

# INTRODUCTION

## 1.1 Background of Study

Nepal is located in between the latitude 26 22' north to 30 27' and longitude 80 4' east to 88 12' east and Average length 885 Km east to west and average breadth is about 193 Km north to south and area is land-locked country and the nearest sea port is located at Bay of Bengal, Calcutta in India, 1126 Km to the south east of country, which has greatly hindered its foreign trade situation.

Surround by China and India the two regional super-powers. Nepal is still in the list of the least developed countries in the world Majority of population is still much below the poverty line. The agro-dominated economy is further worsened by the complete geographical situation. Various factors like the landlocked situation, poor resource mobilization, lack of entrepreneurs, lack of institution commitment erratic government policies political instability, etc. are responsible for the slow pace of development in Nepal.

Economic Development in Nepal, in real sense, started only after Rana regime in the late period of Rana regime, some positive attempts were made. As result, 'Udyog Parishad' got its existence in 1935 AD-Biratnager Jute Mill in 1936 AD. Just before the break of Second World War, a twenty year plan was announced and National planning committee was set up in 1949 AD but plan never came to the notice of people and this idea disappeared with the dissolution of National planning committee.

Nepal in early 1950 AD began the process of economic and social development in spite of the lack of modern institutions and infrastructures. Budgetary system was introduced in 1952 AD (2008BS) in the same year, a separate ministry for planned and Development was established for uplifting the nation.

It is forty-seven years since the first five-year plan was executed up to now nine successive plans has already been implemented. A cursory look at these plans shows that the major focus has been laid on agro-sector, industrial sector and in the field of infrastructure development.

Economic stabilization program, adopted in 2042 BS with the assistance of IMF can be taken as the beginning of economic liberalization in Nepal. Structural adjustment program brought in 2044 BS with the structural adjustment facility from IMF can be considered as the continuation of same policy. After the restoration of multiparty system the first elected government (2047 BS), encouraged the process of globalization in order to accelerate the process of economic liberalization and globalization the government enforced 'the Foreign investment and Technology Transfer Act-2049 and 'Foreign Investment and One Window Policy-2049' As per the arrangement in policies license should be taken from the related department for technology transfer Technology can be transferred in case of collage industries the fixed assets constituting up to twenty million rupees. Foreign investors should pay 15% tax on earning.

Similarly, the government enforced 'Industrial Enterprises Act-2049 formulated new 'Industrial Policy-2049 and 'Commercial Policy-2049. The policies include one window provision for internal and foreign investors, non-nationalization of new industries, implementation of full convertibility of Nepalese currency on current account etc. Non-requirement of license for the establishment of the industries other than having social cost was another aspect of the policy.

In the similar way, the government enforced the 'Privatization Act-2050 including its regulation and guidelines. The government developed various criteria for promoting private sector organizations. They include management contract, Partial privatization, and lease contract, asset selling and selling of shares. In case, the shares to the employees of enterprise, 25% to the public and management shares to the competent party or individuals.

Those policies have certainly contributed in the initial stage of globalization in the country. Their effectiveness can be measured in near future in terms of economy generating issues and enhancing overall GNP and GDP of the country. Since last decade, there have been a considerable growth in service sector activities in Nepal including a share increases in banking, Insurance, transportation, airlines, finance companies, co-operative societies, hydropower centers etc. A growing number of NGOs and INGOs, multinational companies are mushrooming in Nepal.

The concept of financial institutions in Nepal dates back more than sixty years. In 1994BS, first commercial bank, Nepal Bank Limited was established under the Banking Act-1993'. The government provided 51% equity of the bank and the promoters shared the rest Nepal Rastra Bank, the central bank emerged in 2013 BS under 'Rastra Bank Act-2012'. Since then, It has been providing policies and guidance to the financial sectors in one hands and is monitoring and controlling then in the other Realizing the need of adequate banking services for the integrated and speedy development of industrial sector, Rastriya Banijya Bank came into existence in 2022 Bs with 100% government equity.

After the establishment of Agricultural Development Bank in 2024BS, growth of banking institutions remained almost stagnant till 2040BS. No new banks opened in this period though some branches of previously established bank were extended. Liberalization policy of government formulated in 2038BS allowed private sectors to open joint venture banks in foreign collaboration Nepal Arab Bank Limited became the first commercial bank to register under new arrangement. The bank started its operation since 2041BS. It is an associated of Dubai Bank Limited, UAE and Nepalese promoters Nepal Indosuez Bank Limited and Nepal Grind lays Bank Limited were other joint venture banks established afterwards.

After restoration of multiparty democracy in the country, the government formulated new policies along with the amendment of existing policies. To accelerate the process of economic liberalization and globalization. As consequence, other six JVBS came in existence Nepal Bank of Ceylon Limited has been the youngest one until now Relation to the commercial banks, they have been altogether fifteen in number. These banks attempted to introduce foreign management skill technical knowledge and foreign capital. The situation created an environment of healthy competition among the existing financial institutions.

It evident that different nine joint venture banks were established in different dated with their head office mainly at Kathmandu, except Bank of Ceylon (Siddhartha agar).

Therefore, the present study focuses on the comparative financial performance analysis of Nepal SBI Bank Limited and Everest Bank Limited. For the purpose, the study evaluates the position of the bank with respect to liquidity, Leverage capital adequacy, turnover and

profitability and tests the relationship between various variable. The study assumes the hypothesis that the performance of sampled banks does not differ significantly.

## **1.2 Statement of the problem**

The number of joint venture banks is being increased in response to the economic liberalization policies of the government besides joint venture banks, commercial banks are also being registered by Nepalese promoters other institutions offering similar nature of services like finance companies, co-operative societies and development banks are growing in large number these institutions have the tendency to centralize in major cities focusing the activities among the industrialists, traders and entrepreneurs.

As per the economic survey of fiscal year 03/04. Nepalese economy witnessed mixed trend. Total credit and investment of the bank grew by lower rate than that of the previous year. The rate of resource utilization by commercial banks declined in the year as compared to the previous year. Sluggish securities market could not show any conspicuous sign of revival in the manufacturing sector banks have been facing the considerable pressure to lower the commercial banks are competing for limited opportunities narrow clientele base and barring investment in treasury bills. There are hardly any other opportunities available for short-term investment. Because of continued slackness in the economic activities in the country, the demand for credit has not picked up besides, competition in the banking sector has turned more and leading opportunities in good projects are very limited.

With the prevailing economic condition of the country. The investment in agriculture, manufacturing and industrial sectors has not grown satisfactory. Hence, the joint venture banks are also not succeeding perfectly to shift the deposit in profitable sectors competition being the burning issues at present their eyes for the better productive and growth.

The problem of the study lies on the issues related to the Nepal SBI Bank and Everest Bank answer to the following question.

- How far have Nepal SBI Bank and Everest Bank been able to shift the monetary resources from savers to users?
- How sound is the operational result in relation to their profitability?
- What is the comparative position of two banks in terms of liquidity, leverage capital adequacy and profitability?

### **1.3 Objective of the study**

Main objective of this research is to examine and evaluate the financial performance to two joint venture banks namely Nepal SBI Bank and Everest Bank. The specific objectives of this research are as follow.

-To examine and comparative the financial position of selected joint venture banks.

-To evaluate liquidity, Leverage, capital adequacy turnover and profitability position of Nepal SBI Bank and Everest Bank.

- To find the future trend of total deposit, total investment, loan and advance, net worth, net profit, earning per share and market value( per share of these banks for coming five years)

- To evaluate the relationship between the two variable in terms of total deposit to total investment, total deposit to loan and advance, total deposit to net profit performing assets to net profit, net worth to bet profit, earning per share to market value per share, dividend per share to market value per share, and dividend per share to market value per share of the banks.

-Lastly, to identify the financial strengths and weaknesses of the concerned banks and offer suggestion for the improvement in performance.

### **1.4 Significance of the study**

At present the joint venture bank are going a wide popularity through the efficient management and professional service and playing an eminent role in the economy.

Regarding the economic structure of the country, the banks do not have sufficient investment opportunities. Rapidly increasing financial instruction are creating threats to the joint venture banks. In this context, the financial analysis would not analyze strengths, weaknesses, opportunities and threats of selected joint venture banks. The result of the research will be helpful for JVBs especially for sample to formulate strategies to face the increasing competitions. The study no doubt will also have multidimensional importance for various areas. These are mentioned below:

- Importance to shareholders
- Importance to policy formulators and academically professional.
- Importance to management bodies of these banks for the evaluation of the performance of their banks and in comparison which others banks.
- Importance to government bodies and policymaker such as Central bank.
- Interested outside parties such as investors, customers (depositors, loan takers as well others types of clients.), competitors, personnel of the banks stock brokers, dealers and market makers etc.
  
- Significance to student and various groups those having interested in banking sectors as well as the management bookies of these banks for the evaluation of performance of their banks and in comparison which other bank.
  
- This study helps these banks to identify its hidden weakness regarding financial administration and necessity of the present study is justified.

### **1.5 Limitation of the study**

This reach will try it's almost care to cover mist of the importance sector; it is still subject to the following limitations in brief. Being a student, lack of the sufficient time and resources are the major limitation therefore the study has been conduced as partial fulfillment of the requirement for therefore the study has been conducted as partial fulfillment of the requirement for the master of business studies of the management faculty TU. of the nine JVBs, the study covers judgmentally selected two small samples i.e. Nepal SBI Bank and Everest Bank which is based on secondary data therefore the reliability of the study depends upon the accuracy of the provided published audited

general report documents such as balance sheet, profit and loss account, statement which are circulated of the close of the financial year.

- The analysis period of research covers only five years i.e. the fiscal year 2002/2003 to 2006/2007
- It focuses on financial performance and does not cover other aspects.
- Relating to the literature review, only master level theses have been reviewed.
- In this study, only selected financial and statistical tools and techniques are used.

## **1.6 An Introduction of the sampled Banks**

Everest Bank and Nepal SBI Bank are two JVBs out of nine. JVBs currently operation in Nepal Both of the banks is operating in Nepal. Both of the banks are operating with the joint venture of Indian Banks. These banks were established in the gap of sixteen months paid up of capital of 'both of the banks byes the review period of 1998/99 is almost equal. Both of them carry out their operation under Nepal Rastra Bank ACT-2012 and Commercial Bank Act-2013.

### **1.6.1 Nepal SBI Bank**

Nepal SBI Bank was established in 2050BS.It started its operation on 23<sup>rd</sup> Ashad 2050. It is an associate of state bank of India and Nepalese entrepreneurs. Regarding the composition of equity capital, state Bank of India, general public employee's provident fund and Agricultural Development Bank share: 50%, 30%, 15% and 5% respectively. Under the technical service agreement signed between two Banks, state Bank of India has been providing top management service to the bank service to bank. The bank operates with objective of providing loan to industry, commerce and trade. It also wishes to have public benefited from the various services.

The bank has 12 branches in various parts of the kingdom. Its corporate office is located in Hattisar, Kathmandu and main branch office in Durbarmarg, Kathmandu.It has two other branches within the valley-new Road branch and Embally of India Extension counter. Eight branches outside the valley are in Birgunj,Biratnager,Bairahawa, Rampur, Britamod, Sisuwa, Pokhara and Dharan.

The bank has utilized advanced computerized technique in its operation. The software in the user is 'bancs-2000' developed by info sis technology, India. The branches within the valley perform their routine works from Monday to Friday i.e. Five days a week.

Apart from the conventional facilities, other facilities made available by the bank are listed below.

- It provides loan and advances by means of term loan as well as working capital.
- It provides its customers with letter of credit and guarantees.
- It provides remittance facility to various parts of the world.
- It is going to introduce 'Swift Transfer' System in near future.
- It provides merchant banking facilities like underwriting of public issues and standing instructions.

