of significance unless otherwise stated.

**Step – 5: Decisions:**

Making a decision by comparing the calculated value of F with tabulated value of F, since Cal F is less than Tab F<sub>0.05</sub> at 5% level of significance, we accept H<sub>0</sub>. Otherwise, H<sub>1</sub> is accepted.

## **CHAPTER – IV**

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

In this chapter data collected from secondary sources are analysed and presented using the financial statements of NBBL and HBL. The basic objective of analysing the financial performance is to highlight the strength and weakness of these both banks. To evaluate the financial performance of these two banks through financial statistical (ANOVA-one way) ratio analysis and Hypothesis test, mean, s.d. and c.v are used in this study. The available data are tabulated, analysed and interpreted so that financial forecast of these two banks can be done easily. For this purpose relevant tables were prepared from the financial statements of both the banks, and on the basis of these tables, relevant ratios of each bank were computed and analysed.

In order to find out the strengths and weaknesses of both banks in terms of their financial performance various ratios have been calculated which are as follows.

#### **4.1 Financial ratio analysis**

Various ratios are compiled from the balance sheet and profit and loss account. The important tools of the ratio analysis are as follows:

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

Satisfactory liquidity position is one of the distinguishing characteristics of a sound banking system. As a critical factor of evaluation, liquidity is the ability of a bank to satisfy the credit needs of the community, to meet demands for deposits and deposits substitutes, to oblige maturing obligation on time without loss to the bank and without unfavourable impact on longer projection on profitability.

Liquidity position of NBBL and HBL is analysed using the following relevant liquidity ratios.

###### **4.1.1.1 Current Ratio**

Current ratio indicates the degree of short term solvency and the strength of a firm. A high current ratio indicates efficiency to meet short term obligations and excessive in investment in current assets and vice versa. Current assets normally includes cash in hand or bank and

those assets which can be converted in to cash within a year such as account receivable, bills purchased and discounted, investment in government securities, money as short call, loans advances and overdraft. Current liabilities include, borrowing from bank, deposit, margin, provision, accrued expenses, bills payable, bills for collections being payable (contra), other liabilities. It is computed as dividing current assets by current liabilities.

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

The current ratio is the most commonly applied ratio for carrying out short term solvency, since, it shows the limit to which the claims of short term creditors are covered by assets that are expected to be converted into cash within a year. A high current ratio indicates excessive investment in current assets leading to under utilisation of firm's resources and hence low profitability. On the other hand, a low current ratio indicates that firm may not be able to meet its short term obligation, hence the low margin of safety may lead to loss of goodwill. Current ratio 2 : 1 is assumed to be an appropriate ratio. In the following table, we have presented data relating to the current ratio of both two JVBs.

**Table 4.1**  
**4.1 Current Ratio**  
(in times)

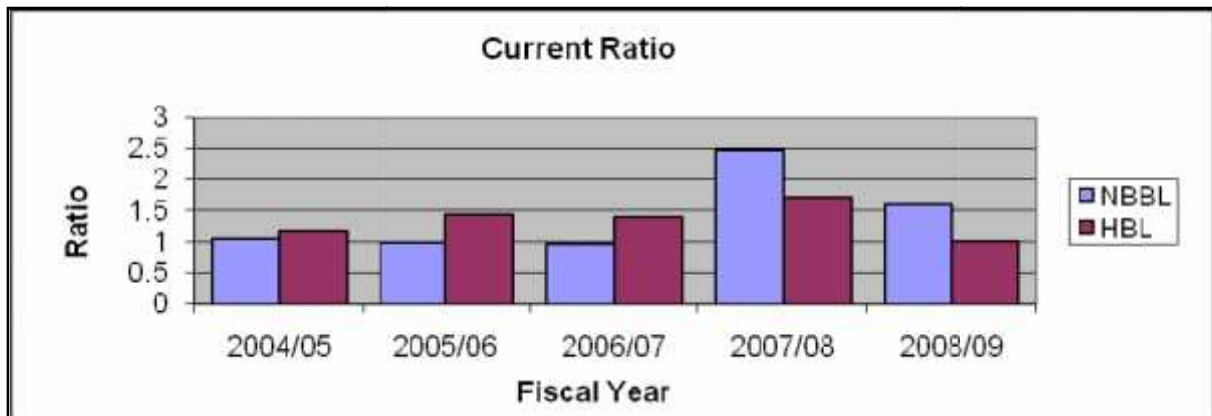
(Rs. In '000)

Fiscal Year	NBBL			HBL		
	Current assets	Current liabilities	Ratio %	Current assets	Current liabilities	Ratio %
2004/05	7,568,945	7,124,568	1.06	15,906,718	13,227,568	1.20
2005/06	6,859,745	6,845,698	1.00	18,484,608	12,709,743	1.45
2006/07	6,587,652	6,715,879	0.98	21,261,089	15,129,961	1.41
2007/08	7,418,741	2,996,886	2.48	22,146,283	12,813,024	1.73
2008/09	2,572,416	1,602,682	1.60	29,738,837	29,089,981	1.02
		Mean	1.42		Mean	1.36
		S.D.	0.64		S.D.	0.27
		C.V.	45.07		C.V.	19.85

(Source: Appendix 1)



**Figure 4.1**



The above table clearly indicates that the current ratio in both banks are more than one percent except in the year 2006\07 its 0.98 in NBBL. The ratio of HBL is 1.20 percent (2004\05) to 1.02 percent (2008\09). The current ratio of NBBL has fluctuating trend all over the study period. Comparative evaluation of current ratio indicates that the ratio of HBL always exceeds that of NBBL apart from the year 2007\08 and 2008\09. It means that HBL deserves greater capacity to meet short term obligation. In general, current ratio is better when it is 2:1 and both the banks have not maintained this norms except in the year 2007\08, NBBL has maintained the norms 2:1. From the above, calculation it indicates that the ability to discharge the short term obligation of HBL is better than that of NBBL. However, current ratio is only a test of quantity, not a test of quality of liquidity position. So the researcher can not decide the liquidity position of both banks on the basis of such test.

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

Cash and bank balance to total deposit ratio measures the bank’s ability in paying to current depositors as well as other depositors. Current depositors must be paid whenever they demand their deposits. If it is not paid when demanded it will have the negative impact on the bank’s reputation. It is calculated as follows

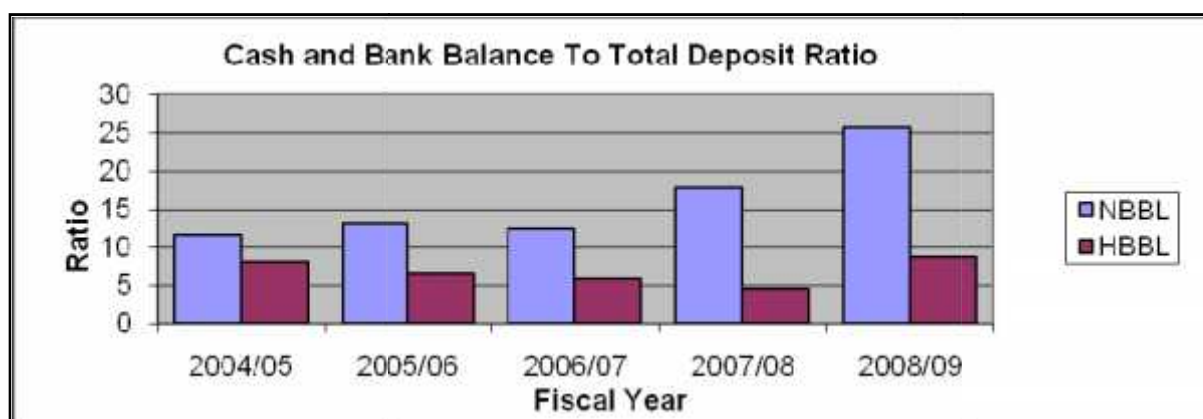
$$\text{Cash and Bank Balance to Total Deposit Ratio} = \frac{\text{Cash and Bank Balance}}{\text{Total Deposits}}$$

The following table shows the capacity to discharge immediate calls current deposit.

**Table 4.2****4.2 Cash and Bank Balance to Total Deposit Ratio (in Percentage)****(Rs. In '000)**

Fiscal Year	NBBL			HBL		
	Cash/bank balance	Total Deposit	Ratio %	Cash/bank balance	Total Deposit	Ratio %
2004/05	1,401,765	12,125,578	11.56	2,014,470	24,814,011	8.12
2005/06	1,694,683	13,015,136	13.02	1,717,352	26,490,851	6.48
2006/07	1,164,052	9,385,949	12.40	1,757,340	30,048,417	5.85
2007/08	1,922,847	10,883,652	17.67	1,448,141	31,842,789	4.55
2008/09	2,571,416	9,997,697	25.72	3,048,525	34,681,345	8.79
		Mean	16.07		Mean	6.76
		S.D.	5.89		S.D.	1.71
		C.V.	36.65		C.V.	25.30

(Source: Appendix 2)

**Figure 4.2**

The above table shows that the cash and bank balance to current deposit ratios have been fluctuating of both banks. The ratio of NBBL has ranged between 11.56 percent (2004\05) to 25.72 percent (2008\09). Similarly the ratio in case of HBL has ranged between 8.12 percent (2004\05) and 8.79 percent (2008\09). This ratio of NBBL is always higher than that of HBL through out the study period. The average ratio of NBBL is 16.07 percentage and HBL is 6.76 percentage respectively. From the above analysis, it can be concluded that the total cash with respect to current deposit is better in NBBL when compared to HBL. It means, NBBL has better cash and bank balance for paying them when demanded by depositors. According to the coefficient of variation, HBL's is lower than that of NBBL. This indicates that the

variability of the ratios of HBL is more consistent than that of NBBL. However, in practice holding higher level idle amount cash and bank balance can not be healthy to the concerned institutions.

#### 4.1.2 Activity Ratio

Activity ratios are the indicators with regard to it's efficiency in assets management or successful in mobilising total deposits on investment. In this section, some of the activity ratios are calculated to assess banks efficiency in utilising available resources.

##### 4.1.2.1 Loans and Advances to Total Deposit Ratio

The ratio measures the extent to which the banks are successful in mobilising them for the purpose of profit generation. A high ratio represents the greater efficiency to utilise funds provided by outsiders (i.e. total deposits) and vice versa. Total deposit include current, saving, fixed, calls, margin and other deposits. This ratio is computed by dividing loans and advances by total deposits.

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

**Table 4.3**

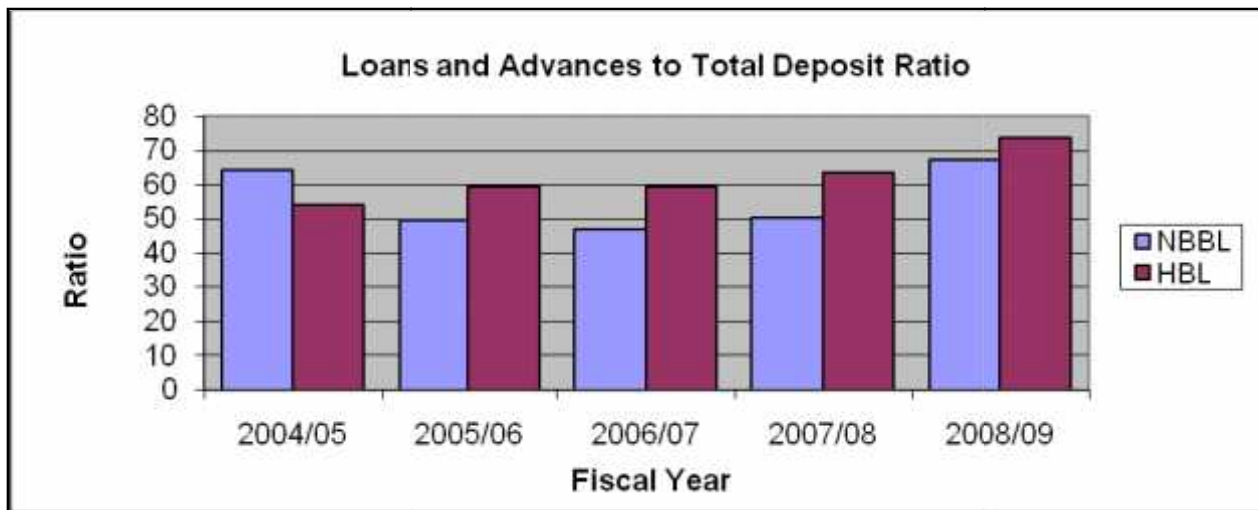
#### 4.3 Loans and Advances to Total Deposit Ratio (in Percentage)

(in Rs. '000)

Fiscal Year	NBBL			HBL		
	Loan and advances	Total deposit	Ratio %	Loan and advances	Total deposit	Ratio %
2004/05	7,787,690	12,125,578	64.23	13,451,168	24,814,011	54.21
2005/06	6,460,246	13,015,136	49.64	15,761,976	26,490,851	59.50
2006/07	4,409,013	9,385,949	46.97	17,793,723	30,048,417	59.22
2007/08	5,457,808	10,883,652	50.15	20,179,613	31,842,789	63.37
2008/09	6,704,943	9,997,697	67.06	25,519,519	34,681,345	73.58
		Mean	55.61		Mean	61.98
		S.D.	9.29		S.D.	7.26
		C.V.	16.71		C.V.	11.71

(Source: Appendix 3)

**Figure 4.3**



The above table shows the ratio of loans and advances to total deposits. This ratio is fluctuating in case of NBBL and increasing trend in case of HBL. The ratio is always higher in HBL as compared to NBBL. In HBL the investment ratio is between 54.21 percent (2004\05) to 73.58 percent (2008\09). In NBBL, the highest ratio being 67.06 percent in the last fiscal year of the study period and the lowest is 46.97 percent in 2006\07 of the study period.

From the above analysis HBL, has maintained sufficient margin of cash to meet their deposit amount as compared to NBBL. It means the earnings from deposits are poor for NBBL because this bank has kept more fund idle without investing it in profitable business. Calculating the mean loans and advances to total deposits ratio of HBL is considerably greater than that of NBBL. Similarly, the coefficient between the ratios of the bank NBBL's is higher than that of HBL. It proves that HBL has better utilised its deposit in loans and advances more efficiently than NBBL. HBL is efficient in terms of its earning power.

#### **4.1.2.2 Investment to Total Deposits Ratio**

This ratio measures the extent in which the banks are successful in mobilising total depositors on investment. That means, this ratio is affected by the financial policy which is based on implementation aspect of deposits i.e. investment. This ratio is calculated by using the following formula.

