

CHAPTER I

INTRODUCTION

1.1 Background of the Study

Banking system occupies an important role in the economic development of a country. A banking institution is indispensable in a modern society. It plays a pivotal role in the economic development of a country and focus the core of the money market in an advance country. The basic function of the bank is to collect deposits as much as possible from customers and mobilize it into the most preferable and profitable sector like industry, commerce, agriculture, entertainment etc.

Like other countries, Goldsmiths, merchants and moneylenders were the ancient bankers of Nepal. Tejarath Adda established during the tenure of the Prime Minister Ranoddip Singh (B.S. 1993) was the first step towards the institutional development of banking in Nepal. Tejarath Adda did not collect deposits from the public but gave loans to employees and public against the bullion. But the concept of modern banking institution in Nepal was introduced when the first commercial bank, Nepal Bank Limited (NBL) was established in 1994 B.S. under Nepal Bank Act 1993 B.S. Being a commercial bank, it was natural that NBL paid more attention to profit generating business and preferred opening branches at urban areas.

Nepal Rastra Bank (NRB) was set up in 2013 B.S. as a central bank under NRB Act 2012 B.S. Since then it has been functioning as the government's bank and has contributed to the growth of financial sector. After this, government set up Rastriya Banijya Bank (RBB) in B.S. 2022 as a fully government owned commercial bank. As the name suggests, commercial banks are to carry out commercial transaction only but due to rising market in the country, they had to carry out the function of all type of financials institutions. Hence, Industrial Development Center (IDC) was set up in 2013 B.S. in order to focus more on

industrial development. In 2016, IDC was converted to Nepal Industrial Development Corporation (NIDC). Similarly, Agricultural Development Bank (ADB) was established in B.S. 2024 to provide finance for agricultural products so that agricultural productivity could be enhance by introducing modern agriculture techniques.

The commercial bank have been established gradually after the commercial bank act 2013 B.S. With the passage of time so many commercial banks have been established gradually because of the liberal and market friendly economic policy of Nepal Government. The banking activities are getting very much dynamic as well as complex.

Entrepreneurs were interested in setting of new bank including branches of foreign banks due to higher return on investment. However, current political and economic scenario of the country coupled with new prudential norms of Nepal Rastra Bank and stiff competition may make the entrepreneurs give a second thought to the idea of establishing banks.

1.1.1 Focus of Study

Himalayan Bank Limited (HBL)

Himalayan Bank was established in 1993 in joint venture with Habib Bank Limited of Pakistan, one of the largest commercial bank of Pakistan. It is the sixth commercial bank of 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 - Loans and Deposits. Besides, commercial activities, bank also offers industrial and merchant banking facilities. The authorized capital of the bank has been Rs. 2000 million. Similarly, the paid up and issued capital of the bank has been Rs. 1013.51.

(Source: <http://www.nepalstock.com/companydetail.php?StockSymbol=HBL#>)

With the highest deposit base and loan portfolio amongst private sector banks, HBL holds of a vision to become a leading bank of the country, ensuring attractive and substantial returns to the stakeholders of the bank. The bank's mission is to become preferred provider of quality financial services in the country. However, the total deposits in the banking sector were Rs 291,245mio during the fiscal year 2005/06. Similarly, the loans and advances in the banking sector reached Rs.227,735 during the same period. There are two components in the mission of the Bank;

Preferred Provider and Quality Financial Services; therefore HBL believe that the mission will be accomplished only by satisfying these two important components with the Customer at focus. The Bank always strives positioning itself in the hearts and minds of the customers.

| Share Ownership | Percentage |
|--------------------------------|-------------------|
| Nepal Government | 0 |
| Foreign Institution | 20 |
| A' Class Licensed Institutions | 0 |
| Other Licensed Institutions | 14 |
| Other Entities | 51 |
| Individuals | 0 |
| Others | 0 |
| General Public | 15 |
| | 100 |

(Source: Annual report HBL 16 July, 2007)

1.1.2 Nepal Bangladesh Bank Limited (NBBL)

NBBL is a joint venture bank, which was established in 2051/02/23 under the Company Act 2042 B.S. in Nepal. NBBL is a joint venture bank with International Finance Investment and Commerce Bank Limited (IFIC) of Bangladesh. The authorized capital of bank has been Rs. 1500 million, issued capital Rs. 1000 million and paid up capital Rs. 744.13 million.

(Source: <http://www.nbbl.com.np/financial.php>)

The prime objective of this bank is to render banking services to the different sectors like industries, traders, businessmen, priority sector, small entrepreneurs and weaker section of the society and every other people who need Banking Services. During the period of 10 years of its operation, it has accommodated a large number of clients and has been able to provide excellent services to its clients. With a network of 17 branches, the bank commands the largest network among the joint venture commercial banks in Nepal.

| Share Ownership | Percentage |
|------------------------|-------------------|
| Foreign ownership | 50.00 |
| General public | 30.00 |
| Financial Institution | 1.25 |
| Organized Institution | 4.92 |
| Others | 13.83 |
| Total | 100.00 |

(Source: Annual report NBBL 16 July, 2007)

1.2 Statement of the Problem

Establishment of Joint Venture banks only in urban areas, like Kathmandu, Pokhara, Birgung, Hetauda, Biratnagar, etc. has raised certain questions. This application is not able to contribute the socio - economic development of the country where around 80% people live in rural and 79% of the population depends on agriculture. These banks should expand their operation in rural areas. NRB, as the central bank has ruled that joint venture banks should invest 10% of their total investment in the rural areas. These banks are inclined to pay fines rather than investing their resources to such less profitable sector.

The main objective of the bank is to collect deposits and provide loans into the most profitable and preferable sector. The present study basically focused on the financial performance of HBL and NBBL. In Nepal many banks and financial companies have opened up within a short span of time. Although joint venture banks seem to have perform better than local commercial banks, they have been facing a bottleneck competition against one another. Therefore, it is necessary to analyze the profitability position of HBL and NBBL. Thus the present study seeks to explore the efficiency and comparative financial performance of HBL and NBBL.

In Nepal, the profitability rate, operating expenses and dividend distribution rate among the shareholders has been found different in the financial performance of the two joint venture banks in different period of time. The problem of the study will ultimately find out the

reasons about difference in financial performance. A study of financial performance of the banks would be highly beneficial for pointing out their strength and weakness. Although joint venture banks are considered efficient in their performance, it is important to know how far are they efficient? This question does emerge in banking sector. At present we have twenty-five commercial banks. In spite of rapid growth, some indicators show performance is not much encouraging towards the service coverage. In such a situation the study tries to analyze the present performance of banks, which would give the answers of following queries.

- a) What are the comparative liquidity, profitability, activity and leverage ratio among HBL and NBBL banks?
- b) Satisfaction of the depositors, investors, shareholders with the efficiency of the banks.
- c) Are the trends of different ratios of these banks satisfactory?

1.3 Objective of the Study

The main objectives of the study is to evaluate and analysis the financial performance of these two joint venture banks i.e. HBL and NBBL and to recommend the suitable suggestion for improvement.

- a) To analyse and compare the financial strengths and weakness of the sample financial institution.
- b) To determine the financial performance through the use of appropriate financial and statistical tools.
- c) To evaluate its financial position.
- d) To suggest the financial performance and to provide the recommendation on HBL and NBBL

1.4 Need of the Study

This study has focus only on the study of financial performance between HBL and NBBL. This study of financial performance analysis gives insight into the relative financial

condition and performance of these two banks. This will provide guideline for improving its performance to achieve the banks overall objectives. Similarly, this study helps the banks to identify its hidden weakness regarding financial administration. This study has following signification: -

- a) This study explains the shareholders about the financial performance of their respective banks.
- b) 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 plan and programs.

1.5 Significance of the Study

Commercial bank plays a crucial role in the development of an economy. Especially in Nepal, where the manufacturing sector has not grown very well, the need for good financial system is must. On the other hand, the world economy seems to be slowing down. With this alarming global recession popping up in the world economy, there is high chance that Nepalese economy can be badly affected by this slowdown. The slowdown in the economic segments has a definite impact on the banking sector too. Further, globalization and accession to WTO, South Asia Free Trade Area (SAFTA) and BIMSTEC membership has invited more challenges as well as opportunities. Branches of foreign companies will be allowed insurance services and wholesale banking after January 1, 2010.

In this situation, the commercial banks should be more competitive. They should become financially strong and must shape their plans and strategies accordingly. Hence, this study tried to analyze and indicate the overall financial health of these joint venture banks of whether they are capable to compete the challenges and grab to opportunities or not.

So, the study basically covered the commercial banks falling in the same strategic group to be more meaningful. No single measure can tell much. Thus, a case study was conducted based on two big joint venture banks. The study may be more fruitful and rationale to their stakeholders at present situation.

1.6 Limitation of the Study

The following are the limitation of the present study: -

- a) This study is limited to the comparative study of financial performance of two joint venture banks HBL and NBBL.
- b) This study is based on secondary data.
- c) This study has analyzed and evaluated of data to the latest five years period i.e. since 2002 to 2007
- d) This study follows with specific tools: - such as ratio analysis, mean, C.V., hypothesis etc.

1.7 Organization of the Study

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

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 & Pant “The purpose of the reviewing the literature is to develop some expertise in One’s area, to see what new contribution can be made and to review some idea for Developing research design”. (Pant and Wolf; 1996:31-44). This portion has been divided into two parts: -

- a. Conceptual Framework
- b. Review of Related Studies

2.1 Conceptual Framework

The modern financial evaluation has greatly affected the role and importance of financial performance. Nowadays finance is best characterized as ever changing with new ideas and techniques. Only efficient manager of the company can achieve the set up goals. If a bank does not maintain adequate equity capital, it makes the bank more risky. If a bank has inadequate equity capital, it must use more debt that has high fixed cost. So any firm must have adequate equity capital in their capital structure.

The main objective of the bank is to collect deposits and to provide loan into the most profitable sector. If a bank fails to utilize it’s collected resources than it can not generate revenue. Resource mobilization management of bank includes resource collection, investment portfolio, loans and advances, working capital, fixed assets management etc. It measures the extent to which bank is successful to utilize its resources. To measure the bank performance in many aspects, we should analyze its financial indicator with the help of financial statements.

Financial analysis is the process of identifying the financial strength and weakness of the concerned bank. It is the process of finding detail accounting information given in the financial statement. It is performed to determine the liquidity, solvency, efficiency and profitability position of an organization. The function or the performance of finance can be broken down into three major decisions i.e. the investment decision, the financing decision, and the dividend decisions. An optional combination of the three decisions will maximize the value of the firm.

2.1.1 Banking: An Introduction

The Lexis “Banking” is a derivative of terminology “Bank”. Bank itself is an organizational engaged in any or all the various functions of banking viz. receiving, collecting, transferring, paying, lending, investing, dealing exchanging and servicing (safe deposit, trusteeship, agency, custodianship) money and claims to money both domestically and internationally. This is a broad concept under which different types of bank includes. There are several popular modalities of banking. It may differ country to country. Commercial banking is one of them. (Prashikshan, 2006, NRB). Banking and Financial Institutions are also the transmission channels of monetary policy, it is important for the effective monetary policy management to ensure that their financial health is sound and overall financial sector is stable.

2.1.2 Development of Banking System in Nepal

Nepal's first commercial bank, the Nepal Bank Limited, was established in 1937. The government owned 51 percent of the shares in the bank and controlled its operations to a large extent. Nepal Bank Limited was headquartered in Kathmandu and had branches in other parts of the country.

There were other government banking institutions. Rastriya Banijya Bank (National Commercial Bank), a state-owned commercial bank, was established in 1966. The Land Reform Savings Corporation was established in 1966 to deal with finances related to land reforms.

There were two other specialized financial institutions. Nepal Industrial Development Corporation, a state-owned development finance organization headquartered in Kathmandu, was established in 1959 with United States assistance to offer financial and technical assistance to private industry. Although the government invested in the corporation, representatives from the private business sector also sat on the board of directors. The Co-operative Bank, which became the Agricultural Development Bank in 1967, was the main source of financing for small agribusinesses and cooperatives. Almost 75 percent of the bank was state-owned; 21 percent was owned by the Nepal Rastra Bank, and 5 percent by cooperatives and private individuals. The Agricultural Development Bank also served as the government's implementing agency for small farmers' group development projects assisted by the Asian Development Bank (see Glossary) and financed by the United Nations Development Programme. The Ministry of Finance reported in 1990 that the Agricultural Development Bank, which is vested with the leading role in agricultural loan investment, had granted loans to only 9 percent of the total number of farming families since 1965. Since the 1960s, both commercial and specialized banks have expanded. More businesses and households had better access to the credit market although the credit market had not expanded.

In the mid-1980s, three foreign commercial banks opened branches in Nepal. The Nepal Arab Bank was co-owned by the Emirates Bank International Limited (Dubai), the Nepalese government, and the Nepalese public. The Nepal Indosuez Bank was jointly owned by the French Banque Indosuez, Rastriya Banijya Bank, Rastriya Beema Sansthan (National Insurance Corporation), and the Nepalese public. Nepal Grindlays Bank was co-owned by a British firm called Grindlays Bank, local financial interests, and the Nepalese public.

Nepal Rastra Bank was created in 1956 as the central bank. Its function was to supervise commercial banks and to guide the basic monetary policy of the nation. Its major aims were to regulate the issue of paper money; secure countrywide circulation of Nepalese currency and achieve stability in its exchange rates; mobilize capital for economic development and for trade and industry growth; develop the banking system in the country, thereby ensuring the existence of banking facilities; and maintain the economic interests of

the general public. Nepal Rastra Bank also was to oversee foreign exchange rates and foreign exchange reserves.

There is a significant growth in the number of banks in Nepal in the last two decades. At the beginning of the 1980s when the financial sector was not liberalized, there were only two commercial banks. During 1980s, there were only few banks. After the liberalization in the 1990s, financial sector has made a progress both in term of the number of banks and financial institutions and their branches. As on Mid July 2008, the number of commercial banks is 25 based on the applications for establishment of new banks as well as for the up-gradation of other financial institution, the number is likely to grow in the near future as well.

Table 2.1

| Type of Financial institution | Mid July 2008 | | | | | | | | |
|-------------------------------|---------------|------|------|------|------|------|------|------|------|
| | 1980 | 1985 | 1990 | 1995 | 2000 | 2005 | 2006 | 2007 | 2008 |
| Commercial Banks | 2 | 3 | 5 | 10 | 13 | 17 | 18 | 20 | 25 |
| Development Banks | 2 | 2 | 2 | 3 | 7 | 26 | 28 | 38 | 58 |
| Finance Companies | 0 | 0 | 0 | 21 | 45 | 60 | 70 | 74 | 78 |
| | 0 | 0 | 0 | 4 | 7 | 11 | 11 | 12 | 12 |
| Total | 4 | 5 | 7 | 38 | 72 | 114 | 127 | 144 | 173 |

(Source: - Nepal Rastra Bank)

Banking system occupies an important role in the economic development of a country. A banking institution is indispensable in a modern society. It plays a pivotal role in the economic development of a country and focus the core of the money market in an advance country. The pivotal function of the bank is to collect deposits as much as possible from customers and mobilize it into the most preferable and profitable sector like industry, commerce, agriculture, entertainment etc.

2.1.3 Concept and Definition of Commercial Bank

Commercial banking is also known as business banking. After the Great Depression, the U.S. Congress required that banks only engage in banking activities, whereas investment banks were limited to capital market activities. As the two no longer have to be under separate ownership under U.S. law, some use the term "commercial bank" to refer to a bank or a division of a bank primarily dealing with deposits and loans from corporations or large businesses. In some other jurisdictions, the strict separation of investment and commercial banking never applied. Commercial banking may also be seen as distinct from retail banking, which involves the provision of financial services direct to consumers. Many banks offer both commercial and retail banking services.

An institution which accepts deposits, makes business loans, and offers related services. Commercial banks also allow for a variety of deposit accounts, such as checking, savings, and time deposit. These institutions are run to make a profit and owned by a group of individuals, yet some may be members of the Federal Reserve System. While commercial banks offer services to individuals, they are primarily concerned with receiving deposits and lending to businesses.

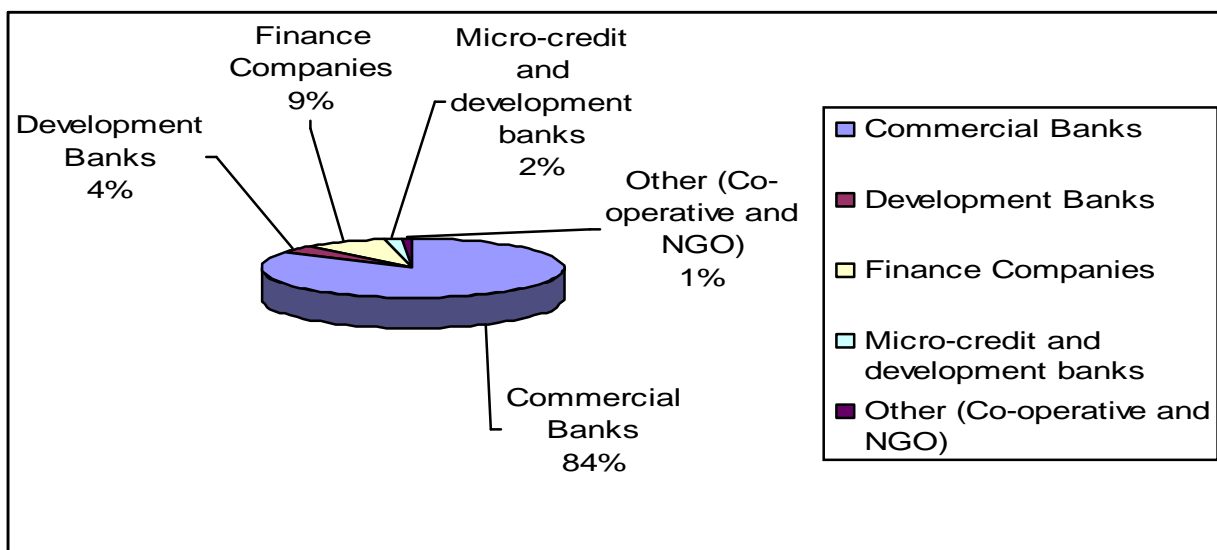
The Nepalese organized financial sector is composed of banking sector and non-banking sector. Besides commercial banks, there are sizeable numbers of development banks, finance companies, micro-credit development banks, co-operative, NGOs and postal saving offices that undertake limited banking and near banking financial services. Non-bank financial sector comprises saving funds and trusts like Employee Provident Fund, Citizen Investment Trusts, and Mutual fund.

The growth of financial sector in Nepal is much better compared to other sectors in the country. The economic reforms initiated by the Government more than one and half decade ago have changed the landscape of several sectors of the Nepalese economy including the financial sector. Despite the decade's conflict and political insurgency, this sector has continued to grow. Over the past 20 years, Nepal's financial significantly both in terms of business volume as well as size of assets and market has increased. Nepal has a reasonably

diversified financial sector, as evidenced by the number and variety of institutions that play an active role in this sector, relative to Nepal's small and underdeveloped economic base.

Though Nepalese financial sector is reasonably diversified with institutional arrangement of varied nature of financial institutions, commercial banks are the major players in this system and they occupy substantial share in the structure of financial sector. The following table depicts the share of commercial banks out of total financial assets.

Figure 2.1
Share of Total Assets



(Source: - Nepal Rastra Bank)

The banking sector is an important part of the national economy. Banks take deposits, support the payment system and provide the largest source of funds in the market. Safe and sound banking system is of crucial importance for the financial stability and sustainable development. Nepal has a special characteristic of bank dominated financial sector. As the domestic capital and stock markets are in the initial stage of development, the banking sector largely dominates the entire financial sector.

The financial performance of the commercial banks can be categorized on the basis of assets, composition of assets, composition of liabilities, capital, deposit, loans and

advances, non banking assets, investment, earnings, and liquidity. The total assets of the commercial bank increased by 7.67 percent in the year 2006/07 (previous year 13.29%). The increase in the total assets is mainly on account of the increase in the loan portfolio of the banks. The increase was 40.06 billion on the previous year. The loan portfolio of the banks has posted an increase of Rs. 26.18 billion during the period. The assets of the banking industry comprises of various assets, but is dominated by loans, which accounts for almost half of the total assets. Loans and advances comprises major share in the total assets followed by investment and cash and bank balance in that order. The bank's liability consists of various forms of liability, primarily of share capital and reserves, deposits and borrowings. The consolidated capital of the Nepalese banking industry has shown positive trend during the review period. The capital has improved by Rs. 8.10 billion in 2006/07. The total deposit of the banking sector was approximately Rs. 337 billion as on Mid July 2007. The deposits have increased by 15.51 percent in 2006/07 as compared to 29.20 percent in 2005/06. The total loans and advances extended by the banking industry on Mid July, 2007 rose to 232 billion which is an increment of 19.50 %. The total amount of non banking assets on Mid July 2007 was Rs. 2.94 billion, a decrease of Rs. 1.01 billion from the previous year. The total volume of the investment as on Mid July 2007 was Rs. 94.96 billion which is an increment of 3.55 per cent. Total earnings of the banking industry in 2006/07 were Rs. 32.08 billion, which is an increase of Rs. 3.45 billion from the previous year.

Nepal Rastra Bank is committed to strengthen and ensure the stability and soundness of the banking system. In order to achieve the role of protecting the interests of depositors, the department has crafted a number of prudential requirements to be complied with by banking institutions. The prudential requirements advised on banking institutions are designed to limit risk taking to levels that are manageable and that do not place the individual banking institution and the banking system at risk. In addition other prevailing laws, the main legislative framework for supervision function includes: -

-)] Nepal Rastra Bank Act 2002
-)] Bank and Financial Institutions Act, 2006 (Umbrella Act)

-) Company Act 2006
-) Supervision By-laws
-) Directives to commercial banks and financial institutions

NRB has continued to review the relevant legislations and regulations in 2006/07 in order to put in place up-to-date regulatory framework that meets international standards and resolves the issues of the banking industry.