Performance review of the bank depicts that the total deposits of the bank grew from 3744.50 million rupees in the fiscal year 2000/01 to 4380 million rupees in 2005/06, recording a moderate growth of 16.97%. During the same period, total loans and advance reached the level of 2963 million rupees from 2363 million rupees recording a growth of 2\*5.36% over the pervious year. Accordingly total negative growth of 70.28% the level of investment in government securities. Net profit, during the period declined to 16.70million rupees from 58.90 million rupees showing the negative growth of 71.58%.

### **1.6.2 Everest Bank**

Everest Bank was established in 2051BS. It started its operation on 1<sup>st</sup> Kartik 2051. In the beginning, it had shared with United Bank of India Limited. But in 2053BS, United Bank handed over its proportion of equity to Punjab National Bank Regarding the composition of equity capital Nepalese promoters, General public and Punjab National Bank share 50%,30% and 20% respectively, the technical service agreement signed between two banks, Punjab National Bank has been providing top management service and banking expertise to Everest Bank. Punjab National Bank has helped the bank operates with the objective of providing full range of quality banking service to both the business community and general people.



The bank has 25 branches in various parts of the country; its head office is located in Baneshwar, Kathmandu. Other branches located within Kathmandu valley are New Road, Balaju, Chabahil, Lamizpat, Stungal, Pulchowk, Gwarko Teku Branch. Remaining branches outside the valley are in Sunsari, Butwal, Birgunj, Samara, Biratnagar, Mangalapur, Birtamod, Itahari, Janakpur, Simra, ICD Dryport, Dhangadhi, Bhairawa etc.

The bank is using computerized banking technique. The software in use is 'Pumori Plus'. It is going to launch 'Anywhere Branch Banking System' through 'Wide Area Network' in the near future. The branches within the valley provide their services from Monday to Friday i.e. five days a week. However, the main branch in Baneshwar and New Road Branch are providing service through additional counters on Sunday too.

Apart from the conventional services, attractive services made available by the bank are listed below.

Apart from conventional deposit schemes, it has offered cumulative deposit scheme, unfix deposit scheme and recurring deposit plan.

- It provides credit on competitive terms by way of term loans as well as working capital.
- It accepts foreign currency deposits at attractive rates and lends in competitive rate.
- It provides its customers with letter of credit as well as guarantees.
- It has been providing remittance facility to various parts of the world by means of swift transfer.
- It has been facilitating merchant banking facilities and standing instructions.

Performance review of Everest Bank shows that the total deposit of the bank reached 1949 million rupees in the fiscal year 2002/03 from 1125 million rupees in the previous year indicating an annual growth rate of 73.26%. During same period, total loans and advances reached 1365 million rupees from 872 million rupees showing the growth rate of 56.58%. According, total investment reached 283 million rupees from 218 million rupees showing the growth rate of 29.88%. Net profit during the period reached 252 million rupees from 250 million rupees showing an annual growth of 0.78%.

## **1.7 Organizing the study**

The study has broadly been dividing into five chapters:

Chapter1, Introduction- It deals about focus of the study, Statement of the problem, objective of the study, research hypothesis, importance, limitations, introduction of sampled banks and chapter schemes.

Chapter2, Review of Literature – This chapter is deals about concept of Bank, concept of commercial bank, function of commercial bank, concept of joint venture banks, role of joint venture bank, A profile of joint venture banks in Nepal, concept of financial analysis, financial performance analysis of bank and relevant studies though. Review of Relevant studies will include the objectives set by different researches in similar field of study.

Chapter3, Research methodology- It includes with research design, Population and sample, sources of data, data collection procedure, data processing and method of data analysis used in the study.

Chapter4, Analysis and interpretation of data-this chapter analyzes the data and interprets the result so obtained.

Chapter5, Summary- Conclusion and suggestions – it summarizes the result of analysis and offers suggestive framework

## **CHAPTER-2**

### **REVIEW OF LITERATURE**

Review of literature is basic stocktaking of available literature in the field of research. The textual constraints would help the researcher to support the area of research in order to explore the relevant and true facts for the reporting purpose. While conducting the research study, previous studies cannot be, ignore, as that information would help to check the chances of duplication in the present study. Thus, one can find what research study has been conduct and what remains to go with.

Therefore, this chapter is deals about concept of Bank, concept of commercial Bank, function of commercial bank, concept of joint venture bank, role of joint venture bank. A profile of joint venture banks in Nepal, concept of financial analysis performance analysis of bank and review of school thought Review of school thought will include the objective set by different researchers in the similar field of study.

### **Conceptual framework**

2.1.1 Concept of Bank: - A Bank is a financial institution, which plays significant role in the development of a country. It facilitates the growth if trade and industry of national economy. However, Bank is a resource for economic development, which maintains the self-confidence of various segment of society and extends credit to the people.

"A bank is a business organization that receives and holds deposits of fund from other, makes loans or extend credits and transfer funds by written orders of depositors". (Encyclopedia, vol.3, 1981)

"The business of banking is one of collection funds form the community and extending credit to people for useful purpose. Banks have played a pivotal role in making money from lenders to borrowers. Banking is a profit seeking business, not a community charity profit seeker it is expected to pay dividend and otherwise, add to the wealth of shareholders. (O'Edenuster, pub.1980.)

In England, Goldsmiths were the bankers in an ancient period. They used to lend money to the government and at the time of emergency to keep deposits for safety purpose. The people used to keep their ornaments to goldsmiths because they had safe box. In ancient time, the

Foreign exchange also used to be done by such goldsmiths, merchant and money lender<sup>45</sup>s. (Regmi, 1969 p16)

In Nepal, Banking transaction took place only after the establishment of Nepal Bank Limited in 1994 B.S. being only bank at that time; it performed the activities of central bank to some extent. The central bank was essential to establish but no activity was done until 2007 AD. The country, then, realized to established under-Nepal Rastra Bank Act 2012. Before that, the credit need of people for commercial and other purpose was mostly performed by the unorganized market of private moneylender.

(Nepal Rastra Bank, central office, KTM)

In short, the term bank in the modern times refers to an institution having the following features:-

- 1) It deals with money; it accepts deposits and advances loans.
- 2) It also deals with credit; it has the ability to credit; the ability to expand its liability.
- 3) It is a commercial institution; it aims at earning profit.
- 4) It is a unique financial institution that creates demand deposits that serve as a medium of exchange and as a result, the bank manages the payment system of the country.

### **2.1.2 CONCEPT OF COMMERCIAL BANK**

Commercial institutions are that financial institution, which deals in accepting deposits of people and institution and giving loans against securities. They provide working capital needs of trade industry and even to agricultural sector.

Moreover, commercial bank also provides technical and administrative assistance to trade, industries and business enterprise.

"Commercial bank is corporation demand deposits, subject to check and makes short term loans to business enterprises, regardless of the scope of its other service". (Principle of Bank operation U.S.A.1972.p.345)

"A commercial banker is dealer in money such as cheques and bills of exchanges. He also provides a variety of financial services". (The world Book, London, Vol14, 185, page 600)

Principally, commercial banks accept deposits and provide loans, primary to business firms, thereby, facilitating the transfer of funds in the economy.

Commercial banks are the heart of the financial system. They hold the deposits of many persons, government establishment, and business units. They make funds available through their-lending and investing activities to borrowers, individuals, business firms and government establishment units.

Therefore, commercial banks are those banks who pool together the savings of community and arrange for their productive use .They supply the financial needs on modern business by various means. Commercial banks are restricted to invest their funds in corporate securities. Their business is confined to financing the short-term needs of trade and industry, they cannot finance in fixed assets. A part from financing, they also render service like collection of bill, and cheques, safekeeping of valuable, financial advising, etc to their customer's. (Shakespeare 1996, p.24)

The American institute of Banking has laid down the four major functions of commercial bank such as receiving and handing of deposits, handing payments of its clients making loans and investments and creating money by extension of credit. (Principle of Bank operation 1972 U.S.A.)

Under Nepal commercial Bank 2031B.S.some roles and functions of commercial Bank have been define and emphasized commercial Bank provide short term as well us long term debt whenever necessary for trade and commerce. They except deposit form public,

and grants loans in different forms. They purchase and discount bills of exchange, promissory notes, exchange foreign currency etc.

However, central bank is the main bank of the any nation that directs and controls all the banks whose existence is in the country. In Nepal, Nepal Rasta Bank is the central bank of the country. All the commercial bank performs their function under rules, regulations and directives provided by Nepal Rastra Bank.

Nepal is poor least developed country having a low per capital income and GDP, As a result, many economic problems such as inflation, devaluation of money trade, trade deficit, budget deficit etc. arise. For4 the sake of removing these problems, many JVBs are being

incorporate in our country by sharing Nepali and foreign investment toward making more profit by using the funds in profitable sector.

Meanwhile, under the free enterprise system like U.S.A., the interest of nation as well as those of individuals and stockholders is supposed to be best served by vigorously seeking profit. But the profit cannot be the sole objective of the any enterprise. It should not be evaluated just on the ground of profit earned neither the bank nor the community will be best served if the banker unreasonably sacrifices the safety of his funds or the liquidity of his bank in an effort to increase income. (Principle of Bank Operation, 1972 page -149)

### **2.1.3 FUNCTION OF COMMERICAL BANKS**

Commercial banks are the most important types of financial institution for the nation in terms of aggregate assets. Traditional functions of commercial banks are only concerned with accepting deposits and providing loans. However, modern commercial banks work for overall development of trade commerce, services and agriculture also. The business of banking is very broad in modem business age. The number and variety of services provided by bank will probably expand. Recent innovation in banking includes the introduction of credit cards, accounting services for business firms, factoring leasing; participating in the Euro dollar market and lock-box is banking. (Jersey,1979). The main functions of commercials banks are as follows.

### 1) Accepting deposits:

According to Sir. Johan Padget.

"It is fair deduction that no persons or body, corporate or otherwise, can be banker who does not

- (a) Take deposits A/C.
- (b) Issues and pay cheques
- (c) Collect cheques horn his customers.

Here, all functions are related with the acceptance of deposits; therefore, accepting deposits by bank is the oldest function of bank. A bank accepts deposits in three forms Viz current, saving and fixed A/C.

Saving deposit is one of the deposits collected form small depositors and low-income depositors. The bank usually pays small interests to depositors against their deposits.

Current account is also known as demand deposits. Under this, any amount may be deposits. There are no restriction regarding number and amount of withdrawals as contrary to saving A/C. The bank does not pay any interest on such account but charge small amount on the customers having current account.

A fixed deposit is one where a customer is requested to keep a fixed amount with the bank for specific period, generally by those who do not need money for stipulated period. The bank pays a higher rate on such deposits.

### 2) Advancing Loans:-

The second major-function of a commercial bank is to provide loans and advances form the money which it receives bye way of deposits for the development of industry, trade and commerce, services and agriculture also. The main purpose of commercial bank is to boost up the development pace of communities as well as that of economy as a whole.

### 3) Agency Services:-

A bank also performs number of services on behalf of the customers. The following bank under agency services:

- Dealing with (ie transaction of foreign exchange business.
- Serving as an agent of correspondent on behalf of the customer.
- Issuing letter of credit, circulate notes, bank notes, traveler's cheques etc.
- Purchase and sale of different kinds of securities, remittance of funds.
- Collection and payments of cheques, promising notes, coupons, dividend and other type of bonds etc.
- Keeping valuable; articles in safe custody.
- Providing financial advising to various persons and bodies whenever required.

#### 4) Creating money :-

The major function of commercial banks that separates it form other financial institution is the ability to create and investing activities. The power of commercial banking system to create money is a great economic significance as it results in the elastic credit system that is necessary for economic progress at a relatively steady growth rate.

#### **2.1.4 CONCEPTS OF JOINT VENTURE BANKS**

A joint venture is joining of forces between two or more enterprises for the purpose carrying out a specific operation (industrial or commercial investment, production or trade Gupta 1984,pp 15-25)

Joint venture bank are the mode of trading to achieve mutual exchange of goods and services for sharing competitive advantage by performing joint investment schemes between Nepalese investors, financial and no-financial institution as well as private investors and their parents banks each supplying 50 percent of total investment. The parent banks, which have experience in highly mechanized and efficient modern banking services in many parts of the world, have come to Nepal with higher technology, advanced management skills and international of banking institutions.