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

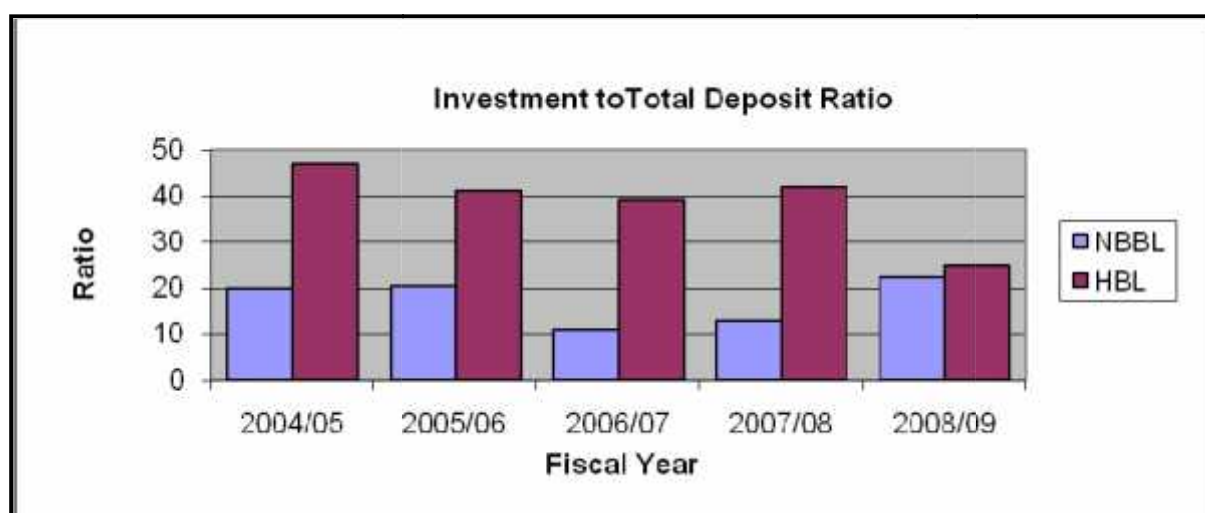
**Table 4.4**  
**4.4 Investment to Total Deposit Ratio (in Percentage)**

(in Rs.'000)

Fiscal Year	NBBL			HBL		
	Investment	Total deposit	Ratio %	Investment	Total deposit	Ratio %
2004/05	2,411,720	12,125,578	19.89	11,692,342	24,814,011	47.12
2005/06	2,661,833	13,015,136	20.45	10,889,031	26,490,851	41.10
2006/07	1,034,560	9,385,949	11.02	11,822,984	30,048,417	39.35
2007/08	1,389,901	10,883,652	12.77	13,340,177	31,842,789	41.89
2008/09	2,222,431	9,997,697	22.23	8,710,690	34,681,345	25.12
		Mean	17.27		Mean	38.92
		S.D.	5.02		S.D.	8.24
		C.V.	29.07		C.V.	21.17

(Source: Appendix 4)

**Figure 4.4**



The above table clearly shows that the ratio of both the NBBL and HBL have been fluctuating all over the study period. This ratio is always higher in HBL as compared to NBBL. The mean investment to total deposits ratio of HBL is significantly greater than that of NBBL i.e. (38.92 percent > 17.27 percent). Similarly, the coefficient of variation in the ratio of

NBBL is higher than that of HBL i.e (29.07 percent > 21.17 percent) It means that the variability of the ratios of HBL is more consistent than that of NBBL. So from this analysis that HBL is more successful in utilising its resources on investment than that of NBBL. But in the process of portfolio management of bank assets, various factors such as availability of fund, liquidity requirement, central bank norms etc. are to be considered.

### **4.1.3 CAPITAL STRUCTURE/LEVERAGE RATIOS**

As institution should have short term liquidity as well as long term solvency. Since the liquidity relates to the short term solvency, capital structure ratio is concerned with long term solvency, has been examined in this section. The capital structure ratio that has been planned to be analysed shall highlight on long term financial plan, debt servicing capacity, strengths and weaknesses. The capital structure ratio in NBBL and HBL can be measured and analysed by following ratio.

#### **4.1.3.1 Total Debts to Total Assets Ratio**

The ratio of total debts to assets ratio signifies the extent of debt financing on the total assets and measures the financial security to the outsiders. This ratio shows that what portion of the capital assets is financed by outside funds. A high debt ratio implies a bank's success in exploiting debt to be more profitable as well as its riskier capital structure. This ratio is calculated by dividing total debt by total assets.

$$\text{Total Debts to Assets Ratio} = \frac{\text{Total Debts}}{\text{Total Assets}}$$

Total debt includes short term and long term and deposits. Similarly, total assets mean all the assets of right hand side of balance sheet. The debt to total assets ratio of NBBL and HBL during the study period have been tabulated below.

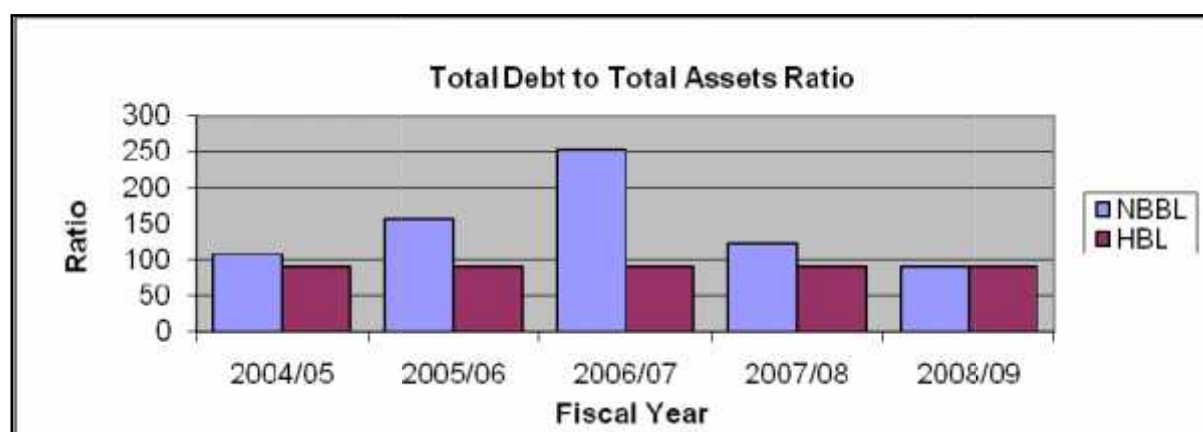
**Table 4.5**  
**4.5 Total Debt to Total Assets Ratio (in Percentage)**

(in Rs. '000)

Fiscal Year	NBBL			HBL		
	Total debt	Total assets	Ratio %	Total debt	Total assets	Ratio %
2004/05	16,254,876	15,116,371	107.53	26,302,948	28,871,343	91.10
2005/06	18,452,451	11,709,281	157.59	27,694,215	30,579,808	90.56
2006/07	18,369,525	7,254,548	253.21	31,372,642	34,314,868	91.43
2007/08	11,582,473	9,391,026	123.34	33,662,540	36,857,624	91.33
2008/09	10,852,307	11,964,552	90.70	36,200,441	40,046,686	90.39
		Mean	146.47		Mean	90.96
		S.D.	64.57		S.D.	0.46
		C.V.	44.08		C.V.	0.51

(Source: Appendix 5)

**Figure 4.5**



In case of HBL, debt financing has always exceeded 90 percent of the total investment in the study period. Similarly, more than 90 percent of the assets has been financed by the debt capital in case of NBBL all over the study period. The debt to assets ratio of NBBL is fluctuating during the study period. Both banks have excessively used debt to finance total assets. More specifically, NBBL has used relatively more debt financing. The comparative table shows that the mean debt assets ratio of NBBL is higher than HBL, it means NBBL has used more debt in the total assets and the capital structure of NBBL is more leveraged in comparison to HBL. The coefficient of variation between the ratios of HBL is lower than that of NBBL, this indicates that the variability of the ratios of HBL is more consistent than that of NBBL.

### 4.1.3.2 Total Debt to Total Equity Ratio

This ratio measures the relative claims of outsider and owners over the firm's assets, indicating the extent of debt financing in the firm compared to shareholders equity financing in other words, the debt to equity ratio indicates the relative contribution of debt capital and equity capital fund of the total investment. A high ratio shows the larger share of financing by the creditors as compare to that of owners, creditors prefers low debt equity ratio. The total debts to equity ratio is calculated by using the following formula.

$$\text{Total Debts to Total Equity Ratio} = \frac{\text{Total Debts}}{\text{Total shareholders equity}}$$

The total debts include current accounts saving account, call and short deposits, overdraft, fixed deposits, loan and advance, borrowing from other banks, shareholders equity include paid up capital, reserve and surpluses and undistributed profit.

The total debt to equity ratios of NBBL and HBL during the study period have been tabulated below.

**Table 4.6**  
**4.6 Total Debt to Total Equity Ratio (in Percentage)**

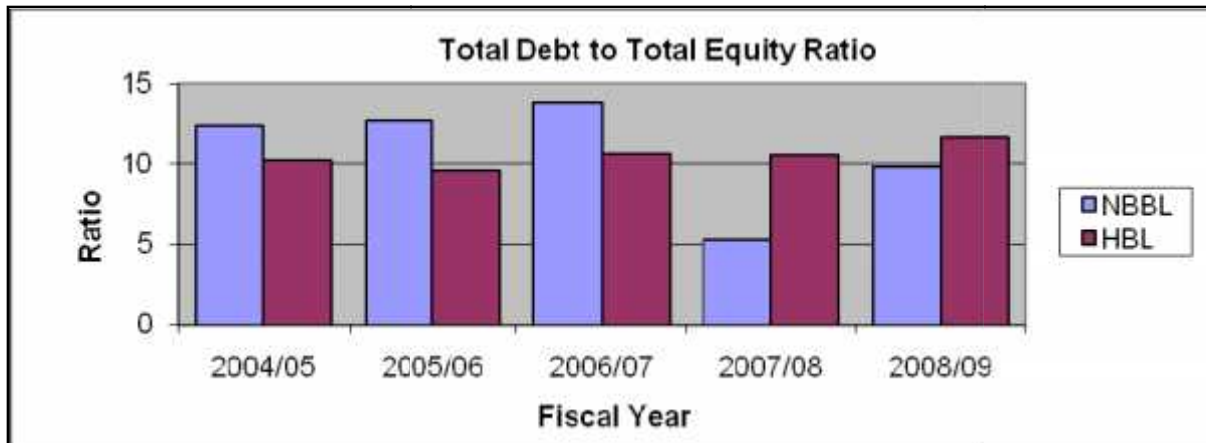
(in Rs. '000)

Fiscal Year	NBBL			HBL		
	Total debt	Share holder's equity	Ratio %	Total debt	Share holder's equity	Ratio %
2004/05	16,254,876	1,310,161	12.41	26,302,948	2,568,395	10.24
2005/06	18,452,451	1,452,140	12.71	27,694,215	2,885,893	9.60
2006/07	18,369,525	1,332,689	13.78	31,372,641	2,942,226	10.66
2007/08	11,582,473	2,191,447	5.29	33,662,540	3,195,466	10.53
2008/09	10,852,307	1,112,245	9.76	36,200,441	3,119,881	11.60
		Mean	10.79		Mean	10.53
		S.D.	3.41		S.D.	0.72
		C.V.	31.60		C.V.	6.84

(Source: Appendix 6)

**Figure 4.6**





The total debt to equity ratio of NBBL has ranged between 13.78 and 5.29 times. This ratio has fluctuated over the study period. This ratio of HBL has a constant around 10 times. The above table clearly reveals that the total debt to equity ratios of both banks is highly leveraged. More specifically, the claims of the outsiders exceed far more those of the owners over the banks assets, though HBL seems relatively more leveraged. The above listed table shows that the mean debt equity ratio of HBL is lower than of NBBL. So NBBL is more riskier than HBL. The coefficient of variation between the ratio of NBBL is to some extent more uniform than HBL. From the above analysis it can be concluded that the HBL’s capital structure is less leveraged when compared to NBBL.

#### 4.1.3.3 Interest Coverage Ratio

The interest coverage ratio is one of the most conventional coverage ratios, which measures the debt servicing capacity of an institution. This ratio reveals how many times the interest charges are covered by the EBIT out of which they will be paid. High ratio may imply unused debt capacity. In contrast a low ratio is a danger signal because the firm is using excessive debt and does not have the ability to offer assured payment of interest to the creditors. From the point of view, of creditors, the larger the coverage ratio, the greater ability of the firm to make the payment of interest to creditors.

$$\text{Interest Coverage Ratio} = \frac{\text{Total EBIT}}{\text{Total Interest Expenses}}$$

EBIT denotes earning before interest and taxes. Similarly, interest denotes all the interest payable on both the deposits and borrowing.

The interest coverage ratio of NBBL and HBL has been tabulated below.

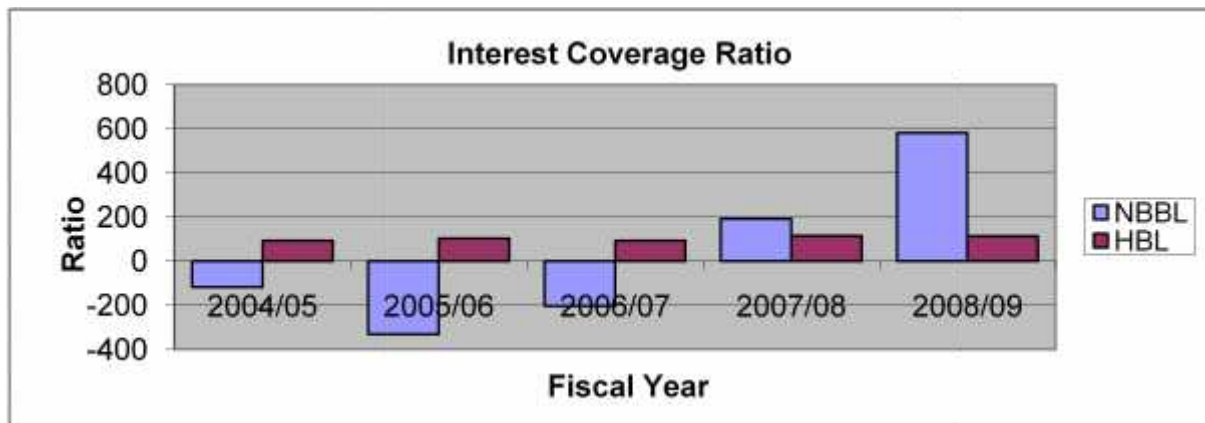
**Table 4.7**  
**Interest Coverage Ratio**  
**4.7 Interest Coverage Ratio (in Percentage)**

(in Rs. '000)

Fiscal Year	NBBL			HBL		
	Total EBIT	Total interest expenses	Ratio %	Total EBIT	Total interest expenses	Ratio %
2004/05	-649,543	547,942	-118.54	522,540	561,963	92.98
2005/06	-1,716,811	518,093	-331.37	672,398	648,841	103.63
2006/07	-877,383	432,218	-202.99	717,402	767,411	93.48
2007/08	761,981	397,996	191.45	948,838	823,744	115.19
2008/09	2,385,551	409,775	582.16	1,066,605	934,778	114.10
		Mean	24.14		Mean	103.88
		S.D.	366.64		S.D.	10.72
		C.V.	15.18		C.V.	10.32

(Source: Appendix 7)

**Figure 4.7**



The interest coverage ratio of NBBL is fluctuating between -118.54 percent (2004\05) and 582.16 percent (2008\09). Similarly, the ratio of HBL has ranged between 92.98 percent (2004\05) and 115.19 percent (2007\08). The comparative table listed above shows that the mean ratio of interest coverage ratio of HBL is greater than that of NBBL  $103.88 > 24.14$  percent. It means greater the ratio, the more the ability to make the payment of interest to creditors. The coefficient variation between the ratios of HBL is lower than that of NBBL i.e.  $10.32 \text{ percent} < 15.18 \text{ percent}$ . It means that the variability of the ratios of HBL is more uniformed than that of NBBL.