Roles of Commercial Banks

Commercial banks are engaged in the following activities:

-) Processing of payments by way of telegraphic transfer, EFTPOS, internet banking or other means.
-) Issuing bank drafts and bank cheques,
-) Accepting money on term deposit
-) Lending money by way of overdraft, installment loan or otherwise
-) Providing documentary and standby letter of credit, guarantees, performance bonds, securities underwriting commitments and other forms of off balance sheet exposures
-) Safekeeping of documents and other items in safe deposit boxes
-) Currency exchange

2.1.4 Functions of Commercial bank

Normally, commercial bank's function can be categorized into two types: -

- a. Primary function
- b. Secondary function

Primary function

- i. Acceptance of deposit:** - An important function of commercial bank is to attract deposit from the Public. Those people who want to keep their money safe deposit their cash in the bank. Commercial bank accepts deposits from every class and takes

responsibility to repay the deposit in the same currency whenever they are demanded by the depositors. Hence one of the primary functions of commercial bank is acceptance of deposits.

ii. Lending: - Another function of commercial bank is to make loans an advance of deposit received in various forms. Bank apply the accumulated public deposits to productive use by way of loans and advance, overdraft and cash credit against approved security.

iii. Investment: - Now-a-days commercial banks are also involved in the investment activities. Generally investment means long term and mid-term investments.

Secondary Function

Secondary functions are two types: -

A. Agency Service: -

1. Collection and payments of Cheques
2. Standing Instruction
3. Acting as correspondence
4. Collecting of bills- electricity, gas, WASA, telephone etc.
5. Purchase & Sales of stocks/share-act as a banker to issue

B. Miscellaneous or General Services: -

1. Safe Custody
2. Lockers-Trustee
3. Remittance facilities –DD, TT, MT and PO
4. Advisory Services
5. Providing Credit Reports
6. Opening L/C
7. Demand Forex/Travers Cheque only Authorized Dealer branches
8. Compete service in Foreign Trade
9. Other Services: Debit Card, Credit Card, On-Line banking SMS Banking

10. Creation of Credit: a multiplier effect, deposit creates credit and credit creates deposits – derivative deposit.

Beside these activities, commercial bank may perform further tasks; all its activities are guided by its authority for the betterment of the company or for society.

2.2 Review of Related Studies

2.2.1 Review of Journals/ Articles

Finance is a broad field and there are various books written in this subject. The book of M.Y. Khan and P.K. Jain (1990) is considered to be a useful book in the financial management. The modern approach of Khan and Jain views the term financial management in broad sense and provides a conceptual and analytical framework for financial decision making. According to them, “The finance function covers both acquisitions of funds as well as their allocation; hence apart from the issues of acquiring external funds, the main concern of financial management is the efficient and wise allocation of funds to various uses.” The major financial decisions according to Khan and Jain are: -

- J The Investment decision
- J The Financial decision and
- J The Dividend policy decision.

I.M. Pandey (1997), published a book namely, “Financial Management” which defines financial management as that managerial activity that is concerned with the planning and controlling of the firm’s financial resources. I.M. Pandey believes that among the most crucial decision of the firm are those, which relate to finance, and an understanding of the theory of financial management provides the conceptual and analytical insights to make the decisions skill fully.

I.M. Pandey further identifies two kinds of finance functions: -

- (a) Routine and
- (b) Managerial finance functions.

The routine finance function do not require a great managerial ability to carry them out and they are chiefly clerical in nature. Managerial finance functions on the other hand are so called because they require skill full planning Control and execution of financial activities. There are, according to I.M. Pandey four important managerial finance functions: -

-) Investment or long-term assets miss decision.
-) Financing or capital-mix decision.
-) Dividend of profit allocation decision.
-) Liquidity of short-term asset-mix decision.

A summary of what the researcher have reviewed in various books of finance have been highlighted below.

Finance is defined as the acquisition and investment of fund for the purpose of enhancing the value and wealth of an organization. The various finance areas include investments, public finance, corporate finance and financial institutions. The basic function of finance is to manage the firm's balance sheet in most efficient way. The balance sheet reflects how a firm acquired its financing. The main objective of a company is to maximize shareholders' wealth. Market price of company's stock represents its value and this can be maximized by firm's optimum investment, financing and dividend decisions. The capital investment decision is the allocation of the capital to investment proposals whose benefits are to be realized in the future. As the future benefits are not known with certainty, investment proposal necessarily involve risks. Consequently they should be evaluated in relation to their expected return and risk. In the financial decision, the financial manager is concerned with determining the best financing mix or an optimum 'Capital structure'. If a company can change its total valuation by varying its capital structure, an optimal financing would exists, in which market price per share could be maximized.

Another important decision of the firm, according to Van Horne (1994), is its Dividend policy. The decision includes the percentage of earnings paid to stockholders in cash dividends. The dividend payout ratio determines the amount of earnings retained in the

firm and must be evaluated in the light of the objective of maximizing shareholder's wealth. The Financial management involves the solution of the three major decisions altogether. They determine the value of a company to its share holders. The researcher believes that the objective of any firm is to maximize its value, and therefore, the firm should strive for an optimal combination of the three inter-related decisions solved jointly. The main thing is that the financial managers relate each decision to its effect on the valuation of the firm debt and equity resources, and it reflects the disposition of acquired financing among the various asset accounts.

In the word of the researcher, "Financial ratio can be derived from the balance sheet and the income statement. They must be analyzed on a comparative basis. Ratio may also be judged in comparison with those of similar firms in the same line of business and when appropriate, with an industry average and we can look to future progress in this regard."

The major financial functions required for managing the banks balance sheet are summarized below: -

- a. Analysis and planning
- b. Financial structure management &
- c. Asset management

The first function financial analysis and planning is to understand the bank's current financial condition and plan for its future financial requirement in different economic scenarios.

After analyzing the financial needs, the second function is to manage the financial structure of the bank, which can be done by optimizing the use of debt and equity in the capital structure. While deciding about this optimum structure, a financial manager must concentrate in minimization of cost of funds in one hand, and maximization of value of the firm in the other. Moreover financial structure management for a banking sector includes, a

typical treasury function, which is also called funds management this function contributes a significant portion in profits earned by banks.

The final function is the management of asset structure of the bank. Advances of credit and investment in certain portfolios constitute the major portion of the bank's asset. The major financial function related to assets management is to decide for the least risky and most profitable alternatives of investments. This can be conducted by determining returns and risks associated with the loans and advances made by bank. All the above financial decisions or functions as mentioned by different writers are instrumental towards effective handling of financial management. Which includes activities beginning from rising or funds to efficient and effective use of funds no matter either it is a banking or non-banking institution.

B.N. Ahuja (1998), "Financial Performance analysis is a study or relationship among the various financial factor in business a disclosed by a single set of statement and a study of the trend of these fact as shown in a series of statements. By establishing a strategic relationship between the item of a balance sheet and income statements and other operative data, the financial analysis unveils the meaning and signification of such items."

According to R.W. Metcalf and P.H. Tatar (1996), "Financial Performance analysis is a process of evaluating the relationship between components parts of a financial statement to obtain a better understanding of a firm's position and performance."

Similarly, Khan and Jain have defined that (1990), "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."

A study of financial performance is a basic process, which provides information on profitability, liquidity position, earning capacity, efficiency in operation, sources and use of capital, financial achievement and status of the companies. These information will help to

determine the extent of efficiency and effectiveness of the company in respect of deploying financial resources in the profitable manner.

2.2.2 Review of Thesis

Prior to this study, the several researchers have found various studies regarding financial performance of commercial and joint venture banks. In this study, only relevant subject matters are reviewed which are as follows: -

Maharjan, Mandira (2006), performed a research work on “A Study on Financial Performance of NABIL Bank Limited” concluded that the liquidity position of the bank is good enough to meet the short-term obligations. The study shows that the bank is mobilizing its loan and advances adequately. The bank has better mobilization of its saving deposits in loans and advances adequately. The bank has better mobilization of its saving deposits in loan and advances for income generating purpose but it has not nicely mobilized its fixed deposits in loans and advances to generate the income. So it is suggested investing more in loan and advances as well as less in government securities efficiently for generating profit. Interest earned by the bank is inadequate in comparison to the assets. So it has drawn attention of the bank towards the sense of significant EBIT. Since, the net profit of the bank in comparison to the total deposit is relatively low, it focused on earning operational profit wither by increasing their operational efficiency, or by decreasing their operational expenses as far as possible. The bank is also suggested to formulate and implement some sound and effective financial and non financial strategies to meet required level of profitability as well as the social responsibility.

Joshi, Jitendra Man (2004), has conducted study on “Financial Analysis of Nepalese Commercial Banks” with the objectives of finding the comparative financial strengths and weakness of various commercial banks, return rate and expected return to the shareholders, systematic and unsystematic risk of the banks and providing recommendation on the basis if research findings, by using financial ratios, it is calculated that lending condition of banks are in decreasing trend. Banks in strong condition are holding good customers and discouraging low rated and less amounted loans. Instead of that, they are initiated towards

remittance, bank guarantees and other commission generating activities, while other banks are showing aggressive and are spontaneously increasing loan loss provision. Deposits in the banks are also decreasing while some banks are holding enough funds. Its recommended for SCBNL was utilizing the maximum of the outsider's funds towards the credit sector because return on credit sector is higher than on investment sector. Loan loss provision of SCBNL is comparatively higher. It is recommended to control while sanctioning loan outflows. So, the bank should improve its credit management.

A study conducted by Luitel, Nabin Kishor (2003) on, "A Study on Financial Performance Analysis of Nepal Bank Limited" reveals that, since NBL has not maintained a balanced ratio among its deposit liabilities during the second period with the first period, the bank seems to be unable to utilize its high cost resources in high yielding investment portfolio. During both the periods there are negative operating profit for two years however, the company enjoyed the net profit due to the non-operational activities from first period of both years. Hence, there is a demarcation between operational and non-operational activities of the bank and performance and result of the first period shows that the bank is more inclined towards non-operating activities. Furthermore, the liquidity position of the bank is also not satisfactory during both periods. It is even worse during the second period as various current ratios have fluctuated during these periods and it shows lack of specific policy of holding various types of current assets. Thus it can be said that the financial position of the NBL is worse during the second period due to its inefficiency in risk management. Yet, the overall financial position of the bank is unsatisfactory during both periods.

Shrestha, Birendra (2003) conducted a study on, "A Comparative Analysis of Financial Performance of the Selected Joint Venture Banks" has set the following objectives: -

-) To examine the comparative financial strengths and weakness of the selected JVBs.
-) To highlight various aspects relating to financial performance of the JVBs. For last five years.

The major findings of the study were as follows: -

Analysis of liquidity ratio indicates better quality position of the NB bank. Although liquidity position of NBL and NABIL are lower, they are still able to meet their current obligation. Analysis of leverage or capital structure ratio indicates that long-term debt to net worth ratio of NB bank is the highest and NABIL is the lowest. JVB's are extremely leveraged. Total debt to net worth and total asset ratio of HBL is the highest and that if NAVUK has relatively lower leverage.

Return on investment, interest earned to total assets ratio and commission and discount earned to personnel expenses ratio of NB bank is higher than NABIL and HBL, while return on shareholder's equity is higher in HBL and interest income to interest expense ratio is high in NABIL bank.

The valuation ratios used for analysis showed the following results. The PE ratio and DPR of NABIL bank is the highest and HBL is the second highest, while the MVPS to BVPS ratio of HBL is the highest and NB is the lowest. Operating profit is higher than that of HBL and NB bank. NABIL's operating profit is 42.62% of its operating income, HBL is 33.51% and NB bank is 33.86 % only.

Joshi, Keshav Raj (2003) in thesis "A study on financial performance of commercial banks" concludes that "Liquidity position of commercial banks is sound. Their debt to equity ratio is high which doubts on solvency. Debt to equity ratio of local commercial banks is higher than other joint venture banks. Assets utilization for earning purpose is 2/3 of the total assets. The main source of income for these banks is interest from loan and advance of overall profitability position, is better than others."

Joshi, Archana (2002) conducted a study on "A Comparative Study on Financial Performance of Nepal SBI bank Ltd & Nepal Bangladesh bank Ltd." with the following objectives.

- J To highlight various aspects of relating to financial performance of Nepal Bangladesh bank and Nepal SBI bank.
- J To analyze various aspects of relating to financial performance through the use of appropriate financial tools.
- J To show the cause of change in cash position of the two banks.

Through her research she has presented the following findings of the study: -

The analysis of liquidity of these commercial banks shows different position here; the average current ratio of NSBI is greater than that of NBBL. Therefore, the liquidity position of SBI is in normal position.

The turnover of the commercial banks is the main indication of income generating activities. These ratios are used to judge how efficiently the firm is using its resources. From the analysis of turnover of these banks, NBBL has better turnover than NSBI in terms of loans and advances to total deposit ratio. Thus, NBBL has better utilization of resources income generating activities than NSBI bank; which definitely lead to increase in income and this making an increment profit for the organization. Despite the fluctuating trend in the ratio of cash and bank balance to total deposit NSBI bank is more efficient than NBBL in cash management i.e., it is more able to keep more cash balance against its various deposits.

The analysis of profitability of these two commercial banks is also different. The overall calculation seems to be better for NBBL though certain ratios like dividend per share, dividend payout ratios etc are better for NSBI bank. From the calculation, NBBL seems to tackle their investors more efficiently.

Going through net profit to total deposit ratio, it can be said that NBBL seems to be more successful in mobilizing its customers saving in much more productive sectors. NBBL has slightly riskier debt financing position in comparison to NSBI bank.

Poudel, Ashok (2002), thesis entitled “Financial Performance Analysis of EBL” has focused on the objectives as to examine the financial statement of the bank and analyze them to see the financial soundness of the bank to observe the return over the equity to highlight the relationship between variables, to provide suggestions and recommendation for the improvement of the future performance of EBL based on the findings of the analysis. It is found that the liquidity position of the bank to meet the daily cash requirement is sound. There is strong position regarding the mobilization of total deposit on loan and advances, normal position and decreasing trend of regarding the mobilization of total deposit as investment and bank has average position towards the utilization of working fund. Analysis of EPS reveals that the bank has very good increasing trend regarding EPS even though first two years showed negative figure. The trend analysis of deposit, net profit, loan and advances and EPS shows the increasing trend even though the value shows in the beginning of study period.

Subedi, Narayan Prasad (2002), “A Comparative Study of Financial Performance between HBL and EBL” concluded that the current ratio of EBL is greater than that of HBL. The variability of the ratios of HBL is more uniform than that of EBL. The liquidity of bank may be affected by external and external factors such as interest rates, supply and demand position of loans and saving to total deposit considerably lower than that of EBL. Comparatively HBL’s profitability position is better than that of EBL. Profitability ratios like return on total assets, return on total deposits are not satisfactory in both banks. HBL has lower capital adequacy ratio in comparison to directive issued by NRB. HBL’s loan and advances to total deposit ratio are significantly lower than that of EBL.

A thesis conducted by Oli, Jhalak Bdr. (2002) entitled, “A comparative study of financial performance of HBL, NSBIBL and NBBL” concludes that the liquidity position of two JVBs i.e. NSBIBL and NBBL are always above than non standard and HBL is always below than normal 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 utilized their total deposits in terms of extending loan and advances for profit generating purpose on compared to NSBIBL and HBL. But

NSBIBL is also better than HBL. It has concluded that net profit to total assets ratio in case of HBL is found better performance by utilizing overall resources but the generated profit is found lower for the overall resources in three JVBs.”

Udas, Shyam Kumar (2001), conducted research on “A Comparative appraisal on Financial Performance of Nepal Bangladesh Bank Limited and Bank of Kathmandu Limited”, found that both banks are maintaining sufficient amount of cash to meet the demand by their depositors. BOK has higher portion of cash and bank balance out of its current assets than NB bank. Similarly, profitability position of NB bank is quite better than BOK. Both banks are highly leveraged even though BOK is higher than NB bank. The earnings per share of NB bank is higher than BOK.

Deoja, Surendra (2001) in “A comparative study of the financial performance between Nepal SBI Bank Ltd. and Nepal Bangladesh Bank Ltd.” analyzed different ratio of NSBI and NBBL for the period of five years till fiscal year 2000. Here, in some cases the liquidity position of NBBL is higher where as in some cases the ratio of NSBIBL is higher. It concludes that liquidity position of these two banks is sound. NBBL has better utilization of resource in income generating activity than NSBIBL. They are on 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.”

A research study made by Dhungana, Pramod (2001) on the “A study of joint venture bank’s profitability” has analyzed the profitability ratio of the joint venture banks i.e. NEBL, NABIL and NGBL. The research conducted that all JV Bank’s have been in satisfactory level during the study period exhibiting their better performance and efficiency in utilizing their deposits. However, they are unable to mobilize saving from different parts of the country. Among these three banks, NIBL is earning more interest. The researcher suggests all the JV banks to banks to mobilize saving from different parts of the country. The bank needs to increase their equity base too.”

Shakya, Amogh Siddhi (2000), performed study on “Evaluation of Financial Performance of Himalayan Bank Limited”. The period study was from fiscal year 1995/96 to 1999/00. It tried to examine the overall performance of HBL for five years. The main tools used for analysis purpose was ratio analysis. The report concluded that the liquidity position of the bank was good. The bank had sufficient liquidity to meet unanticipated calls on all deposits. The deposits should be utilized more on productive sectors like government securities and shares of other institutions because idle asset is not good. The analysis of the report showed that the bank had good rate of return though it was not able to keep up generating to have quite stable mixture of debt and equity financing. It is recommended that the bank should try to increase the utilization of assts by provision loans and should mobilize the deposits in order to generate income and thus, earning more profit.

Another thesis performed by Maharjan, Dharma Ratna (1998), “A comparative analysis of financial performance between NBBL and NGBL” analyzed different ratios of NBBL and NGBL for the period of five years till final year 2000, refers that the average ratio of cash and bank balance to deposit ratio of NBBL is considerably greater than that of NGBL and the variability of the ratio of NGBL is more uniform than that of NBBL. The uniformity, in this ratio of NGBL is that it has maintained more money at call which is very helpful to make liquidity position very sound. NGBL is unable to meet normal standard mean. Better utilization of collected fund is significantly high in case of NBBL. Investment of NBBL seems highly riskier than NGBL. Profitable position of NBBL has increasing trend up to fiscal year 1997 where as NGBL shows fluctuation trend. The overall capital position is better in NGBL than that of NBBL.

A thesis conducted by Singh, Shanker Kr. (1997) entitled, “A comparative evaluation of financial performance of Nepal Arab Bank Limited and Nepal Grindlays Bank Limited” reveals that the liquidity position in terms of current ratio of both the bank NABIL and NGBL is below than the normal standards i.e. 2:1. According to the analysis of turnover or activity ratios, NABIL is more successful to utilize the outsider fund for generating profit from the loans and advances. NGBL is more successful to utilize their assets for profit generation. Comparatively, NGBL utilized its assets for income generation. Profitability

ratio of both the banks reveal positive reform during the study period, but the progress is higher in NGBL where as NABIL seems more efficient in utilizing its capital employed in generating interest income. As NABIL has acquired more funds, it has also raised more capital by issuing shares, bonus shares and retained earning.”

Pant, Y. (1996) through his thesis has tried to make attempt to highlight the discrepancy between collection and utilization of resources. It stated that to make the proper utilization of resources, the commercial banks should give importance on long term lending too. He has also stated that D/E ratio is very high in NIDC which leads the corporation very risky. So, it should maintain the appropriate ratio of D/E by increasing the share capital and decreasing the borrowing.

Adhikari, Prabin (1993), thesis, "Evaluating the financial performance of the NBL" noted out that the average growth rate in total deposit was 2.15 times in a period of 10 years (F.Y. 2037/38 to 2046-47 B.S). The same for fixed saving and current deposits were recorded to be 2.19, 2.54 and 7.16 times respectively. The cost of deposit was increased by 2.55 times during the period. He also found that average growth in loan loss provision was higher than the growth in loan loss provision was higher than the growth in loans and advances. The increase in the income from government securities during the period was 6.16 times whereas it was 1.9 times in interest. The average growth in total expenditure was 2.33 times whereas it was 2.55 times in interest expenditure. During the period of study conducted by the researcher, no other aspect was satisfactory but the liquidity positioned. He has also calculated that the bank has been concentrating more on non-banking activities as a result of which there are operating losses suffered by the bank which is two times during the period. He has further recommended carrying out the activities in planned way for better profitability.

CHAPTER-III

RESEARCH METHODOLOGY

The rationale behind the study is to analyze, examine and compute financial performance of HBL and NBBL. Thus, this chapter includes those methods and techniques used for finding out before said objectives.

Research methodology refers to the various segmental steps (along with the rationale of each step) to be adopted by a reporter in studying a problem with certain objectives in a view. It is a way to solve the research problem systematically. It includes the various steps that are generally adopted by a researcher in studying his or her research problem along with the logic behind them. It would be appropriate to mention here that research project is not meaningful to any one unless they are in sequential order which will be determined by the particular problem at hand. This chapter focuses and deals with the following aspects of methodology.

- Research design
- Population and sample
- Sources of data
- Methods of data analysis

3.1 Research Design

Research Design is the plan structure and strategy of investigation conceived to obtain answer to research question.” The basic objective of this study is to evaluate the financial performance of HBL and NBBL. The research design of this study is analytical as well as descriptive approaches to evaluate the financial performance of these banks.

Basically this study is based on secondary data and the past five years data will be used for the finding of objective.

3.2 Population and Sample

Nowadays, a number of commercial banks have emerging rapidly. Some have established and others are in the process of establishment. Here, all the commercial banks are population of the study and HBL and NBBL have been selected as sample for the present study. And only latest five years financial statements are analyzed. The banks are two among the six joint venture banks and due to the availability of data the sample banks are selected.

3.3 Sources of Data

The main sources of data for this study are secondary data. Besides, necessary suggestions are taken form various experts both inside and outside of the banks whenever required.

Other sources of data are: -

- Bulletins and reports
- Annual report of HBL and NBBL
- Discussion with financial officers and experts.