JBVs in Nepal are formed as full- fledged commercial bank under the company act 2021 B.S. and operated under Baniyja Bank Act2031BS. The firms joint venture Bank Nepal Arab Bank Limited was established in 1984, July12, before that, no bank were established under the Joint venture principle when two or more independent firms mutually decide upon to participate in a business venture to the total equity or more or less capital and



establish a new organization it will known as joint venture, JVBs are established by joining different forces and with ability to achieve a common goal with each of the partners. They are more efficient and effective monetary institution in modern banking field than other old type of banks in Nepalese context.

Meanwhile, the Majesty's Government of Nepal has allowed VBs to operate in the private sector, and has allowed finance company. Joint venture banks are already playing on increasing dynamic and vital role in the economic development of country. This will undoubtedly increase with the time to come .All Nepalese JVBs are established and operated under the rules, regulation and lance of Nepal Rastra Bank.

HMO's deliberate policy of allowing foreign JVBs to operate in Nepal is basically targeted to encourage local traditionally run commercially banks to enhance their bankable capacity through competitive efficiency, modernization and mechanization via computerization and prompt-customer service. (Shrestha2047-44-51). The main objectives of JVBs are to grant banking facilities to the people by facilitating tele-banking services to businessperson;

Industrialists; and other professionals and to grant loans and advances agriculture; commerce and industrial sector.

#### **2.1.5 ROLE OF JVBs IN NEPAL**

Joint Venture banks pose a serious challenge to the existence of the efficient any very traditional banks but the same challenge can be taken by the domestic banks as an opportunity to modernize them and sharpen their competitive Zeal's. Murari R. Sharma JVBs Nepal co-exisiting or crowding out Prashast Lalitpur, Nepalses journal public Administration

It is undoubtedly true that JVBs are playing an increasing significant and dynamic role in the economic development of the country. The main roles of JVBs can be explained the following ways.

1) Introducing new methods and technology in banking services.

The JVBs have invited new era of banking in this remote Himalayan Kingdom by introducing high technology and efficient methods in the banking business other area of expertise are forward cover for foreign exchange transaction by importers and exporters, merchant banking inter bank market for money and securities, arranging foreign currency loans. (Chopra, 204.)

2) Creating a competitive environment:-

The JVBs have created a competitive environment in banking business in Nepal prior to the arrival of JVBs, there was little competitive zeal between NBL and RBB as they had almost set bunch of customers, working as services. This competitive environment will benefit the common person, business and industry and the country as whole.

3) Providing new services:-

JVBs so far have not provided any phenomenon service that was not offered by domestic bank, they have drawn a large number of customers who assume that they will eventually benefit from their association with these banks when they introduce new services. At present, a speedier than that of domestic bank is the hallmark of JVBs, through their services is basically in traditional areas which could be highly educative for domestic banks.

4) Providing more resources for investment:-

JVBs have played a significant role in channelizing the additional resources for investment for the development of country. It is assumed that the JVBs have mobilized net additional resources if they tap so far untapped resources in the local market.

5) Offering boiler links with International market:-

The JVBs are usually better placed to raise resources internationally for viable projects in a developing country like Nepal. It is much easier for Nepalese business to provide international linkage through the joint venture banks.

## 2.1.6 A PROFILE OF JOINT VENTURE BANKS IN NEPAL

Brief profile of joint venture banks in Nepal

Bank	Date of Establishment (BS)	Paid up capital as on mid-July 1999AD (RS. in million)	Equity composition	Head office
NABIL	2041-03-29	392.9	Dubai Bank Ltd-50%, General Public-30%, NIDC-10%, Rastriya Beema Sansthan-9.67%, Nepal Stock Exchange Ltd-0.33%	Kathmandu
NISBL	2042-11-16	135.6	Bank Indoxuez-50%, General Public 20%, Rastriya Banijya Bank 15%, Rastriya Beema Sansthan 15%	Kathmandu
GNBL	2043-10-16	339.5	Australian & Newzeland banking group (ANZ)-50%, Nepal Bank Limited-35%, General Public-15%	Kathmandu
HBL	2049-10-05	192	Nepalese Promoters 51%, Habib Bank of Pakistan-20%, General Public-15%, EPF-14%	Kathmandu
NSBI-BL	2050-03-23	119.90	State Bank of India-50%, General Public-30%, EPF-15%, ADB/N-5%	Kathmandu
NBBL	2051-02-23	177.40	International Finance Investment & Commercial Bank of Dhaka-50%, General Public-30%, Nepalese Promoters-20%	Kathmandu
BOCL	2053-06-28	350	Ceylon Bank of Srilanka-45%, General Public-30%, Nepalese Promoters-17%, Nepal Insurance company Ltd.-8%	Kathmandu
BOKL	2051-11-28	90	Nepalese Promoters-50%, Siam Commercial Bank, Thailand-30%, General Public-20%	Kathmandu

### 2.1.7 Financial Analysis

Financial analysis involves the use of various financial statements the first is the balance sheet, which represent a snapshot of the firm's financial position at a moment in time and next is the income statement that depicts a summary of the firm's profitability over time. (Van horn, Wachowicz, 1997).

Analysis and interpretation of financial statement is an attempt to determine the financial performance of any organization so that a forecast may be made of the prospects for future earning ability to pay interest, debts maturity and probability of a sound dividend policy.

In the word of Myers, financial statement analysis is largely a study of relationship among the various financial factors in a business as disclosed by a single set of statement and a study of trends of these factors as shown in a series of statement. (Myer, 1961)

It is the process of identifying the financial strength and weakness of the firm by properly establishing relationships between the items of the balance sheet and the profit and loss account.

It is a so the analytical and judgmental process that helps answer questions that been posed. Therefore, it is means to end a part from the specific analytical answers, the solutions to financial problems and issues depend significantly on the views of the parties involved in the related issues and on the nature and reliability of the information available. (Helfert, 1992, p2)

Besides, it can be taken as the starting point for making plans, before using any sophisticated forecasting and planning procedures. Financial data can be use to analyze a firm's past performance and assess its present financial strength. Management of the firm would be particularly interested in knowing the financial strengths make their best use and to spot out the financial weaknesses to take corrective actions.

The analysis attempts to dissect the financial statements in to their components based on the purpose on one hand and between individual components and total of these items on the other. In course of studying and evaluation the financial position of the organization, a

study of trend of various important factors over the past several years is also undertaken to have clear understanding of changing profitability and financial conditional of the business organization. (Shrivastav, 1993, p.56)

Financial statement analysis involves a comparison of a firm's performance with that of other firm's in the same line of business, which is often, identified by the firm's industry classification. (Western, Brighms, 1996, p.78)

With respect to the problems identified from the analysis, pertinent care should be made to distinguish between the cause and symptom of problem. (Hampton1998, p99.)

Through the application of analytical tools, profitability and financial health of a concern is evaluated in a proper, critical and scientific manner. (Jain1996, p.36)

The analysis of transaction determines the solvency of business and the measure of efficiency of operations as compared to similar concerns. The analysis reveals how far the dream and ambition of the top management have been converted into reality during each financial year. The analysis, being a technique of x-raying the financial position as well as progress of a concern, it enables managers and investors take decision that will affect the company's future.

### **Financial Performance**

It has already mentioned that this study relates to the analysis of financial performance of EBL. Financial performance analysis focuses on financial statements and the significant relationship that exists among the variables contained. In this regard Metcalf and Tittard says, "Analyzing financial performance is a process of evaluating financial statements to obtain a better understanding of a firm's position and performance." (Metcalf and Tittard, 1976, p56)

Profit is one of the basis indicators of sound financial performance. It is usually the result of sound business management, cost control, credit risk management and general efficiency of operation. Profit is essential for an enterprise for its survival, growth and maintains capital adequacy profit retention.

Though profit is important for any business concern including joint venture banks but profit cannot be the sole objective, for example neither the bank nor the community will be best served if the banker reasonably sacrifices the safety of its funds or the liquidity of the banking system in an effort to increase income. (American Institute of Banking, p.149)

Financial statements provide information about a firm's position as well as its operation over some period. However, the real value of financial statements lies in the fact that they can be used to predict the firm's financial position in the future, and to determine expected earnings and dividends. From an investor's standpoint, predicting the future is what financial statement analysis is all about, while management's standpoint financial statement analysis is useful to anticipate future conditions and for planning actions that will influence the future course of events. (Weston and Brigham, 11th edition p.93)

Ratio analysis is used to compare a firm's financial performance and status to that of other firms or to itself over time.

Financial ratios are the tools to analyze the financial conditions and performances. We calculate ratios because in this way we get a comparison that may prove more useful than the raw numbers by themselves. (C, Van Horne, 9<sup>th</sup> edition p.96)

#### Ratio Analysis

Ratio analysis is a powerful tool of financial analysis. In financial analysis, a ratio is used as an index or yardstick for evaluating the financial position and performance of a firm. The absolute accounting figures reported in the financial statements do not provide a meaningful understanding of the performance and the financial position of a firm. An accounting figure conveys meaning when it is related to some other relevant information. (Pandey, 1992, p.10)

## Review of related studies

### Review of Books

Finance is a broad field and there are various books written in this subject. The book of M.Y. Khan and P.K. Jain is considered 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 three major financial decisions according to Khan and Jain are:

- The investment decision;
- The financing decision; and
- The dividend policy decision

Stresses on Risk- Return trade off as one of the major financial functions. They believe that the maximization of the value of the firm can be achieved through maximizations of returns in on hand and minimization of risk in the other. The relationship between the expected future state of the economy and the performance of individual firms enables a relation to be set forth between the state of the economy and the returns from investment in firms.(Weston and Brigham,11<sup>th</sup> edition,p.29)

- Investment in assets new products;
- Determining the best mix of financing and dividends in relation to a company's overall valuation.

According to him" Investment of funds in assets determines the size of the firm, its profit from the operations, its business risk and its liquidity. Obtaining the best of mix of financing and dividends determines the firm's financial charges and its financial risk; it also affects its valuation. "He further incorporates other core financial are such as:

- Creation of value;
- Investment decision;
- Financing decision;
- Financial management

The objective of the company must be to create value for its shareholders. Market price of company's stock represents its value and this can be maximizing by firm's optimum investment, financing and dividend decisions.

The objective of the company must be to create value for its shareholder. Market price of company's stock represents its value and this can be maximizing by firm's optimum investment, financing and dividend decisions.

The capital investment decision is the capital to investment proposals whose benefits are to be realized in the future. As the future benefits are not known with certainty, investment proposals necessarily involve risk. Consequently, they should be evaluated in relations to their expected return and risk.

In the financing 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 exist, in which market price per share could be maximized.

Another important decision of the firm, according to Van Horne is its Dividend policy. The dividend decision includes the percentage of earning paid to stockholders in cash dividends. The dividend payout the ratio determines the amount of earning 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. Together, they determine the value of a company to its shareholders. Van Horne believes that the objective of any firm is to maximize its value and therefore, the firm should strive for



optimal combinations of the three inter-related decision, solved jointly. The main thing is that the financial managers relate each decision to its effect on the valuations of the firm.

- I. M. Pandey further identifies two kinds of finance functions:
  - a) Routine
  - b) Managerial finance functions.

The routine finance function do not require a great managerial ability to carry them out and they are chiefly in nature. Managerial finance functions on the other hand are so called because they require skillful planning, control and execution of financial activities. There are, according to I.M.Pandey four important managerial finance functions: (Pandey, Vikash publishing house, 1989.p 39)

- Investment or long-term asset mix decision.
- Financing or capital –mix decision
- Dividend or profit allocation decision
- Liquidity or short- term asset- mix decision

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

Finance is defined as the acquisition and investment of fund for enchanting the value and wealth of an organization. The various finance areas include investment, 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 financing through debt and equity resources, and it reflects the disposition of acquired financing among the various asset accounts. The major financial functions required for managing the banks balance sheet are summarizing 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 if 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 earned by banks.