#### 4.1.4 PROFITABILITY RATIOS

Profit is essential for a firm's survival and future growth. Hence, management of the firm is interested in the operating efficiency of the firm profitability ratio, being one of the important indicators of operating efficiency. One of the focus of commercial banks is to be enough profitable so as to meet variety of objectives like achieving desirable liquidity position, meet fixed interest obligation, overcome the future contingencies, explicit hidden investment opportunities, encourage branch expansion, finance government for the development of funds etc. Profitability ratio as matter of fact are the best indicators of overall efficiency of the bank because they compare return of value over bonds put into business as assets employed.

Profitability position of NBBL and HBL can be measured by analysing following ratios.

##### 4.1.4.1 Net profit to Total Assets Ratio

Assets management is very important because of the return on assets will rise if fewer assets are employed in all the measures of the effective management of working capital. Minimising taxes within the legal options available will also improve the return. Return on total assets ratio measures the profitability with respect to the total assets. In the present study, this ratio is examined to measure the profitability of all financial resources invested in the bank assets. Return on assets is vital ratio for measuring the financial performance. Higher ratio means better financing position. The ratio of return on total assets is calculated by dividing net profit after tax (NPAT) by total assets.

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

**Table 4.8**

#### 4.8 Net Profit to Total Assets Ratio (in Percentage)

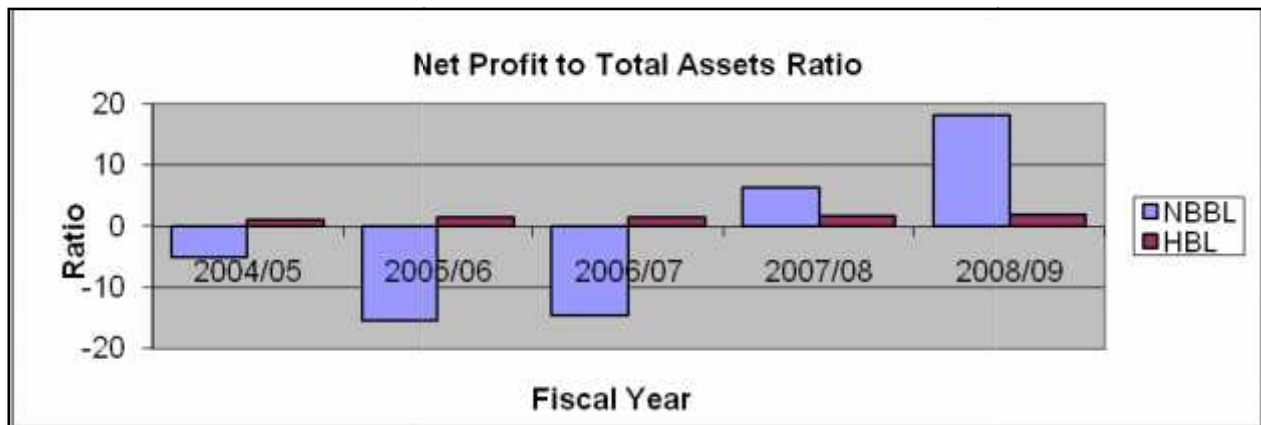
(in Rs '000)

Fiscal Year	NBBL			HBL		
	Net Profit	Total assets	Ratio %	Net Profit	Total assets	Ratio %
2004/05	-749,543	15,116,371	-4.96	308,277	28,871,343	1.07
2005/06	-1,797,158	11,709,281	-15.35	457,458	30,579,808	1.50
2006/07	-1,061,581	7,254,548	-14.63	491,824	34,314,868	1.43
2007/08	596,487	9,391,026	6.35	635,869	36,857,624	1.73
2008/09	2,158,105	11,964,552	18.04	752,835	40,046,686	1.88

		Mean	-2.11		Mean	1.52
		S.D.	14.29		S.D.	0.31
		C.V.	-677.25		C.V.	20.39

(Source: Appendix 8)

**Figure 4.8**



The mean ratio of return on total assets of NBBL is lower than that of HBL, i.e.  $-2.11 < 1.52$ . Likewise, the coefficient of variation between the ratios of NBBL is lower than that of HBL i.e.  $-677.25 < 20.39$  percent. This shows that the variability of the ratio of NBBL is more uniform than that of HBL.

In brief, the net profit to total assets ratio of HBL has appeared better position than that of NBBL. From the above analysis HBL's profitability position in relation to this ratio is better than that of NBBL.

#### **4.1.4.2 Net profit to Net worth (Shareholder's Equity) Ratio (ROSE)**

Return on shareholder fund is another effective measure for the profitability of bank. This ratio measures the productivity of shareholders funds. ROSE basically, measures the company's return towards investment made by owner of the company. Return means the funds after subtraction of all expenses including tax (NPAT) which actually belongs to the owners. ROSE reveals how well the company uses the resources of owners. ROSE is computed as following formula.

$$\text{Net profit to Net worth (shareholder's equity)} = \frac{\text{Net Profit}}{\text{Total shareholders equity}}$$

This ratio for NBBL and HBL is shown in the following table

**Table 4.9**

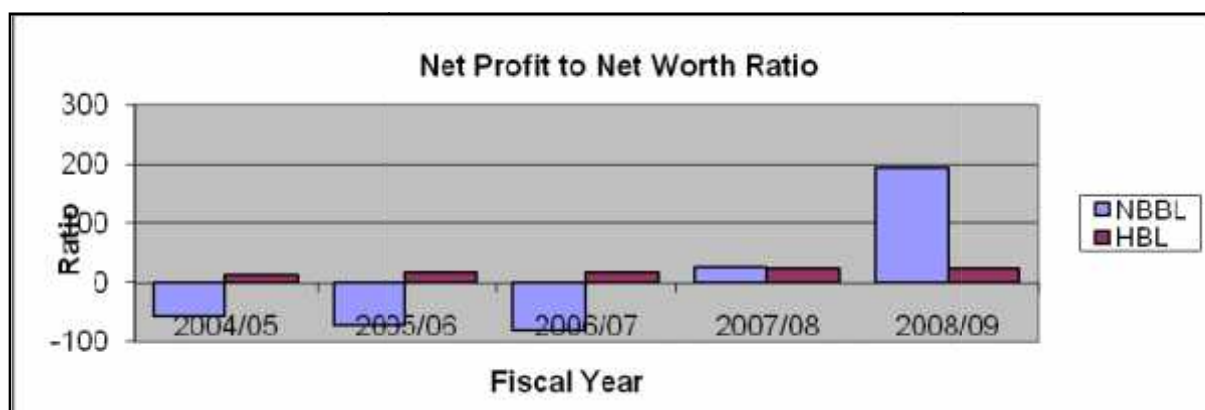
**4.9 Net Profit to Net worth (Shareholder’s Equity) Ratio (in Percentage)**

(in Rs. ‘000)

Fiscal Year	NBBL			HBL		
	Net Profit	Shareholder’s equity	Ratio %	Net Profit	Shareholder’s equity	Ratio %
2004/05	-749,543	1,310,161	-57.21	308,277	2,568,395	12.00
2005/06	-1,797,158	1,452,140	-70.80	457,458	2,885,593	15.85
2006/07	-1,061,581	1,332,689	-79.66	491,824	2,942,226	16.72
2007/08	596,487	2,191,447	27.22	635,869	3,195,466	25.30
2008/09	2,158,105	1,112,245	194.03	752,835	3,119,881	24.13
		Mean	2.72		Mean	18.8
		S.D.	115.09		S.D.	5.70
		C.V.	42.31		C.V.	30.32

(Source: Appendix 9)

**Figure 4.9**



It is observed on the above table that ROSE ratio of the two banks differs every fiscal year. NBBL has registered its ROSE ratio that ranged from -57.21 to 194.03 percent. The HBL has registered ROSE ratio between 12.00 to 25.30 percent. The average ROSE ratio of HBL

comes to be 18.8 percent but in NBBL, it is 2.72 percent only. The higher ratio means better capacity of utilising the owner's funds. The coefficient variation between the ratios of HBL is lower than that of NBBL (i.e. 30.32 percent < 42.31 percent). It means that the variability of the ratios of HBL is more uniformed than that of NBBL. In conclusion, the above analysis shows that HBL's profitability position in relation to this ratio is better than that of NBBL.

#### 4.1.4.3 Net profit to Total Deposit Ratio

Net profit to total deposit ratio measures the return on deposits. Here total deposits means those total amount deposited in various accounts, i.e. current saving, fixed, other (margin) and call and short deposits. Generally, higher ratio signifies better utilisation of deposits and vice versa. Since the capital structure of the firm strongly affects its profitability. Since the major function of commercial bank is to mobilise deposits. Here this ratio will enable to measure its efficiency towards its deposits mobilisation.

Net profit to total deposits ratio is calculated as shown in the following table.

$$\text{Net Profit to Total Deposit Ratio} = \frac{\text{Net Profit}}{\text{Total deposit}}$$

The total net profit to total deposit ratio of NBBL and HBL has been tabulated below.

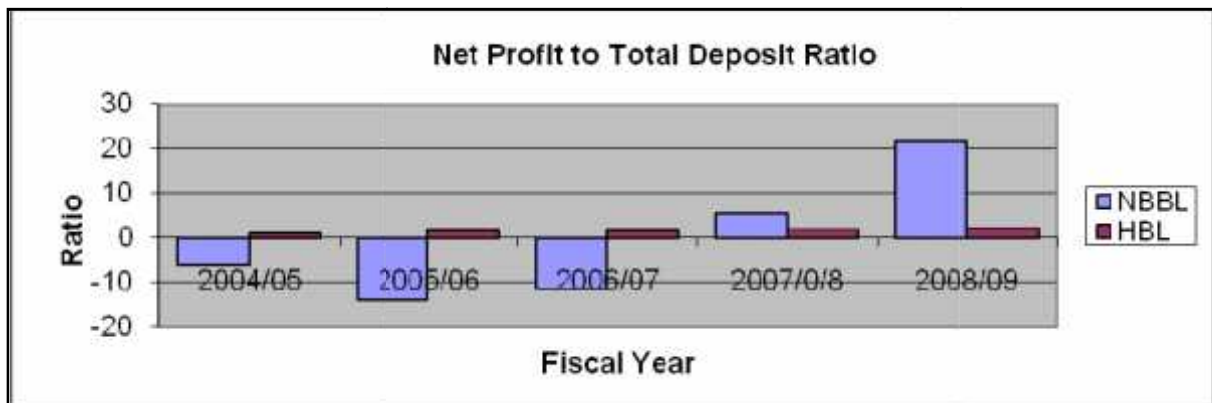
**Table 4.10**  
**4.10 Net Profit to Total Deposit Ratio (in Percentage)**  
**(in Rs. '000)**

Fiscal Year	NBBL			HBL		
	Net Profit	Total deposit	Ratio %	Net Profit	Total deposit	Ratio %
2004/05	-749,543	12,125,578	-6.18	308,277	24,814,011	1.24
2005/06	-1,797,158	13,015,136	-13.81	457,458	26,490,851	1.73
2006/07	-1,061,581	9,385,949	-11.31	491,824	30,048,417	1.64
2007/08	596,487	10,883,652	5.48	635,869	31,842,789	2.00
2008/09	2,158,105	9,997,697	21.59	752,835	34,681,345	2.17

		Mean	-0.85		Mean	1.76
		S.D.	14.57		S.D.	0.36
		C.V.	-17.14		C.V.	20.45

(Source: Appendix 10)

**Figure 4.10**



The net profit to total deposit ratio of NBBL has ranged between -6.18 percent (2004\05) to 21.59 percent (2008\09). The above table shows that the ratio has recorded an negative trend till the first three years and increased during the last two year of the study period.

Thus, both the banks have been able to maintain profitability over the study period. However, the profitability position of both the banks is far from satisfactory. The reason behind it could be attributed to inefficient in utilising the mobilised deposits properly and reduction in interest rates on lending.

The coefficient of variation between the ratios of NBBL is negative than that of HBL (i.e. -17.14 percent < 20.45 percent) it means that the variability of the ratios of HBL is, to some extent, more uniform than that of NBBL. According to the calculation, HBL is more effectively utilising its deposits.

#### **4.1.4.4 Interest Earned to Total Assets Ratio**

Interest earned total assets ratio measures the percentage of interest earned in relation to total assets of the banks. The ratio signifies the mobilisation of its assets in interest generating purpose. Banks usually earn interest through the provision of loans, advance, overdraft and investment in various securities. A high ratio reflects the better efficiency in utilising the resources in interest generating sectors and vice versa.