3.4 Methods of Data Analysis

Financial performance is analyzed through the use of two important tools. The first most important tool is the financial tool that includes ratio analysis.

3.4.1 Financial Tools

In this research study, there are various financial tools but only selected ratios are used on the study: -

3.4.1.1 Ratio Analysis

Although there are many financial tools, we have no extensively used ratio analysis method. The suitable process of knowing the financial strength and weakness of the company by properly establishing relationships between the items and the balance sheet and the profit and loss account is “financial performance analysis”. Ratio analysis is a power tool of financial analysis. To achieve an effective result ratio must analyzed in a

comparative basis. “The technique of ratio analysis is a part of the whole process of the analysis of the financial statement of any business or industrial concern especially to take out put and credit decision.”

“In financial analysis, a ratio is used as a bench mark for evaluating the financial position and performance of a firm.”

The following ratios are going to be analyzed under the financial performance analysis of NBBL and HBL.

- a) Liquidity Ratios
- b) Leverage Ratios
- c) Activity (or utilization) Ratios.
- d) Profitability Ratio
- e) Other essential Ratios (i.e. ROI, EPS, DPS, and income and expenditure Analysis)

In brief, the following major ratios are used to analyze the financial performance: -

1. Liquidity Ratio

- a) Current Ratio
- b) Cash and Bank Balance to Deposit Ratio (without fixed deposit)
- c) Cash and Bank Balance to Current Deposit Ratio
- d) Fixed Deposit to Total Deposit

2. Activity Turnover Ratio

- a) Loan and Advance to Total Deposit ratio
- b) Loans and Advance to Fixed Deposit Ratio
- c) Loans and Advance to Saving Deposit Ratio
- d) Investment by Total Deposit Ratio

3. Leverage Ratio

- a) Debt-Equity Ratio
- b) Debt-Assets Ratio

4. Profitability Ratio

- a) Net Profit to Total Assets Ratio
- b) Net profit to Total Deposit Ratio
- c) Return to Net Worth (Share Holder's Equity)
- d) Net Profit Margin

5. Income and expenditure analysis

6. Others Ratios

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

1. Liquidity Ratio: - Liquidity ratio measures the firm's ability to meet current obligations. In fact analysis of liquidity needs for the preparation of cash budgets and cash and funds flow statement but liquidity ratios, by establishing a relationship between cash and other current assets to current obligations, provides quick measure of liquidity. A firm should ensure that it does not suffer from lack of liquidity and also that it does not have excess liquidity.

a) Current Ratio: - The Current ratio is a measure of the firm's short-term solvency. It indicates the availability of current assets in rupees for every one rupee of current liability or 2:1 is normal standard of current ratio. A ratio of greater than one means, that the firm has more current assets than current liabilities.

$$\text{i.e. Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liability}}$$

Current assets include cash and other assets which can be converted into cash within one year i.e. debtors, inventories, account receivable, bills purchased, marketable securities, discount, advances and overdraft and prepaid expenses etc. The current liability is defined as liability which are short-term maturing obligation to be met within

a year i.e. bills payable, banks credit, trade creditors, provision for taxation, dividends payable and outstanding expenses etc.

b) Cash and Bank Balance to Deposit Ratio (without fixed deposits): - This ratio is used to measure whether bank and cash balance is sufficient to cover its current call margin including deposits (excluding fixed deposits). The ratio is calculated as: -

$$\text{CBBDR} = \frac{\text{Cash and Bank Balance}}{\text{Deposits (except fixed deposits)}}$$

c) Cash and Bank Balance to Current Deposit Ratio: - This ratio indicates the ability of banks current fund to cover this current ratio. The failure of a company to meet its obligation due to lack of sufficient liquidity, will result in poor credit worthiness, loss of creditor etc. But a very high degree of liquidity is also bad, idle assets earn nothing.

This ratio is calculated as
$$= \frac{\text{Cash and Bank Balance}}{\text{Current Deposits}}$$

d) Fixed Deposit to Total Deposit Ratio: - Fixed deposits are long term investment. This ratio is calculated as: -

$$\text{Fixed deposit to total deposit ratio} = \frac{\text{Fixed Deposit}}{\text{Total Deposit}}$$

2. Activity Turnover Ratio: - Activity ratios or utilization ratios are employed to measure the efficiency with which the bank manages and utilizes its resources. This ratio is also called efficiency ratio or asset utilization ratio or turnover ratio because they indicate speed with which assets are being converted or turned over into profit generating assets. In this section, some of the activity ratios are calculated to measure the efficiency of assets management of HBL and NBBL, which are as follows: -

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

$$\text{b) Loan and Advance to Fixed Deposit Ratio} = \frac{\text{Loans and Advances}}{\text{Fixed Deposits}}$$

c) **Loan and Advance to Saving Deposits Ratio:** - This ratio assesses, how many times the fund is used to loan and advances against saving deposit. It is calculated as: -

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

d) **Investment by Total Deposits Ratio:** - This ratio basically measures the capacity utilization. This ratio is calculated as

$$\text{Investment by Total Deposit Ratio} = \frac{\text{Total Investment}}{\text{Total Deposits}}$$

3. Leverage Ratio (Capital Structure Ratio): - The Short term creditors are more concerned with the firm's current debt-paying ability. On the other hand, long-term creditors are more concerned with the firm's long-term financial strength. In fact, a firm should have a strong short as well as long-term financial position. To judge the long-term financial position of the firm, financial leverage or capital structure ratios are calculated. The following two ratios are examined under leverage ratio.

a) **Debt-Equity Ratio:** - This relationship describes the lender's contribution for each rupee of the owner's contribution is called Debt-equity ratio. D/E ratio is directly computed by dividing total debt by net worth.

$$\text{D/E Ratio} = \frac{\text{Total Debt}}{\text{Net Worth (Share Holder's Equity)}}$$

Total Debt refers to different between total liabilities and capital and shareholders fund".

b) Debt-Assets Ratio: - This ratio is calculated by dividing total debt by total assets. This is stated as: -

$$\text{D/A Ratio} = \frac{\text{Total Debt}}{\text{Total Assets}}$$

“Total asset refers to Total Assets from balance sheet items.”

4. Profitability Ratio: - Profit is the difference between revenues and expenses over a period of usually one year. Profit is the ultimate output of a company and it will have no future fails to make sufficient profit. Therefore, the financial manager should continuously evaluate the efficiency of the company in terms of profits. The profitability ratio is calculated to measure the operating efficiency of the company.

Profitability ratio can be determined on the basic of either sales or investment. Major profitability ratios are as under: -

a) Net profit to Total Assets Ratio: - This ratio is measured by dividing net profit after tax (NPAT) by total asset. This can be stated as NPAT/ Total Sales.

NPAT indicates with portion of income is left to the internal equities after all costs, expenses have been deducted.

b) Net Profit to Total Deposit Ratio: - This ratio is computed by dividing the net profit by total deposits. It can be stated as follows: -

$$\text{Net profit to Total Deposit ratio} = \frac{\text{Net Profit}}{\text{Total Deposits}}$$

c) Return to Net Worth (Shareholder’s Equity): - Net worth is found out by subtracting the total external liabilities from total assets.

(Total Assets = All assets excluding the intangible assets and accumulated loss).

This ratio is computed by: -

$$\text{Return to Net Worth} = \frac{\text{NPAT}}{\text{Net Worth}}$$

Higher ratio indicates overall efficiency of the firm. For the interest of the company, this ratio determines whether the investments in the firm are attractive or not.

d) Net Profit Margin: - 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.

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

Net profit margin ratio establishes a relationship between net profit and sales and indicates management's efficiency in manufacturing, administering and selling the products. This ratio is the overall measure of the firm's ability to turn each rupee sales into net profit. If the net profit is inadequate, the firm will fail to achieve satisfactory return on shareholder's funds. This ratio also indicates the firm's capacity to withstand adverse economic conditions. A firm with a high net margin ratio would be in an advantageous position to survive in the face of falling selling price, rising cost of production or declining demand for the product. It would really be difficult for a low net margin firm to withstand these adversities.

5. Income and Expenditure Analysis: - In this analysis, we must be concerned with what percentage of operating incomes and expenses that are computed to find out how much percentage of operating income and expenditure are made in these joint venture banks.

6. Other Ratios: -These other ratios are very necessary to study a financial performance of two joint venture banks. The other ratios are as follows: -

a) Return on Investment: - The conventional approach of calculating return on investment is dividing NPAT by investment. It can be stated as: -

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

These are three different concepts regarding investment such as: -

(i) Return on Assets: - ROA deals with the relationship between profit and assets
ROA is computed by dividing NPAT by Total Assets.

(ii) Return on Capital Employed: - ROCE is computed as: -

$$\text{ROCE} = \frac{\text{NPAT}}{\text{Capital Employed}}$$

Capital Employed is equal to net worth plus total debt.

(iii) Return on Shareholders Equities: - ROSE is calculated to see the profitability of owner's investment. The shareholders equity or net worth will include paid-up capital, share premium and reverse and surplus less accumulated loss. The ratio is computed as: -

$$\text{ROSE} = \frac{\text{NPAT}}{\text{Share holders equity}}$$

b) Earning Per Share (EPS): - The EPS is calculated by dividing the profit after tax by the total number of common shares outstanding.

$$\text{EPS} = \frac{\text{Profit after tax}}{\text{No. of common shares outstanding}}$$

EPS calculations made over year indicate whether or not the firms earning power on per-share basis has changed over the period. The EPS of the company should be compared with the industry average and the earning per share of other firms. It does not reflect how much is paid as dividend and how much is retained in the business. But as a profitability index, it is a valuable and widely used ratio.

c) Dividend Per Share (DPS): - DPS is the earning distributed to ordinary shareholders divided by the numbers of ordinary share outstanding.

$$\text{DPS} = \frac{\text{Earning paid to shareholders (dividend)}}{\text{Number of ordinary shares outstanding}}$$

3.4.2 Statistical Tools

The statistical tools related for the comparison of HBL and NBBL are follows: -

3.4.2.1 Arithmetic Mean

Arithmetic mean or simply a ‘mean’ of a set of observation is the sum of all the observations divided by the number of observation.

Arithmetic mean is also known as the arithmetic average. 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: -

$$\bar{x} = \frac{x_1 + x_2 + \dots + x_n}{n}$$

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

3.4.2.2 Standard Deviation (S.D.)

The standard deviation is the absolute measures of dispersion in which the drawbacks present in other measures of dispersion are removed.

Standard deviation is defined as the positive square root of the mean of the square of the deviation taken from the arithmetic mean. It is denoted by

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

Where,

X = Expected return of the historical data.

N = Number of observations.

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

The relative measure of dispersion is the co-efficient of variation, comparable across distribution, which is defined as the ratio of the standard deviation to the mean expressed in percent.

In symbol: -

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

Where,

† = Standard deviation

\bar{X} = Mean value of variances

Coefficient of variance is also useful in comparing the amount of variation in data groups with different mean. It is the relative measure of dispersion. A distribution with smaller coefficient is said to be more homogeneous than the other. On other hand, a series with greater coefficient of variance is said to be more variable of heterogeneous than the other (Gupta, S.C.; 2000:416)

3.4.2.4 Hypothesis Test, F-Test (ANOVA Test)

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

- (i) The population for each sample must be normally distributed with same mean and variance.
- (ii) All sample observations must be randomly related and independent.
- (iii) 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 or 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.

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

- (i) Grand Total (T) = $x_1 + x_2 + \dots + x_n$
- (ii) Total no. of observation (N) = $n_1 + n_2 + \dots + n_n$
- (iii) Correlation factor (C.F.) = $\frac{T^2}{N}$
- (iv) Sum of squares due to column (SSC)

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

(v) Sum of squares due to total (SST): -

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

(vi) Sum of square due to error (SSE): -

$$SSE = SST - SSC$$

(vii) 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 $\alpha = 5\%$ 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 Fo.05 at 5% level of significance, we accept H₀. Otherwise, H₁ is accepted.

CHAPTER – FOUR

DATA PRESENTATION AND ANALYSIS

The basic objective of analyzing the financial performance and interpretation is to highlight the strength and weakness of the business. Therefore, in this chapter, we find out the financial performance of the banks through financial statistical tools i.e. Ratio analysis and Hypothesis (ANOVA- one way) test and mean, s.d. and c.v. Consequently, this analysis help the management take benefit of strategic management technique by providing the information regarding the strengths and weakness of the two JVBs, so as to exploit the opportunities lying in the environment and manage the threats posed by the environment.

4.1 Financial Ratio Analysis

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

4.1.1 Liquidity Ratio: - The liquidity ratio is applied to measure the ability of the banks to meet the short-term obligation. A high liquidity ratio shows the financial strength ness of the firms. A standard liquidity ratio must be 2:1. The ratio analyzed under liquidity ratio is as follows: -

4.1.1.1 Current Ratio: - In this study, current assets includes the cash and bank balance, money at call, bills purchased and discounted, loans , advances and overdraft and investment in Government of Nepal securities and other assets. A current liability includes the short-term borrowings (loan), customer deposit of excluding fixed deposits, bills payable and other liabilities.

The standard current ratio is 2:1. If the ratio is less than 2:1 the solvency position of the bank is not good. If the ratio is more than 2:1, the bank may have an excessive investment

in current assets. So, each bank must maintain an adequate amount of current assets to meet the current obligation.

Calculation of current ratios is as follows: -

$$\text{Current Ratio} = \frac{\text{Current assets (CA)}}{\text{Current Liabilities (CL)}}$$

Cash and Bank Balance to Deposit Ratio

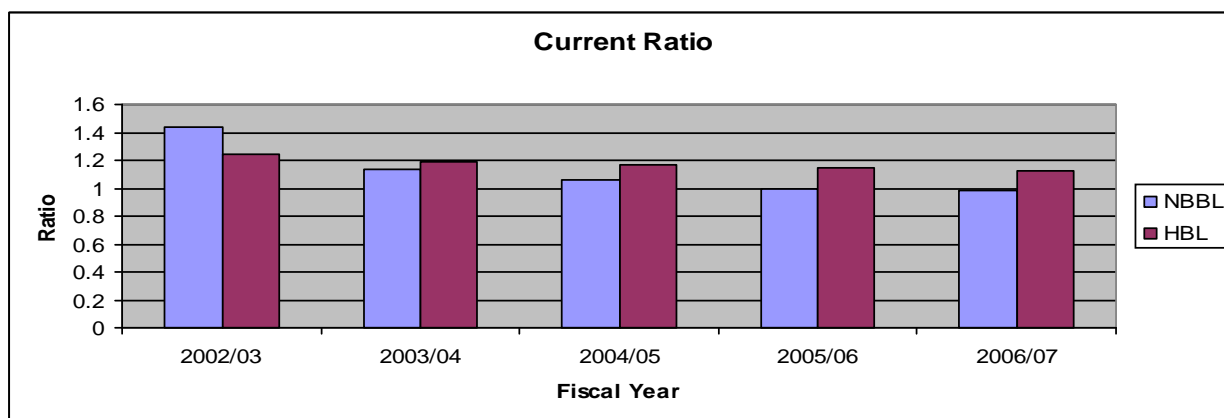
Table-4.1
Current Ratio (in times)

(Rs. in '000)

| F.Y | NBBL | | | HBL | | |
|---------|-------------|----------------|---------------|------------|----------------|---------------|
| | C.A. | C.L. | Ratio | C.A | C.L. | Ratio |
| 2002/03 | 658,974,456 | 456,987,621 | 1.44 | 12,973,908 | 10,459,875 | 1.24 |
| 2003/04 | 715,484,578 | 625,897,562 | 1.14 | 15,289,715 | 12,897,456 | 1.19 |
| 2004/05 | 756,894,584 | 712,456,897 | 1.06 | 15,906,720 | 13,587,965 | 1.17 |
| 2005/06 | 685,974,512 | 684,569,874 | 1.00 | 18,484,609 | 16,127,847 | 1.15 |
| 2006/07 | 658,765,231 | 671,587,954 | 0.98 | 21,261,089 | 18,956,958 | 1.12 |
| | | Average | 1.12 | | Average | 1.17 |
| | | SD | 0.19 | | SD | 0.045 |
| | | C.V. | 16.73% | | C.V. | 3.87 % |

(Source: - Appendix 1)

Chart – 4.1



It is already mentioned that the standard current ratio is 2:1. This table is clearly showing the current ratios of the two banks named NBBL and HBL. The above table shows that the average ratio of last 5 years of NBBL is 1.12 whereas 1.17 of HBL. So, between two banks, the table indicates that both the banks are below than the normal standard but HBL is slightly better than NBBL.

The current assets and current liabilities of NBBL in the FY year 2002/03 is 1.44, whereas in 2006/07 it is 0.98. This shows the decreasing trend of current ratio which means that the bank's obligation to pay its short term liability has deteriorate in these years. The average current ratio has also decreased to 1.12. Similarly, the current assets and current liabilities of HBL in the FY year 2002/03 is 1.24, whereas in 2006/07 it is 1.12. With average ratio of 1.17, the bank's current obligation to pay its short term obligation seems to decrease. Even though the current ratio of both these banks has decreased, HBL seems to be in better position better than NBBL.

On the basis of the coefficient of variation the C.V. of NBBL is higher than HBL (16.73% > 3.87%). This shows that the variability of the ratio is higher in NBBL.

From the above analysis, it is proved that, HBL is better short-term solvency position as compared to NBBL in the fiscal year 2002/2003

4.1.1.2 Cash and Bank Balance to Deposit Ratio (without fixed deposit): - This is computed by dividing cash and bank balance by deposits (except fixed deposits).

$$\text{Cash and bank balance to deposit ratio} = \frac{\text{Cash + Bank Balance}}{\text{Deposits (except fixed)}}$$

A high cash and bank balance refers the greater ability to cover their deposit excluding fixed deposit and vice versa. But very high ratio is disadvantage, as ideal assets earn nothing.

The ratio is as follows: -

Table-4.2

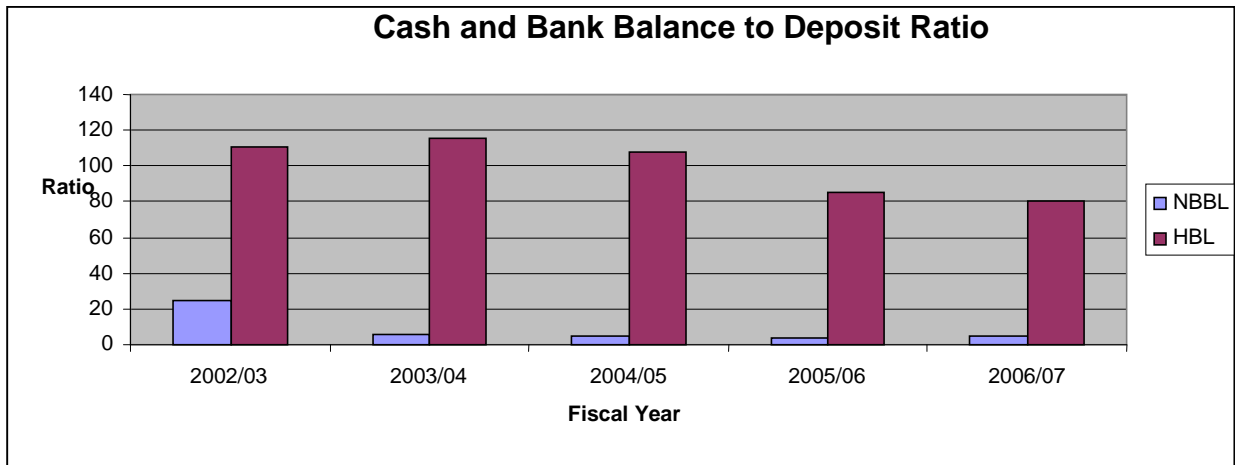
Cash and bank balance to Deposit Ratio (except fixed deposit) in percentage

(Rs. in '000)

| F.Y | NBBL | | | HBL | | |
|---------|-----------------------|----------------|----------------|-----------------------|----------------|---------------|
| | Cash and bank balance | Deposits | Ratio | Cash and bank balance | Deposits | Ratio |
| 2002/03 | 364,617,950 | 1,498,784,671 | 24.33 | 1,979,209 | 1,783,971 | 110.94 |
| 2003/04 | 309,789,847 | 5,559,498,120 | 5.57 | 2,001,184 | 1,730,015 | 115.67 |
| 2004/05 | 352,152,614 | 7,974,079,134 | 4.42 | 2,014,471 | 1,870,658 | 107.68 |
| 2005/06 | 354,456,408 | 10,148,136,110 | 3.49 | 1,717,352 | 2,014,064 | 85.27 |
| 2006/07 | 391,686,544 | 7,807,849,552 | 5.02 | 1,757,341 | 2,184,728 | 80.44 |
| | | Average | 8.57 | | Average | 100.00 |
| | | SD | 8.85 | | SD | 16.00 |
| | | C.V. | 103.22% | | C.V. | 16 % |

(Source: - Appendix 2)

Chart – 4.2



With comparing annually, HBL shows higher ratio in each of the year than NBBL. Holding of more cash and bank balance mean keeping the assets idle. So, from the above analysis,

HBL is holding more idle balance of cash and bank which is one of the main factors for less profit. It is suggested to HBL to use funds in other securities.

The average ratio of NBBL is 8.57%, which is lower than HBL of 100%. And with comparing to average ratio, HBL is more profitable because the liquidity position of HBL is better than that of NBBL.

According to C.V. Ratio, NBBL has higher C.V. (103.22%) where as HBL has lower C.V. (16.00%). This explains that HBL is more preferable than NBBL. NBBL has high risk or the variability of the ratio is lower in HBL than NBBL.

From the above analysis, it is concluded that, the cash and bank balance position with respect to total deposit except fixed deposit, is better performance in the case of HBL than NBBL.

4.1.1.3 Cash and Bank Balance to Current Deposit: - This ratio shows the ability of bank's immediate funds to cover the current deposits.

$$\text{Cash and bank balance to current deposit ratio} = \frac{\text{Cash + Bank balance}}{\text{Current Deposit}}$$

A higher ratio refers the greater capacity to cover this current deposit but a very high ratio is also bad, because idle assets earn nothing.