The final function is the management of asset structure of the bank. Advance 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 decision or functions as mentioned by different writers are instrumental towards effective handling of financial management, which includes activities beginning form raising of funds to efficient and effectives use of funds; no matter either it is a banking or non-banking institution.

### **2.2.2 Review of Journals**

After reviewing the books, certain useful journals on domestic market, banking, financial statement analysis and monetary credit situation of Nepal are studied.

An article written by Radha krishna Paudel on banking challenges ahead 22 focuses in the potential areas where banks should invest to fight the prevailing economic recession. Currently growth in the profitability of JVBs has been mainly due to external factors such of

the foreign exchange rate but not to the growth in the real sector of the economy. Therefore, to sustain enter new areas by marketing their credit in important sub sectors such as hydro electricity, tourism, irrigation etc.

Mr. Poudel further writes that,-" Saving collection is another factor which is necessary for banks to balance their operations and generate sufficient surplus in their cash- flows. In recent years, growth rate of bank deposits has declined to about 16 percent compared against 23 percent of the past. Mobilization of internal resources in the country demands that banks attract more financial resources from the public."

According to Mr.Poudel, Balance sheet, profit and loss a/c and the accompanying notes are the most useful aspects of the bank. We need to understand the major characteristics of bank's balance sheet and profit and loss a/c. The banks balance sheet is composed of financial claims as liabilities in the form of deposits and as assets in the form of loans. Fixed assets accounts form a small portion of the total assets. Financial innovations, which are generally contingent in nature, are considered as off- balance sheet items. (Poudel, 2053P.27)

Interest received on loans, advances, and investment and paid on deposit liabilities are the major components of profit and loss account. The other sources of income are fee, commission, discount and service charges.

The users of the financial statement of a bank need relevant, reliable and comparable information which assists them in evaluating the financial position and performance of the banks and which is useful to then making economic decision. The disclosure requirement of bank's financial statement has been expressly laid down in the concerned act. Commercial banking act 1974 requires the audited balance sheet and profit and loss account to be published in the leading newspaper for the information of general public.

According to Poudel, the principal objectives of analyzing financial statements are to identify:

- Financial adaptability (Liquidity)
- Financial performance (Profitability) and
- Financial Position of Banks (Solvency)

Most of the users of the financial statements are interested in assessing the bank's overall performance i.e. Profitability, which is affected by the following factors:

- a) The structure of balance sheet and profit and loss account.
- b) Operating efficient and internal management system.
- c) Managerial decision taken by top management regarding interest rate, exchange rate, lending policies etc.
- d) Environmental changes(technology, government, competition, economy)

According to Mr. Poudel, the other factors, to be considered analyzing the financial statements of banks is to assess the capital adequacy ratio and liquidity position. In the line of the norms set by bank for international settlement (BIS), capital adequacy of a bank is assessed based on risk-weighted assets. It indicates a bank's financial strength and solvency. Presently the capital funds of a bank should not be less than 8% (at least 4% should be in the form of tier-1 capital or core capital) of its risk weighted assets as capital funds. Banks facing with capital adequacy problem may increase capital, reduce assets, or reallocate the existing assets structure in order to maintain the desired level of capital base.

Liquidity is measured by the speed with which banks assets can be converted into cash to meet deposit withdrawals and other current obligations. It is also important in view of survival and growth of a bank.

He has laid down an approach to evaluate the bank's overall performance through balancing between the risk and return components of the bank.

Dr. Shrestha in his work commercial Bank's comparative performance evaluation 24 stresses on a proper risk management. He believes in the appropriate classification of loans under the performing and non-performing category. In the context he writes, "Adequate provisioning is the surest way to get relief from sinking loan after careful consideration of portfolio risk. A clear out criteria is necessary to treat interest suspense account and it is advisable that all interest unpaid for more than six month need to be treated and unearned income".

Regarding the risk management of the bank Dr. Shrestha's other suggestions include;

Any customer having overdue loan of two years or more in his account should not be given other loan facilities.

Strong provisioning or reservations are required in restructuring portfolio relating to overdub loans.

All credits including overdrafts should be given a maturity date and should be subjected to revision at that date and consequently categorize as good, substandard or doubtful loans.

Financial credit worthiness of the borrower must be evaluate properly before granting the loans.

The above journals focus in the various aspects of the bank's economic environment. NRB press communiqué shows the current domestic market scenario article by Radha Krishna Poudel concentrates work stresses in effective's way of evaluating the financial performance and Dr. Shrestha suggestions are focuses towards proper risk management. Whatever, aspects of the bank the above journals target, they all have to be combinable assessed and kept in strict consideration for effective and efficient financial performance of the banks in the Nepalese economy. (Shrestha, 2047, P.38)

### **2.2.3 Review of Previous Thesis**

Various thesis works have been done in different aspects of commercial banks such as lending policy, investment policy, financial performance analysis, resource mobilization and capital structure. The review of some previous study, which is relating to the Nepalese banking sector, is the most relevant sources and assistants for this research.

Mr. Joshi, through his thesis, " A study on financial performance of commercial banks" concluded that the liquidity position of commercial bank is satisfactory local commercial bank have been found relatively highly leveraged compared to the joint venture banks. Loans and advances have been their main form of the investment. Two third assets have

been used for earning purpose. Profitability position of NABIL is stronger than others.(Joshi, 1989,p.10)

Mr.Pradhan has done a research for which he carried out a survey of 78 enterprises. According to his" The most important finance function appeared to be working capital management while, the least important one appeared to be maintaining good relation with stockholder. (Pradhan, 1994P.16)

The finding reveals that banks and retained earnings are two most widely used financing sources most enterprising do not borrow from one bank only and they do switch between banks to banks which offers best interest rates most enterprises find that banks are flexible in interest rate. Further, he said that among the bank loans, bank loan of less than one year are more popular in public sectors whereas bank loan of 1-5 year are more popular in private sectors. In periods of tight money the majority of private sectors enterprises fill that bank will treat all forms equally while public sector does not fell so. Similarly, he concluded that the banks interest rate is just right while the majority of non-trade sector find that the same is one higher side.

Mrs. Bhattarai, in her thesis paper entitled " Lending policy of commercial banks in Nepal", has tries to examine the lending policy of the commercial banks and she has concluded that efficient utilization resources is mire important than collection of same lower investment means lower capital formations that hampers economic development that banks showed emphasis on efficient utilization of resources.(Bhattarai,2033 B.S.P.19)

Mr. Acharya's study entitled" A comparative study of financial performance of JVBs in Nepal especially on NABIL and NIBL concludes that the liquidity position of both the banks is below normal standard of 2:1(i.e. unsatisfied), comparatively this ratio if NIBL is better on an average. Both the banks are found to be efficient in utilized most of their total assets.

Based on the findings of analysis, the research suggest finding out the root cause of weak liquidity position to improve the liquidity of both banks. Similarly, both the banks are suggested to maintains improved capital structure in increasingly equity base to extend loan advance to utilize more of the total deposits to minimize operational expenses or to

mobilize resources and efficiently and to extend their banking facilities even in rural areas.

Mr. Regmi's thesis "A comparative study of the financial performance of HBL and NBBL" 30, he suggested NBBL to increase its current assets because the bank is not maintaining adequate liquidity position in comparison with HBL. As capital structures of both the bank are highly levered both the banks are recommended to maintain and improve mix at debt and owner's equity by increasing equity share. He further suggests to HBL to improve the efficiency in utilizing the deposits in loan and advance for generating the profit NBBL should try to maintain present position on this regards. Profitability position of HBL is comparatively better than the same of NBBL. So, NBBL is recommended to utilize its resources more efficiently for generating more profit margins. If resources held idle, bank faces high cost and causes the low profit margin. An ideal dividend payout ratio is based upon shareholders expectations and the growth requirement of the banks. NBBL is suggested to increase its dividend payout ratio. (Regmi, 2001, p.29)

The two banks should extend their resources to rural areas and promote the development of poor and disadvantaged group. In order to do so banks should open their branches in the remote areas with objectives of providing cheaper banking services especially HBL should initiated an this regard because it has few branches in comparison to NBBL.

Because of the start competition between banking, sectors both the banks are suggest to formulate and implement some sound and effective financial and non-financial strategies to minimize operational expenses to meet required level of profitability. The banks are further suggested to adopt modern banking technologies to enhance their better and wide market.

Mr. Adhikari's thesis" A comparative study of financial performance of NSBIBL and EBL" conclude that EBL is found superior regarding the liquidity, quality assets they possessed and capital adequacy overall capital structure of NSBIBL appears more levered than that on EBL. But NSBIBL is found superior in terms of profitability and turnover comparatively interest remained more dominant in the total income and expenses of NSBIBL than that of EBL. Regarding the test of hypothesis is (at 5% level of significance) the performance of the sampled banks significantly different with respect to

the ratios, loans and advances to saving deposits. Loan loss provision to total deposit interest earned to total assets and tax per share correlation analysis signifies that EBL is successful to utilize its resources more efficiently than NSBIBL. (Adhikari, 2001, p.28)

The review of the above mention bunch of research writes have definitely enriched my vision to elaborate analysis to come to the meaningful conclusion in realistic term and thereby come with some conclusion, few key suggestions that help in improvement of commercial banks.

Previous researches on the basis of financial performance of commercial banks in Nepal. But this research is about joint venture bank of Nepal with sample of Nepal SBI Bank Limited and Everest Bank Limited. This research is about the financial performance of selected two banks. In the previous research, there is no clear-cut financial performance of joint venture banks. The research can help the people who wanted to know about the overall financial performance of joint venture bank in Nepal. There are two-selected bank to find out the comparative financial position of selected bank. Therefore, this topic may not new but the researches efforts may be appreciable.



## **CHAPTER-3**

### **RESEARCH METHODOLOGY**

The rationale behind the study is to evaluate and assess the financial position or performance of the two newly operated joint venture banks viz. Nepal SBI Bank Limited and Everest Bank Limited. Thus, this chapter includes those methods and techniques used for finding out a fore said purpose.

Research methodology refers to the various sequential steps (a long with the rationale of each step) to be adopted by a researcher in studying a problem with certain objective in view. It is a way to systematic solve the research problem it may be understood as a science of studying how search is done scientifically. Includes the various steps that are generally adopted by a researcher studying his/ her research problem along with the logic behind them, it would be appropriate to mention here that research project are not meaningful to any one unless they are in sequential order which will be determined by the particular problem at hand therefore, this study aims at analyzing and interpreting the purpose of comparative financial performance or appraisal of two JVBs. This chapter focuses and deals with the following aspects or methodology.

- Research design
- Population and Sample
- Source of data
- Data collection procedure
- Method of Date analysis

#### **3.1 RESEARCH DESIGN**

Research design is the task of defining the research problem. In other words, "A research design is the arrangement of conditions, for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. In fact, the research design is the conceptual structure within which the research is conduct.

General objective; of this research study is to examine and evaluate the financial performance of joint venture banks especially that of NSBIBL and EBL in order to achieve the objective, both descriptive and analytical research design has been followed. The study focuses on the examination of relationship between those variables that influence- financial decisions of the sampled banks hence; it is an ex-post factor research.

### 3.2 Populations and Sample

The population for this study comprises nine joint venture banks currently rating in the country. All the joint venture banks perform the functions of commercial banks under rules, regulations and directives of Nepal Rastra Bank. The sample consists of two judgmentally selected banks- Nepal SBI Bank and Everest Bank. These units represent 22.22% of the total population and are comparable to each other in various aspects.

### 3.3 Sources of Data

Although present study is on secondary data. However, necessary suggestion are also taken from various experts both inside the bank whenever required the necessary data is obtained from the head office of the JVBs such as, published balance sheet, profit and loss account and other related statement of accounts as well as the annual reports of the respectively banks. Likewise, other related and necessary information are also obtained from the publication of security exchange centre, Nepal Rastra Bank and other publications used for the purpose are book & booklets magazine journals, newspaper school of thought etc.