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

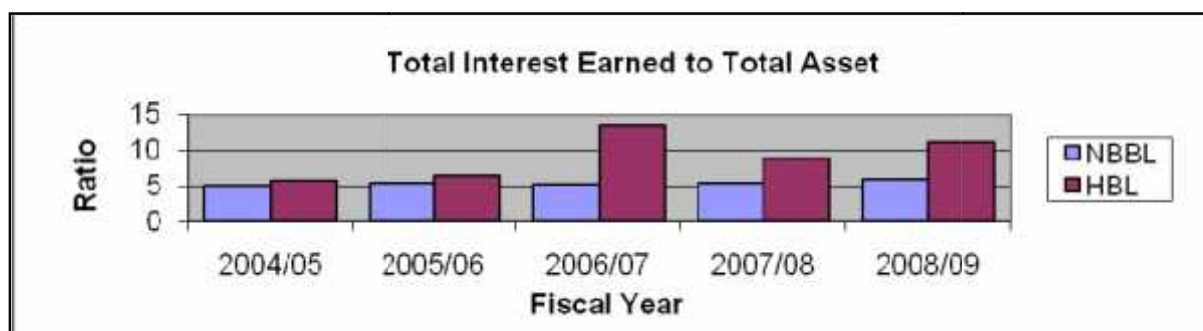
The interest earned to total assets ratio of NBBL and HBL has been tabulated below.

**Table 4.11**  
**4.11 Total Interest Earned to Total Assets Ratio (in Percentage)**  
(in Rs. '000)

Fiscal Year	NBBL			HBL		
	Total interest earned	Total assets	Ratio %	Total interest earned	Total assets	Ratio %
2004/05	1,446,468	28,871,343	5.01	876,508	15,116,371	5.80
2005/06	1,626,473	30,579,808	5.32	758,131	11,709,281	6.47
2006/07	1,775,582	34,314,868	5.17	982,196	7,254,548	13.54
2007/08	1,963,647	36,857,624	5.33	828,275	9,391,026	8.82
2008/09	2,342,198	40,046,686	5.85	1,337,112	11,964,552	11.18
		Mean	5.34		Mean	9.16
		S.D.	0.32		S.D.	3.24
		C.V.	6.00		C.V.	35.37

(Source: Appendix 11 )

**Figure 4.11**



The interest earned to total assets ratios of NBBL has fluctuated between 5.01 percent to 5.85 percent over the study period. The average ratio of HBL (9.16 percent) is higher than NBBL (5.34 percent). It can be concluded that comparatively HBL has been able to earn more



interests in relation to total assets. This ratio reflects that HBL has been more efficient in utilising the total assets in interest generating purpose. But the coefficient of variation between ratios of NBBL is to some extent, lower than that of HBL i.e. 6 percent < 35.37 percent. This shows that the ratio of NBBL is more consistent than that of HBL.

#### 4.1.4.5 Net Profit Margin Ratio

Net profit margin ratio is computed by dividing profit after tax by gross earning. Gross earning includes the interest income, commission and discount, exchange gain, non operating income and other incomes. The ratio indicates the firm's capacity to withstand economic condition.

Net profit margin ratio is calculated as shown in the following table.

$$\text{Net Profit Margin Ratio} = \frac{\text{Profit After Tax}}{\text{Gross Earning}}$$

The total net profit margin ratio of NBBL and HBL has been tabulated below.

**Table 4.12**  
**Net profit Margin Ratio**  
**4.12 Net Profit Margin Ratio (in percentage)**

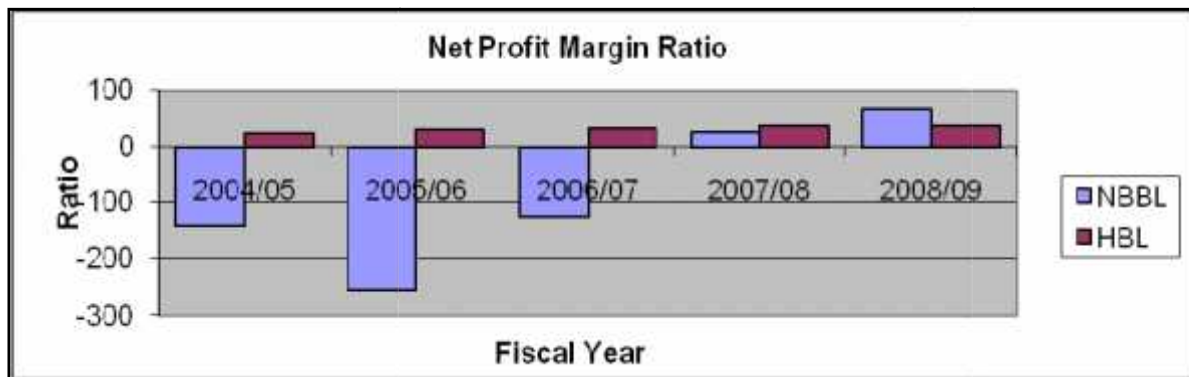
(in Rs. '000)

Fiscal Year	NBBL			HBL		
	Total interest earned	Total assets	Ratio %	Total interest earned	Total assets	Ratio %
2004/05	-749543	535231	-140.04	308277	1198717	25.72
2005/06	-1797158	708715	-253.58	457458	1395422	32.78
2006/07	-1061581	852289	-124.56	491824	1396855	35.21
2007/08	596487	2178071	27.39	635869	1607196	39.56
2008/09	2158105	3184144	67.78	752835	1991858	37.8

		Mean	-84.6		Mean	34.21
		S.D.	131.33		S.D.	5.4
		C.V.	-155.24		C.V.	15.78

(Source: Appendix 12)

**Figure 4.12**



The above table shows the net profit margin ratio. On the basis of average ratio, HBL has a good result because, it has higher average ratio (i.e.,  $-84.6 < 34.21$ ) and on the basis of yearly ratios. HBL are incurring higher profit than NBBL.

#### **4.1.5 INCOME AND EXPENDITURE ANALYSIS**

##### **INCOME ANALYSIS**

It is analysed to find out the proportionate contribution of different sources of income in generating total incomes. Income analysis is considered to be an important indicators for the financial performance.

The main sources of income of commercial banks are interest received from loans and advances, government securities, commission and discounts, foreign exchange and fluctuation gain and other miscellaneous sources.

The contribution of each sources to the total income has been tabulated in terms of percentage in case of both banks.

a) **Interest received:**

The table shows the composition of various sources of total income. In NBBL, the ratio of interest income is in fluctuating trend over the study period which has ranged between 67% (2007/08) to 81% (2004/05). The average ratio of interest received is equal to 77.05% similarly in HBL the highest ratio of interest received is 82.15% (2004/05) and lowest is 79.56% (2005/06) and the average ratio is 80.91%, which is greater than NBBL. From the above analysis, HBL is more successful to collect as interest than NBBL. So it is said that HBL support the prudent mobilization of available deposits.

**b) Commission and Discount :**

Commission and Discount includes income from letter of credit, letter of guarantee, collecting fees, remittance fees and other fees and commission.

It is clear from table 4.13 that the proportionate contribution of commission and discounts has fluctuated annually in case of both JVBs. In NBBL it has ranged between 6.81%(2006/07) to 8.93%(2005/06) in case of HBL it is 7.54% (2004/05) to 9.71%(2008/09). But the contribution of commission and discounts to total income is highest in HBL as compare to NBBL. It means HBL has extended better services to its customers than that of NBBL.

**c) Foreign exchange gain :**

It is also major source of the total income of the JVBs, which includes income through the sale of exchange currency and revaluation gain. It has ranged between 3.28%(2006/07) to 7.31%(2007/08) in case of NBBL and the average ratio is 5.14% where as 701%(2006/07) to 9.69% (2005/06) in case of HBL and the average ratio is 8.19% which is greater than NBBL. So, it earns the extended network of HBLs branches in the country consequently large volume of foreign exchange transaction, may be one of the prominent reasons behind this.

**d) Other Income :**

Other income has a very nominal contribution in the total income in case of both the banks. In the table no.4.13 the average other income in NBBL is 8.83% and HBL is 2.15%

**Table 4.13**  
**Total Income**  
**4.13 Total Income (in Percentage)**

Fiscal Year	2004/05		2005/06		2006/07		2007/08		2008/09		Average	
	NBBL	HBL	NBBL	HBL	NBBL	HBL	NBBL	HBL	NBBL	HBL	NBBL	HBL
Interest received	80.92	82.15	79.37	79.56	78.56	82.04	67.19	80.78	79.21	80.03	77.05	80.91
Commission and discount	8.59	7.54	8.93	8.09	6.81	8.93	8.54	8.35	7.25	9.71	8.02	8.52
Foreign exchange gain	3.66	7.80	6.70	9.69	3.28	7.01	7.31	7.92	4.77	8.54	5.14	8.19
Non Operating Income	-	0.16	-	0.10	1.94	0.16	1.48	0.40	1.36	0.14	0.96	0.20
Other income	6.83	2.35	5.00	2.56	9.41	1.86	15.48	2.55	7.41	1.58	8.83	2.15
Total	100	100	100	100	100	100	100	100	100	100	100	100

(Source: Annual report of NBBL and HBL from 2004/05 to 2008/09)

## **EXPENSES ANALYSIS**

It is evaluated to find out proportionate expenses under the different headings. Commercial banks have various headings under which expenses are made. But income statements of the banks only major headings shows and other sub headings grouped within these major headings for their business in the preparation of financial statements. The major headings of expenses are interest expenses, deposit, loans and advances, staffs cost, office operating expenses, provision of stall bonus, general loans which is against loss, provision for income tax, provision for staff gratuity and exchange equalisation funds. Office expenses have included as the following operative expenses. Other expenses/sundries credit card expenses, written off expenses annual general meeting expenses, board meeting fees and expenses fees and commission paid, contribution and duration, advertisement, insurance, audit fee, professional services, depreciation, supplies and stationary, communication means, entertainment, transportation expenses, repair and maintenance and utilities, banking premises, rent, management expenses, miscellaneous expenses all the expenses that are related to office, non operating expenses, i.e. loss from the sale of assets, written off expenses, provision for fax and shortage written off. The totalling amount of operating expenses of the banks are presented on the following table.

### **a) Interest Expenses**

The major part of the total expenses is bank's interest. In case of NBBL, the ratio is in fluctuating trend which ranges from 45.03% (2008\09) to 68.05% (2004\05) and the average ratio is 59.84% . Similarly, the average ratio of HBL is 52.12%. In an average NBBL has paid proportionately more interest than HBL.

### **b) Staff Expenses**

Staff expenses include the salaries, allowance, contribution to provident fund, training expenses and other expenses related to staff. The average ratio of NBBL is 16.27%. This ratio has ranged from 11.91% (2004\05) to 19.11% (2007\08) over the study period. The highest ratio is 20.05% (2008\09) and lowest ratio is 16.06% (2004\05) and the average ratio is 18.70% which is greater than NBBL. It shows that HBL has spent more amounts in employee expenses than NBBL.

**c) Office operating expenses**

This is also to record major part of total expenses after interest expenses. This expenses includes the house rent, telephone, fax, insurance, repair and maintenance, water and electricity charges, printing and stationery and donation expenses etc. In NBBL, the average expenses 16.58% and in HBL the average expenses is 23.66% which is greater than NBBL. Comparatively, it concludes that, the NBBL is more efficient to reduce in operating expenses than HBL over the study period.

**d) Provision for Bonus**

Bonus is the most motivating factor to the staff. Bonus is distributed when firms earn enough profit. The table clear shows that, the average bonus paid to staff is 7.31% in NBBL and 5.52% in HBL. Here, this indicates that NBBL has incurred higher portion of expenses on its bonus out of total operating expenses.

**Table 4.14**  
**4.14 Operation Expenses (in Percentage)**

FY	2004/05		2005/06		2006/07		2007/08		2008/09		Average	
	NBBL	HBL	NBBL	HBL	NBBL	HBL	NBBL	HBL	NBBL	HBL	NBBL	HBL
Interest expenses	68.05	52.23	66.54	50.68	65.58	52.82	54.01	52.97	45.03	51.91	59.84	52.12
Staff expenses	11.91	16.60	18.06	18.32	17.08	18.74	19.11	19.77	15.21	20.05	16.27	18.70
Office operating expenses	20.04	25.78	15.40	25.75	17.34	23.51	16.54	21.16	13.55	22.12	16.58	23.66
Provision for bonus	-	5.39	-	5.25	-	4.93	10.34	6.10	26.21	5.92	7.31	5.52
Total	100	100	100	100	100	100	100	100	100	100	100	100

(Source: Annual report of NBBL and HBL from 2004/05 to 2008/09)

## 4.1.6 OTHER RATIOS

The other ratios can be calculated by the following related ratios

### INVESTIBILITY RATIOS

Investor contemplating to invest in a bank should know the investment potentiality of the bank before taking final decision. Analysis of investibility ratios helps the investors to know the investibility of the bank. Under this topic the following ratios are calculated.

#### 4.1.6.1 Return on Investment Ratio

Return on investment measures firms return from investment. The conventional approach of calculating return on investment is to divide net profit by investment. Investment includes investment on Government of Nepal securities, on share, on debt and other investment.

Thus it is calculated as follows:

$$\text{Return on Investment} = \frac{\text{Net Profit}}{\text{Investment}}$$

**Table 4.15**

#### **Return on Investment Ratio**

#### **4.15 Return on Investment Ratio (in Percentage)**

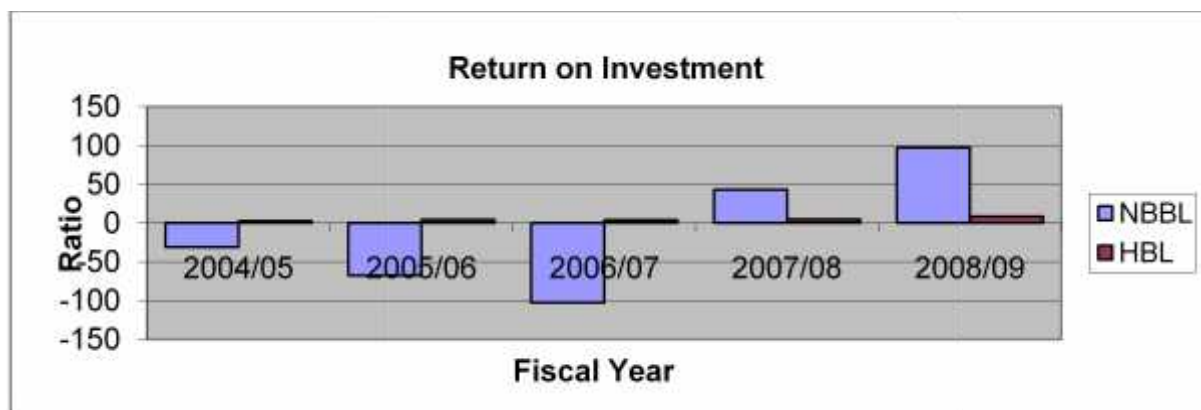
(in Rs. '000)

Fiscal Year	NBBL			HBL		
	Net Profit	Investment	Ratio %	Net Profit	Investment	Ratio %
2004/05	-749,543	2,411,720	-31.08	308,277	11,692,341	2.64
2005/06	-1,797,158	2,661,833	-67.52	457,458	1,088,9031	4.20
2006/07	-1,061,581	1,034,560	-102.61	491,824	11,822,984	4.16
2007/08	596,487	1,389,901	42.92	635,869	1,3340,177	4.77
2008/09	2,158,105	2,222,431	97.11	752,835	8,710,690	8.64
		Mean	-12.24		Mean	4.88
		S.D.	81.51		S.D.	2.24
		C.V.	-665.93		C.V.	45.90

(Source: Appendix 13)



**Figure 4.15**



The table shows the return on investment of the respective banks. Ratios show that both HBL and NBBL is in fluctuating trend. In HBL the ratio ranges from 2.64 (2004\05) to 8.64 (2008\09) and the average ratio is 4.88% and similarly, in NBBL the ratio ranges from -31.08 (2004\05) to 97.11 (2008\09) and the ratio is -12.24%. Since the average ratio of HBL is higher than NBBL HBL has good return on investment and NBBL's C.V. is negative and incurring loss.