The computation of this ratio is shown in following table.

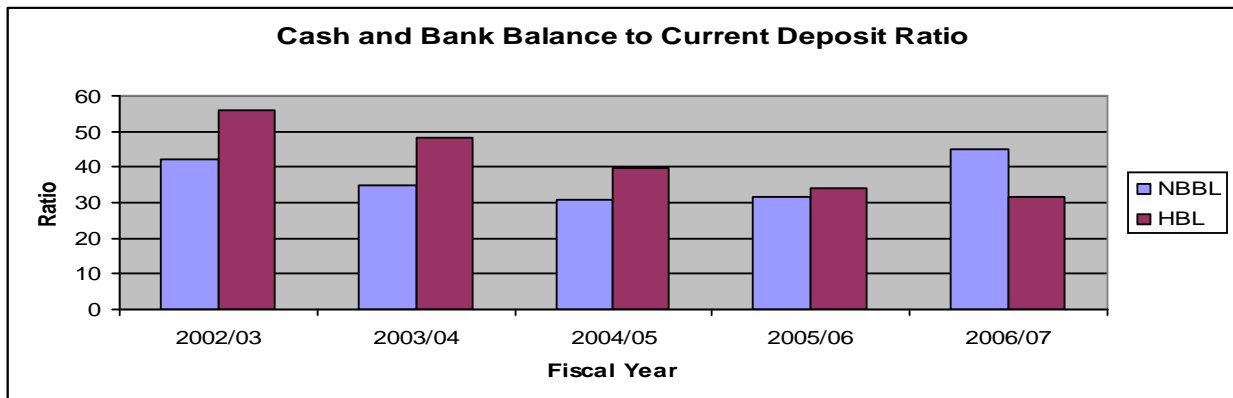
Table-4.3
Cash and Bank Balance to Current Deposit Ratio (in percentage)

(Rs. in '000)

| F.Y | NBBL | | | HBL | | |
|---------|-----------------------|-----------------|---------------|-----------------------|-----------------|----------------|
| | Cash and bank balance | Current deposit | Ratio | Cash and bank balance | Current deposit | Ratio |
| 2002/03 | 364,617,950 | 864,489,240 | 42.18 | 1,979,209 | 3,540,851 | 55.90 |
| 2003/04 | 309,789,847 | 884,242,243 | 35.03 | 2,001,184 | 4,145,447 | 48.27 |
| 2004/05 | 352,152,614 | 1,138,579,542 | 30.93 | 2,014,471 | 5,045,160 | 39.93 |
| 2005/06 | 354,456,408 | 1,117,556,892 | 31.72 | 1,717,352 | 5,028,150 | 34.15 |
| 2006/07 | 391,686,544 | 872,501,287 | 44.89 | 1,757,341 | 5,589,580 | 31.44 |
| | | Average | 36.95 | | Average | 41.94 |
| | | SD | 6.22 | | SD | 10.12 |
| | | C.V. | 16.83% | | C.V. | 24.14 % |

(Source: - Appendix 3)

Chart – 4.3



This table shows the cash and bank balance to current deposit ratio. The highest ratio of NBBL is 44.89% in the fiscal year 2006/07 and lowest ratio is 30.93% in 2004/05 and average ratio is 36.95%. Similarly, the highest ratio of HBL is in the fiscal year 2002/03 where it is 55.90% and lowest in the year 2006/07 of 31.44% and the average ratio is 41.94%. The average ratio of HBL is higher than NBBL i.e. 41.94% >30.93%.

However, a very high ratio indicates the unwise investment decision. This shows that the bank is unable to invest its current deposits in productive or profitable area.

4.1.1.4 Fixed Deposit to Total Deposit Ratio: - Fixed deposits are long term deposits and bank can mobilize it on investment, loan and advances. It is the most important long-term financial resources for a bank. The following table shows the fixed deposit ratio of the two banks.

$$\text{Fixed deposits to total deposits} = \frac{\text{Fixed Deposit}}{\text{Total Deposit}}$$

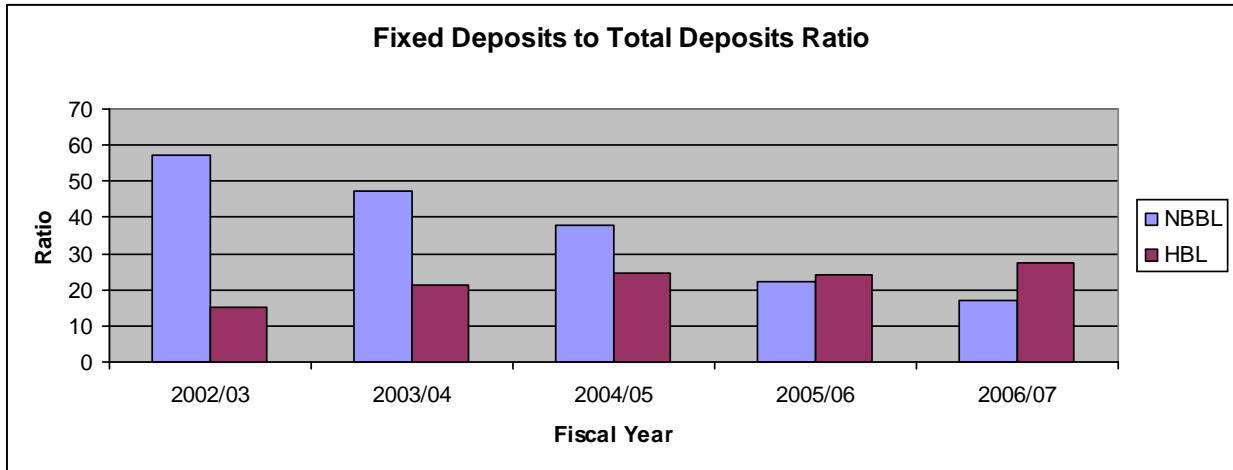
Table-4.4

Fixed Deposit to Total Deposit Ratio (in percentage)

| F.Y | NBBL | | | HBL | | |
|---------|---------------|----------------|---------------|---------------|----------------|---------------|
| | Fixed Deposit | Total Deposit | Ratio | Fixed Deposit | Total Deposit | Ratio |
| 2002/03 | 5,453,626,762 | 9,534,219,948 | 57.20 | 3,205,372,779 | 21,045,086,740 | 15.23 |
| 2003/04 | 5,031,582,970 | 10,591,081,091 | 47.51 | 4,710,176,693 | 22,010,332,984 | 21.40 |
| 2004/05 | 4,833,297,186 | 12,807,376,325 | 37.74 | 6,107,430,801 | 24,814,011,984 | 24.61 |
| 2005/06 | 2,867,568,215 | 13,015,136,113 | 22.03 | 6,350,202,266 | 26,490,851,640 | 23.97 |
| 2006/07 | 1,578,254,789 | 9,385,949,552 | 16.82 | 8,201,134,697 | 30,048,417,756 | 27.29 |
| | | Average | 36.26 | | Average | 22.50 |
| | | SD | 16.94 | | SD | 4.57 |
| | | C.V. | 46.71% | | C.V. | 20.32% |

(Source: - Appendix 4)

Chart -4.4



According to the above table, the highest ratio of NBBL is 57.20% in 2002/03 and the lowest ratio is 16.82% in fiscal year 2006/07 and on an average of 36.26%. Similarly, the highest ratio of HBL is 27.29% in the fiscal year 2006/07 and lowest is 15.23 in the fiscal year 2002/03 and on an average of 22.50%.

The average ratio of NBBL is higher than HBL. This table shows that NBBL's Liquidity position is better than HBL. The higher proportion of fixed deposits indicates the stronger liquidity position.

4.1.2 Activity Turnover Ratio

This ratio is used to examine the efficiency with which the firm manages and utilizes its assets. The better the management of assets, the larger is the amount utilization of the funds. Some of the activity turnover ratio is as follows: -

4.1.2.1 Loans and Advances to Total Deposit Ratio: - This ratio is employed to measure the utilization of their total deposit on loan and advances. Higher ratio indicates the proper utilization of deposit and lower ratios is the signal of balance remained unutilized.

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

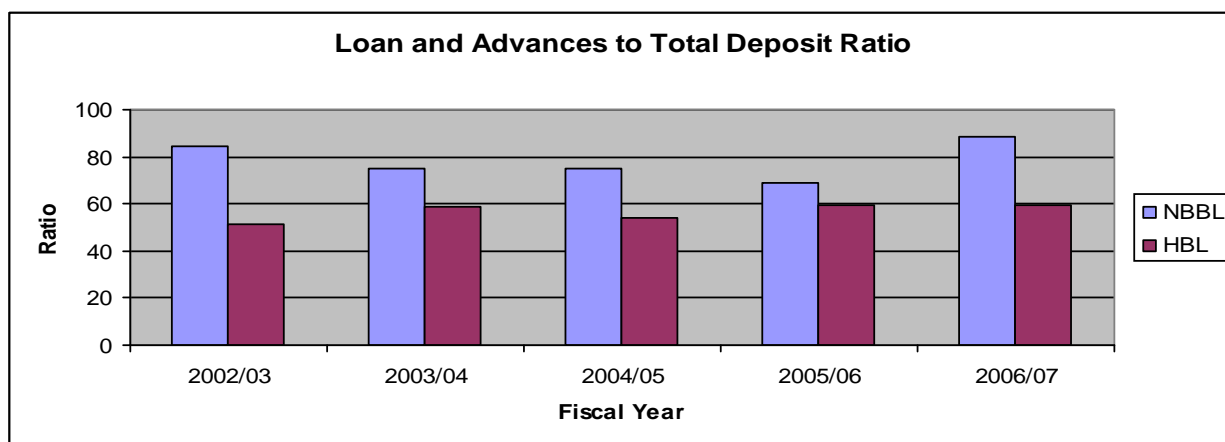
Table-4.5

Loan and Advances to Total Deposit Ratio (in percentage)

| F.Y | NBBL | | | HBL | | |
|---------|-------------------|----------------|--------------|-------------------|----------------|---------------|
| | Loan and Advances | Total Deposit | Ratio | Loan and Advances | Total Deposit | Ratio |
| 2002/03 | 8,083,986,711 | 9,534,219,948 | 84.79 | 10,844,598,988 | 21,045,086,740 | 51.53 |
| 2003/04 | 7,961,511,057 | 10,591,081,091 | 75.17 | 12,919,630,994 | 22,010,332,984 | 58.70 |
| 2004/05 | 9,644,694,741 | 12,807,376,325 | 75.31 | 13,451,168,267 | 24,814,011,984 | 54.21 |
| 2005/06 | 9,010,787,452 | 13,015,136,113 | 69.23 | 15,761,976,082 | 26,490,851,640 | 59.50 |
| 2006/07 | 8,302,846,983 | 9,385,949,552 | 88.46 | 17,793,723,864 | 30,048,417,756 | 59.22 |
| | | Average | 78.59 | | Average | 56.63 |
| | | SD | 7.84 | | SD | 3.57 |
| | | C.V. | 9.98% | | C.V. | 6.31 % |

(Source: - Appendix 5)

Chart – 4.5



This above table shows the loans and advances to total deposit ratio. The lowest ratio of NBBL is 69.23% in the fiscal year 2005/06 and the highest ratio is 88.46% in the year 2006/07 and the average ratio is 78.59%. Similarly, the lowest ratio of HBL is 51.53% in 2002/03 and the highest ratio is 59.50% in the fiscal year 2005/06 and the average ratio is 56.63%. The average ratio of NBBL is higher than that of HBL (78.59% > 56.63%). It shows that NBBL has better utilization of deposits other than HBL, where, NBBL is

utilizing in an average of 78.59% of deposit and HBL is utilizing in an average of only 56.63% of total deposit over the study period.

According to co-efficient of variation, NBBL is more fluctuating than HBL over the study period. The C.V. of NBBL is 9.98% which is higher than HBL which is 6.31%.

4.1.2.2 Loan and Advance to Fixed Deposit Ratio: - This ratio examines that how many times the fund is used in loans and advances against fixed deposits. Bank must be utilized the fixed deposit properly.

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

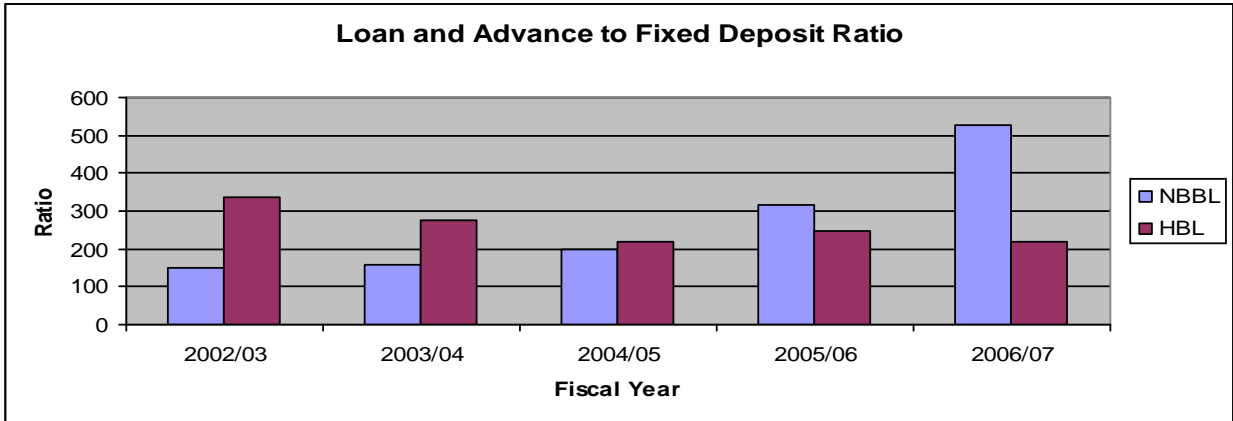
Table-4.6

Loan and Advances to Fixed Deposit Ratio (in percentage)

| F.Y | NBBL | | | HBL | | |
|---------|-------------------|----------------|---------------|-------------------|----------------|----------------|
| | Loan and Advances | Fixed Deposit | Ratio | Loan and Advances | Fixed Deposit | Ratio |
| 2002/03 | 8,083,986,711 | 5,453,626,762 | 148.23 | 10,844,598,988 | 3,205,372,779 | 338.33 |
| 2003/04 | 7,961,511,057 | 5,031,582,970 | 158.23 | 12,919,630,994 | 4,710,176,693 | 274.29 |
| 2004/05 | 9,644,694,741 | 4,833,297,186 | 199.54 | 13,451,168,267 | 6,107,430,801 | 220.24 |
| 2005/06 | 9,010,787,452 | 2,867,568,215 | 314.23 | 15,761,976,082 | 6,350,202,266 | 248.21 |
| 2006/07 | 8,302,846,983 | 1,578,254,789 | 526.08 | 17,793,723,864 | 8,201,134,697 | 216.97 |
| | | Average | 269.26 | | Average | 259.61 |
| | | SD | 157.97 | | SD | 49.78 |
| | | C.V. | 58.67% | | C.V. | 19.17 % |

(Source: - Appendix 6)

Chart- 4.6



This table indicates that, in NBBL the ratio is in increasing trend whereas in HBL it is in decreasing trend except in the year 2005/06. NBBL has highest ratio of 526.08% in the fiscal year 2006/07 and the lowest ratio of 148.23% in the year 2002/03 and on the average of 269.26%. Similarly, on the other hand, the highest ratio of HBL is 338.33% in the fiscal year 2002/03 and the lowest ratio is 216.97% in 2006/07 and on the average of 259.61%.

The average ratio of NBBL is higher than that of HBL i.e. 269.26% > 259.61%. In this analysis, it is concluded that NBBL has proper utilization of fixed assets than HBL because NBBL has higher average ratio than HBL.

4.1.2.3 Loan and Advance to Saving Deposit Ratio: - This ratio assesses how many times the fund is used to loan and advances against saving deposits. It is computed as: -

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

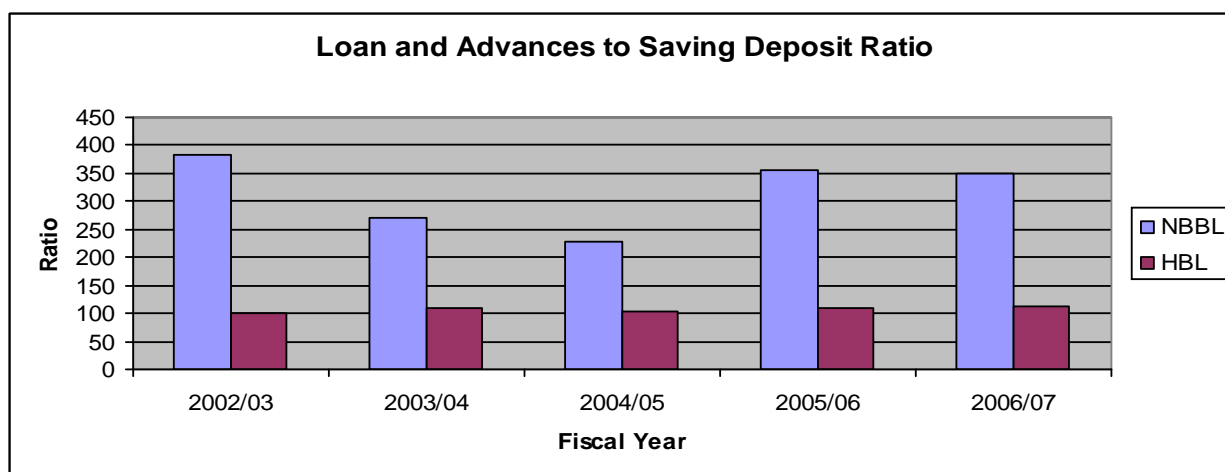
Table-4.7

Loan and Advances to Saving Deposit Ratio (in percentage)

| F.Y | NBBL | | | HBL | | |
|---------|-------------------|----------------|---------------|-------------------|----------------|---------------|
| | Loan and Advances | Saving Deposit | Ratio | Loan and Advances | Saving Deposit | Ratio |
| 2002/03 | 8,083,986,711 | 2,106,651,214 | 383.74 | 10,844,598,988 | 10,870,542,377 | 99.76 |
| 2003/04 | 7,961,511,057 | 2,943,784,900 | 270.45 | 12,919,630,994 | 11,759,602,062 | 109.86 |
| 2004/05 | 9,644,694,741 | 4,245,340,885 | 227.18 | 13,451,168,267 | 12,852,414,902 | 104.66 |
| 2005/06 | 9,010,787,452 | 2,542,156,426 | 354.45 | 15,761,976,082 | 14,582,855,172 | 108.08 |
| 2006/07 | 8,302,846,983 | 2,365,897,452 | 350.94 | 17,793,723,864 | 15,784,769,766 | 112.73 |
| | | Average | 317.35 | | Average | 107.02 |
| | | SD | 65.65 | | SD | 5.00 |
| | | C.V. | 20.69% | | C.V. | 4.68 % |

(Source: - Appendix 7)

Chart – 4.7



The table shows that, both banks ratios are in fluctuating trend. The highest ratio of NBBL is 383.74% in the fiscal year 2002/03 and the lowest ratio is 227.18% in the fiscal year 2004/05. Similarly, the highest ratio of HBL is 112.73% in the last fiscal year 2006/07 and the lowest ratio is 99.76% in the fiscal year 2002/03. The average ratio of NBBL is higher than that of HBL i.e. 317.35% > 107.02%. Over fluctuation ratio of all fiscal year saving deposit is not efficiently utilized to invest in loan and advances due to the over function.

The C.V. of NBBL is higher than that of HBL which is 20.69% > 4.68%. It shows that the ratios are fluctuating more in NBBL than HBL. There is higher variability in ratios of NBBL than HBL.

4.1.2.4 Investment by Total Deposit Ratio: - This ratio measures the capacity utilization. It shows the percentage amount of total deposit on investment. It is computed by: -

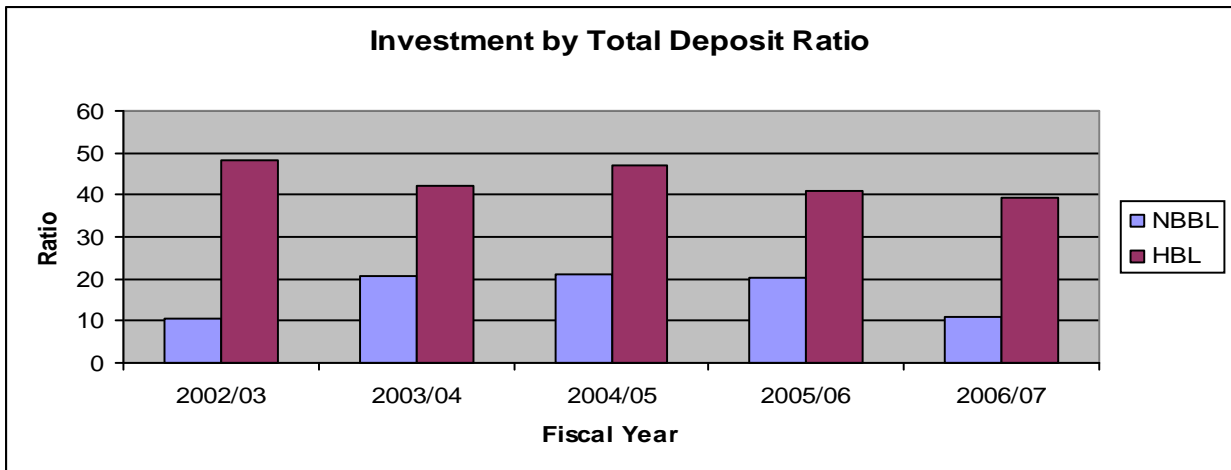
$$\text{Investment by Total Deposit} = \frac{\text{Total Investment}}{\text{Total Deposit}}$$

Table-4.8
Investment by Total Deposit Ratio (in percentage)

| F.Y | NBBL | | | HBL | | |
|---------|---------------|----------------|---------------|----------------|----------------|--------------|
| | Investment | Total Deposit | Ratio | Investment | Total Deposit | Ratio |
| 2002/03 | 1,008,642,434 | 9,534,219,948 | 10.58 | 10,175,435,017 | 21,045,086,740 | 48.35 |
| 2003/04 | 2,168,923,095 | 10,591,081,091 | 20.48 | 9,292,102,510 | 22,010,332,984 | 42.21 |
| 2004/05 | 2,699,166,702 | 12,807,376,325 | 21.08 | 11,692,341,559 | 24,814,011,984 | 47.12 |
| 2005/06 | 2,661,833,500 | 13,015,136,113 | 20.45 | 10,889,031,449 | 26,490,851,640 | 41.10 |
| 2006/07 | 1,034,560,190 | 9,385,949,552 | 11.02 | 11,822,984,558 | 30,048,417,756 | 39.35 |
| | | Average | 16.72 | | Average | 43.63 |
| | | SD | 5.41 | | SD | 3.91 |
| | | C.V. | 32.38% | | C.V. | 8.96% |

(Source: - Appendix 8)

Chart – 4.8



This ratio is employed to which banks mobilized the total deposits on investment properly. This table has shown that, in NBBL, ratios are in fluctuating trend and in HBL ratios are in decreasing trend. The policy of investment by total deposit ratio is better financing policy of a bank. In NBBL the highest ratio is 21.08% in the fiscal year 2004/05 and the lowest ratio is 10.58% in the first fiscal year 2002/03. Similarly, the highest ratio of HBL is 48.35% in the first fiscal year and the lowest in the last fiscal year of 39.35%.