#### 3.3.1 Data Collection Procedure

The problem of the study lies on the issues related to the comparative strengths and weaknesses of the banks. Because of liberal policy adopted by the government, financial institution has been emerging in the country. The sampled banks have been facing threats from such institutions. Therefore, the study has been conducted to examine and evaluate the financial performance of the sampled units. This study is also intended to find the weaknesses and strengths so that appropriate suggestion can be provided to enhance the performance of the banks in coming days.

For the purpose, various data are required. With the view of obtaining the data, researcher made several visits of the sampled banks, in first visit, the researcher consulted the concerned authority of the bank and explained about the above stated problems and objectives of the study. He also explained why he is interested in these two banks and what he wishes to analysis after keeping forth the view of researcher. The authorities got convinced and appraised the effort. They assured that they would have far as possible. Regarding the information needed, they said that they would make them available up to the extended that does not affect the privacy and secrecy of the bank. Researcher got pleased with the response shown by them arid started the work.

In next visit, he approached share department and asked for the profit and loss account and balance sheet of the bank of last five years. In the department after explaining the need of such information the related staff the provided the necessary statement.

To acquire the primary data, researcher made some other visit in the bank due to the increasing transactions and business of the employees in the bank; they could not afford time to the researcher whenever he needed. After same efforts, they could manage some time and hence, the researcher got the information through direct interview with them.

In late visit, the researcher met the accounting expert in the bank for the clarification of the component items of the statements so as so avoid the ambiguity and confusion.

Similarly, researcher obtained economic surveys, annual and periodic reports and banking directive from Nepal Rastra Bank, Baluwatar. There, he visited library and banking operation department. In the department, he explained why he needed such reports and hence, he became able to get those reports.

For the reference materials, the researcher visited Nepal Commerce Campus, Shanker dev Campus and Central Department of Management, T.U. Many visits in management department and various sections of central library, TU led the researcher lobe successful in conducting this study.

### 3.4 Data Processing

Data obtained from the, various sources cannot be directly used in there original form further they need to be verified and simplified for the purpose of analysis. Data information, figure and facts so obtained need to be checke, rechecked edited and tabulated for computation.

According to the nature of data, they have been inserted in meaningful tables, which have been shown in annexes. Homogenous data have been sorted in one table and similarly various tables have been prepared in understandable manner odd data excluded form the table. Using financial and statistical tools data have been analyzed and interpreted.

### 3.5 Method of Data analysis

Financial statement can provide information useful for the parties directly or indirectly involved in the business. For the purpose of study, the data collected and obtained are scanner and tabulated under various heads. The researcher has used two sorts of tools has been used to achieve the results. Here is the brief discussion of both the tools, which are used to analyze and interpret the financial performance of two JVBs i.e. Nepal SBI Bank LTD. and Everest Bank LTD.

- Financial tools
- Statistical tools

#### 3.5.1 Financial tools

Financial tools are those, which are used for the analysis and interpretation of financial data. These tools can be used to get the precise knowledge of a business, winch in turn, are fruitful in exploring the strengths and weaknesses of the financial policies and strategies. For the sake of analysis following various financial tools have been used in order to meet the purpose of the study.

##### 3.5.1.1 Ratio analysis

Ratio analysis helps to summarize the large quantities of financial data and to make quantitative judgments about the firm's financial performance. Ratio is the expression of one figure in terms of another. It is the expression of relationship between the mutually independent figures, in financial analysis; ratio is use to as an index of yardstick for

evaluating the financial position and performance of firm. Ratio analysis is very much powerful & widely used tool of financial analysis. It is define as the systematic use of ratio to interpret the financial statements so that the strength and weakness of a firm as well as its historical performance and current financial condition can be determined. It helps the analysis to make qualitative judgment in about the financial position and performance of the firm. Therefore, it is helps to establish relationship among various ratios and interpret there on specially, based on comparison between two or more firms or inters firm comparison and comparison between present and past ratios for the same firm give enormous and fruitful results to examine the financial performance.

The obsolete accounting figure reported in the financial statement does not provide a meaningful understanding of the performance and financial position of the firm. An accounting figure conveys meaning when it is related to some other relevant information. Therefore, the ratio is the relationship between two accounting figures expressed mathematically. It helps to summarize large quantitative relationship helps to form a quality judgment. However, " A single ratio itself does not is indicate favorable or unfavorable conditions. It should be compared with some standard.

A ratio is simply a number expressed in terms of another number and it expresses the quantitative relation between any two variables.

Ratio can be calculated between any two items of financial statements. It means there may be as many ratios as there are the numbers of items. However, under the ratio analysis technique, it is not practical to work out all the ratios. Hence, only the required ratios have been worked out.

There are numerous ratios to analyze and interpret the financial form once of the enterprise or firm. However, for our purpose, only important and relevant ratios are used to check the financial health of two JVBs in Nepal, which are as below;

#### 3.5.1, 1.1 Liquidity Ratios:

Liquidity ratios are used to judge the firm's ability to moot short-term obligation. These ratios give insights into the present cash solvency of the firms and its ability to remain solvent in the event of adversities. It is the comparison between short-term

obligation and the short –term resources available to meet these obligations. These ratios are calculated to find the ability of banks to meet their short-term obligation, which are likely to mature in the short period. The following ratios are developed and used for our purpose to find the liquidity positions of the two joint venture banks.

a) Current Ratio:

This ratio indicated the current short-term solvency position of a current ratio is the relationship between current assets and current liabilities. It is calculated by dividing the current liabilities by current assets, which is expressed as follows:

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

Current assets refer in those assets, which are convertible in cash within a year or so. They includes, cash and Bank Balance, investment in treasury bills, money at short call, or placement, loans and advances, bills purchased and discounted, overdrafts. Other short-term loans, foreign currency loans, bills for collection, customer's acceptance liabilities, pre-payment expenses, and other receivable. Similarly, current- liabilities refer to those obligations maturing within a year. It includes, current account deposits, saving account deposits, margin deposits, call deposits, intra-bank reconciliation A/c, bills payable, bank over-draft, provisions, accrued expenses, bill for collection, and customer's acceptance liabilities etc.

A higher ratio indicates better liquidity position. However, "A very high ratio of current assets to current liabilities may be indicative of slack management practice, as it might signals excessive inventories for the current requirement and poor credit management in terms of over-expanded account receivable.

Current ratio is a measure of firm's solvency. It indicates the availability of the current assets in rupees for every one rupee of current liability. As a conventional rule, a current ratio of 2 to 1 in considered satisfactory. However, these rules should not be blindly followed, as it is the test of quantity not quality. In spite of its shortcoming, it is a crude-and quick measure of the firm's liquidity.

b) Cash and bank balance to current & saving deposit ratio.

The ratio shows the ability of banks immediate funds to cover their (current Margin, call and saving) deposit. Higher the ratio shows higher liquidity position and ability to cover the deposits and vice versa. The ratio is compute by dividing and bank balance by current and saving deposits. Cash and bank balance to current and saving deposits ratio.

$$= \frac{\text{Cash \& bank balance}}{\text{Current and saving deposit}}$$

Cash and bank balance comprises cash in hand, foreign cash in hand, cheques and other cash items, balance with domestic bank and balance held in foreign banks current and saving deposit consists of all types of deposits excluding fixed deposits.

The ratio measures the ability of banks to meet its immediate up to total deposit legations. The bank should maintain adequate cash and bank balance to meet the unexpected as well as heavy withdrawal of deposits. High ratio indicates sound liquidity position of the bank; however, too high ratio is not enough as it reveals the under utilization of fund.

c) Cash and Bank balance to total deposit ratio

The ratio is calculated using following formula,

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

Total deposit consists of current deposit, saving deposit, fixed deposit, money at call and short notice and other deposits.

The ratio shows the proportion of total deposits held as most liquid assets. High ratio shows the strong liquidity position of the bank. Too high ratio is not favorable for the bank because it produces adverse effect on profitability due to idleness of high-interest bearing fund.

d) NRB balance to current and saving deposit ratio

The ratio is computed by dividing the balance held with Nepal Rastra Bank by saving deposits,

$$\text{NRB balance to current saving deposit ratio} = \frac{\text{NRB balance}}{\text{Current and saving deposits}}$$

Commercial banks are required to hold certain portion of current and saving deposits in Nepal Rastra Bank's account. It is to ensure the smooth functioning and sound liquidity position of the bank. As per the directive of Nepal Rastra Bank, the required ratio is 8% therefore the ratio measures whether the bank is following the direction of NRB or not.

e) NRB balance to fixed deposits ratio

The ratio is computed by dividing the balance held with Nepal Rastra Bank by fixed deposits accepted.

$$\text{NRB balance to fixed deposit ratio} = \frac{\text{NRB balance}}{\text{Fixed deposit}}$$

It shows the percentage of amount deposited by the bank in Nepal Rastra Bank as compared to the fixed deposits. According to the direction of NRB, this ratio should be maintained 6%. Hence, the ratio so calculated finds whether the bank has obeyed the direction of central bank or not.

f) Fixed deposit to total deposit ratio

It is calculated as follow:

$$= \frac{\text{Fixed deposit}}{\text{Total deposit}}$$

The ratio shows what percentage of total deposit has been collected in form of fixed deposit. High ratio indicates better opportunity available to the bank to invest in sufficient profit generating long-term loans. Low ratio means bank should invest the fund of low cost in short-term loans.

### 3.5.1.1.2 Leverage Ratio.

Leverage or capital structure ratios are used to judge the long-term financial position of the firm. It evaluates the financial risk of long-term creditors greater the proportion of the owner's capital structure, lesser will be the financial risk borne by supplier of credit funds.



Debt is more risky from the firm's point of view. The firm has legal obligation to pay interest to debt holders irrespective of the profit made or losses incurred by the firm. However, use of debt is advantageous to shareholders in two ways:

- ) They can retain control on the firm with a limited stake
- ) Their earning is magnified when rate of return of the firm on total capital is higher than the cost of debt.

However, the earning of shareholders reduces if the cost of debt becomes more than the overall rate of return. In case, there is the threat of insolvency. Thus, the debt has two-folded impact-increases shareholder earning-increase risk. Therefore, a firm should maintain optimal mix of investors and outsiders fund for the benefit owners and its stability.

Under this group, following ratios are calculated to test the optimality capital structure;

- ) Debt-Equity ratio
- ) Debt-Asset ratio
- ) Debt to total capital ratio
- ) Interest coverage ratio

a) Debt –Equity ratio

The ratio is calculated by dividing total debt by shareholder's equity.

$$\text{We calculate} = \frac{\text{Total debt}}{\text{Shareholder's equity}}$$

Total debt consists of all interest bearing long-term and short-term debts. These include loans and advances taken from other financial institutions, deposits, carrying interest etc. Shareholder's equity includes paid-up capital, reserves and surplus and undistributed profit.

The ratio shows the mix of debt and equity in capital. It measures creditors' claims against owners. A high ratio shows that the creditors' claims are greater than those of owners are. Such a situation introduces inflexibility in the firm's operation due to the increasing interference and pressures from creditors' low ratio imply a greater claim of owners than

creditors. In such a situation, shareholders are less benefited if economic activities are good enough. Therefore, the ratio should be neither too high nor too low.

b) Debt-Asset ratio

The ratio can be calculated by dividing total debt by total assets

$$\text{Debt-asset ratio} = \frac{\text{Total debt}}{\text{Total assets}}$$

The ratio shows the contribution of creditors in financing the assets of the bank. High ratio indicates that the greater portion of the bank's assets has been financed through outsider's fund. The ratio should be too high per too low.

c) Debt to total capital ratio

The ratio is obtained by dividing total debt by total capital of the firm.

$$= \frac{\text{Total debt}}{\text{Total capital}}$$

Total capital refers to the sum of interest- bearing debt and net worth/shareholder's equity.