#### 4.1.6.2 Earning Per Share (EPS)

Earning per share itself implies generated income which reduces tax and distributes to its real owners. Earning per share is calculated by dividing net income available to the common stockholders by the total number of common shares outstanding.

$$\text{Earning per Share} = \frac{\text{Total NPAT}}{\text{Total no.of Common Share Outstanding}}$$

The following table shows the earning per share of NBBL and HBL.

**Table 4.16**  
**Earning per share**  
**4.16 Earning per share**

(in Rs. '000)

Fiscal Year	NBBL			HBL		
	Total NPAT	no. of share	Ratio	Total NPAT	no. of share	Ratio
2004/05	-749,543	7,200	-104.10	308,277	6,435	47.91
2005/06	-1,797,158	7,200	-249.61	457,458	7,722	59.24
2006/07	-1,061,581	7,200	-147.44	491,824	8,108	60.66
2007/08	596,487	7,441	80.16	635,869	10,135	62.74
2008/09	2,158,105	18,603	116.01	752,835	12,162	61.90
		Mean	-60.99		Mean	58.49

The above table shows, that after third year EPS of NBBL is increasing. The highest EPS was secured in the fiscal year 2008\09. Similarly, EPS of HBL have been gradually fluctuating. NBBL has ranged EPS Rs. -104.10 to Rs. 116.01. HBL has ranged EPS Rs. 47.91 to Rs. 62.74. The average EPS of HBL is Rs 58.49.

The comparative table listed above shows that the mean EPS of HBL is significantly greater than that of NBBL and co-efficient of variation between the ratios of NBBL is negative than that of HBL. It means that the variability of ratios of HBL is more significantly greater than that of NBBL. Thus the analysis of earning trend helps the researcher to conclude that EPS of HBL has better position than that of NBBL. The analysis of the EPS trend shows that HBL's profitability of common shareholder is better than that of NBBL.

#### 4.1.6.3 Dividend per share (DPS)

Dividend implies that portion of net profit is allocated to shareholders as their return in terms of cash. The EPS implies what the owners are theoretically entitled to get from company. EAT implies that cash amount is allocated to shareholders dividend in terms of total numbers of ordinary share outstanding. DPS has been computed by using the following formula.

$$\text{Dividend per Share} = \frac{\text{Total Proposed Dividend Amount}}{\text{Total no.of Common Share issued}}$$

**Table 4.17**  
**Dividend per share**  
**4.17 Dividend per share**  
**(in Rs. '000)**

Fiscal Year	HBL		
	proposed dividend	no. of share	Ratio %
2004/05	20,321,73	6,435	31.58
2005/06	270,270	7,722	35
2006/07	324,320	8,108	40
2007/08	456,075	10,135	45.00
2008/09	529,777	12,162	43.56
		Mean	39.03

From the above table it is clear that dividend has been distributed by HBL and its dividend ratio ranges between Rs. 31.58 (2004\05) to 45 (2007\08). However, NBBL has not provided any dividend to their shareholders as the bank has not been able to generate sufficient profit.

## 4.2 Statistical Tools

### 4.2.1 Hypothesis test (One-way ANOVA test) for Liquidity Position

#### Null hypothesis:

$H_0: \mu_1 = \mu_2$  i.e. there is no significant difference in liquidity position of NBBL and HBL.

#### Alternative hypothesis:

$H_1: \mu_1 \neq \mu_2$  i.e. there is significance difference in liquidity position of NBBL and HBL.

Compute the test statistics, F-Test,

$$F = \frac{MSC}{MSE}$$

#### Calculation of required items: -

Let  $X_1$  and  $X_2$  denote the current ratio of NBBL and HBL respectively and calculation items of  $X_1$  and  $X_2$  are as follows: -

Year	X <sub>1</sub>	X <sub>2</sub>	X <sub>1</sub> <sup>2</sup>	X <sub>2</sub> <sup>2</sup>
2004/05	1.06	1.20	1.12	1.44
2005/06	1.00	1.45	1.00	2.10
2006/07	0.98	1.41	0.96	1.99
2007/08	2.48	1.73	6.15	2.99
2008/09	1.60	1.02	2.56	1.04
<b>Total</b>	7.12	6.81	11.79	9.56

Now,

$$\text{Grand total 'T'} = \sum X_1 + \sum X_2 = 7.12 + 6.81 = 13.93$$

$$\text{Total no. of observation (N)} = n_1 + n_2 = 5 + 5 = 10$$

$$\text{Correlation factor (C.F.)} = \frac{T^2}{N} = \frac{(13.93)^2}{10} = \frac{194.04}{10} = 19.40$$

**Sum of squares due to column (SSC)**

$$\begin{aligned} \text{SSC} &= \frac{(x_1)^2}{n_1} + \frac{(x_2)^2}{n_2} - \text{C.F.} \\ &= \frac{(7.12)^2}{5} + \frac{(6.81)^2}{5} - 19.40 \\ &= 10.14 + 9.28 - 19.40 \\ &= 0.02 \end{aligned}$$

**Sum of squared due to total (SST):**

$$\begin{aligned} \text{SST} &= \sum X_1^2 + \sum X_2^2 - \text{C.F.} \\ &= 11.79 + 9.56 - 19.40 \\ &= 1.95 \end{aligned}$$

**Sum of square due to error (SSE):**

$$\begin{aligned} \text{SSE} &= \text{SST} - \text{SSC} \\ &= 1.95 - 0.02 \\ &= 1.93 \end{aligned}$$

**To compute F-Test, preparation of ANOVA Table**

Source of Variations	Sum of squares	d.f. (Degree of Freedom)	Mean Sum of Square (MSS)	F – Ratio
Between bank or Columns	SSC = 0.02	C – 1 = 2 – 1 = 1	MSC = SSC/C-1 = 0.02/1 = 0.02	F = MSC/MSE = 0.02/0.24 = 0.08
Due to error within Banks	SSE = 1.93	N – C = 10 – 2 = 8	MSE = SSE/N-C = 1.93/8 = 0.24	
Total	SST = 1.95	N – 1 = 9		

**Critical Value for d.f. (1,8) at 5% level of significance is**

Cal F = 0.08

Tabulated F<sub>0.05, (1,8)</sub> = 5.32

**Decision,**

Calculated value of F is less than tabulated value of F at 5% significance. So, H<sub>0</sub> is accepted that is, there is no significance difference between liquidity position or current ratio of NBBL and HBL.

**4.2.2 Hypothesis test for Activity Turnover Position**

**Formulation of H<sub>0</sub> and H<sub>1</sub>**

**Null hypothesis:**

H<sub>0</sub>:  $\mu_1 = \mu_2$  i.e. there is no significance difference between loan and advance to total deposit ratio of NBBL and HBL.

**Alternative hypothesis:**

H<sub>1</sub>:  $\mu_1 \neq \mu_2$  i.e. there is significance difference between loan and advance to total deposit ratio of NBBL and HBL.

Compute the test statistics, F-Test,

$$F = \frac{MSC}{MSE}$$

**Calculation of required items: -**

Let X<sub>1</sub> and X<sub>2</sub> denote the loan and advance to total deposit ratio of NBBL and HBL respectively and calculation items of X<sub>1</sub> and X<sub>2</sub> are as follows: -

Year	X <sub>1</sub>	X <sub>2</sub>	X <sub>1</sub> <sup>2</sup>	X <sub>2</sub> <sup>2</sup>
2004/05	64.23	54.21	4,125.49	2,938.72
2005/06	49.64	59.50	2,464.13	3,540.25
2006/07	46.97	59.22	2,206.18	3,507.01
2007/08	50.15	63.37	2,515.02	4,015.76
2008/09	67.06	73.58	4,497.04	5,414.02
<b>Total</b>	278.05	309.88	15,807.86	19,415.76

Now,

$$\text{Grand total 'T'} = \sum X_1 + \sum X_2 = 278.05 + 309.88 = 587.93$$

$$\text{Total no. of observation (N)} = n_1 + n_2 = 5 + 5 = 10$$

$$\text{Correlation factor (C.F.)} = \frac{T^2}{N} = \frac{(587.93)^2}{10} = \frac{3455661.68}{10} = 34566.17$$

**Sum of squares due to column (SSC)**

$$\begin{aligned} \text{SSC} &= \frac{(x_1)^2}{n_1} + \frac{(x_2)^2}{n_2} - \text{C.F.} \\ &= \frac{(278.05)^2}{5} + \frac{(309.88)^2}{5} - 34566.17 \\ &= 15462.36 + 19205.12 - 34566.17 \\ &= 101.31 \end{aligned}$$

**Sum of squared due to total (SST):**

$$\begin{aligned} \text{SST} &= \sum X_1^2 + \sum X_2^2 - \text{C.F.} \\ &= 15807.86 + 19415.76 - 34566.17 \\ &= 657.45 \end{aligned}$$

**Sum of square due to error (SSE):**

$$\text{SSE} = \text{SST} - \text{SSC}$$

$$= 657.45 - 101.31$$

$$= 556.14$$

**To compute F-Test, preparation of ANOVA Table**

Source of Variations	Sum of squares	d.f. (Degree of Freedom)	Mean Sum of Square (MSS)	F – Ratio
Between bank or Columns	SSC = 101.31	C – 1 = 2 – 1 = 1	MSC = SSC/C-1 = 101.31/1 = 101.31	F = MSC/MSE = 101.31/69.52 = 1.46
Due to error within Banks	SSE = 556.14	N – C = 10 – 2 = 8	MSE = SSE/N-C = 556.14/8 = 69.52	
Total	SST = 657.45	N – 1 = 9		

**Critical Value for d.f. (1,8) at 5% level of significance is**

Cal F = 1.46

Tabulated F<sub>0.05, (1,8)</sub> = 5.32

**Decision,**

Calculated value of F is less than tabulated value of F at 5% significance. So, H<sub>0</sub> is accepted that is, there is no significance difference between activity turnover ratio or loan and advance to total deposit of NBBL and HBL.

**4.2.3 Hypothesis test for Investment by Total Deposit Ratio**

**Formulation of H<sub>0</sub> and H<sub>1</sub>**

**Null hypothesis:**

H<sub>0</sub>:  $\mu_1 = \mu_2$  i.e. there is no significance difference between investment by total deposit ratio of NBBL and HBL

**Alternative hypothesis:**

H<sub>1</sub>:  $\mu_1 \neq \mu_2$  i.e. there is significance difference in investment by total deposit ratio of NBBL and HBL.

Compute the test statistics, F-Test,

$$F = \frac{MSC}{MSE}$$

**Calculation of required items: -**

Let  $X_1$  and  $X_2$  denotes the investment by total deposit ratio of NBBL and HBL respectively and calculation items of  $X_1$  and  $X_2$  are as follows: -

Year	$X_1$	$X_2$	$X_1^2$	$X_2^2$
2004/05	19.89	47.12	395.61	2,220.29
2005/06	20.45	41.10	418.20	1,689.21
2006/07	11.02	39.35	121.44	1,548.42
2007/08	12.77	41.89	163.07	1,754.77
2008/09	22.23	25.12	494.17	631.01
<b>Total</b>	86.36	194.58	1,592.49	7,843.70

Now,

$$\text{Grand total 'T'} = \sum X_1 + \sum X_2 = 86.36 + 194.58 = 280.94$$

$$\text{Total no. of observation (N)} = n_1 + n_2 = 5 + 5 = 10$$

$$\text{Correlation factor (C.F.)} = \frac{T^2}{N} = \frac{(280.94)^2}{10} = \frac{78927.28}{10} = 7892.73$$

**Sum of squares due to column (SSC)**

$$\begin{aligned} \text{SSC} &= \frac{(x_1)^2}{n_1} + \frac{(x_2)^2}{n_2} - \text{C.F.} \\ &= \frac{(86.36)^2}{5} + \frac{(194.58)^2}{5} - 7892.73 \\ &= 1491.61 + 7572.28 - 7892.73 \\ &= 1171.16 \end{aligned}$$

**Sum of squared due to total (SST):**

$$\begin{aligned} \text{SST} &= \sum X_1^2 + \sum X_2^2 - \text{C.F.} \\ &= 1592.49 + 7843.70 - 7892.73 \\ &= 1543.46 \end{aligned}$$

**Sum of square due to error (SSE):**

$$\text{SSE} = \text{SST} - \text{SSC}$$



$$= 1543.46 - 111.16$$

$$= 372.3$$

**To compute F-Test, preparation of ANOVA Table**

Source of Variations	Sum of squares	d.f. (Degree of Freedom)	Mean Sum of Square (MSS)	F – Ratio
Between bank or Columns	SSC = 1171.16	C – 1 = 2 – 1 = 1	MSC = SSC/C-1 = 1171.16/1 = 1171.16	F = MSC/MSE = 1171.16/46.54 = 25.16
Due to error within Banks	SSE = 556.14	N – C = 10 – 2 = 8	MSE = SSE/N-C = 372.3/8 = 46.54	
Total	SST = 1543.46	N – 1 = 9		

**Critical Value for d.f. (1,8) at 5% level of significance is**

Cal F = 25.16

Tabulated F<sub>0.05, (1,8)</sub> = 5.32

**Decision,**

Calculated value of F is greater than tabulated value of F at 5% significance. So, H<sub>1</sub> is accepted that is, there is significance difference in the investment by total deposit ratio of NBBL and HBL.