The average ratio of HBL is higher than that of NBBL i.e. $43.63\% > 16.72\%$. The C.V. of NBBL is higher than that of HBL which is $32.38\% > 8.96\%$. It shows that greater fluctuation in ratios of NBBL than HBL. From the above analysis it is employed that NBBL is utilizing its deposits more on investment. It has better position in utilizing its proportion of deposits.

4.1.3 Leverage Ratio or Capital Structure Ratio

Leverage ratio examines the proportionate relationship between debt and equity. Financial leverage or capital structure ratios are calculated to examine the long-term financial position and strength and weakness of the banks. The following ratios are calculated under the leverage ratios:

4.1.3.1 Total Debt to Shareholder’s Equity Ratio: - This ratio describes the lenders contribution for each rupee of the owner’s contribution. It is computed by dividing the total debt by shareholders equity. It is stated as: -

$$\text{Debt-Equity Ratio} = \frac{\text{Total Debt}}{\text{Shareholders equity}}$$

Where, total debts include the borrowing, deposits and current liabilities. And shareholder’s fund includes share capital, reserve fund and profit and loss account. Total debt to share holder fund of NBBL and HBL is shown in Table -4.9

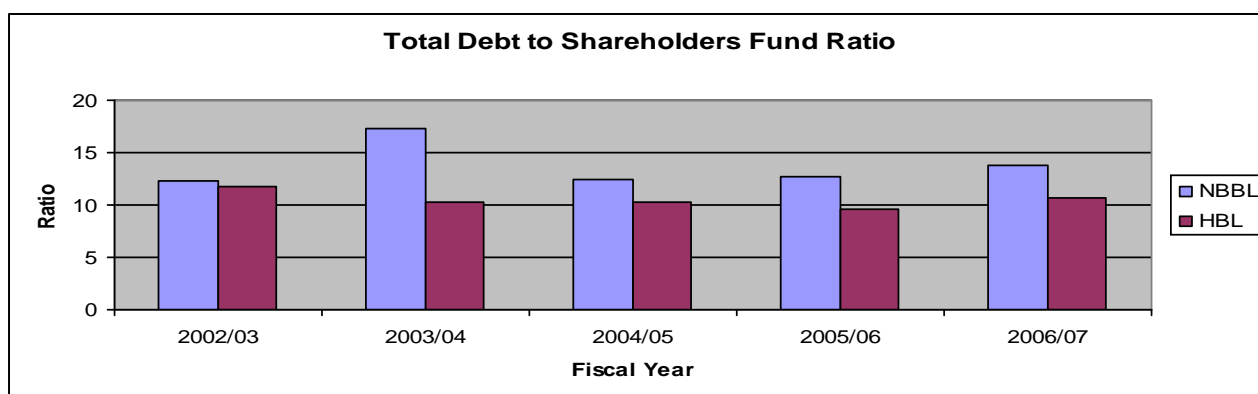
Table-4.9
Total Debt to Shareholders Fund Ratio (in times)

(Rs. in ‘000)

| F.Y | NBBL | | | HBL | | |
|---------|------------|----------------|---------------|------------|----------------|---------------|
| | Total Debt | S.H.E. | Ratio | Total Debt | S.H.E. | Ratio |
| 2002/03 | 12,458,936 | 1,018,128 | 12.24 | 22,292,091 | 1,905,885 | 11.70 |
| 2003/04 | 14,589,256 | 843,255 | 17.30 | 23,437,859 | 2,291,928 | 10.23 |
| 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 |
| | | Average | 13.69 | | Average | 10.49 |
| | | SD | 2.11 | | SD | 0.776 |
| | | C.V. | 15.41% | | C.V. | 7.40 % |

(Source: - Appendix 9)

Chart – 4.9



According to the above table, total debt to share holder's equity ratio of NBBL is fluctuating trend which has ranged from 12.24% (2002/03) to 17.30% (2003/04) and average ratio is 13.69%. Similarly, of HBL is also fluctuating trend which has ranged from 9.60% (2005/06) to 11.70% (2002/03) and average ratio of 10.49%.

On the basis of C.V., HBL is slightly lower than HBL. The variability of HBL is lower than NBBL. This explains that HBL's ratio is less fluctuating over the study period, than NBBL. With comparing between NBBL and HBL, NBBL has higher average ratio than HBL. High 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.

4.1.3.2 Total Debt to Total Assets Ratio: -This ratio indicates the extent of debt financing on the total assets and measures the financial security to the creditors. It is calculated by dividing the total debt by total assets. Total assets include the total asset from the balance sheet items.

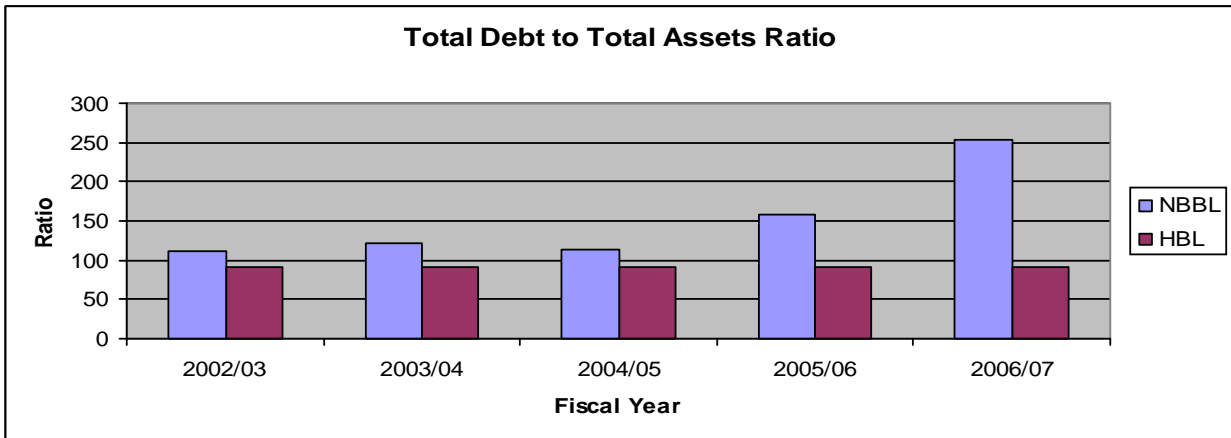
Table-4.10
Total debt to Total Assets Ratio (in percentage)

(Rs. in '000)

| F.Y | NBBL | | | HBL | | |
|---------|------------|----------------|---------------|------------|----------------|---------------|
| | Total Debt | Total Assets | Ratio | Total Debt | Total Assets | Ratio |
| 2002/03 | 12,458,936 | 11,102,233 | 112.22 | 22,292,091 | 24,197,974 | 92.12 |
| 2003/04 | 14,589,256 | 11,932,611 | 122.26 | 23,437,859 | 25,729,787 | 91.09 |
| 2004/05 | 16,254,876 | 14,257,973 | 114.01 | 26,302,948 | 28,871,343 | 91.10 |
| 2005/06 | 18,452,451 | 11,709,281 | 157.58 | 27,694,215 | 30,579,808 | 90.56 |
| 2006/07 | 18,369,525 | 7,254,548 | 253.21 | 31,372,641 | 34,314,868 | 91.42 |
| | | Average | 155.86 | | Average | 91.26 |
| | | SD | 59.72 | | SD | 0.57 |
| | | C.V. | 38.31% | | C.V. | 0.62 % |

(Source: - Appendix 10)

Chart – 4.10



From the above table, the ratio of NBBL is in increasing trend except in the year 2004/05, the ratio ranges from 112.22% (2002/03) to 253.21% (2006/07) and the average ratio is 155.86%. Similarly, the ratios are in fluctuating trend of HBL, it ranges from 90.56% (2005/06) to 91.42% (2006/07) and the average ratio of 91.26%.

The average ratio of NBBL is higher than that of HBL i.e. $155.86\% > 91.26\%$. From above analysis, debt to equity 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.

4.1.4 Profitability Ratio

Profitability ratio is measurement of efficiency and the search for it provides the degree of success in achieving desired profit. Any firm should earn a satisfactory profit to survive and run over a long period in the competitive environment. Profitability ratio can be determined on the basis of either sales or investment. Though this ratio, the investors decide whether to invest in a particular business or not. The following profitability ratios are computed to analyze the profitability of two JVB's.

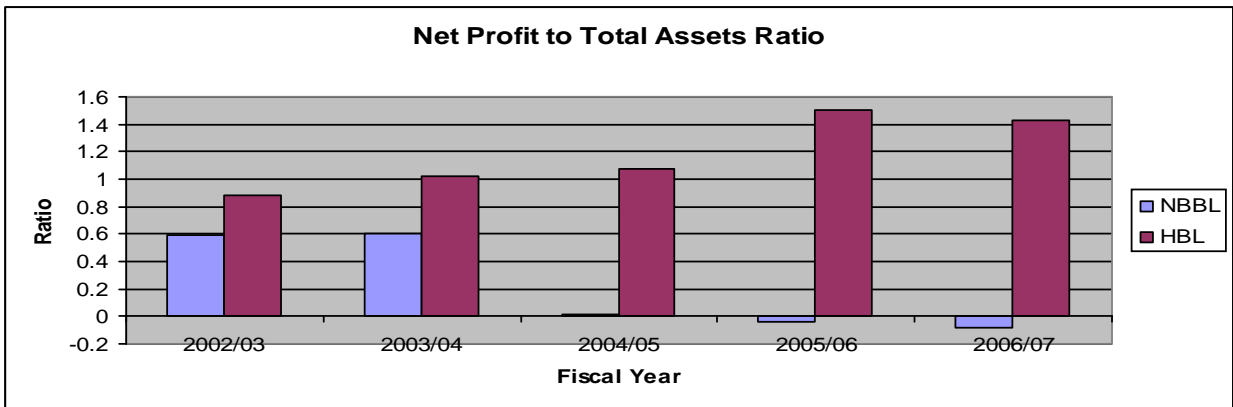
4.1.4.1 Net Profit to Total Assets Ratio: - This ratio measures the bank's ability to earn a rate of return on the total assets invested. It measures the return on assets. The ratio is calculated by dividing the net profit after tax by total assets. A higher ratio usually indicates efficiency of a bank.

Table-4.11**Net Profit to Total Assets Ratio (in percentage)**

(Rs. in '000)

| F.Y | NBBL | | | HBL | | |
|---------|------------|----------------|----------------|------------|----------------|---------------|
| | Net Profit | Total Assets | Ratio | Net Profit | Total Assets | Ratio |
| 2002/03 | 65,783 | 11,102,233 | 0.59 | 212,132 | 24,197,974 | 0.88 |
| 2003/04 | 71,495 | 11,932,611 | 0.60 | 263,052 | 25,729,787 | 1.02 |
| 2004/05 | 2,643 | 14,257,973 | 0.018 | 308,277 | 28,871,343 | 1.07 |
| 2005/06 | -457,854 | 11,709,281 | -0.039 | 457,458 | 30,579,808 | 1.50 |
| 2006/07 | -576,925 | 7,254,548 | -0.079 | 491,824 | 34,314,868 | 1.43 |
| | | Average | 0.22 | | Average | 1.18 |
| | | SD | 0.34 | | SD | 0.27 |
| | | C.V. | 157.21% | | C.V. | 22.88% |

(Source: - Appendix 11)

Chart – 4.11

This table shows the ratio of NP to TA. In NBBL, the ratios are in decreasing trend and in fiscal year 2005/06 the ratios are even in negative whereas in case of HBL, it is in increasing trend except in the year 2006/07. In NBBL, the ratios ranges from 0.59% (2002/03) to -0.079% (2006/07) and the average is of 0.22%. Similarly, in case of HBL, the ratios range from 0.88% (2002/03) to 1.50% (2005/06) and the average ratio of 1.18.

On the basis of average ratio, net profit to total assets ratio of HBL has appeared better position than NBBL. Comparatively NBBL has been able to earn more profit by utilizing

their resources. The C.V. of NBBL is very higher than HBL. Thus, the ratios of NBBL are more fluctuating than HBL.

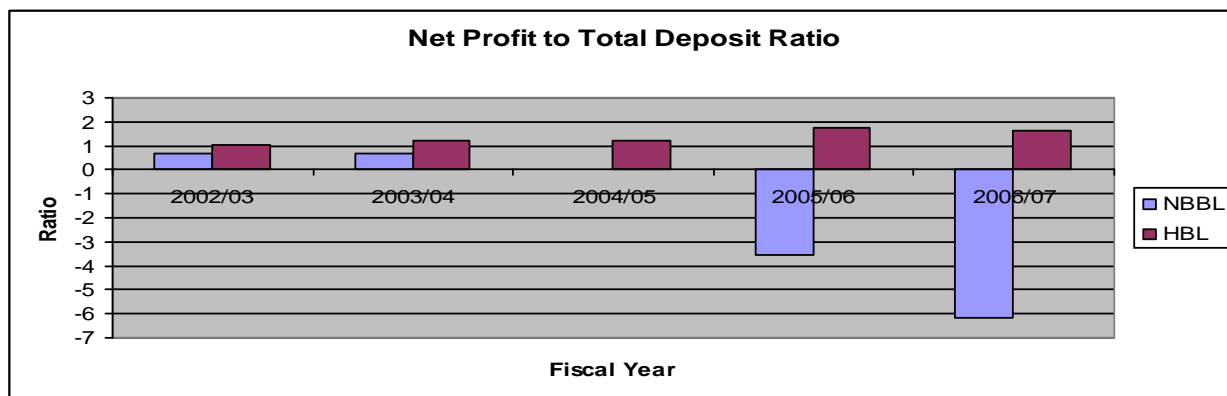
4.1.4.2 Net profit to Total Deposit Ratio: - This ratio is used for measuring the internal rate of return from deposits. This ratio reveals how efficiently banks mobilizing its deposits in generating profit. Higher ratio indicates the return from investment on loans and advances are better utilized. It is computed by dividing the net profit by total deposits. The ratio is shown below: -

Table-4.12
Net Profit to Total Deposit Ratio (in percentage)

| F.Y | NBBL | | | HBL | | |
|---------|--------------|----------------|----------------|------------|----------------|---------------|
| | Net Profit | Total Deposit | Ratio | Net Profit | Total Deposit | Ratio |
| 2002/03 | 65,783,645 | 9,534,219,948 | 0.69 | 212,132 | 21,045,086 | 1.02 |
| 2003/04 | 71,495,022 | 10,591,081,091 | 0.68 | 263,052 | 22,010,332 | 1.20 |
| 2004/05 | 2,643,245 | 12,807,376,325 | 0.02 | 308,277 | 24,814,011 | 1.24 |
| 2005/06 | -457,854,698 | 13,015,136,113 | -3.52 | 457,458 | 26,490,851 | 1.73 |
| 2006/07 | -576,925,896 | 9,385,949,552 | -6.14 | 491,824 | 30,048,417 | 1.64 |
| | | Average | -1.65 | | Average | 1.37 |
| | | SD | 3.06 | | SD | 0.30 |
| | | C.V. | -185.45 | | C.V. | 22.20% |

(Source: - Appendix 12)

Chart -4.12



In NBBL, the ratios ranged from 0.69% (2002/03) to -6.14 (2006/07). The ratios are in negative from year 2005/06 and the average ratio of NBBL is even in negative of (1.65) %. Whereas of HBL, the ratios are in increasing trend except in the year 2006/07. The ratios range from 1.02% (2002/03) to 1.73% (2005/06) and the average ratio of 1.37. It shows that HBL is earning profit and NBBL is occurring loss. So, by this analysis, it can be concluded that HBL high net profit to total deposit ratio and HBL can mobilize deposits efficiently and can earn profit by using total deposits in investment sectors. The C.V. of NBBL is in higher negative which means that there is a greater fluctuation in the ratios.

4.1.4.3 Return to Net Worth (Shareholders Equity): - It is the most vital tool to examine whether the concern has earned a satisfactory return to its owners or not. Here, return means net profit after tax. This ratio is computed by dividing net profit after tax by shareholders equity. The ratio is shown below on table 13.

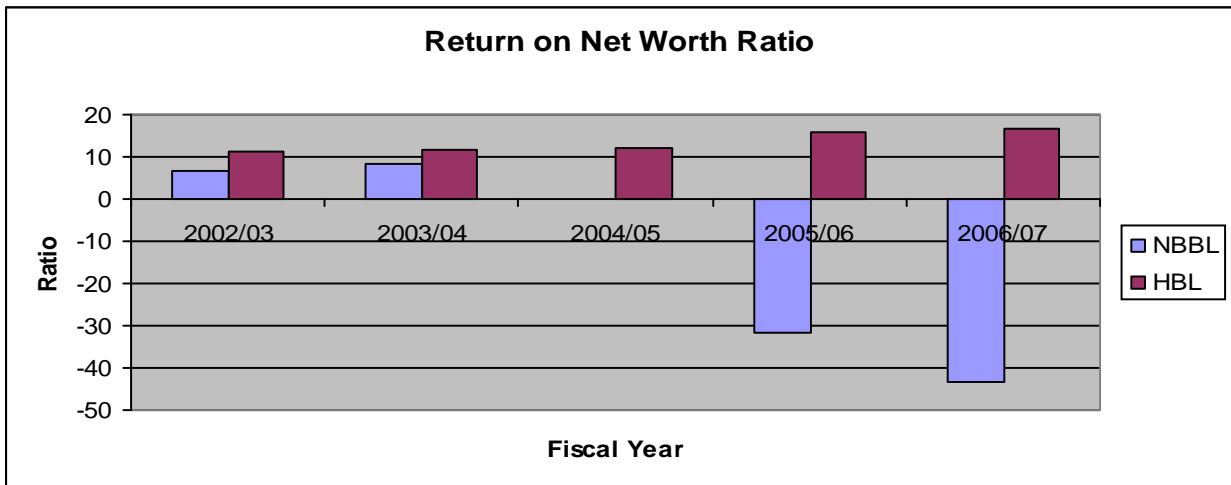
Table-4.13
Return on Net Worth Ratio (in percentage)

(Rs. in '000)

| F.Y | NBBL | | | HBL | | |
|---------|------------|----------------|-----------------|------------|----------------|---------------|
| | Net Profit | S.H.E | Ratio | Net Profit | S.H.E | Ratio |
| 2002/03 | 65,783 | 1,018,128 | 6.46 | 212,132 | 1,905,885 | 11.13 |
| 2003/04 | 71,495 | 843,255 | 8.48 | 263,052 | 2,291,928 | 11.48 |
| 2004/05 | 2,643 | 1310,161 | 0.20 | 308,277 | 2,568,395 | 12.00 |
| 2005/06 | -45,7854 | 1,452,140 | -31.53 | 457,458 | 2,885,893 | 15.85 |
| 2006/07 | -576,925 | 1,332,689 | -43.29 | 491,824 | 2,942,226 | 16.72 |
| | | Average | -11.94 | | Average | 13.44 |
| | | SD | 27.81 | | SD | 2.64 |
| | | C.V. | -181.23% | | C.V. | 19.64% |

(Source: - Appendix 13)

Chart -4.13



The above table shows the ratio of net worth. The highest ratio of NBBL is in fiscal year 2003/04 of 8.48% and the lowest is of -43.29% in the year 2006/07 and the average ratio of -11.94%. Similarly, the average ratio of HBL is 13.44% and the data range from 11.13% (2002/03) to 16.72% (2006/07). The ratios of HBL are in increasing trend which shows that HBL is efficiently utilizing its shareholders fund in generating profit. Whereas, NBBL return on net worth is negative from 2005/06, which indicates that NBBL is suffering loss on net worth. The C.V. of NBBL is also in higher negative which means the ratios are in fluctuating trend.

4.1.4.4 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, no operating income and other incomes. This ratio indicates the firm's capacity to withstand adverse economic condition. Net profit margin ratio of NBBL and HBL is presented below.