It shows the proportion of debt in total capital employed by the bank. High ratio indicates greater claim of creditors. Contrary to it, low ratio is the indication of lesser claim of outsiders. For the sound solvency position, the ratio should not be too high or too low.

d) Interest coverage ratio

The ratio is calculated by dividing net profit before deduction of interest and tax by interest charges.

$$= \frac{\text{Net profit before interest and tax}}{\text{Interest charges ratio}}$$

The ratio, also known as times interest-earned ratio is used to test the debt servicing capacity of the bank. It shows the number of times the interest charges are covered by funds that are ordinarily available for their payment. It indicates the extent to which the earning may fall without causing any embarrassment to the firm regarding the payment of interest. Higher ratio is desirable, but too high a ratio indicates the firm is very conservative in using debt. A lower ratio indicates excessive use of debt or insufficient operation.

### 3.5.1.1.3 Capital Adequacy Ratio

Capital adequacy ratio measures whether the firm has maintained sufficient capital or not. In other words, it helps to decide whether the existing capital is adequate or there is the not need or reforms. The ratio is tested to ensure the safety and stability of the firm in long run.

Over capitalization and under capitalization both have adverse effect on profitability of the firm. If the capital is excess, it remains idle, if the capital is insufficient, the firm may not be able to grasp the opportunity from potential profitable sectors. Therefore, the commercial banks have been directed to retain sufficient ratio by the central bank. As per the directive this ratio should be 8% of there total risk, weighted assets and total off-balance sheet transitions, Here, capital fund refers to the core capital and supplementary capital commercial banks cannot declare and distribute dividend until they meet capital adequacy ratio under this group, following ratios are tested.

) Net worth to total deposit ratio

) Net worth to total assets ratio

) Net worth to total credit ratio

a) Net worth to total deposit ratio

The ratio is calculated by dividing net worth by total deposits.

$$= \frac{\text{Net worth}}{\text{Total deposit}}$$

The ratio measures the percentage of net worth in relation to the total deposits collection in the bank. The ratio is a yardstick to see whether the bank has maintained the capital fund according to the direction of Nepal Rastra Bank.

b) Net worth to total assets ratio

The ratio is calculated by dividing the net worth by total assets of the bank.

$$= \frac{\text{Net worth}}{\text{Total assets}}$$

The ratio measure what is the percentage of shareholders' fund is relation to the total assets owned by the bank. High ratio means greater contribution of investors fund and strong capital adequacy position.

c) Net worth to total credit ratio

The ratio is obtained when net worth is divided by the total credit of the bank.

$$= \frac{\text{Net worth}}{\text{Total credit}}$$

Total credit refers to the total of loans and advances granted, cash credit overdrafts, bill purchased and discounted.

It measures the relative proportion of the shareholders fund with respect to the credit. High ratio shows that the firm has adequate capital, which is the index of safety. Moreover, a bank with higher ratio is less affected by the instability of the financial market.

#### 3.5.1.1.4 Turnover Ratio

Turnover ratios, also known as utilization ratios or activity ratios are employed to evaluate the efficiency with which the firm manages and utilizes its assets. They measure how effectively the firm uses investment and economic resources at its command. Investments are made in order to produce profitable sales. Unlike other manufacturing concerns, the bank produces loans, advances and other innovations. So it sells the same. High ratio depicts the managerial efficiency in utilizing the resources they show the sound profitability position of the bank. Low ratio is the result of insufficient utilization of resources. However, too high ratio is also not good enough as it may be due to the insufficient liquidity.

Depending upon special nature of assets and sales made by the bank, following ratios are tested;

- Loans and advances to total deposits ratio
- Loans and advances to fixed deposits ratio
- Loans and advances to saving deposit ratio
- Investment to total deposit ratio
- Performing assets to total assets ratio
- Performing assets to total debt ratio

a) Loan and advanced to total deposit ratio

The ratio is computed by dividing total loans and advances by total deposit liabilities.

$$= \frac{\text{Loans and advances}}{\text{Total deposit}}$$

Loan and advanced consist of loans, advances, cash credit overdraft, foreign bills purchased and discounted.

The ratio indicates the proportion of total deposits invested in loans and advances. High ratio means the greater use of deposits for investing in loans and advances. However, very high ratio shows poor liquidity position and risk in loans on the contrary; too low ratio may be the causes of idle cash or use of fund in less productive sector.

b) Loan and advances to fixed deposit ratio

The ratio is calculated by dividing loans and advances by fixed deposit liabilities

$$= \frac{\text{Loan and advances}}{\text{Fixed deposit ratio}}$$

The ratio indicates what proportion of fixed deposit has been used of loans and advances. Since fixed deposits carry high rate of interest, fund so collected need to be invested in such sectors, which yield at least sufficient return to meet the obligation. High ratio means utilization of the fixed deposit in form of loans.

c) Loan and advances to saving ratio

The ratio is calculated using following formula

$$= \frac{\text{Loan and advances}}{\text{Saving deposit}}$$

The ratio measures what extent of saving deposit has been turned over to loans and advances. Saving deposit also, being an interest bearing liability needs to be invested in productive sector. High ratio indicates greater utilization of the saving deposit in advancing loans.

d) Investment to total deposit ratio

The ratio obtained by dividing investment by total deposits collection in the bank.

$$= \frac{\text{Investment}}{\text{Total deposit ratio}}$$

Investment comprises investment its HMG treasury bills development bonds, company shares and other type of investment.

The ratio shows how efficiently the major resources of the bank have been mobilized. High ratio indicates managerial efficiency regarding the utilization of deposits. Low ratio is the result of less efficiency in use of funds.

e) Performing assets to total assets ratio

It is calculated by dividing performing assets by total assets.

$$= \frac{\text{Performing assets}}{\text{Total assets ratio}}$$

Performing assets to total assets include those assets, which are invested for income generating purpose. These consist of loans, advances; bills purchased and discounted investment and money at call or short notice.

The ratio measures what percentage of the assets has been funded for income generation. High ratio indicates greater utilization of assets and hence sound profitability position.

f) Performing assets to total debt ratio

It is calculated as follows

$$= \frac{\text{Performing assets}}{\text{Total debt}}$$

It shows the pattern of use of the fund collected from the outsiders High ratio represents the success of bank in utilization of creditors fund in productive areas low ratio indicates idleness of the cost bearing resources.

### 3.5.1.1.5 Asset Quality ratio

As explained earlier, turnover ratios measure the turnover of economic resource in terms of quantity. Only the investment is not of great significance, but the return from them with minimum default in payment by debtors is significant. A firm may be in a state of enough profit and though unable to meet liability. Therefore, asset quality ratios are intended to measure the quality of assets contained by the bank.

Following ratios are computed in this group:

- a) Loan loss coverage ratio
- b) Loan loss provision to total income ratio
- c) Loan loss provision to total deposit ratio
- d) Accrued interest to total interest income ratio
- a) Loan loss coverage ratio

The ratio is calculated by dividing provision for loans loss by total risk assets.

$$= \frac{\text{Loan loss provision}}{\text{Total risk assets}}$$

For the purpose, risk assets constitute loans and advances, bills purchased and discounted.

Nepal Rastra Bank has directed commercial banks to maintain provision for loan loss based on category of loans and risk grade. The ratio, therefore, measures whether the provision is sufficient to meet the possible loss created by defaulted in payment of loan or not. High ratio indicates that the major portion of loan is risky.

- b) Loan loss provision to total income ratio

The ratio is obtained by dividing loan loss provision by total income.

$$= \frac{\text{Loan loss provision}}{\text{Total income ratio}}$$

The ratio shows what portion of total income has been held as safety cushion against the possible bad loan. Higher ratio indicates that the greater portion of loan advanced by the bank is inferior in quality. Low ratio means that the bank has provided most of its loans and advance in secured sector.

- c) Loan loss provision to total deposit ratio

The ratio is obtained by dividing the provision for loan loss by total deposit in the bank.

$$= \frac{\text{Loan loss provision}}{\text{Total deposit ratio}}$$

It shows the proportion of bank's income held as loan loss provision in relation to the total deposit collected. Higher ratio means quality of assets contained by the bank in form of loan is not much satisfactory. Low ratio is the index of utilization of resources in healthy sector.

d) Accrued interest to total interest income ratio

The ratio is obtained by dividing accrued interest by total interest income.

$$= \frac{\text{Accrued interest}}{\text{Total interest income}}$$

Accrued interest refers to the interest that is accrued but not collected. Total interest income includes the interest received from the investment in various sectors.

The ratio shows the percentage of accrued interest with respect to total income in form of interest. High ratio indicates the larger portion interest remained to be collected. Lower ratio reflects the better quality of assets in the bank.

#### 3.5.1.1.6 Profitability Ratio

Profitability ratios are designed to highlight the end-result of the business activities, which in the imperfect world of ours, is the sole criterion of cover all efficiency of business unit.

A company should earn profit to survive and grow over a long period. It is a fact that sufficient profit must be earned to sustain the operations of the business, to able to obtain funds from investors for expansion and growth; and to contribute towards the social overheads for the welfare of society. The profitability ratios are calculated to measure the operating efficiency of the company. Management of the company, creditors and owners are interested in the profitability of the firm. Creditors want to get interest and repayment of principal regularly. Owners want to get a reasonable return from their investment.

To meet the objective of study, following ratios are calculated in this group;

- Return on total assets
- Return on net deposit
- Return on total deposit
- Total interest expenses to total interest income ratio
- Interest earned to total assets ratio
- Staff expenses to total income ratio
- Office operation expenses to total income ratio



a) Return on total asset

The ratio is calculated by dividing net profit after tax by total on asset on the bank.

$$= \frac{\text{Net profit after tax}}{\text{Total assets}}$$

Net profit refers to the profit deduction of interest and tax. A total asset means the assets that appear in asset of balance sheet.

It measures the efficiency of bank in utilization of the overall assets. High ratio indicates the success of management in overall operation. Lower ratio means insufficient operation of the bank.

b) Return on net worth

The ratio is computed by dividing net profit after tax by net worth.

$$= \frac{\text{Net profit after tax}}{\text{Net worth}}$$

The ratio is tested to see the profitability of the owner's investment "reflects the extent to which the objective of business is accomplished". The ratio is of great interest to present as well as prospective shareholders and of great significance to management, which has the responsibility of maximizing the owner's welfare, so higher ratio is desirable.

C) Return on total deposit

The ratio is computed by dividing net profit after tax by total deposit.

$$= \frac{\text{Net profit after tax}}{\text{Total deposit}}$$

The ratio shows the relation of net profit earned by the bank with the total deposit accumulated. High ratio is the index of strong profitability position.

d) Total interest expenses to total interest income ratio

The ratio is obtained by dividing total interest expenses by total interest income.

$$= \frac{\text{Total interest expenses}}{\text{Total interest income}}$$

Total interest expenses consist of interest expense incurred for deposit, borrowing and loans taken by the bank. Total interest income includes interest income received from

loans, advance, cash credit, overdrafts and government securities, inter bank and other investment. The ratio shows the percentage of interest expenses incurred in relation to the interest income realized. Lower ratio is favorable from profitability point of view.

e) Interest earned to total assets ratio

The ratio is calculated by dividing interest income by total asset of the bank.

$$= \frac{\text{Interest earned}}{\text{Total assets}}$$

The ratio shows percentage of interest income as compared to the assets of the bank. High ratio indicates the proper utilization of bank's assets for income generating purpose. Low ratio represents unsatisfactory performance.

f) Staff expenses to total income ratio

The ratio is obtained by dividing the staff expenses by total income.

$$= \frac{\text{Staff expenses}}{\text{Total income}}$$

Staff expenses include the salary and allowances, contribution to the provident fund & gratuity fund, staff training expenses and other allowance and expenses made for staff.

The ratio measures the proportion of income spent for the staff, whose contribution is of great significance in the success of the bank. High ratio indicates that the major portion of income is used for staff. From the firm's point of view, low ratio is advantages. However, the staffs prefer high ratio, as it is the result of higher level of facilities and benefits provided to them.

g) Office operation expenses to total income ratio.