**4.2.4 Hypothesis test for Capital Structure/Leverage Ratio**

**Formulation of H<sub>0</sub> and H<sub>1</sub>**

**Null hypothesis:**

H<sub>0</sub>:  $\mu_1 = \mu_2$  i.e. there is no significance difference in leverage ratio or debt to Total Asset ratio of NBBL and HBL.

**Alternative hypothesis:**

H<sub>1</sub>:  $\mu_1 \neq \mu_2$  i.e. there is significance difference in leverage ratio of NBBL and HBL.

Compute the test statistics, F-Test,

$$F = \frac{MSC}{MSE}$$

**Calculation of required items: -**

Let  $X_1$  and  $X_2$  denote the leverage ratio (debt to total asset ratio) of NBBL and HBL respectively and calculation items of  $X_1$  and  $X_2$  are as follows:

Year	$X_1$	$X_2$	$X_1^2$	$X_2^2$
2004/05	107.53	91.10	11562.70	8,299.21
2005/06	157.59	90.56	24834.61	8,201.11
2006/07	253.21	91.43	64115.30	8,359.44
2007/08	123.34	91.33	15,212.76	8,341.17
2008/09	90.70	90.39	8,226.49	8,170.35
<b>Total</b>	<b>732.37</b>	<b>454.81</b>	<b>123951.86</b>	<b>41,371.28</b>

Now,

$$\text{Grand total 'T'} = \sum X_1 + \sum X_2 = 732.37 + 454.81 = 1187.18$$

$$\text{Total no. of observation (N)} = n_1 + n_2 = 5 + 5 = 10$$

$$\text{Correlation factor (C.F.)} = \frac{T^2}{N} = \frac{(1187.18)^2}{10} = \frac{1409396.35}{10} = 140939.64$$

**Sum of squares due to column (SSC)**

$$\begin{aligned} \text{SSC} &= \frac{(x_1)^2}{n_1} + \frac{(x_2)^2}{n_2} - \text{C.F.} \\ &= \frac{(732.37)^2}{5} + \frac{(454.81)^2}{5} - 140939.64 \\ &= 107273.16 + 41370.43 - 140939.64 \\ &= 7703.95 \end{aligned}$$

**Sum of squared due to total (SST):**

$$\begin{aligned} \text{SST} &= \sum X_1^2 + \sum X_2^2 - \text{C.F.} \\ &= 123951.86 + 41371.28 - 140939.64 \\ &= 24383.50 \end{aligned}$$

**Sum of square due to error (SSE):**

$$\text{SSE} = \text{SST} - \text{SSC}$$

$$= 24383.50 - 7703.95$$

$$= 16679.55$$

**To compute F-Test, preparation of ANOVA Table**

Source of Variations	Sum of squares	d.f. (Degree of Freedom)	Mean Sum of Square (MSS)	F – Ratio
Between bank or Columns	SSC = 7703.95	C – 1 = 2 – 1 = 1	MSC = SSC/C-1 = 7703.95/1 = 7703.95	F = MSC/MSE = 7703.95/2084.94 = 3.70
Due to error within Banks	SSE = 16679.55	N – C = 10 – 2 = 8	MSE = SSE/N-C = 16679.55/8 = 2084.94	
Total	SST = 24383.50	N – 1 = 9		

**Critical Value for d.f. (1,8) at 5% level of significance is**

$$\text{Cal } F = 3.70$$

$$\text{Tabulated } F_{0.05, (1,8)} = 5.32$$

**Decision,**

Calculated value of F is less than tabulated value of F at 5% significance. So,  $H_0$  is accepted that is, there is no significance difference in leverage ratio or debt to equity ratio of NBBL and HBL.

**4.2.5 Hypothesis test for Profitability Ratio**

**Formulation of  $H_0$  and  $H_1$**

**Null hypothesis:**

$H_0: \mu_1 = \mu_2$  i.e. there is no significance difference in profitability ratio or Net Profit Margin ratio of NBBL and HBL.

**Alternative hypothesis:**

$H_1: \mu_1 \neq \mu_2$  i.e. there is significance difference in profitability ratio of NBBL and HBL.

Compute the test statistics, F-Test,

$$F = \frac{\text{MSC}}{\text{MSE}}$$

**Calculation of required items: -**

Let  $X_1$  and  $X_2$  denote the net profit margin of NBBL and HBL respectively and calculation items of  $X_1$  and  $X_2$  are as follows: -

Year	$X_1$	$X_2$	$X_1^2$	$X_2^2$
2004/05	-140.04	25.72	19,611.20	661.52
2005/06	-253.58	32.78	64,302.82	1,074.53
2006/07	-124.56	35.21	15,515.19	1,239.74
2007/08	27.39	39.56	750.21	1,564.99
2008/09	67.78	37.80	4,594.13	1,428.84
<b>Total</b>	-423.01	171.07	104,773.55	5,969.62

Now,

$$\text{Grand total 'T'} = \sum X_1 + \sum X_2 = -423.01 + 171.07 = -251.94$$

$$\text{Total no. of. observation (N)} = n_1 + n_2 = 5 + 5 = 10$$

$$\text{Correlation factor (C.F.)} = \frac{T^2}{N} = \frac{(-251.94)^2}{10} = \frac{63473.76}{10} = 6347.38$$

**Sum of squares due to column (SSC)**

$$\begin{aligned} \text{SSC} &= \frac{(x_1)^2}{n_1} + \frac{(x_2)^2}{n_2} - \text{C.F.} \\ &= \frac{(-423.01)^2}{5} + \frac{(171.07)^2}{5} - 6347.38 \\ &= 35787.49 + 5852.99 - 6347.38 \\ &= 35293.10 \end{aligned}$$

**Sum of squared due to total (SST):**

$$\begin{aligned} \text{SST} &= \sum X_1^2 + \sum X_2^2 - \text{C.F.} \\ &= 104773.55 + 5969.62 - 6347.38 \\ &= 104395.79 \end{aligned}$$

**Sum of square due to error (SSE):**

$$\begin{aligned}
SSE &= SST - SSC \\
&= 104395.79 - 35293.10 \\
&= 69102.69
\end{aligned}$$

**To compute F-Test, preparation of ANOVA Table**

Source of Variations	Sum of squares	d.f. (Degree of Freedom)	Mean Sum of Square (MSS)	F – Ratio
Between bank or Columns	SSC = 35293.10	C – 1 = 2 – 1 = 1	MSC = SSC/C-1 = 35293.1/1 = 35293.10	F = MSC/MSE = 35293.1/ 8637.84
Due to error within Banks	SSE = 69102.69	N – C = 10 – 2 = 8	MSE = SSE/N-C = 69102.6918/8 = 8637.84	= 4.08
Total	SST = 104395.79	N – 1 = 9		

**Critical Value for d.f. (1,8) at 5% level of significance is**

$$\text{Cal F} = 4.08$$

$$\text{Tabulated } F_{0.05, (1,8)} = 5.32$$

**Decision,**

Calculated value of F is less than tabulated value of F at 5% significance. So,  $H_0$  is accepted that is, there is no significance difference in profitability ratio of NBBL and HBL.

**4.2.6 Hypothesis test for Earning Per Share**

**Formulation of  $H_0$  and  $H_1$**

**Null hypothesis:**

$H_0: \mu_1 = \mu_2$  i.e. there is no significance difference between earning per share of NBBL and HBL.

**Alternative hypothesis:**

$H_1: \mu_1 \neq \mu_2$  i.e. there is significance difference in EPS of NBBL and HBL.

Compute the test statistics, F-Test,

$$F = \frac{MSC}{MSE}$$

### Calculation of required items: -

Let  $X_1$  and  $X_2$  denotes the EPS of NBBL and HBL respectively and calculation items of  $X_1$  and  $X_2$  are as follows: -

Year	$X_1$	$X_2$	$X_1^2$	$X_2^2$
2004/05	-104.10	47.91	10,836.81	2,295.37
2005/06	-249.61	59.24	62,305.15	3,509.38
2006/07	-147.44	60.66	21,738.55	3,679.64
2007/08	80.16	62.74	6,425.63	3,936.31
2008/09	116.01	61.90	13,458.32	3,831.61
<b>Total</b>	<b>-304.98</b>	<b>292.45</b>	<b>114,764.46</b>	<b>17,252.31</b>

Now,

$$\text{Grand total 'T'} = \sum X_1 + \sum X_2 = -304.98 + 292.45 = -12.53$$

$$\text{Total no. of. observation (N)} = n_1 + n_2 = 5 + 5 = 10$$

$$\text{Correlation factor (C.F.)} = \frac{T^2}{N} = \frac{(-12.53)^2}{10} = \frac{157.00}{10} = 15.7$$

**Sum of squares due to column (SSC)**

$$\begin{aligned} \text{SSC} &= \frac{(x_1)^2}{n_1} + \frac{(x_2)^2}{n_2} - \text{C.F.} \\ &= \frac{(-304.98)^2}{5} + \frac{(292.45)^2}{5} - 15.7 \\ &= 18602.56 + 17105.40 - 15.7 \\ &= 35692.26 \end{aligned}$$

**Sum of squared due to total (SST):**

$$\begin{aligned} \text{SST} &= \sum X_1^2 + \sum X_2^2 - \text{C.F.} \\ &= 114764.46 + 17252.31 - 15.7 \\ &= 132001.07 \end{aligned}$$

**Sum of square due to error (SSE):**

$$\begin{aligned} \text{SSE} &= \text{SST} - \text{SSC} \\ &= 132001.07 - 35692.26 \\ &= 96308.81 \end{aligned}$$

**To compute F-Test, preparation of ANOVA Table**

Source of Variations	Sum of squares	d.f. (Degree of Freedom)	Mean Sum of Square (MSS)	F – Ratio
Between bank or Columns	SSC = 35692.26	C – 1 = 2 – 1 = 1	MSC = SSC/C-1 = 35692.26/1 = 35692.26	F = MSC/MSE = 35692.26/ 12038.60
Due to error within Banks	SSE = 96308.81	N – C = 10 – 2 = 8	MSE = SSE/N-C = 96308.81/8 = 12038.60	= 2.96
Total	SST = 132001.07	N – 1 = 9		

**Critical Value for d.f. (1,8) at 5% level of significance is**

Cal F = 2.96

Tabulated F<sub>0.05, (1,8)</sub> = 5.32

**Decision,**

Calculated value of F is less than tabulated value of F at 5% significance. So, H<sub>0</sub> is accepted that is, there is no significance difference in EPS of NBBL and HBL.

**4.3 MAJOR FINDINGS**

**(i) The liquidity position of both the banks reveals that**

- ) The mean ratio of current ratio of both banks is below than the normal standard but NBBL is slightly better than HBL. The average ratio of NBBL is higher than HBL i.e. (1.42>1.36). The C.V. of NBBL is higher than HBL which indicates that NBBL is riskier and there are fluctuations in the ratios of HBL.
- ) The mean ratio of cash and bank balance to total deposit ratio the average ratio of NBBL is higher than HBL. But the variability of the ratios of NBBL is more consistent than that of HBL, it means that both banks have not been adopting constant policy in relations this ratio.

**(ii) The activity ratios of both Banks revealed the following positions**

- ) The mean ratio of loan and advances to total deposit of NBBL is lower than that of HBL (55.61% to 61.98%). It shows that HBL has better utilisation of deposits other than NBBL, where NBBL is utilising in an average of 55.61% of deposit and HBL is utilising in an average of 61.98% of total deposit over the study period.
- ) The mean ratio of investment to total deposit ratio measures the capacity utilisation. The average ratio of HBL is higher than that of NBBL i.e. 38.92% > 17.27% from the above analysis it is clear that NBBL is utilising its deposits more an investment. It has better position in utilising its proportion of deposits.

**(iii) Capital structure ratio of both banks show the following positions**

- ) While comparing total debt to total assets ratio, the average ratio of NBBL is higher than that of HBL i.e. 146.47% > 90.96% from the above analysis, debt to total assets ratio of NBBL is always higher than HBL which implies that NBBL has riskier debt financing position as compared to HBL over the study period.
- ) While comparing the total debt to shareholders equity ratio the average ratio of NBBL is higher than HBL i.e. 10.79% > 10.53%. Total debt to shareholders equity ratio refers that the use of debts by the banks helps to enhance the rate of return of shareholders fund.
- ) The average ratio of NBBL is lower than HBL i.e. 24.14% < 103.88%. Over the study period HBL is utilising

**(iii) Profitability ratios of both the banks shows the following position**

- ) While comparing net profit to total assets ratio, return to networth, return on total deposit ratio is the measurements of efficiency and the search for it provides the degree of success in achieving desired profit.
- ) The average ratio of Interest earned to total assets ratio of NBBL is lower than HBL i.e. 5.34% < 9.16% It means that NBBL has not mobilised its assets into interest generating projects. On the other hand HBL with the highest ratio has been successful in generating more interest by the proper use of its available assets than others.

**(iv) Other Ratios**

- ) The average EPS of NBBL and HBL is Rs. -60.99 and Rs. 58.49 over the study period. It is quite clear that HBL has the highest EPS of Rs. 58.49. It reveals that HBL



has been successful in maintaining the highest value per share price by the proper utilisation of its resources.

- J Table 4.15 shows that HBL is paying dividend over the study period. However, NBBL has been unable to generate profit in this period.
- J The Return on Investment of NBBL and HBL are in fluctuating trend. The average ratio of NBBL is -12.24% over the study period whereas the average ratio of HBL is 4.88%. This shows that, HBL is in better financing position.

#### **(v) Statistical Analysis**

Test of Hypothesis suggested that the liquidity position between NBBL and HBL is not significantly different at 5% level of significance. In the same way, turnover position in respect of loan and advances to total deposit ratio between NBBL and HBL is not significantly different at 5% level of significance. Likewise, leverage position in terms of debt to total assets ratio of NBBL and HBL is not significantly different. Similarly, profitability position in terms of net profit margin and earning per share of NBBL and HBL is not significantly different at 5% level of significance.

# CHAPTER – V

## SUMMARY, CONCLUSION AND RECOMMENDATION

### 5.1 SUMMARY

The economic development of a country cannot be imagined without the development of commerce and industry. The Nepal's forward financial system is dominated by the banking system, where commercial banks are the largest and important constitution. A sound banking system is necessary for the national development. The role of commercial banks in the economic growth of the nation can be estimated to be prominent. The very challenging job of commercial banks is to collect the scattered idle resources from the small savers. Actually commercial banks pool the fund in the sizable volume in order to feed the fund requirement of productive sectors of the economy. Such investments in the productive sector promote trade and industrialization in the country thereby raising the employment opportunity and earning to the labourers and materials suppliers to such industries and traders.