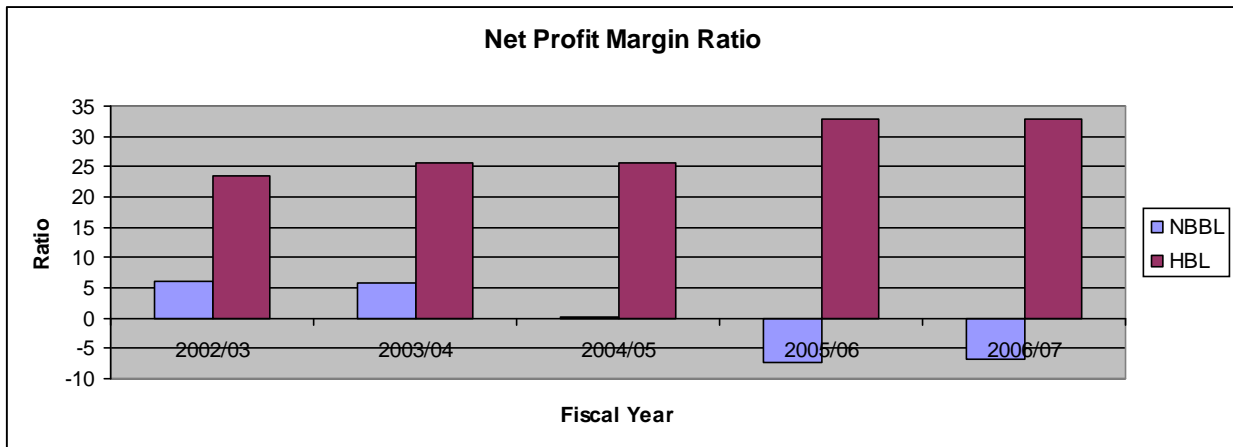
Table-4.14

Net profit margin ratio (in percentage)

| F.Y | NBBL | | | HBL | | |
|---------|------------|----------------|------------------|------------|----------------|---------------|
| | Net Profit | Gross Earning | Ratio | Net Profit | Gross Earning | Ratio |
| 2002/03 | 65,783 | 1,076,802 | 6.11 | 212,132 | 900,180 | 23.56 |
| 2003/04 | 71,495 | 1,243,828 | 5.75 | 263,052 | 1,028,075 | 25.58 |
| 2004/05 | 2,643 | 1,327,195 | 0.20 | 308,277 | 1,198,717 | 25.72 |
| 2005/06 | -457,854 | -6,324,589 | -7.24 | 457,458 | 1,395,422 | 32.78 |
| 2006/07 | -576,925 | -8,564,836 | -6.74 | 491,824 | 1,493,619 | 32.93 |
| | | Average | -0.38 | | Average | 28.11 |
| | | SD | 6.47 | | SD | 4.41 |
| | | C.V. | 17.03.12% | | C.V. | 15.69% |

(Source: - Appendix 14)

Chart – 4.14



The above table shows the net profit margin ratio. On the basis of average ratio, HBL has a good result because, it has high average ratio (i.e. 28.11% > -0.38%) and on the basis of yearly ratios, NBBL are incurring loss from the fiscal year 2005/06 and HBL are earning profit as its ratio are in increasing trend.

On the basis of average and C.V., HBL has higher average and lower C.V. (4.41%) than NBBL. Lower C.V. indicates lower risk and high return and the yearly ratio are less fluctuated.

4.1.5 Income and Expenditure Analysis

Income analysis

This analysis states the proportionate composition of different sources of income in generating total income. The items of income are interest received, commission and discount, foreign exchange gain, non-operating income and other incomes.

(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 75% (2005/06) to 79% (2006/07). The average ratio of interest received is equal to 77.11%. Similarly, in HBL, the highest ratio of interest received is 82.60% (2002/03) and lowest is 79.53% (2006/07) and the average ratio is 81.17%, 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: - This topic includes the income received as commission. Besides this, commission received from letter of credit, remittance charge, bank overdraft, guarantee commission are other items of commission and discount. The contribution of commission and discount to total income is 12.88% in NBBL and 7.88% in HBL, which shows that the contribution of commission in total income in NBBL is higher than HBL.

(c) Foreign Exchange Gain: - It includes the income through the sale of exchange currency and revaluation gain. In NBBL, the ratio of exchange gain is in fluctuating trend and it ranges between 6.46% (2006/07) to 10.40% (2002/03) and the average ratio is 8.10%. Whereas of HBL the ratio ranges from 7.40% (2003/04) to 9.70% (2005/06) and the average ratio of 8.23%, which is less than NBBL. So, it appears that NBBL has made better contribution in total income than HBL as foreign gain.

(d) Other Income: - Above table shows the contribution of different income to total income. But very low percentage is generated from other income. The average ratio of other income of NBBL is 1.79% and of HBL is 2.40%.

Table 4.15
Major Income (in percentage)

| S.No | Source of Income | 2002/03 | | 2003/04 | | 2004/05 | | 2005/06 | | 2006/07 | | Average | |
|------|-------------------------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|
| | | NBBL | HBL | NBBL | HBL | NBBL | HBL | NBBL | HBL | NBBL | HBL | NBBL | HBL |
| 1. | Interest Received | 78.60 | 82.60 | 77.11 | 81.99 | 75.82 | 82.15 | 75.00 | 79.56 | 79.00 | 79.53 | 77.11 | 81.17 |
| 2. | Commission and discount | 9.55 | 7.05 | 14.92 | 8.15 | 15.09 | 7.54 | 13.29 | 8.09 | 11.56 | 8.55 | 12.88 | 7.88 |
| 3. | Exchange gain | 10.40 | 7.54 | 6.47 | 7.40 | 7.71 | 7.80 | 9.45 | 9.70 | 6.46 | 8.71 | 8.10 | 8.23 |
| 4. | Non operating income | - | 0.74 | - | 0.22 | 0.05 | 0.16 | 0.45 | 0.09 | - | 0.43 | 0.12 | 0.32 |
| 5. | Other incomes | 1.45 | 2.07 | 1.50 | 2.24 | 1.33 | 2.35 | 1.72 | 2.56 | 2.98 | 2.78 | 1.79 | 2.40 |
| | Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

(Source: - Annual Report of NBBL and HBL from 2002/03 to 2006/07)

Expenses Analysis

The cost occurred in producing revenue is called expenses. This analysis states the proportionate contribution of different sources of expenditure. The total expenses include the interest on deposit and loan and advances, staff expenses, office operating expenses and provision for staff bonus.

(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 73.67% (2002/03) to 78.68% (2006/07) and the average ratio is 76.86%. Similarly, the average ratio of HBL is 72.18%. In an average, NBBL has paid proportionately more interest than HBL.

(b) Staff (employee) 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 7.28%. This ratio has ranged from 6.62% (2004/05) to 8.73% (2006/07) over the study period. Similarly, in HBL the ratio is in increasing trend except in the year 2003/04. The highest ratio is 11.61% (2006/07) and lowest ratio is 6.59% (2003/04) and the average ratio is 8.06%, 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 the record major part of total expenses after interest expenses. This expense includes the house rent, telephone, fax, insurance, repair and maintenance, water and electricity charges, printing and stationary and donation expenses etc. In NBBL, the average expenses 12.17% and in HBL the average expenses is 15.52%, 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 above table shows that, average bonus paid to staff is 3.69% in NBBL and 4.24% in HBL. Here, this indicates that HBL has incurred higher portion of expenses on its bonus out of total operating expenses.

Table 4.16
Major Operating Expenses (in percentage)

| S.No | Participation | 2002/03 | | 2003/04 | | 2004/05 | | 2005/06 | | 2006/07 | | Average | |
|------|---------------------------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|
| | | NBBL | HBL | NBBL | HBL | NBBL | HBL | NBBL | HBL | NBBL | HBL | NBBL | HBL |
| 1. | Interest Expenses | 73.67 | 75.13 | 76.64 | 74.25 | 77.81 | 72.35 | 77.50 | 73.02 | 78.68 | 66.13 | 76.86 | 72.18 |
| 2. | Employee Expenses | 6.63 | 7.16 | 6.82 | 6.59 | 6.62 | 7.28 | 7.62 | 7.65 | 8.73 | 11.61 | 7.28 | 8.06 |
| 3. | Office Operating Expenses | 15.66 | 13.89 | 12.77 | 15.27 | 11.32 | 16.12 | 10.13 | 14.53 | 11.00 | 17.82 | 12.17 | 15.52 |
| 4. | Provision for Staff | 4.04 | 3.82 | 3.77 | 3.89 | 4.25 | 4.25 | 4.75 | 4.80 | 1.59 | 4.44 | 3.69 | 4.24 |
| | Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

(Source: - Annual Report of NBBL and HBL from 2002/03 to 2006/07)

4.1.6 Other Ratios: -

4.1.6.1 Return on Investment (ROI): - 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. ROI of NBBL and HBL is presented below: -

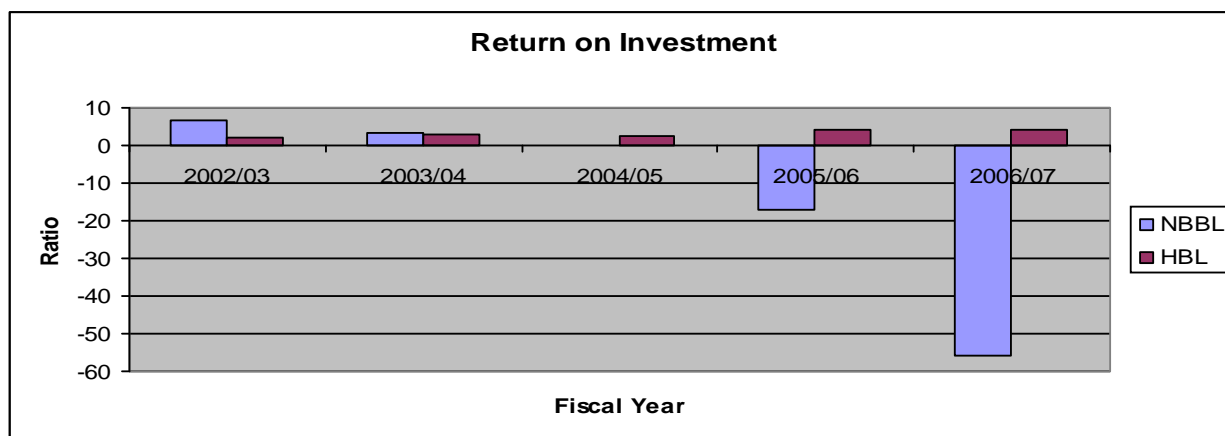
Table-4.17
Return on Investment (in percentage)

(Rs. in '000)

| F.Y | NBBL | | | HBL | | |
|---------|------------|----------------|-----------------|------------|----------------|---------------|
| | Net Profit | Investment | Ratio | Net Profit | Investment | Ratio |
| 2002/03 | 65783 | 1008642 | 6.52 | 212132 | 10175435 | 2.08 |
| 2003/04 | 71495 | 2168923 | 3.30 | 263052 | 9292102 | 2.83 |
| 2004/05 | 2643 | 2699166 | 0.098 | 308277 | 11692341 | 2.64 |
| 2005/06 | -457854 | 2661833 | -17.20 | 457458 | 10889031 | 4.20 |
| 2006/07 | -576925 | 1034560 | -55.76 | 491824 | 11822984 | 4.16 |
| | | Average | -12.61 | | Average | 3.18 |
| | | SD | 25.80 | | SD | 0.95 |
| | | C.V. | -204.64% | | C.V. | 29.92% |

(Source: - Appendix 15)

Chart -4.15



The table shows the return on investment of the respective banks. Ratios show that HBL is in fluctuating trend and NBBL is in decreasing trend. In NBBL ratio ranges from 6.52% (2002/03) to -55.76% (2006/07) and the average ratio of -12.61%. Similarly, in the case of HBL, the ratios range from 2.08% (2002/03) to 4.20% (2005/06) and the average ratio of 3.18%. Since, the average ratio of HBL is higher; HBL has good return on investment. But the NBBL average and the C.V. are negative NBBL is incurring loss.

4.1.6.2 Earning per Share: - Earning per share measures the profit available to each equity holders. It is the profit after tax figure that is divided by the number of common shares to calculate the value earning per share. This figure tells us what profit the common shareholders for every share holder have earned. EPS of NBBL and HBL is presented below: -

Table-4.18
Earning per Share (in rupees)

(Rs. in '000)

| F.Y | NBBL | | | HBL | | |
|---------|------------|----------------|----------------|------------|----------------|-----------|
| | Net Profit | No. of Share | EPS(Rs.) | Net Profit | No. of Shares | EPS (Rs.) |
| 2002/03 | 65783 | 3600 | 18.27 | 212132 | 4290.00 | 49.45 |
| 2003/04 | 71495 | 3600 | 19.86 | 263052 | 5362.50 | 49.05 |
| 2004/05 | 2643 | 7200 | 0.37 | 308277 | 6435.00 | 47.91 |
| 2005/06 | -457854 | 7200 | -63.59 | 457458 | 7722.00 | 59.24 |
| 2006/07 | -576925 | 7200 | -80.13 | 491824 | 8108.10 | 60.66 |
| | | Average | -105.22 | | Average | 53.26 |

The above table shows that, the earning per share of NBBL is in increasing trend up to the second year and then it is in decreasing trend even to negative. The EPS ranges from Rs. -80.13 (2004/05) to Rs. 19.86 (2003/04) and the average EPS is -105.22. Similarly, the EPS ranges from Rs. 47.91 to Rs. 60.66 (2006/07) and the average EPS of Rs. 53.26. The average EPS of HBL is higher than NBBL i.e. Rs. 53.26 > Rs. -105.22. From the above analysis, we conclude that the HBL shareholder's earning profit is good than NBBL shareholders.

4.1.6.3 Dividend per Share (DPS): - Dividend per share indicates the certain percentage of earning paid to the shareholders on per share basis. It is calculated by dividing amount of the numbers of common share. This analysis shows that which bank has paid more dividends comparatively. DPS of NBBL and HBL is presented below: -

Table - 4.19
Dividend per Share (in rupees)

| F.Y | HBL | | |
|---------|-----------|----------------|---------------|
| | Dividend | No. of Share | DPS |
| 2002/03 | 107250000 | 4290000 | 25.00 |
| 2003/04 | 107250000 | 5362500 | 20.00 |
| 2004/05 | 203217300 | 6435000 | 31.58 |
| 2005/06 | 270270000 | 7722000 | 35.00 |
| 2006/07 | 324324000 | 8108000 | 40.00 |
| | | Average | 30.316 |

(Source: - Appendix 1)

The above table indicates the DPS provided by HBL for the period of five years i.e., from 2002 to 2007. 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_1 | X_2 | X_1^2 | X_2^2 |
|--------------|-------------|-------------|-------------|-------------|
| 2002/03 | 1.44 | 1.24 | 2.07 | 1.54 |
| 2003/04 | 1.14 | 1.19 | 1.30 | 1.42 |
| 2004/05 | 1.06 | 1.17 | 1.12 | 1.37 |
| 2005/06 | 1.00 | 1.15 | 1.00 | 1.32 |
| 2006/07 | 0.98 | 1.12 | 0.96 | 1.25 |
| Total | 5.62 | 5.87 | 6.45 | 6.90 |

Now,

$$\text{Grand total 'T'} = X_1 + X_2 = 5.62 + 5.87 = 11.49$$

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

$$\text{Correlation factor (C.F.)} = \frac{T^2}{N} = \frac{(11.49)^2}{10} = \frac{132.02}{10} = 13.20$$

Sum of squares due to column (SSC)

$$\begin{aligned} \text{SSC} &= \frac{(\sum X_1)^2}{n_1} + \frac{(\sum X_2)^2}{n_2} - \text{C.F.} \\ &= \frac{(5.62)^2}{5} + \frac{(5.87)^2}{5} - 13.20 \\ &= 6.32 + 6.89 - 13.20 \\ &= 0.01 \end{aligned}$$

Sum of squares due to total (SST): -

$$\begin{aligned} SST &= X_1^2 + X_2^2 - C.F \\ &= 6.45 + 6.90 - 13.20 \\ &= 0.15 \end{aligned}$$

Sum of square due to error (SSE): -

$$\begin{aligned} SSE &= SST - SSC \\ &= 0.15 - 0.01 \\ &= 0.14 \end{aligned}$$

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 = 0.01 | C – 1 = 2 – 1 = 1 | MSC = SSC/C -1 = 0.01/1 = 0.01 | F = MSC/ MSE = 0.01/ 0.018 = 0.555 |
| Due to error within Banks | SSE = 0.14 | N – C = 10 – 2 = 8 | MSE = SSE/N –C = 0.14/8 = 0.018 | |
| Total | SST = 0.15 | N – 1 = 9 | | |

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

$$\text{Cal F} = 0.555$$

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

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 between liquidity position or current ratio of NBBL and HBL.

4.2.2 Hypothesis test for Activity Turnover Position

Formulation of H_0 and H_1

Null hypothesis:

$H_0: \mu_1 = \mu_2$ i.e. there is no significance difference between loan and advance to total deposit ratio of NBBL and HBL.

Alternative hypothesis:

$H_1: \mu_1 \neq \mu_2$ 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_1 and X_2 denote the loan and advance to 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 |
|--------------|---------------|---------------|-----------------|-----------------|
| 2002/03 | 84.79 | 51.53 | 7189.34 | 2655.34 |
| 2003/04 | 75.17 | 58.70 | 5650.53 | 3445.69 |
| 2004/05 | 75.31 | 54.21 | 5671.60 | 2938.72 |
| 2005/06 | 69.23 | 59.50 | 4792.79 | 3540.25 |
| 2006/07 | 88.46 | 59.22 | 7825.17 | 3507.01 |
| Total | 392.95 | 283.15 | 31129.43 | 16087.01 |

Now,

$$\text{Grand total 'T'} = X_1 + X_2 = 392.95 + 283.15 = 676.10$$

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

$$\text{Correlation factor (C.F.)} = \frac{T^2}{N} = \frac{(676.10)^2}{10} = \frac{457111.21}{10} = 45711.12$$

Sum of squares due to column (SSC)

$$\begin{aligned}
 SSC &= \frac{(\sum X_1)^2}{n_1} + \frac{(\sum X_2)^2}{n_2} - C.F.. \\
 &= \frac{(392.95)^2}{5} + \frac{(283.15)^2}{5} - 45711.12 \\
 &= 30881.94 + 16034.78 - 45711.12 \\
 &= 1205.60
 \end{aligned}$$

Sum of squares due to total (SST): -

$$\begin{aligned}
 SST &= \sum X_1^2 + \sum X_2^2 - C.F \\
 &= 31129.43 + 16087.01 - 45711.12 \\
 &= 1505.32
 \end{aligned}$$

Sum of square due to error (SSE): -

$$\begin{aligned}
 SSE &= SST - SSC \\
 &= 1505.32 - 1205.60 \\
 &= 299.72
 \end{aligned}$$

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 = 1205.60 | C – 1 = 2 – 1 = 1 | MSC = SSC/C -1 = 1205.60 / 1 =1205.60 | F = MSC/ MSE = 1205.60/37.46 = 32.18 |
| Due to error within Banks | SSE = 299.72 | N – C = 10 – 2 =8 | MSE = SSE/N –C = 299.72/8 = 37.46 | |
| Total | SST = 1505.32 | N – 1 = 9 | | |

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

Cal F = 32.18

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

Decision,

Calculated value of F is greater than tabulated value of F at 5% significance. So, H_1 is accepted, that is, there is significance difference between activity turnover ratio or loan and advance to total deposit ratio of NBBL and HBL..

4.2.3 Hypothesis Test for Investment by Total Deposit Ratio**Formulation of H_0 and H_1** **Null hypothesis:**

$H_0: \mu_1 = \mu_2$ i.e. there is no significance difference between investment by total deposit ratio of NBBL and HBL.

Alternative hypothesis:

$H_1: \mu_1 \neq \mu_2$ 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 |
|-------------|-------------------------|-------------------------|---------------------------|---------------------------|
| 2002/03 | 10.58 | 48.35 | 111.94 | 2337.72 |
| 2003/04 | 20.48 | 42.21 | 419.43 | 1781.68 |
| 2004/05 | 21.08 | 47.12 | 444.37 | 2220.29 |
| 2005/06 | 20.45 | 41.10 | 418.20 | 1689.21 |
| 2006/07 | 11.02 | 39.35 | 121.44 | 1548.42 |
| | 83.60 | 218.15 | 1515.38 | 9577.32 |

Now,

$$\text{Grand total 'T'} = X_1 + X_2 = 83.60 + 218.15 = 301.75$$

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

$$\text{Correlation factor (C.F.)} = \frac{T^2}{N} = \frac{(301.75)^2}{10} = \frac{91053.06}{10} = 9105.31$$

Sum of squares due to column (SSC)

$$\begin{aligned} \text{SSC} &= \frac{(\sum X_1)^2}{n_1} + \frac{(\sum X_2)^2}{n_2} - \text{C.F.} \\ &= \frac{(83.60)^2}{5} + \frac{(218.15)^2}{5} - 9105.31 \\ &= 1397.79 + 9517.88 - 9105.31 \\ &= 1810.36 \end{aligned}$$

Sum of squares due to total (SST): -

$$\begin{aligned} \text{SST} &= \sum X_1^2 + \sum X_2^2 - \text{C.F.} \\ &= 1515.38 + 9577.32 - 9105.31 \\ &= 1987.39 \end{aligned}$$

Sum of square due to error (SSE): -

$$\begin{aligned} \text{SSE} &= \text{SST} - \text{SSC} \\ &= 1987.39 - 1810.36 \\ &= 177.03 \end{aligned}$$

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 = 1810.36 | C – 1 = 2 – 1 = 1 | MSC = SSC/C -1 =1810.36/1 =1810.36 | F = MSC/ MSE = 1810.36/22.13 = 81.80 |
| Due to error within Banks | SSE = 177.03 | N – C = 10 – 2 =8 | MSE = SSE/N –C = 177.03/ 8 = 22.13 | |
| Total | SST = 1987.39 | N – 1 = 9 | | |

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

$$\text{Cal F} = 81.80$$

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

Decision,

Calculated value of F is greater than tabulated value of F at 5% significance. So, H_1 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 Leverage Ratio

Formulation of H_0 and H_1

Null hypothesis:

$H_0: \mu_1 = \mu_2$ i.e. there is no significance difference in leverage ratio or debt to equity ratio of NBBL and HBL.