The ratio is obtained by dividing office operation expenses by total income.

$$= \frac{\text{Office operation expenses}}{\text{Total income}}$$

Office operation expenses comprise expenses incurred in house rent, water, electricity, repair, maintenance, legal expenses, audit expenses and other miscellaneous expenses made in course of operation.

It shows the percentage of income spent for day-to-day operation of the bank. High ratio shows that large amount of income is spent for the operating activities of the bank. Lower ratio is favorable to the bank, as it is the reflection of operational efficiency.

### 3.5.1.2 Other indicators

Above stated ratios, throw light on various aspects of bank. Management investors and creditors can get information regarding their interest. Some indicators are dealt here which provide more knowledge about the performance of the bank. They are listed below.

- ) Earning per share(EPS)
- ) Dividing per share(DPS)
- ) Tax per share (TPS)
- ) Dividend payout ratio(DPR)
- ) Price-earning ratio (P/E Ratio)
- ) Market value per share to book value per share(MVPS/BVPS)

#### a) Earning per share(EPS)

It is obtained by dividing earning available to common shareholders by number of equity shares out-standing.

$$= \frac{\text{Earning available to common shareholders}}{\text{No. of equity shares outstanding}}$$

Earning per share refers to the income available to the common shareholders on per share basis, it enables us to compare whether the earning based on per share basis has changed over past period or not. The investors favour high EPS. It reflects the sound profitability of the bank.

#### b) Divided per share(DPS)

It is obtained by dividing earning paid to shareholder by number of equity shares outstanding.

$$= \frac{\text{Earning paid to shareholders}}{\text{No. of equity shares outstanding}}$$

The net profit after the deduction of preference dividend belongs to equity shareholders. However, the income that really receives is the amount of earning distributed as dividend. Dividend may be distributed in form of cash or bonus share. Dividend distribution affects the price of share. Shareholders prefer high dividend. However, it may sometimes be wise to distribute less amount of profit in investment opportunities are available.

c) Tax per share (TPS)

It is obtained by dividend tax paid to the government by number of outstanding equity shares.

$$= \frac{\text{Tax paid to the Government}}{\text{No. of equity shares outstanding}}$$

Tax is paid to the government after the deduction of interest income. Tax is paid only if profit is earned.

The ratio measures the contribution of shareholders for the development of the country as tax acts as a source of income for government. High TPS represents better profitability position of the bank, as it is the result of high profit.

d) Dividend payout ratio (DPR)

It is obtained by dividing dividend per share by earning per share.

$$= \frac{\text{Dividend per share}}{\text{Earning per share}}$$

It shows the percentage of earning distributed to the shareholder. High ratio indicates less retention of earning in the bank. Low ratio means higher portion of income is held in the bank to grasp the profitable opportunities. Generally, the shareholder prefers high DPS.

e) Price-earning ratio( P/E Ratio)

$$= \frac{\text{Market value per share}}{\text{Earning per share}}$$

P/E ratio is widely used to evaluate the bank's performance as expected by investors. It represents the investors' judgment or expectation about the growth in the banks earning. In other words, it measures how the market is responding towards the earning performance of the concerned institution. High ratio indicates greater expectation of the market towards the achievement of firm.

f) Market value per share to book value per share( MVPS/BVPS)

It is the ratio of market value per share to book value per share.

$$= \frac{\text{MVPS}}{\text{BVPS}}$$

BVPS is net worth divided by the number of shares outstanding.

The ratio measures the value that the financial market attaches to the management and organization of the bank as a growing concern high ratio is indication of strong management and organization.

### 3.5.1.3 Income and Expenditure Analysis

This is a tool with the help of which the components of income and expenditure can be compared between two competitive firms. By this analysis, one is able to conclude which sources of income & expenditure are dominant in the related concern. Under income analysis, overall income is split up into major headings. Interest income, commission & discount, foreign exchange income and other income. Under expenditure analysis, entire operating expenses are split up into four major headings- interest expenses, staff expenses, office operation expenses and bonus facility.

### 3.5.2 Statistical Tools

Various statistical tools can be used to analyze the data available to the researcher. These tools are used in research in order to draw the reliable conclusion through the analysis of financial data.

Following tools are used for are purpose.

- Arithmetic mean
- Coefficient of variation
- Student's T-test
- Coefficient of correlation
- Probable error of correlation coefficient
- Least-square line trend

#### 3.5.2.1 Arithmetic mean

An average is a single value selected from a group of values to represent them in same way, which is supposed to stand for whole group of which it is a part, as typical of all the values in the group( Waugh A.E.), Out of various measures of the central tendency, arithmetic mean is one of the useful tools applicable here, it is easy to calculate and understand and based on all observations.

Arithmetic mean of a given set of observations is their sum divided by the number of observation. In general, if  $X_1, X_2, X_3, \dots, X_n$  are the given observations, then arithmetic mean usually denoted by  $\bar{X}$  is given by,

$$\bar{X} = \frac{X_1 + X_2 + X_3 + \dots + X_n}{n} = \frac{\sum X}{n}$$

Where,  $n$  = number of observation

### 3.5.2.2 Variance

It is a statistical measure of the variability of a set of observations. The symbol is pronounced "Sigma Square". It is the measure of total risk. The smaller the variance, the lower the riskiness of the stock and vice versa.

$$\sigma^2 = \frac{\sum_{T=1}^n (X_T - \bar{X})^2}{n}$$

Where,

$N$  = No. of observation

$\bar{X}$  = Average rate of return

### 3.5.2.3 Standard deviation

It is the square root of the variance standard deviation

$$\sigma = \sqrt{\frac{\sum_{T=1}^n (X_T - \bar{X})^2}{n}}$$

Where,

$N$  = No. of observation

$\bar{X}$  = Average rate of return

### 3.5.2.4 Coefficient of variation

According to Prof. Karl Pearson, coefficient of variation is the percentage variation in mean, standard deviation being considered as the total variation in the mean. It is one of the relative measures of dispersion that is useful in comparing the amount of variation in data groups with different mean.

Coefficient of variation, denoted by C.V. is given by;

Where,  $\sigma$  = Standard Deviation

i.e.

$$\sqrt{\frac{\sum x \times \sum d^2}{N \quad N}}$$

For comparing the variability of two distributions, we compute the coefficient of variation for each distribution. A distribution with smaller CV is said to be more homogeneous or uniform or less variable than other, conversely a series with greater CV is said to be more variable or heterogeneous than the other.

### 3.5.2.5 Student's T-test

Student's t-test is a useful statistical tool to see the significance of the difference between two sample means, the population variances being equal but unknown (Gupta S.C.). Student's t-test is based on the assumption that the present population from which the sample is drawn is normal, the sample observations are independent and the population standard deviation is unknown. The test is applied for the sample less than 30.

If  $X_1, X_2, X_3, \dots, X_n$  and  $Y_1, Y_2, Y_3, \dots, Y_n$  be two independent random samples from the given normal population, null hypothesis is set as; i.e. the sample means  $\bar{X}$  and  $\bar{Y}$  do not differ significantly under the assumption that of population variance are equal but unknown. The test statistic under  $H_0$  is i.e.  $S^2$  is unbiased estimate of the common population variance  $\sigma^2$  based on both samples. By comparing the value of  $t$  with the tabulated value of  $t$  for  $n_1 + n_2 - 2$  degree of freedom and at 5% level of significance, null hypothesis is accepted or rejected. If the calculated value of  $t$  came to be less than the tabulated value, null hypothesis is accepted otherwise, rejected.

### 3.5.2.6. Karl Person's coefficient of correlation

It is a statistical tool for measuring the intensity or the magnitude of linear relationship between two series. Karl Pearson's measure, known as Pearson's correlation coefficient between two variable series  $X$  and  $Y$  is usually denoted by ' $r$ ' and can be obtained as

Where,

$$r = \frac{n \sum XY - \sum X \sum Y}{\sqrt{[\sum X^2 - (\sum X)^2] [\sum Y^2 - (\sum Y)^2]^{1/2}}}$$

Where,

- N= number of observation in series x and y
- X = Sum of observations in series X
- Y = Sum of observations in series y
- X<sup>2</sup> = Sum of squared observation in series X
- || Y<sup>2</sup> = Sum of squared observation in series Y

XY sum of the product of observation in series X and Y value of r lies between -1 and +1. r = 1 implies that there is a perfect positive correlation between the variable, r = -1 implies that there is a perfect negative correlation between the variable r = 0 means the variable are uncorrelated. But r = 0 does not always mean that the variables are uncorrelated; they may be related in some other form such as logarithm, quadratic, exponential etc.

### 3.5.2.6 Probable error of correlation coefficient

Probable error of correlation coefficient is a measure of testing the reliability of an observed value of correlation coefficient. It is calculated to find the extent to which correlation coefficient is dependable as it depends upon the condition of random sampling.

As,

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

Where, r = Standard error

Reason for taking 0.6745 is that in a normal distribution 50% of observations lie in the range 0.6745 where, u and a denote the population mean and standard deviation.

E (R) is used to test if an observed value of sample correlation coefficient is significant of any correlation in the population. If r < P.E., correlation is not at all significant. If r > P.E., r is definitely significant.



### 3.5.2.8.3 Least square linear trend

Trend analysis is a very useful and commonly applied tool to forecast the future event in quantitative term, based on the tendencies in the dependent variable in the past period.

The straight-line trend implies that irrespective of the seasonal and cyclic as well as irregular fluctuation, the trend value increases or decreases by absolute amount per unit of time. The linear trend values mathematically,

$$Y = a + bx$$

Where, Y = the value of dependent variable

$$a = Y\text{- intercept}$$

$$b = \text{Slope of the trend line}$$

$$x = \text{Value of the independent variable}$$

i.e. time = Year- 2002/03 (with regard to the data used in the study)

Normal equations fitting above equation are:

### 3.6 Limitation of financial analysis

From the above discussion, it has been evident that financial performance analysis is of great significance for investor, creditor, management, economist and other parties having interest in business. It helps management to evaluate its efficiency in past performance and take decision relating to the future. However, it is not free from drawbacks. Their limitations are listed below.

#### Historical nature of financial statements

The basic nature of statements is historical. Past can never be a precise and infallible index of the future and can never be perfectly for the future forecast and planning.

#### b) No substitute for judgment

Reliability of financial analysis is a tool to be used by expert analyst to evaluate the financial performance of a firm. That is why; it may lead to faulty conclusion if used by unskilled analyst.

#### c) Reliability of figures

Reliability of analysis depends on reliability of the figures of the financial statements under scrutiny. The entire working of analysis will be vitiated by manipulating in the income statement, window dressing in the balance sheet questionable procedure adopted by the accountant for the valuation of fixed assets and such other facts.

d) Single year analysis is not much valuable

The analysis of these statements relating to single year only will have limited use and value. From this, one cannot draw meaningful conclusion.

e) Result may have different interpretation

Different users may differently interpret the result derived from the analysis. For example, a high current ratio may suit the banker but it may be the index of insufficiency of the management due to under- utilization of fund.

f) Changes in accounting methods

Analysis will be effective if the figures derived from the financial statements is comparable. Due to change in accounting method, the figures of current period may have no comparable base, and then the whole exercise of analysis will become futile.

g) Pitfall in inter-firm comparison

When different firms are adopting different procedures, records, objectives, policies and different items under similar heading, comparison will be more difficult. If done, it will not provide reliable basis to assess the performance, efficiency, profitability and financial condition of the firm as compared to whole industry.

h) Price level change reduces the validity of analysis

The continuous and rapid changes in the value of money, in the present day, economically also reduces the validity of the analysis. Acquisition of assets at different levels of prices make comparison useless as no meaningful conclusion can be drawn from a comparative analysis of such items relating to several accounting period.

i) Selection of appropriate tool

There are different tools of analysis available to the analyst. The tools to be used in a particular situation depend on skill, training, intelligence and expertise of the analyst. If wrong tool is used, it may give misleading results and may lead to wrong conclusion, which may be harmful to the interest of business.