Commercial banks pool together the savings of the community and use the funds productively through prudent investments. The commercial act 2031 defines “a commercial banks as a bank which deals in exchanging currency, accepting deposits, giving loans is involved in commercial activities”.

The present study has been under taken examine and evaluate the financial performance analysis of two JVBs namely NBBL and HBL.

Under this study, the researcher has tried to cover the various aspects of banks covering the period of five years i.e., FY 2004/05 to 2008/09. In the first introductory chapter, the study report has tried to give history and introduction of banking and its relation to the economy, brief profile of the concerned banks, statement of the problem, objective of the study and its limitation. During the research work, the researcher consulted extensive review of various literature books, past thesis, journals and as per requirement, internet materials from relevant websites were also visited. These works are compiled in the second chapter titled “Review of Literature”.

To conduct the research work researcher consulted mainly the secondary sources of data. Then the research work was analyzed by financial tools, such as liquidity ratio, activity turnover ratio, leverage ratio, profitability ratio and other ratio, statistical tools such as mean, standard deviation, coefficient of variation, and F-test (one-way Anova) are followed for this research work in third chapter titled “Research Methodology”.

In the fourth chapter titled “Presentation and Analysis of Data” which was the main body of the research work. The data has been collected and presented in tabular form, bar diagrams, as far as possible are tried to be interpreted in the study report in logical ways, data are then analyzed applying various financial mathematical and statistical tools and major finding of the study have been listed in a systematic manner.

Finally the summary, conclusion and recommendation made by the research are presented in the current chapter titled summary, conclusion and recommendation.

## **5.2 CONCLUSION**

The researcher had analyzed the data by using financial tools like ratio analysis as well as statistical tools like mean, s.d., hypothesis etc.

- The liquidity position of the banks in term of current ratios shows that the ratios of both banks NBBL and HBL are always below the normal standard i.e., 2:1 where as NBBL average ratio is greater than HBL. It shows that the liquidity position in term of current assets to current liabilities of NBBL is better than HBL. So, it is concluded that NBBL is better short term solvency position as compared with HBL. The liquidity position of cash and bank balance to deposit ratio of NBBL is higher than that of HBL (i.e., 16.07% > 6.76% on an average). So, it is concluded that NBBL has sufficient cash and bank balance.
- The activity turnover ratio is used to examine the efficiency with which the firm manages and utilizes its assets. The activity turnover of HBL in terms of loan and advances to total deposit ratio is better than that of NBBL. (i.e., 61.98% > 55.61%). From the analysis, it is concluded that HBL has been successfully utilized their deposits in term of loan and advances for profit generating purpose as compared to NBBL.

- In term of investment to total deposit ratio of HBL has higher average ratio (38.92%) than that of NBBL (17.27%). So, it can be concluded that HBL is successful in utilizing its deposits ratio, HBL seems better than that of NBBL.
- The capital structure position in terms of total debt to shareholder's equity ratio of NBBL is higher than that of HBL. The average of total debt to shareholder's equity ratio implies that NBBL has more risky and aggressive capital structure than HBL. Total debt to total assets ratio implies a bank's success in exploiting debts to be more profitable as well as its riskier capital structure. The average of total debt to total assets ratio of NBBL (146.47%) is higher than HBL (90.96%). Total debt to total assets ratio of NBBL is higher as compared to HBL which implies that total debt of NBBL has riskier debt financing position than that of HBL.
- Profitability ratio is measurement of efficiency. It provides the degree of success in achieving desired profit. Profitability in terms of net profit to total assets ratio, net profit to total deposit, return to net worth, interest earned to total assets and net profit margin ratio. HBL average ratio is always greater than that of NBBL. The reason for this is that, NBBL has incurred loss. NBBL needs to improve his performance for the survival of the organization.
- In terms of ROI the average ratio of NBBL is -12.24% over the study period whereas the average ratio of HBL is 4.88%. This shows that, HBL seems better financing performance.
- In case of NBBL, the EPS is more fluctuated than HBL. The average EPS is -60.99% within the study periods. The EPS of HBL is first decreasing than increasing trend and the average EPS is 58.49%. This shows that, HBL is found better performance in term of EPS than NBBL.
- Test of Hypothesis suggested that the liquidity position between NBBL and HBL is not significantly different at 5% level of significance. In the same way, activity turnover position in respect of loan and advances to total deposit ratio between NBBL and HBL is not significantly different at 5% level of significance and in respect of investment by total deposit ratio between NBBL and HBL is significantly different at 5% level of significance. Likewise, leverage position in term of debt to equity ratio of NBBL and HBL is not significantly different. Similarly, Profitability position in terms of net profit margin and earning per share of NBBL and HBL are not significantly different at 5% level of significance.

### 5.3 RECOMMENDATIONS

Based on the analysis following recommendations can be given in advance to NBBL and HBL banks to overcome weakness and inefficiency and to improve the present financial performance position of them.

- The liquidity position in terms of current ratio of both bank, is below than normal standard. The average ratio of NBBL is higher than HBL. So, HBL should increase current assets
- The overall liquidity position of NBBL is in normal standard and HBL is also trying to gain that position. Since the liquidity position of HBL is not satisfactory level, therefore, the researcher suggests the bank to keep the reasonable amount of liquidity.
- The turnover of the commercial banks is the main factor of income generating activity. From the analysis of turnover of these two banks, HBL has better turnover than NBBL in terms of loan and advances to total deposit ratio and investment to total deposit ratio HBL has better utilization of resources in income generating activities than NBBL. So, it is recommended that NBBL should invest its deposit in profit generating sector.
- The capital structures/leverage position of NBBL and HBL shows that, both banks are highly leveraged. Use of more debt helped to enhance the rate of return on shareholder's fund. However, excessive use of debt may cause solvency of the bank. So, these banks should maintain a proper balance of total debt to shareholder's fund.
- Profitability position of NBBL is in worst condition as the bank is incurring loss here, comparatively, HBL has better profitability position, However, both banks are not in satisfactory level. So, both banks are recommended to utilize the resources more efficiently for profit generating.

## BIBLIOGRAPHY

1. **Agarwal, N.P.**, 1981, *Analysis of Financial Statements*, National Publishing, New Delhi
2. **Bajracharya, Ratna R.**, 2047, *Rastriya Banijya Bank, A Comparative Performance Study*, Rajat Jayanti Smarika, RBB, Kathmandu
3. **Bhusal, Lekh Nath**, 2055, *Nepal Rastra, Bank Annual Report*, Kathmandu Nepal Rastra Bank
4. **Bista, Bhagat**, 2048, *Nepal Ma Aadunik Byabastha*, Indu Chhapakhana, Kupondol, Lalitpur
5. **Chopra, Sunil** 34<sup>th</sup> Anniversary, 2046, *Role of Foreign Banks in Nepal*, NRB Samachar, Kathmandu
6. **Chowdhary, S.B.**, 1978, *Management Accounting*, Kalyani Publishers, New Delhi, India
7. **Chifton, H. Kereps** and **Edward F. Gee**, 1974, *Analysis Financial Statement*, American Banking Association
8. **Deoja, Surendra**, 2001, *A comparative study of the financial performance between Nepal SBI Bank Ltd (NSBIBL) and Nepal Bangladesh Bank Ltd (NBBL)*, An Unpublished Master Thesis Submitted to Central Department of Management, T.U., Kathmandu
9. **Gupta, D.P.**, 1984, *The Banking System. Its role in Export Development, The financing of exports from developing international trade centre*, UNCTAD, GATT
10. **Government, Ministry of Finance**, 1998-99, *Economic Survey, 1998\99*, Kathmandu, Ministry of Finance
11. **Howard, K. Wolf & Prem R. Pant**, 2<sup>nd</sup> Ed., 1999 *A Handbook for Social Science Research & Thesis writing*, P.R.Pant, Kha 1-647, Dillibazaar Kathmandu
12. **J.A. Mackinnon**, and **L.J.E. Trape**, 1948, *Accounts Analysis*, Gee and Company Ltd., London
13. **James C. Horirgon**, 1965, *Some Ampitical Bases of Financial Ratio Analysis* *Accounting Review*, Vol. XL, No.3

14. **Jauch Lawarance & Glueck William F.**, 5<sup>th</sup> Ed., 1988, *Business Policy and Strategic Management*, McGraw Hill Book Company
15. **John J. Hampton**, 1981, *Financial Decision Making*, Prentice Hall of India, New Delhi
16. **Joshi, Archana**, 2002 conducted a study on “A Comparative study on Financial performance of Nepal SBI Bank Limited and Nepal Bangladesh Bank Limited” An Unpublished Master Thesis Submitted to Central Department of Management, T.U., Kathmandu
17. **Joshi, Murari and Sharma, R.**, 52<sup>nd</sup> Issue, 1998, *Joint Venture Banks in Nepal*; Coexisting Out, Prakashan, Lalitpur. The Nepalese Journal of Public Administration
18. **Jouch, Lawrance and Glueck, William, F., Wilton**, 5<sup>th</sup> ed., 1988, *Business Policy and Strategic Management*, McGraw Hill Book Company
19. *Journal of international Trade Center*, UNICTAD/GATT, The finance of export from development countries
20. *Journal of Nepal Rastra Bank*, 1997, Economic Report, Kathmandu
21. **Kennedy, Ralph**, and **Macmillan, Stewart**, 1947, *Financial Statement from Analysis and Interpretation*, Richard, O Irwin/ne, Chicago, 1947
22. **Khan, M.Y., Jain and P.K.** 1990, *Financial Management*, Tara McGraw Hill Publishing Co. Ltd., New Delhi
23. **Kothari, C.R.**, 1989, *Research Methodology Method and Technology*, New Delhi: Eastern Pvt.
24. **Levin, Richard, I and David S. Rubin**, Fifth Ed., 1994, *Statistics for Management*, Prentice Hall India Pvt. Ltd., New Delhi
25. **Littleton**, 1993, *Accounting Evaluation to 1900*, American Institute Publishing Company, New York.
26. **Lowrence D. Scals & Hally Charles W.**, 2<sup>nd</sup> Edition. *Introduction to Financial Management*, McGraw, Hill, Book Company, New York.
27. **M.M. and Goyal, S.N.**, 1977, *Principal of Management Accounting*, Shahitya Bhavan, Agra.

28. **Maigs, W.B. and others**, 1978, *Intermediate Accountancy*, McGraw Hill, New York.
29. **Maleku, Chanda**, 2009, *Financial performance of Nepal Bangladesh Bank Limited and Himalayan Bank Limited* An Unpublished Master Thesis, Submitted to Central Department of Management, T.U., Kathmandu
30. **Maharjan Sunil**, 2006, *Financial performance of commercial banks with respect to Himalayan Bank Limited, Nepal Investment Bank Limited and Everest Bank Limited* An Unpublished Master Thesis Submitted to Central Department of Management, T.U., Kathmandu
31. **National Planning Commission**, 1998, *The Ninth Plan*, Government, Nepal
32. **NRB Bank Samachar**, 2055. *Annually Publication*, Anniversary Publication.
33. **Oli, Jhalak Bdr**, 2002, *A comparative study of the financial performance of Himalayan Bank Limited (HBL), Nepal SBI Bank Limited (NSBIBL) and Nepal Bangladesh Bank (NBBL)* An Unpublished Master Thesis Submitted to Central Department of Management, T.U., Kathmandu
34. **Panday, J.M.**, Sixth Revised Edition, 1993, *Financial Management*, Vikash Publishing House Pvt. Ltd.
35. **Pant, Y.P.**, 1970, *Problem of Fiscal and Monetary Policy: A Case Study of Nepal*, Sahayogi Prakashan, Kathmandu
36. **Pant. Y.P.** 1971, *Banking & Economic Development*, Nepal Rastra Bank, Kathmandu
37. **Parajul, Prakash Chandra**, 1998, *A Comparative Study on the Financial Performance of Joint Venture Banks in Nepal*, An Unpublished Master Thesis Submitted to Central Department of Management, T.U., Kathmandu
38. **Pradhan, Radhe Shyam**, 1986, *Public Corporation of Nepal, A study of Financial Ratios*, National Book Organisation, New Delhi
39. **S. Winton Korn and Thomas Boyd**, 1969, *Accounting for management Planning and Decision Making*, John wiley and Sons, Inc. New York.
40. **Sharma, Murari, R.**, 352<sup>nd</sup> Issue, 1988, *Joint Venture Banks in Nepal Co-existing or Crowing Out*, Prashan, Nepal Government
41. **Shrestha, B.P.**, 1974, *An Introduction to Nepalese Economy*, Ratna Pustak Bhandar



42. **Shrestha, M.K.**, 2047, *Commercial Bank Comparative Performance Evaluation*, Karmachari Sanchaya Kosh, Kathmandu
43. **Upadhyaya, G.B.** and **Tiwari, N.R.**, 1982, *Principle of Money and Banking in Nepal*, Ratna Pustak Bhandar.
44. **Upreti Pramod**, 2007, *A Comparative study of financial performance of commercial banks with reference to Nepal Investment Bank, Himalayan Bank, Standard Chartered Bank and Everest Bank*, An Unpublished Master Thesis Submitted to Central Department of Management, T.U., Kathmandu
45. **Van Horne James C.**, 1976, *Financial Management Policy*, Prentice Hall of India Pvt. Ltd., New Delhi
46. **Webster's** 8<sup>th</sup> Edition, 1975, *New Collegiate Dictionary*, Sping Field, Mass G. & C. Merrian
47. **Weston, J. Fred** and **Bringham, F. Eugene**, 7<sup>th</sup> Ed., 1981, *Managerial Finance*. The Dryden Press, Hinsdale Illinois
48. **Yadav, Bijay Kumar**, 2009, *A comparative study on the financial performance of Commercial Banks of Nepal (with reference to Standard Chartered, NABIL and Nepal Investment Bank)* An Unpublished Master Thesis Submitted to Central Department of Management, T.U., Kathmandu