Alternative hypothesis:

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

Compute the test statistics: -

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

Calculation of required items: -

Let X_1 and X_2 denote the leverage ratio (debt to equity 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 |
|--------------|--------------|--------------|---------------|---------------|
| 2002/03 | 12.24 | 11.70 | 149.82 | 136.89 |
| 2003/04 | 17.30 | 10.23 | 299.29 | 104.65 |
| 2004/05 | 12.41 | 10.24 | 154.01 | 104.86 |
| 2005/06 | 12.71 | 9.60 | 161.54 | 92.16 |
| 2006/07 | 13.78 | 10.66 | 189.89 | 113.64 |
| Total | 68.45 | 52.45 | 954.55 | 552.20 |

Now,

$$\text{Grand total 'T'} = X_1 + X_2 = 68.45 + 52.45 = 120.90$$

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

$$\text{Correlation factor (C.F.)} = \frac{T^2}{N} = \frac{(120.90)^2}{10} = \frac{14616.81}{10} = 1461.68$$

Sum of squares due to column (SSC)

$$\begin{aligned} \text{SSC} &= \frac{(\sum X_1)^2}{n_1} + \frac{(\sum X_2)^2}{n_2} - \text{C.F.} \\ &= \frac{(68.45)^2}{5} + \frac{(52.45)^2}{5} - 1461.68 \\ &= 937.08 + 550.20 - 1461.68 \\ &= 25.60 \end{aligned}$$

Sum of squares due to total (SST): -

$$\begin{aligned} \text{SST} &= \sum X_1^2 + \sum X_2^2 - \text{C.F.} \\ &= 954.55 + 552.20 - 1461.68 \\ &= 45.07 \end{aligned}$$

Sum of square due to error (SSE): -

$$\begin{aligned} \text{SSE} &= \text{SST} - \text{SSC} \\ &= 45.07 - 25.60 \\ &= 19.47 \end{aligned}$$

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 = 25.60 | $C - 1$ $= 2 - 1 = 1$ | $\text{MSC} = \text{SSC}/C - 1$ $= 25.60/ 1 = 25.60$ | $F = \text{MSC}/ \text{MSE}$ $= 25.60/ 2.43$ $= 10.53$ |
| Due to error within Banks | SSE = 19.47 | $N - C$ $= 10 - 2 = 8$ | $\text{MSE} = \text{SSE}/N - C$ $= 19.47/ 8 = 2.43$ | |
| Total | SST = 45.07 | $N - 1 = 9$ | | |

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

$$\text{Cal F} = 10.53$$

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

Decision,

Calculated value of F is greater than tabulated value of F at 5% significance. So, H_1 is accepted, that is, there is 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,

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

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 |
|---------|--------------|---------------|---------------|----------------|
| 2002/03 | 6.11 | 23.56 | 37.33 | 555.07 |
| 2003/04 | 5.75 | 25.58 | 33.06 | 654.34 |
| 2004/05 | 0.20 | 25.72 | 0.04 | 661.52 |
| 2005/06 | -7.24 | 32.78 | 52.42 | 1074.53 |
| 2006/07 | -6.74 | 32.93 | 45.42 | 1084.38 |
| | -1.90 | 140.57 | 168.27 | 4029.84 |

Now,

$$\text{Grand total 'T'} = X_1 + X_2 = -1.90 + 140.57 = 138.67$$

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

$$\text{Correlation factor (C.F.)} = \frac{T^2}{N} = \frac{(138.67)^2}{10} = \frac{19229.37}{10} = 1922.94$$

Sum of squares due to column (SSC)

$$\begin{aligned} \text{SSC} &= \frac{(\sum X_1)^2}{n_1} + \frac{(\sum X_2)^2}{n_2} - \text{C.F.} \\ &= \frac{(-1.90)^2}{5} + \frac{(140.57)^2}{5} - 1922.94 \\ &= 0.722 + 3951.98 - 1922.94 \\ &= 2029.76 \end{aligned}$$

Sum of squares due to total (SST): -

$$\begin{aligned} SST &= X_1^2 + X_2^2 - C.F \\ &= 168.27 + 4029.84 - 1922.94 \\ &= 2275.17 \end{aligned}$$

Sum of square due to error (SSE): -

$$\begin{aligned} SSE &= SST - SSC \\ &= 2275.17 - 2029.76 \\ &= 245.41 \end{aligned}$$

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 = 2029.76 | C – 1 = 2 – 1 = 1 | MSC = SSC/C -1 = 2029.76/ 1 = 2029.76 | F = MSC/ MSE = 2029.76/30.68 = 66.16 |
| Due to error within Banks | SSE = 245.41 | N – C = 10 – 2 =8 | MSE = SSE/N –C = 245.41/ 8 = 30.68 | |
| Total | SST = 2275.17 | N – 1 = 9 | | |

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

$$\text{Cal F} = 66.16$$

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

Decision,

Calculated value of F is greater than tabulated value of F at 5% significance. So, H_1 is accepted, that is, there is significance difference in profitability ratio of NBBL and HBL.

4.2.6 Hypothesis 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 |
|---------|----------------|---------------|-----------------|-----------------|
| 2002/03 | 18.27 | 49.45 | 333.79 | 2445.30 |
| 2003/04 | 19.86 | 49.05 | 394.42 | 2405.90 |
| 2004/05 | 0.37 | 47.91 | 0.14 | 2295.37 |
| 2005/06 | -63.59 | 59.24 | 4043.69 | 3509.38 |
| 2006/07 | -80.13 | 60.66 | 6420.82 | 3679.63 |
| | -105.22 | 266.30 | 11192.86 | 14335.58 |

Now,

$$\text{Grand total 'T'} = X_1 + X_2 = -105.22 + 266.30 = 161.08$$

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

$$\text{Correlation factor (C.F.)} = \frac{T^2}{N} = \frac{(161.08)^2}{10} = \frac{25946.77}{10} = 2594.68$$

Sum of squares due to column (SSC)

$$\begin{aligned}
 \text{SSC} &= \frac{(\sum X_1)^2}{n_1} + \frac{(\sum X_2)^2}{n_2} - \text{C.F.} \\
 &= \frac{(-105.22)^2}{5} + \frac{(266.30)^2}{5} - 2594.68 \\
 &= 2214.24 + 14183.14 - 2594.68 \\
 &= 13802.70
 \end{aligned}$$

Sum of squares due to total (SST): -

$$\begin{aligned}
 \text{SST} &= \sum X_1^2 + \sum X_2^2 - \text{C.F.} \\
 &= 11192.86 + 14335.58 - 2594.68 \\
 &= 22933.76
 \end{aligned}$$

Sum of square due to error (SSE): -

$$\begin{aligned}
 \text{SSE} &= \text{SST} - \text{SSC} \\
 &= 22933.76 - 13802.70 \\
 &= 9131.06
 \end{aligned}$$

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 = 13802.70 | C – 1 = 2 – 1 = 1 | MSC = SSC/C -1 = 13802.70/ 1 = 13802.70 | F = MSC/ MSE = 13802.70/1141.38 |
| Due to error within Banks | SSE = 9131.06 | N – C = 10 – 2 =8 | MSE = SSE/N – C = 9131.06/ 8 = 1141.38 | = 12.09 |
| Total | SST = 22933.76 | N – 1 = 9 | | |

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

$$\text{Cal F} = 12.09$$

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

Decision,

Calculated value of F is greater than tabulated value of F at 5% significance. So, H_1 is accepted, that is, there is significance difference in EPS of NBBL and HBL.

4.3 Major Findings

1) Liquidity Position

-) In term of current ratio both banks are below than the normal standard but HBL is slightly better than NBBL. 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.

-) In term of Cash and bank balance to deposit ratio (except fixed deposit ratio) the average ratio of NBBL is 8.57%, which is lower than HBL of 100%. And with comparing to average ratio, HBL is more profitable because the liquidity position of HBL is better than that of NBBL.

-) In term of cash and bank balance to current deposit ratio, the average ratio of HBL is higher than NBBL i.e. 41.94% > 30.93% which indicates that a very high ratio indicates the unwise investment decision. This shows that the bank is unable to invest its current deposits in productive or profitable area.

-) In term of fixed deposit to total deposit ratio, the average ratio of NBBL is higher than HBL. It shows that NBBL's Liquidity position is better than HBL. The higher proportion of fixed deposits indicates the stronger liquidity position.

2) Activity Turnover Ratio

-) The loan and advance to total deposit ratio is employed to measure the utilization of their total deposit on loan and advances. The average ratio of NBBL is higher than that of HBL ($78.59\% > 56.63\%$). It shows that NBBL has better utilization of deposits other than HBL, where, NBBL is utilizing in an average of 78.59% of deposit and HBL is utilizing in an average of only 56.63% of total deposit over the study period. According to co-efficient of variation, NBBL is more fluctuating than HBL over the study period. The C.V. of NBBL is 9.98% which is higher than HBL which is 6.31%.
-) In term of loan and advance to fixed deposit ratio, the average ratio of NBBL is higher than that of HBL i.e. $269.26\% > 259.61\%$. In this analysis, it is concluded that NBBL has proper utilization of fixed assets than HBL because NBBL has higher average ratio than HBL.
-) In term of loan and advance to saving deposit ratio, the average ratio of NBBL is higher than that of HBL i.e. $317.35\% > 107.02\%$. Over fluctuation ratio of all fiscal year saving deposit is not efficiently utilized to invest in loan and advances due to the over function. The C.V. of NBBL is higher than that of HBL which is $20.69\% > 4.68\%$. It shows that the ratios are fluctuating more in NBBL than HBL. There is higher variability in ratios of NBBL than HBL.
-) The investment by total deposit ratio measures the capacity utilization. The average ratio of HBL is higher than that of NBBL i.e. $43.63\% > 16.72\%$. The C.V. of NBBL is higher than that of HBL which is $32.38\% > 8.96\%$. It shows that greater fluctuation in ratios of NBBL than HBL. From the above analysis it is employed that NBBL is utilizing its deposits more on investment. It has better position in utilizing its proportion of deposits.

3) Leverage ratio or Capital Structure ratio

-) The total debt to shareholder's equity ratio describes the lenders contribution for each rupee of the owner's contribution. On the basis of C.V., HBL is slightly lower than HBL. The variability of HBL is lower than NBBL. This explains that HBL's ratio is less fluctuating over the study period, than NBBL. With comparing between NBBL and HBL, NBBL has higher average ratio than HBL. High 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.
-) While comparing total debt to total assets ratio, the average ratio of NBBL is higher than that of HBL i.e. $155.86\% > 91.26\%$. From above analysis, debt to equity 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.

4) Profitability Ratio

Profitability ratio is measurement of efficiency and the search for it provides the degree of success in achieving desired profit. Any firm should earn a satisfactory profit to survive and run over a long period in the competitive environment. The NBBL has incurred loss from the fiscal year 2005/06 to 2006/07 due to which all the profitability ratios are lower and even to negative. On the other hand HBL ratios are positive and quiet satisfactory than NBBL.

5) Other Ratios

-) The ROI of NBBL and HBL are in fluctuating trend. The average ratio of NBBL is -12.61% over the study period whereas the average ratio of HBL is 3.18% . This shows that, HBL seems better financing performance.
-) In case of NBBL, the EPS is more fluctuated than HBL. The average EPS is -105.22% within the study period. The EPS of HBL is first decreasing than increasing trend and the average EPS is 53.26% . This shows that, HBL is found better performance in term of EPS than NBBL.

) The table – 19 shows that HBL is paying dividends over the study period. However, NBBL has been unable to generate profit in this period. Higher dividend crates the positive attitude of investors towards the banks, which helps to increase the market value of the share.

6) 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 significantly different at 5% level of significance. Likewise, leverage position in term of debt to equity ratio of NBBL and HBL is significantly different. Similarly, profitability position in terms of net profit margin and earning per share of NBBL and HBL are also significantly different at 5% level of significance.

CHAPTER V

SUMMARY, CONCLUSION AND RECOMMENDATION

This chapter is dedicated to provide conclusions after comparatively analyzing the financial performance of two joint venture banks named NBBL and HBL. It also tries to provide some recommendations to the concerned banks from the conclusion derived from the study.

5.1 Summary

Banks, which deal with commercial activities, are known as commercial banks. These financial institutes help to integrate every financial activity of the community. The main objective of a commercial bank is to play a vital role in the development of good trade.

Commercial banks are mechanisms of mobilizing funds in returnable resources. They offer financial support to all types of business through providing various types of loans and other financial services. Commercial banks aid the economic development of the nation.

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 and is involved in commercial activities.

The commercial banking in Nepal started from 1937 A.D (Baisakh 1994 B.S) with the establishment with Nepal Bank Limited, it was established with 51% ownership of Nepal government and 49% of equity participation from private sector.

Having felt the need of development of banking sector and to help the government to formulate monetary policies, Nepal Rastra bank was set up in 14th Baisakh , 2013 B.S. Since then, it has been functioning as the government bank and has contributed to the growth of financial sector. Though Nepal Rastra Bank has at present, adopted a deregulatory approach, it requires continuous modification in view of fast changing world.

Integrated and speedy developed of the country is possible only when competitive banking service reach every nooks and corners of the country. Today number of commercial bank are concentrated in only few places because lack of development of infrastructure in remote places. Government must give attention toward remote places.

Bank plays vital role in the economic development of nations. So today it is challenging for government to formulate the new banking policy rationally in remote area. Actually more than 60% of total areas of Nepal is covered with rural areas. For the economic upliftment of rural areas it is necessary to provide banking services in rural areas.

The research work entitled the comparative study on financial performance analysis of commercials banks include the following banks: -

- 1) Nepal Bangladesh Bank Ltd.
- 2) Himalayan Bank Ltd.

The research work should have reached the destiny where we satisfy with the queries of research problems which were specified in the statement of the problem in the introductory chapter. To conduct the research work, the researcher consulted mainly the secondary sources such as documents published by concerned banks and also consulted the personalities of the related bank as primary sources where as necessary. Before presenting and analyzing the data, there was also need to review of related books, prior research on the topic. Obviously, it helped the researcher to construct conceptual framework and to analyze and interpret the secondary data according to objective set forth previously. Then the research work was analyzed and interpreted by financial tools such as liquidity ratio, activity turnover ratio, leverage ratio, earning per share, profitability ratio and dividend per share as well as statistical tools such as mean, standard deviation, CV and F-test (one – way ANOVA).

In this way, the researcher analyzed and presented the 4th chapter, which was the main body of the research work. On the basis of data analysis and presentation, the researcher

extracted some major findings. It has been explained along with the data analysis and presentation. So, on the basis of major findings the researcher reached in the conclusions keeping in the previously set objectives in mind. Ultimately, the researcher will recommend on the research problem to its stakeholders.

To know the real performance of banks, the researcher observed and analyzed the comparative performance analysis of two commercial banks for five years period. It is hoped that the comparative performance analysis of the commercial banks will give a rational result and represent the overall banking scenario in terms of performance analysis.

5.2 Conclusion

Establishment of commercial banks especially joint venture banks have continued in response to the economic liberalization policies of the government. So, now in Nepal there are twenty five commercial banks competing with each other in their business. These joint venture banks are mainly concentrated themselves on financing foreign trade, commerce and industry. This study has been mentioned already that the research concentrates only on the comparative financial performance between joint ventures banks i.e. NBBL and HBL.

Out of the 25 commercial banks the researchers has chosen only two JVBs i.e. NBBL and HBL to evaluate their financial performance. The researcher has evaluated data for the least 5 years period i.e. 2002/03 to 2006/07.

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

- The liquidity ratio measures the ability of a firm to meet its short-term obligations and select the short-term financial solvency of a firm. The liquidity position of the banks in term of current ratios shows that the ratios of both banks NBBL and HBL are always below the normal standard (i.e. 2:1) where as HBL's average ratio is greater than NBBL. It shows that the liquidity position in term of current assets to current liabilities of HBL is better than NBBL. So, it is concluded that HBL is

better short-term solvency position as compared with NBBL. The Liquidity position of cash and bank balance to deposit ratio (except fixed deposit) of HBL is higher than that of NBBL (i.e. $100.00\% > 8.57\%$ on an average). So, it is concluded that HBL has sufficient cash and bank balance to deposit except fixed deposit than that of NBBL.

Likewise, the liquidity position of HBL in terms of cash and bank balance to current deposit ratio is found higher than NBBL (i.e. $41.94\% > 36.55\%$ in an average). Here, both banks has so high ratio that it is not better because “ideal assets earn nothing”. So, both banks should invest in productive area. This analysis shows that HBL has more cash ideal than NBBL. In the same way, fixed deposit to total deposit ratio of NBBL is better than that of HBL. The ratio of NBBL is higher. So, the higher ratio of fixed deposit to total deposit ratio indicates the strong liquidity position.

- The activity turnover ratio is used to examine the efficiency with which the firm manages and utilizes its assets. The activity turnover of NBBL in terms of loan and advances to total deposit ratio is better than that of HBL. The minimum ratio of NBBL is 69.23% where as the maximum ratio of HBL is only 59.50% . And the average ratio of loan and advances to total deposit ratio of NBBL is higher than that of HBL (i.e. $78.59\% > 56.63\%$). From the analysis; it is concluded that NBBL has been successfully utilized their deposits in term of loan and advances for profit generating purpose as compared to HBL.

In terms of Loan and advances to fixed deposit ratio of NBBL is higher than that of HBL (i.e. $269.26\% > 259.61\%$ in an average) which means that NBBL is utilizing its collected resources in the form of deposits much more efficiently, which definitely lead to the increase income and thus, making an increment profit for the organization. The turnover position in term of loan and advances to saving deposit ratio, NBBL is always greater than HBL within the study period of 5 years. So, it is concluded that NBBL has better turnover than HBL. NBBL has invested high

proportion of saving deposit in loan and advances as compared to HBL. But in terms of investment by total deposit ratio of HBL has higher average ratio (43.63%) than that of NBBL (16.72%). The yearly ratio of NBBL is always less than HBL. So, it can be concluded that HBL is successful in utilizing its deposits on investment for income generating purpose. So in term of investment by total deposit 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 the proportion of outsiders claim, in the total capitalization, is higher in NBBL. It seems relatively more leverage. Thus, 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 (155.86%) is higher than HBL (91.26%). Total debt to total assets ratio of NBBL is higher as compared to HBL which implies that total debt the NBBL has riskier debt financing position than that of HBL. From this analysis, capital structure ratio has clearly referred that total debt to share holder's fund and total assets are slightly higher for NBBL as compared to 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 ratio, return to net worth (shareholder's equity), return on net worth ratio 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 from the fiscal year 2005/06 to 2006/07 which has brought down NBBL even to negative average ratio. NBBL needs to improve his performance for the survival of the organization. Similarly, coefficient of variation of NBBL is always higher than that of HBL which indicates that NBBL has high risk and more fluctuated than HBL.

- The analyzed data proved that the major source of income of both banks i.e., NBBL's and HBL's is interest receipt. The collection of interest of NBBL is the volume of total earning. The average of collection of interest income is From the calculation the researcher has found that the net profit margin ratio of NBBL is more fluctuated than HBL.
- The major expenses, for the banks NBBL and HBL, are interest expenses, staff expenses, office expenses and provision for bonus.
- The ROI of NBBL and HBL are in fluctuating trend. The average ratio of NBBL is -12.61% over the study period whereas the average ratio of HBL is 3.18%. This shows that, HBL seems better financing performance.
- In case of NBBL, the EPS is more fluctuated than HBL. The average EPS is -105.22% within the study period. The EPS of HBL is first decreasing than increasing trend and the average EPS is 53.26%. 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, turnover position in respect of loan and advances to 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 significantly different. Similarly, profitability position in terms of net profit margin and earning per share of NBBL and HBL are also significantly different at 5% level of significance.

5.3 Recommendation

Based on the summary and conclusion, the following suggestions and recommendations are forwarded: -

- The liquidity position in terms of current ratio of both banks is below than normal standard. The average ratio of HBL is higher than NBBL. So, NBBL should increase current assets.
- The overall liquidity position of HBL is in normal standard except fixed deposit and NBBL is also trying to gain that position. Since the liquidity position of NBBL 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, NBBL has better turnover than HBL in terms of loan and advances to total deposit ratio and loan and advance to saving deposit ratio. So, NBBL has better utilization of resources in income generating activities than HBL. So, it is recommended that HBL should invest its deposit in profit generating sector.
- The 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 shareholders' 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 from the fiscal year 2005/06 to 2006/07. 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 sector. If assets remain idle, banks should bear high cost and cause low profit margin.