### Appendix 1

Let  $X_1$  and  $X_2$  denote the ratio of NBBL and HBL respectively

#### Current Ratios

Year	$X_1$	$X_2$	$(X_1 - \bar{X}_1)^2$	$(X_2 - \bar{X}_2)^2$
2004/05	1.06	1.20	0.13	0.03
2005/06	1.00	1.45	0.18	0.01
2006/07	0.98	1.41	0.19	0.00
2007/08	2.48	1.73	1.12	0.14
2008/09	1.60	1.02	0.03	0.12
<b>Total</b>	7.12	6.81	1.65	0.3

$$\bar{X}_1 = \frac{7.12}{5} = 1.42$$

$$\bar{X}_2 = \frac{6.81}{5} = 1.36$$

$$SD = \sqrt{\frac{\sum(X_i - \bar{X})^2}{N-1}} = \sqrt{\frac{1.65}{4}} = 0.64$$

$$C.V. = \frac{\sigma}{\bar{X}} \times 100 = \frac{0.64}{1.42} = 45.07$$

$$SD = \sqrt{\frac{0.3}{4}} = 0.27$$

$$C.V. = \frac{0.27}{1.36} = 19.85$$

## Appendix -2

### Cash and Bank Balance to Total Deposit Ratio

Year	$X_1$	$X_2$	$(X_1 - \bar{X}_1)^2$	$(X_2 - \bar{X}_2)^2$
2004/05	11.56	8.12	20.34	1.85
2005/06	13.02	6.48	9.30	0.08
2006/07	12.40	5.85	13.47	0.75
2007/08	17.67	4.55	2.56	4.88
2008/09	25.72	8.79	93.12	4.12
<b>Total</b>	80.37	33.79	138.79	11.68

$$\bar{X}_1 = \frac{80.37}{5} = 16.07$$

$$\bar{X}_2 = \frac{33.79}{5} = 6.76$$

$$SD = \sqrt{\frac{\sum(X_1 - \bar{X}_1)^2}{N-1}} = \sqrt{\frac{138.79}{4}} = 5.89$$

$$SD = \sqrt{\frac{11.68}{4}} = 1.71$$

$$C.V. = \frac{\sigma}{\bar{X}} \times 100 = \frac{5.89}{16.07} = 36.65$$

$$C.V. = \frac{1.71}{6.76} = 25.30$$

### Appendix -3

#### Loan and Advance to Total Deposit Ratio

Year	X <sub>1</sub>	X <sub>2</sub>	(X <sub>1</sub> - $\bar{X}_1$ ) <sup>2</sup>	(X <sub>2</sub> - $\bar{X}_2$ ) <sup>2</sup>
2004/05	64.23	54.21	74.30	60.37
2005/06	49.64	59.50	35.64	6.15
2006/07	46.97	59.22	74.65	7.62
2007/08	50.15	63.37	29.81	1.93
2008/09	67.06	73.58	131.10	134.56
<b>Total</b>	278.05	309.88	345.50	210.63

$$\bar{X}_1 = \frac{278.05}{5} = 55.61$$

$$\bar{X}_2 = \frac{309.88}{5} = 61.98$$

$$SD = \sqrt{\frac{\sum(X_1 - \bar{X}_1)^2}{N-1}} = \sqrt{\frac{345.5}{4}} = 9.29$$

$$SD = \sqrt{\frac{210.63}{4}} = 7.26$$

$$C.V. = \frac{\sigma}{\bar{X}} \times 100 = \frac{9.29}{55.61} = 16.71$$

$$C.V. = \frac{7.26}{61.98} = 11.71$$

## Appendix -4

### Investment to Total Deposit Ratio

Year	$X_1$	$X_2$	$(X_1 - \bar{X}_1)^2$	$(X_2 - \bar{X}_2)^2$
2004/05	19.89	47.12	6.86	67.24
2005/06	20.45	41.10	10.11	4.75
2006/07	11.02	39.35	39.06	0.18
2007/08	12.77	41.89	20.25	8.82
2008/09	22.23	25.12	24.60	190.44
<b>Total</b>	86.36	194.58	100.88	271.43

$$\bar{X}_1 = \frac{86.36}{5} = 17.27$$

$$\bar{X}_2 = \frac{194.58}{5} = 38.92$$

$$SD = \sqrt{\frac{\sum(X_1 - \bar{X}_1)^2}{N-1}} = \sqrt{\frac{100.88}{4}} = 5.02$$

$$SD = \sqrt{\frac{271.43}{4}} = 8.24$$

$$C.V. = \frac{\sigma}{\bar{X}} \times 100 = \frac{5.02}{17.27} = 29.07$$

$$C.V. = \frac{8.24}{38.92} = 21.17$$

## Appendix -5

### Total Debt to Total Assets Ratio

Year	X <sub>1</sub>	X <sub>2</sub>	(X <sub>1</sub> - $\bar{X}_1$ ) <sup>2</sup>	(X <sub>2</sub> - $\bar{X}_2$ ) <sup>2</sup>
2004/05	107.53	91.10	1516.32	0.02
2005/06	157.59	90.56	123.65	0.16
2006/07	253.21	91.43	11393.43	0.22
2007/08	123.34	91.33	534.99	0.14
2008/09	90.70	90.39	3110.29	0.32
<b>Total</b>	732.37	454.81	16678.68	0.86

$$\bar{X}_1 = \frac{732.37}{5} = 146.47$$

$$\bar{X}_2 = \frac{454.81}{5} = 90.96$$

$$SD = \sqrt{\frac{\sum(X_1 - \bar{X}_1)^2}{N-1}} = \sqrt{\frac{1678.88}{4}} = 64.57$$

$$SD = \sqrt{\frac{0.86}{4}} = 0.46$$

$$C.V. = \frac{\sigma}{\bar{X}} \times 100 = \frac{64.57}{146.47} = 44.08$$

$$C.V. = \frac{0.46}{90.96} = 0.51$$

## Appendix -6

### Total Debt to Total Equity Ratio

Year	$X_1$	$X_2$	$(X_1 - \bar{X}_1)^2$	$(X_2 - \bar{X}_2)^2$
2004/05	12.41	10.24	2.62	0.08
2005/06	12.71	9.60	3.69	0.86
2006/07	13.78	10.66	8.94	0.02
2007/08	5.29	10.53	30.25	0.00
2008/09	9.76	11.60	1.06	1.14
<b>Total</b>	53.95	52.63	46.56	2.10

$$\bar{X}_1 = \frac{53.95}{5} = 10.79$$

$$\bar{X}_2 = \frac{52.63}{5} = 10.53$$

$$SD = \sqrt{\frac{\sum(X_1 - \bar{X}_1)^2}{N-1}} = \sqrt{\frac{46.56}{4}} = 3.41$$

$$SD = \sqrt{\frac{2.10}{4}} = 0.72$$

$$C.V. = \frac{\sigma}{\bar{X}} \times 100 = \frac{3.41}{10.79} = 31.60$$

$$C.V. = \frac{0.72}{10.53} = 6.84$$

## Appendix -7

### Interest Coverage Ratio

Year	X <sub>1</sub>	X <sub>2</sub>	(X <sub>1</sub> - $\bar{X}_1$ ) <sup>2</sup>	(X <sub>2</sub> - $\bar{X}_2$ ) <sup>2</sup>
2004/05	-118.54	92.98	20357.58	118.81
2005/06	-331.37	103.63	126387.36	0.063
2006/07	-202.99	93.48	51588.04	108.16
2007/08	191.45	115.19	27992.64	127.92
2008/09	582.16	114.10	311386.32	104.45
<b>Total</b>	120.71	519.38	537711.94	459.403

$$\bar{X}_1 = \frac{120.71}{5} = 24.14$$

$$\bar{X}_2 = \frac{519.38}{5} = 103.88$$

$$SD = \sqrt{\frac{\sum(X_1 - \bar{X}_1)^2}{N-1}} = \sqrt{\frac{537711.94}{4}} = 366.64$$

$$SD = \sqrt{\frac{459.403}{4}} = 10.72$$

$$C.V. = \frac{\sigma}{\bar{X}} \times 100 = \frac{366.64}{24.14} = 15.18$$

$$C.V. = \frac{10.72}{103.88} = 10.32$$



## Appendix -8

### Net Profit to Total Assets Ratio

Year	$X_1$	$X_2$	$(X_1 - \bar{X}_1)^2$	$(X_2 - \bar{X}_2)^2$
2004/05	-4.96	1.07	8.12	0.20
2005/06	-15.35	1.50	175.30	0.00
2006/07	-14.63	1.43	156.75	0.01
2007/08	6.35	1.73	71.57	0.04
2008/09	18.04	1.88	406.02	0.13
<b>Total</b>	-10.55	7.61	817.76	0.38

$$\bar{X}_1 = \frac{-10.55}{5} = -2.11$$

$$\bar{X}_2 = \frac{7.61}{5} = 1.52$$

$$SD = \sqrt{\frac{\sum(X_1 - \bar{X}_1)^2}{N-1}} = \sqrt{\frac{817.76}{4}} = 14.29$$

$$SD = \sqrt{\frac{0.38}{4}} = 0.31$$

$$C.V. = \frac{\sigma}{\bar{X}} \times 100 = \frac{14.29}{-2.11} = -677.25$$

$$C.V. = \frac{0.31}{1.52} = 20.39$$

## Appendix –9

### Return to Net Worth Ratio

Year	X <sub>1</sub>	X <sub>2</sub>	(X <sub>1</sub> - $\bar{X}_1$ ) <sup>2</sup>	(X <sub>2</sub> - $\bar{X}_2$ ) <sup>2</sup>
2004/05	-57.21	12.00	3591.60	46.24
2005/06	-70.80	15.85	5405.19	8.70
2006/07	-79.66	16.72	6786.46	4.33
2007/08	27.22	25.30	600.25	42.25
2008/09	194.03	24.13	36599.52	28.41
<b>Total</b>	13.58	94.00	52983.02	129.93

$$\bar{X}_1 = \frac{13.58}{5} = 2.72$$

$$\bar{X}_2 = \frac{94.00}{5} = 18.8$$

$$SD = \sqrt{\frac{\sum(X_1 - \bar{X}_1)^2}{N-1}} = \sqrt{\frac{52983.02}{4}} = 115.09$$

$$SD = \sqrt{\frac{129.93}{4}} = 5.70$$

$$C.V. = \frac{\sigma}{\bar{X}} \times 100 = \frac{115.09}{2.72} = 42.31$$

$$C.V. = \frac{5.70}{18.8} = 30.32$$

## Appendix -10

### Return on Total Deposit Ratio

Year	X <sub>1</sub>	X <sub>2</sub>	(X <sub>1</sub> - $\bar{X}_1$ ) <sup>2</sup>	(X <sub>2</sub> - $\bar{X}_2$ ) <sup>2</sup>
2004/05	-6.18	1.24	28.41	0.27
2005/06	-13.81	1.73	167.96	0.00
2006/07	-11.31	1.64	109.41	0.01
2007/08	5.48	2.00	40.07	0.06
2008/09	21.59	2.17	503.55	0.17
<b>Total</b>	-4.23	8.78	849.4	0.51

$$\bar{X}_1 = \frac{-4.23}{5} = -0.85$$

$$\bar{X}_2 = \frac{8.78}{5} = 1.76$$

$$SD = \sqrt{\frac{\sum(X_1 - \bar{X}_1)^2}{N-1}} = \sqrt{\frac{849.4}{4}} = 14.57$$

$$SD = \sqrt{\frac{0.51}{4}} = 0.36$$

$$C.V. = \frac{\sigma}{\bar{X}} \times 100 = \frac{14.57}{-0.85} = -17.14$$

$$C.V. = \frac{0.36}{1.76} = 20.45$$

## Appendix -11

### Interest Earned to Total Asset Ratio

Year	X <sub>1</sub>	X <sub>2</sub>	(X <sub>1</sub> - $\bar{X}_1$ ) <sup>2</sup>	(X <sub>2</sub> - $\bar{X}_2$ ) <sup>2</sup>
2004/05	5.01	5.80	0.11	11.29
2005/06	5.32	6.47	0.00	7.24
2006/07	5.17	13.54	0.03	19.18
2007/08	5.33	8.82	0.00	0.12
2008/09	5.85	11.18	0.26	4.08
<b>Total</b>	26.68	45.81	0.4	41.91

$$\bar{X}_1 = \frac{26.68}{5} = 5.34$$

$$\bar{X}_2 = \frac{45.81}{5} = 9.16$$

$$SD = \sqrt{\frac{\sum(X_1 - \bar{X}_1)^2}{N-1}} = \sqrt{\frac{0.4}{4}} = 0.32$$

$$SD = \sqrt{\frac{41.91}{4}} = 3.24$$

$$C.V. = \frac{\sigma}{\bar{X}} \times 100 = \frac{0.32}{5.34} = 6.00$$

$$C.V. = \frac{3.24}{9.16} = 35.37$$

## Appendix -12

### Net Profit Margin Ratio

Year	X <sub>1</sub>	X <sub>2</sub>	(X <sub>1</sub> - $\bar{X}_1$ ) <sup>2</sup>	(X <sub>2</sub> - $\bar{X}_2$ ) <sup>2</sup>
2004/05	-140.04	25.72	3073.59	72.08
2005/06	-253.58	32.78	28554.24	2.04
2006/07	-124.56	35.21	1596.80	1
2007/08	27.39	39.56	12541.76	28.62
2008/09	67.78	37.80	23219.66	12.89
<b>Total</b>	-423.01	171.07	68986.05	116.63

$$\bar{X}_1 = \frac{-423.01}{5} = -84.60$$

$$\bar{X}_2 = \frac{171.07}{5} = 34.21$$

$$SD = \sqrt{\frac{\sum(X_1 - \bar{X}_1)^2}{N-1}} = \sqrt{\frac{68986.05}{4}} = 131.33$$

$$SD = \sqrt{\frac{116.63}{4}} = 5.40$$

$$C.V. = \frac{\sigma}{\bar{X}} \times 100 = \frac{131.33}{-84.60} = -155.24$$

$$C.V. = \frac{5.40}{34.21} = 15.78$$

## Appendix -13

### Return on Investment

Year	X <sub>1</sub>	X <sub>2</sub>	(X <sub>1</sub> - $\bar{X}_1$ ) <sup>2</sup>	(X <sub>2</sub> - $\bar{X}_2$ ) <sup>2</sup>
2004/05	-31.08	2.64	354.95	5.02
2005/06	-67.52	4.20	3055.88	0.46
2006/07	-102.61	4.16	8166.74	0.52
2007/08	42.92	4.77	3042.63	0.01
2008/09	97.11	8.64	11957.42	14.14
<b>Total</b>	-61.18	24.41	26577.62	20.15

$$\bar{X}_1 = \frac{-61.18}{5} = -12.24$$

$$\bar{X}_2 = \frac{24.41}{5} = 4.88$$

$$SD = \sqrt{\frac{\sum(X_1 - \bar{X}_1)^2}{N-1}} = \sqrt{\frac{26577.62}{4}} = 81.51$$

$$SD = \sqrt{\frac{20.15}{4}} = 2.24$$

$$C.V. = \frac{\sigma}{\bar{X}} \times 100 = \frac{81.51}{-12.24} = -665.93$$

$$C.V. = \frac{2.24}{4.88} = 45.90$$