- From the point of view of income and expenditure analysis, the major source of income is interest received. The balance sheet as well as calculation shows that NBBL has invested more amounts in government securities rather than loan and advances. So, NBBL is recommended to invest in loan and advances.
- The second major part of total expenses is operating expenses. The analyzed data proved that the NBBL is comparatively, more efficient to reduce in operating as well as other expenses too. Even both banks should minimize their expenses as far as possible to enhance the volume of profit.
- The commercial banks have been established gradually after the commercial bank act 2031 B.S. With the passage of time so many commercial banks, as a joint venture, have been established gradually because of the liberal and market friendly economic policy of government. But bank should prove some social response by expanding their operation in rural areas rather than urban areas. And banks can give response to poor and disadvantages groups. By establishing the branches in rural areas, minimum amount for opening accounts and interest rate should be reduced for creditor

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Appendix 1

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

Current Ratio

| Year | X_1 | X_2 | $(X_1 - \bar{X}_1)^2$ | $(X_2 - \bar{X}_2)^2$ |
|--------------|-------------|-------------|-----------------------|-----------------------|
| 2002/03 | 1.44 | 1.24 | 0.1024 | 0.0049 |
| 2003/04 | 1.14 | 1.19 | 0.0004 | 0.0004 |
| 2004/05 | 1.06 | 1.17 | 0.0036 | 0.000 |
| 2005/06 | 1.00 | 1.15 | 0.0144 | 0.0004 |
| 2006/07 | 0.98 | 1.12 | 0.0196 | 0.0025 |
| Total | 5.62 | 5.87 | 0.1404 | 0.0082 |

$$\bar{X}_1 = \frac{5.62}{5} = 1.12$$

$$\bar{X}_2 = \frac{5.87}{5} = 1.17$$

$$SD = \sqrt{\frac{(X_1 - \bar{X}_1)^2}{N-1}} = \sqrt{\frac{0.1404}{4}} = 0.19$$

$$SD = \sqrt{\frac{0.0082}{4}} = 0.045$$

$$C.V. = \frac{\exists}{\bar{X}} \times 100 = \frac{0.19}{1.12} = 16.73$$

$$C.V. = \frac{0.045}{1.17} = 3.87$$

Appendix -2

Cash and Bank Balance to Deposit Ratio (except fixed deposit)

| Year | X_1 | X_2 | $(X_1 - \bar{X}_1)^2$ | $(X_2 - \bar{X}_2)^2$ |
|---------|-------|--------|-----------------------|-----------------------|
| 2002/03 | 24.33 | 110.94 | 248.38 | 119.68 |
| 2003/04 | 5.57 | 115.67 | 9.00 | 245.55 |
| 2004/05 | 4.42 | 107.68 | 17.22 | 58.98 |
| 2005/06 | 3.49 | 85.27 | 25.81 | 216.97 |
| 2006/07 | 5.02 | 80.44 | 12.60 | 382.59 |

| | | | | |
|--------------|--------------|--------|---------------|----------------|
| Total | 42.83 | 500.00 | 313.01 | 1023.77 |
|--------------|--------------|--------|---------------|----------------|

$$\bar{X}_1 = \frac{42.83}{5} = 8.57$$

$$\bar{X}_2 = \frac{100}{5} = 100.00$$

$$SD = \sqrt{\frac{(X_1 - \bar{X}_1)^2}{N-1}} = \sqrt{\frac{313.01}{4}} = 8.85$$

$$SD = \sqrt{\frac{1023.77}{4}} = 16.00$$

$$C.V. = \frac{\Xi}{\bar{X}} \times 100 = \frac{8.85}{8.57} = 103.22$$

$$C.V. = \frac{16.00}{100} = 16.00$$

Appendix -3

Cash and Bank Balance to Current Deposit

| Year | X ₁ | X ₂ | (X ₁ - \bar{X}_1) ² | (X ₂ - \bar{X}_2) ² |
|--------------|----------------|----------------|--|--|
| 2002/03 | 42.18 | 55.90 | 27.35 | 194.88 |
| 2003/04 | 35.03 | 48.27 | 3.69 | 40.07 |
| 2004/05 | 30.93 | 39.93 | 36.24 | 4.04 |
| 2005/06 | 31.72 | 34.15 | 27.35 | 60.68 |
| 2006/07 | 44.89 | 31.44 | 63.04 | 110.25 |
| Total | 184.75 | 209.70 | 154.67 | 409.92 |

$$\bar{X}_1 = \frac{184.75}{5} = 36.95$$

$$\bar{X}_2 = \frac{209.70}{5} = 41.94$$

$$SD = \sqrt{\frac{(X_1 - \bar{X}_1)^2}{N-1}} = \sqrt{\frac{154.67}{4}} = 6.22$$

$$SD = \sqrt{\frac{409.92}{4}} = 10.12$$

$$C.V. = \frac{\Xi}{\bar{X}} \times 100 = \frac{6.22}{36.95} = 16.83$$

$$C.V. = \frac{10.12}{41.94} = 24.14$$

Appendix -4

Fixed Deposit to Total Deposit Ratio

| Year | X ₁ | X ₂ | (X ₁ - \bar{X}_1) ² | (X ₂ - \bar{X}_2) ² |
|--------------|----------------|----------------|--|--|
| 2002/03 | 57.20 | 15.23 | 438.48 | 52.85 |
| 2003/04 | 47.51 | 21.40 | 126.56 | 1.21 |
| 2004/05 | 37.74 | 24.61 | 2.19 | 4.45 |
| 2005/06 | 22.03 | 23.97 | 202.49 | 2.16 |
| 2006/07 | 16.82 | 27.29 | 377.91 | 22.94 |
| Total | 181.30 | 112.50 | 1147.63 | 83.61 |

$$\bar{X}_1 = \frac{181.30}{5} = 36.26$$

$$\bar{X}_2 = \frac{112.50}{5} = 22.50$$

$$SD = \sqrt{\frac{(X_1 - \bar{X}_1)^2}{N-1}} = \sqrt{\frac{1147.63}{4}} = 16.94$$

$$SD = \sqrt{\frac{83.61}{4}} = 4.57$$

$$C.V. = \frac{\Sigma}{\bar{X}} \times 100 = \frac{16.94}{36.26} = 46.71$$

$$C.V. = \frac{4.57}{22.50} = 20.32$$

Appendix -5

Loan and Advance to Total Deposit Ratio

| Year | X ₁ | X ₂ | (X ₁ - \bar{X}_1) ² | (X ₂ - \bar{X}_2) ² |
|---------|----------------|----------------|--|--|
| 2002/03 | 84.79 | 51.53 | 38.44 | 26.01 |
| 2003/04 | 75.17 | 58.70 | 11.70 | 4.28 |
| 2004/05 | 75.31 | 54.21 | 10.76 | 5.86 |

| | | | | |
|--------------|---------------|---------------|---------------|--------------|
| 2005/06 | 69.23 | 59.50 | 87.61 | 8.24 |
| 2006/07 | 88.46 | 59.22 | 97.42 | 6.71 |
| Total | 392.96 | 283.15 | 245.93 | 51.10 |

$$\bar{X}_1 = \frac{392.96}{5} = 78.59$$

$$\bar{X}_2 = \frac{283.15}{5} = 56.63$$

$$SD = \sqrt{\frac{(X_1 - \bar{X}_1)^2}{N-1}} = \sqrt{\frac{245.93}{4}} = 7.84$$

$$SD = \sqrt{\frac{51.10}{4}} = 3.57$$

$$C.V. = \frac{\exists}{\bar{X}} \times 100 = \frac{7.84}{78.59} = 9.98$$

$$C.V. = \frac{3.57}{56.63} = 6.31$$

Appendix -6

Loan and Advance to Fixed Deposit Ratio

| Year | X ₁ | X ₂ | (X ₁ - \bar{X}_1) ² | (X ₂ - \bar{X}_2) ² |
|--------------|----------------|----------------|--|--|
| 2002/03 | 148.23 | 338.33 | 14648.26 | 6196.84 |
| 2003/04 | 158.23 | 274.29 | 12327.66 | 215.50 |
| 2004/05 | 199.54 | 220.24 | 4860.88 | 1549.99 |
| 2005/06 | 314.23 | 248.21 | 2022.30 | 129.96 |
| 2006/07 | 526.08 | 216.97 | 65956.51 | 1818.17 |
| Total | 1346.31 | 1298.05 | 99815.61 | 9910.46 |

$$\bar{X}_1 = \frac{1346.31}{5} = 269.26$$

$$\bar{X}_2 = \frac{1298.05}{5} = 259.61$$

$$SD = \sqrt{\frac{(X_1 - \bar{X}_1)^2}{N-1}} = \sqrt{\frac{99815.61}{4}} = 157.97$$

$$SD = \sqrt{\frac{9910.46}{4}} = 49.78$$

$$C.V. = \frac{\exists}{\bar{X}} \times 100 = \frac{157.97}{269.26} = 58.67$$

$$C.V. = \frac{49.78}{259.61} = 19.17$$

Appendix -7

Loan and Advance to Saving Deposit Ratio

| Year | X ₁ | X ₂ | (X ₁ - \bar{X}_1) ² | (X ₂ - \bar{X}_2) ² |
|--------------|----------------|----------------|--|--|
| 2002/03 | 383.74 | 99.76 | 4407.36 | 52.71 |
| 2003/04 | 270.45 | 109.86 | 2199.61 | 8.06 |
| 2004/05 | 227.18 | 104.66 | 8130.63 | 5.57 |
| 2005/06 | 354.45 | 108.08 | 1376.41 | 1.25 |
| 2006/07 | 350.94 | 112.73 | 1128.29 | 32.60 |
| Total | 1586.76 | 535.10 | 17242.30 | 100.19 |

$$\bar{X}_1 = \frac{1586.76}{5} = 317.35$$

$$\bar{X}_2 = \frac{535.10}{5} = 107.02$$

$$SD = \sqrt{\frac{(X_1 - \bar{X}_1)^2}{N-1}} = \sqrt{\frac{17242.30}{4}} = 65.65$$

$$SD = \sqrt{\frac{100.19}{4}} = 5.00$$

$$C.V. = \frac{\exists}{\bar{X}} \times 100 = \frac{65.65}{317.35} = 20.69$$

$$C.V. = \frac{5.00}{107.2} = 4.68$$

Appendix -8

Investment by Total Deposit Ratio

| Year | X ₁ | X ₂ | (X ₁ - \bar{X}_1) ² | (X ₂ - \bar{X}_2) ² |
|---------|----------------|----------------|--|--|
| 2002/03 | 10.58 | 48.35 | 37.72 | 22.28 |
| 2003/04 | 20.48 | 42.21 | 14.14 | 2.02 |

| | | | | |
|--------------|--------------|--------|---------------|--------------|
| 2004/05 | 21.08 | 47.12 | 19.01 | 12.18 |
| 2005/06 | 20.45 | 41.10 | 13.91 | 6.40 |
| 2006/07 | 11.02 | 39.35 | 32.49 | 18.32 |
| Total | 83.61 | 218.15 | 117.27 | 61.20 |

$$\bar{X}_1 = \frac{83.61}{5} = 16.72$$

$$\bar{X}_2 = \frac{218.15}{5} = 43.63$$

$$SD = \sqrt{\frac{(X_1 - \bar{X}_1)^2}{N-1}} = \sqrt{\frac{117.27}{4}} = 5.41$$

$$SD = \sqrt{\frac{61.20}{4}} = 3.91$$

$$C.V. = \frac{\text{₹}}{\bar{X}} \times 100 = \frac{5.41}{16.72} = 32.38$$

$$C.V. = \frac{3.91}{43.63} = 8.96$$

Appendix -9

Total Debt to Shareholders fund Ratio

| Year | X ₁ | X ₂ | (X ₁ - \bar{X}_1) ² | (X ₂ - \bar{X}_2) ² |
|--------------|----------------|----------------|--|--|
| 2002/03 | 12.24 | 11.70 | 2.10 | 1.46 |
| 2003/04 | 17.30 | 10.23 | 13.03 | 0.07 |
| 2004/05 | 12.41 | 10.24 | 1.64 | 0.06 |
| 2005/06 | 12.71 | 9.60 | 0.97 | 0.79 |
| 2006/07 | 13.78 | 10.66 | 0.0081 | 0.03 |
| Total | 68.44 | 52.45 | 17.478 | 2.41 |

$$\bar{X}_1 = \frac{68.44}{5} = 13.69$$

$$\bar{X}_2 = \frac{52.45}{5} = 10.49$$

$$SD = \sqrt{\frac{(X_1 - \bar{X}_1)^2}{N-1}} = \sqrt{\frac{17.748}{4}} = 2.11$$

$$SD = \sqrt{\frac{2.41}{4}} = 0.776$$

$$\text{₹} \quad 2.11$$

$$0.776$$

$$\text{C.V.} = \frac{\quad}{\bar{X}} \times 100 = \frac{\quad}{13.69} = 15.41$$

$$\text{C.V.} = \frac{\quad}{10.49} = 7.40$$

Appendix -10

Total Debt to Total Assets Ratio

| Year | X ₁ | X ₂ | (X ₁ - \bar{X}_1) ² | (X ₂ - \bar{X}_2) ² |
|--------------|----------------|----------------|--|--|
| 2002/03 | 112.22 | 92.12 | 1904.45 | 0.74 |
| 2003/04 | 122.26 | 91.09 | 1128.96 | 0.03 |
| 2004/05 | 114.01 | 91.10 | 1751.42 | 0.03 |
| 2005/06 | 157.58 | 90.56 | 2.96 | 0.49 |
| 2006/07 | 253.21 | 91.42 | 9477.02 | 0.03 |
| Total | 759.28 | 456.30 | 14264.81 | 1.32 |

$$\bar{X}_1 = \frac{759.28}{5} = 155.86$$

$$\bar{X}_2 = \frac{456.30}{5} = 91.26$$

$$\text{SD} = \sqrt{\frac{(X_1 - \bar{X}_1)^2}{N-1}} = \sqrt{\frac{14264.81}{4}} = 59.72$$

$$\text{SD} = \sqrt{\frac{1.32}{4}} = 0.57$$

$$\text{C.V.} = \frac{\Xi}{\bar{X}} \times 100 = \frac{59.72}{155.86} = 38.31$$

$$\text{C.V.} = \frac{0.57}{91.26} = 0.62$$

Appendix -11

Net Profit to Total Assets Ratio

| Year | X ₁ | X ₂ | (X ₁ - \bar{X}_1) ² | (X ₂ - \bar{X}_2) ² |
|------|----------------|----------------|--|--|
|------|----------------|----------------|--|--|

| | | | | |
|--------------|-------------|-------------|---------------|-------------|
| 2002/03 | 0.59 | 0.88 | 0.1369 | 0.09 |
| 2003/04 | 0.60 | 1.02 | 0.1444 | 0.03 |
| 2004/05 | 0.018 | 1.07 | 0.0408 | 0.01 |
| 2005/06 | -0.039 | 1.50 | 0.0670 | 0.10 |
| 2006/07 | -0.079 | 1.43 | 0.0894 | 0.06 |
| Total | 1.09 | 5.90 | 0.4785 | 0.29 |

$$\bar{X}_1 = \frac{1.09}{5} = 0.22$$

$$\bar{X}_2 = \frac{5.90}{5} = 1.18$$

$$SD = \sqrt{\frac{(X_1 - \bar{X}_1)^2}{N-1}} = \sqrt{\frac{0.4785}{4}} = 0.34$$

$$SD = \sqrt{\frac{0.29}{4}} = 0.27$$

$$C.V. = \frac{\Sigma}{\bar{X}} \times 100 = \frac{0.34}{0.22} = 157.21$$

$$C.V. = \frac{0.27}{1.18} = 22.88$$

Appendix -12

Net Profit to Total Deposit Ratio

| Year | X ₁ | X ₂ | (X ₁ - \bar{X}_1) ² | (X ₂ - \bar{X}_2) ² |
|--------------|----------------|----------------|--|--|
| 2002/03 | 0.69 | 1.02 | 5.48 | 0.12 |
| 2003/04 | 0.68 | 1.20 | 5.43 | 0.03 |
| 2004/05 | 0.02 | 1.24 | 2.79 | 0.02 |
| 2005/06 | -3.52 | 1.73 | 3.50 | 0.13 |
| 2006/07 | -6.14 | 1.64 | 20.16 | 0.07 |
| Total | -8.27 | 6.85 | 37.36 | 0.37 |

$$\bar{X}_1 = \frac{-8.27}{5} = -1.65$$

$$\bar{X}_2 = \frac{6.85}{5} = 1.37$$

$$SD = \sqrt{\frac{(X_1 - \bar{X}_1)^2}{N-1}} = \sqrt{\frac{37.36}{4}} = 3.06$$

$$SD = \sqrt{\frac{0.37}{4}} = 0.30$$

$$C.V. = \frac{\sum}{\bar{X}} \times 100 = \frac{3.06}{-1.65} = -185.45$$

$$C.V. = \frac{0.30}{1.37} = 22.20$$

Appendix -13

Return on Net Worth Ratio

| Year | X ₁ | X ₂ | (X ₁ - \bar{X}_1) ² | (X ₂ - \bar{X}_2) ² |
|--------------|----------------|----------------|--|--|
| 2002/03 | 6.46 | 11.13 | 338.56 | 5.34 |
| 2003/04 | 8.48 | 11.48 | 20.42 | 3.84 |
| 2004/05 | 0.20 | 12.00 | 147.38 | 2.07 |
| 2005/06 | -31.53 | 15.85 | 383.77 | 5.81 |
| 2006/07 | -43.29 | 16.72 | 982.82 | 10.76 |
| Total | -59.68 | 67.20 | 1872.95 | 27.82 |

$$\bar{X}_1 = \frac{-59.68}{5} = -11.94$$

$$\bar{X}_2 = \frac{67.20}{5} = 13.44$$

$$SD = \sqrt{\frac{(X_1 - \bar{X}_1)^2}{N-1}} = \sqrt{\frac{872.95}{4}} = 27.81$$

$$SD = \sqrt{\frac{27.82}{4}} = 2.64$$

$$C.V. = \frac{\sum}{\bar{X}} \times 100 = \frac{21.64}{-11.94} = -181.23$$

$$C.V. = \frac{2.64}{13.44} = 19.64$$

Appendix -14

Net Profit Margin Ratio

| Year | X ₁ | X ₂ | (X ₁ - \bar{X}_1) ² | (X ₂ - \bar{X}_2) ² |
|--------------|----------------|----------------|--|--|
| 2002/03 | 6.11 | 23.56 | 42.12 | 20.70 |
| 2003/04 | 5.75 | 25.58 | 37.57 | 6.40 |
| 2004/05 | 0.20 | 25.72 | 0.34 | 5.71 |
| 2005/06 | -7.24 | 32.78 | 47.06 | 21.81 |
| 2006/07 | -6.74 | 32.93 | 40.45 | 23.23 |
| Total | -1.92 | 140.55 | 167.54 | 77.85 |

$$\bar{X}_1 = \frac{-1.92}{5} = -0.38$$

$$\bar{X}_2 = \frac{140.55}{5} = 28.11$$

$$SD = \sqrt{\frac{(X_1 - \bar{X}_1)^2}{N-1}} = \sqrt{\frac{167.54}{4}} = 6.47$$

$$SD = \sqrt{\frac{77.85}{4}} = 4.41$$

$$C.V. = \frac{\exists}{\bar{X}} \times 100 = \frac{6.47}{-0.38} = 1703.12$$

$$C.V. = \frac{4.41}{28.11} = 15.69$$

Appendix -15

Return on Investment

| Year | X ₁ | X ₂ | (X ₁ - \bar{X}_1) ² | (X ₂ - \bar{X}_2) ² |
|--------------|----------------|----------------|--|--|
| 2002/03 | 6.52 | 2.08 | 365.96 | 1.21 |
| 2003/04 | 3.30 | 2.83 | 253.13 | 0.12 |
| 2004/05 | 0.098 | 2.64 | 161.49 | 0.29 |
| 2005/06 | -17.20 | 4.20 | 21.07 | 1.04 |
| 2006/07 | -55.76 | 4.16 | 1861.92 | 0.96 |
| Total | -63.04 | 15.91 | 2663.57 | 3.62 |

$$\bar{X}_1 = \frac{-63.04}{5} = -12.61$$

$$\bar{X}_2 = \frac{15.91}{5} = 3.18$$

$$\sqrt{\frac{(X_1 - \bar{X}_1)^2}{N-1}} = \sqrt{\frac{2663.57}{4}}$$

$$\sqrt{\frac{3.62}{4}}$$

$$SD = \frac{\quad}{N-1} = \frac{\quad}{4} = 25.80$$

$$SD = \frac{\quad}{4} = 0.95$$

$$C.V. = \frac{\exists}{\bar{X}} \times 100 = \frac{25.80}{-12.61} = -204.64$$

$$C.V. = \frac{0.95}{3.18} = 29.92$$

Appendix -16

List of Licensed Commercial Banks

| Commercial Banks | Established Date (B.S.) | Operation Date (B.S.) | Head Office |
|-------------------------------------|--------------------------------|------------------------------|--------------------|
| 1. Nepal Bank Limited | 1994/07/30 | 1994/07/30 | Kathmandu |
| 2. Rastriya Banijya Bank | 2022/10/10 | 2022/10/10 | Kathmandu |
| 3. NABIL Bank Ltd. | 2041/03/29 | 2041/03/29 | Kathmandu |
| 4. Nepal Investment Bank Ltd. | 2042/11/16 | 2042/11/16 | Kathmandu |
| 5. Standard Chartered Bank Ltd. | 2043/10/16 | 2043/10/16 | Kathmandu |
| 6. Himalayan Bank Ltd. | 2049/10/05 | 2049/10/05 | Kathmandu |
| 7. Nepal SBI Bank Ltd. | 2050/03/23 | 2050/03/23 | Kathmandu |
| 8. Nepal Bangladesh Bank Ltd. | 2050/02/23 | 2050/02/23 | Kathmandu |
| 9. Everest Bank Ltd. | 2051/07/01 | 2051/07/01 | Kathmandu |
| 10. Bank Of Kathmandu Ltd. | 2051/11/28 | 2051/11/28 | Kathmandu |
| 11. Nepal Credit & Comm. Bank Ltd. | 2053/06/28 | 2053/06/28 | Siddharthanagar |
| 12. Lumbini Bank Ltd. | 2055/04/01 | 2055/04/01 | Narayangadh |
| 13. Nepal Ind. & Commerce Bank Ltd. | 2055/04/05 | 2055/04/05 | Biratnagar |
| 14. Machhapuchre Bank Ltd. | 2057/06/17 | 2057/06/17 | Pokhara |
| 15. Kumari Bank Ltd. | 2056/08/24 | 2057/12/21 | Kathmandu |

| | | | |
|------------------------------------|------------|------------|-----------|
| 16. Laxmi Bank Ltd. | 2058/06/11 | 2058/12/21 | Birgunj |
| 17. Siddhartha Bank Ltd. | 2058/06/12 | 2059/09/09 | Kathmandu |
| 18. Agricultural Dev. Bank Limited | 2024/11/7 | 2024/11/7 | Kathmandu |
| 19. Global Bank Ltd. | 2063/09/12 | 2063/09/12 | Birgunj |
| 20. Bank of Asia Nepal | 2064/06/25 | 2064/06/25 | Kathmandu |
| 21. Citizens Bank Limited | 2064/01/7 | 2064/01/7 | Kathmandu |
| 22. Prime Bank Limited | 2064/06/7 | 2064/06/7 | Kathmandu |
| 23. Sunrise Bank Limited | 2064/06/25 | 2064/06/25 | Kathmandu |
| 24. Development Credit Bank Ltd. | 2057/02/14 | 2057/02/14 | Kathmandu |
| 25. NMB Bank Ltd. | 2052/08/26 | 2052/08/26 | Kathmandu |

Source: - Mirmire – 2008, NRB