## CHAPTER-4

### ANALYSIS AND INTERPRETATION OF DATA

This chapter deals with the analysis and interpretation of data following the researcher methodology dealt in the chapter. In the course of analysis, data gathered from the various sources have been inserted in the tabular form according to 'heir' homogenous nature. The various tables prepared for the analysis purpose have been shown in annexes. Using financial and statistical tools, the data have been analyzed the result of the analysis has been interpreted keeping in mind the conventional standard with respect to ratio analysis, directives of NRB and other factors while using other tools. Moreover, financial performance of the sampled banks has especially been analyzed in cross-sectional manner. Specifically, the chapter includes analysis and interpretation of the following.

- Ratios analysis
- Income and expenditure analysis
- Correlation Analysis
- Lest Square liner trend analysis

#### 4.1 Ratio Analysis

Ratio analysis has been adapted to evaluate the financial health, operating result and growth of the sampled banks. In order to analyze and interpret the tabled data, the following ratios have been used.

- Liquidity ratio
- Leverage ratio
- Capital adequacy ratios
- Turnover ratios
- Asset quality ratios
- Other indicators

##### 4.1.1 Liquidity Ratios

Liquidity ratios have been employed to test the ability of the banks to pay immediate liabilities. These include current ratio, cash and bank balance to total deposit ratio, NRB balance to current and saving deposit ratios, NRB balance to fixed deposit ratio and fixed deposit ratio and fixed deposit to total deposit ratio.

a) Current ratio

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

Annex 1 show that current ratio of NSBIBL for the study period remained 1 15:1, 1.07:1, 1.05:1 and 1.06: 1 respectively form the year 2002\2003 to 2006/2007. Mean of the ratios appeared 1.08:1 and CV appeared 3.39%. Similarly the ratios of EBL for the corresponding period remained 1.07:1, 1.10:1, 1.03:1, 1:1 and 0.98:1 means of the ratios came 1.04:1 whereas CV came 4.26%.

The ratio of both the banks showed slightly decreasing trend. In NSBIBL the ratio did not fall below 1:1 whereas with respect to EBL, it declined in as against non- decreasing trend in other years. Mean of the ratios in NSBIBL was slightly greater than that of EBL which depicts that bot5hy of the banks could riot maintain the conventional standard of 2:1. Having a glance at the nature of assets and liabilities of the commercial banks, the ratio below the stated standard may be accepted as satisfactory, but it signifies that the bank have the poor liquidity position banks may face the problem of working capital if they need to pay the current liabilities at demand. Delay in payment of the liabilities may lead the banks to lose their goodwill. They will have the problem in winning the confidence of current depositors and short-term lenders. Between the two banks, NSBIBL seems to be slightly in the better position. The ratios remained more consistent in NSBIBL then in EBL.

The calculated value of  $t(1.4665)$  remained less than the tabulated value(2.306) at 5% level of significance. Hence, the null hypothesis has been accepted i.e. the mean of the current ratios of the sampled banks does not differ significantly.

b) Cash and Bank balance to current and saving deposit ratio

Cash and Bank balance to

$$\text{Current and saving deposit ratio} = \frac{\text{Cash and Bank balance}}{\text{Current and saving deposit}}$$

Annex 2 shows that, the ratio remained 83.97%, 32.01%, 38.73 and 59.56% and 59.96% in NSBIBI in the respective years of the period. Mean and CV of the ratios were 54.05% and 33.61%, 63.23% respectively. Similarly, the ratio remained

32.57%, 105.81%, 62.11%, 63.23% and 56.40% in corresponding years of study period in EBL. Mean of the ratios appeared 36.96% whereas CV appeared 64.02%.

The ratios of both the banks revealed fluctuation trend over the period, of NSBIBL remained highest in the year 202/2003 and then it declined in consecutive years, the ratio appeared in increasing trend, it remained highest in EBL in the year 2003/2004 (above 100%). The means ratio of EBL appeared greater than that of NSBIBL, which indicates that the former is more efficient in paying the immediate obligation. Higher CV of ratio in EBL as compared to NSBIBL signifies greater variation in the ratios.

The calculated value of t was less than the tabulated value at 5% level of significance ( $0.669 < 2.306$ ). Hence null hypothesis has been accepted i.e. there is not significant difference between the ratios of two banks.

c) Cash and bank balance to total deposit ratio

$$= \frac{\text{Cash and Bank balance}}{\text{Total deposit}}$$

Annex 3 depicts that the ratios were 23.35%, 13.57%, 12.57%, 20.34% and 31% in NSBIBL in the respective years of study period. Mean and CV of the ratios came 21.37% and 34.02% respectively. In the similar way, the ratio in EBL remained 30.21%, 25.63%, 18.52%, 22.68% and 23.64% in the corresponding years. Mean and CV of the ratios came 24.14% and 15.83% respectively.

Glancing at the nature of ratios, trend of cash and bank, balance to total deposit of both the banks appeared fluctuating. In NSBIBL, the ratio reached highest in the year 006/2007. Mean ratio of EBL came higher than that of NSBIBL which means that EBL has the greater ability to repay the deposit i.e. EBL is more efficient to serve the customers from liquidity point view. CV the ratios remained lower in EBL, which signifies greater consistency in it.

Calculated value of t appeared less than the tabulated value at 5% level of significance i.e.  $0.6746 < 2.306$ . Hence, null hypothesis has been accepted i.e. the difference appeared in the mean value of the ratio is not significant.

d) NRB balance to current and saving deposit ratio

NRB balance to current and saving deposit ratio

$$= \frac{\text{NRB balance}}{\text{Current saving deposits}}$$

From the annex 4, the ratios of NSBIBL were found to be 59.17%, 20.93%, 28.50%, 42.19% and 30.40% in the respective years of study period. Mean and CV of the ratios seemed 30.24% and 33.61% respectively. Similarly the ratios EBL remained 4.03%, 50.96%, 33.61%, 30.10% and 20.58% in the corresponding years. Mean of the ratios came 28.02% and CV came 54.25%.

The calculated ratios did not show particular direction of change in NSBIBL the ratio remained highest in the first year whereas in EBL, it remained highest in the second. In NSBIBL the ratio, in none of the years dropped below the minimum standard of 8% prescribed by NRB. But it declined below the standard in 2005/2006 in EBL. In both of the banks, mean ratio lay at significant level above the standard. Comparatively, it is greater in NSBIBL, which indicates that NSBIBL is stronger in liquidity position than EBL. NSBIBL has deposited excess cash in NRB, which may affect the profitability adversely because idle cash earns nothing, from the CV analysis, it can be concluded that the ratio of EBL varied to a greater extent than that of NSBIBL.

The calculated value of t was less than the tabulated value at 5% level of significance ( $0.8132 < 2.306$ ). Therefore null hypothesis has been accepted i.e. two banks do not differ significantly with respect to this ratio.

e) NRB balance to fixed deposit ratio

NRB balance to fixed deposit ratio

$$= \frac{\text{NRB balance}}{\text{Fixed deposits}}$$

Annex5 – Depicts that the ratios of NSBIBL reached 30.16%, 15.54%, 15.37%, 24.09% and 33% in the respective years under the study. Mean of the ratios appeared 23.63% and CV appeared 30.77%. Similarly, the ratios of EBL were 61.94%, 16.29%, 14.28%, 16.84% and 14.85% respectively loan of the ratios remained 24.84% and CV remained 74.77%.

The ratio of NSBIBL showed fluctuating trend in the period of review. It ranged from the minimum of 15.37% in the year 005/006 to maximum of 33% in the year. In all of the years, the ratio remained higher than 6%, the minimum standard set by NRB. In EBL, the ratio was highest in the year 2001/2002. In the latter years, it remained almost stagnant around 15%. In all the years of study period, it remained higher than the standard. Mean ratio of EBL came nominally greater than that of NSBIBL. It reveals that EBL has slightly thicker cushion against, the fixed deposit to be repaid than that of NSBIBL. Furthermore, CV of the ratios remained significantly higher in EBL, which reflects the greater fluctuation in the ratio.

The calculated value of t i.e. 0.1211 appeared less than the tabulated value at 5% level of significance i.e. 2.306. So, null hypothesis has been accepted i.e. mean ratio of two banks does not differ significantly.

f) Fixed deposit to total deposit ratio

$$= \frac{\text{NRB balance}}{\text{Fixed deposits}}$$

Fixed deposits

Annex6- Highlights that the ratios of NSBIBL remained 66.23%, 57.07%, 64.97%, 63.66% and 47.95% in the respective years of study period. Mean and CV of the ratios were 59.98% and 11.33% respectively. Similarly the ratios of EBL were 70.24%, 75.78%, 70.19%, 64.13% and 58.09% in the corresponding years Mean and CV of the ratios appeared 55.09% and 44.74% in the order mentioned.

The ratio of NSBIBL fluctuated every year during the study period it was highest in the first year but the lowest in the last. The ratio in EBL was least in the first year. It abundantly rose in the second year and then it started to decline. Mean ratio of NSBIBL came higher than that of EBL. It suggests that greater portion of total deposit in NSBIBL has been occupied by fixed deposit in contrast to EBL. It can grasp the opportunity of investing the fund in more profitable loans. On the other hand, EBL has the opportunity to invest in current assets so as to strengthen its liquidity position. CV analysis depicts that the ratios in NSBIBL in the past years of research period remained more uniform than that of EBL. The calculated value of t remained less than the tabulated value at 5% level of significance ( $0.3826 < 2.306$ ). Therefore null hypothesis has been accepted i.e. there is not significant difference between the mean ratios of two banks.

Overall liquidity position of the sampled banks appeared almost similar. In comparison, EBL seemed slightly stronger than NSBIBL. But the mean ratio of the banks did not differ significantly.

#### 4.1.2 Leverage ratios

Leverage ratios have been analyzed and interpreted to judge the long-term financial health of the sampled banks. These include debt-equity ratios, debt-asset ratio, debt to total capital ratio and interest coverage ratio.

##### a) Debt-equity ratio

$$\text{Debt-equity ratio} = \frac{\text{Total deposit}}{\text{Shareholder's equity}}$$

Annex 7 depicts that the debt-equity ratios of NSBIBL were 4.35, 7.60, 9.77, 11.37, and 9.02 in the respective years of study period. Mean and CV of the ratios appeared 8.42 and 20.16% respectively. Similarly the ratios of EBL remained 5.49, 4.34, 11.44, 7.51 and 11.21 in the corresponding years. Mean of the ratios came 8.00 whereas CV came 36.29%.

The ratio of NSBIBL revealed rising trend up to the fourth year and then declined in the last. In case of EBL, it clearly showed the fluctuating trend. Average of the ratios appeared slightly greater in NSBIBL as compared to that in EBL. Both of the banks seem levered but in comparison, NSBIBL seems more levered in other words, capital structure of NSBIBL is riskier than that of EBL. CV of the ratios remained lower in NSBIBL, which clarifies that the ratios of EBL were less consistent.

The calculated value of t i.e. 0.2235 was less than the tabulated value i.e. 2.306 at 5% level of significance. Hence, null hypothesis has been accepted i.e. two banks do not differ significantly with respect to this ratio.

##### b) Debt-asset ratio = $\frac{\text{Total debt}}{\text{Total assets}}$

Annex 8 depicts that the ratios for NSBIBL remained 67.82%, 63.86%, 71.44%, 72.35% and 60.15% in the respective years of study period from the years 2002/2003 to 2006/2007. Average and CV of the ratios were 67.12% and 68.5% in that order. In the similar way, the ratios of EBL were 75.50%, 68.67%, 73.79%, 67.36% and 71.00% in the corresponding years. Mean of the ratio seemed 71.26% and CV seemed 4.27%.



The ratio reflected inconsistent policy of the banks in financing the assets proportion of interest- bearing debt for the purpose. Mean of the ratio came greater in NSBIBL as compared to that in EBL, which signifies that the former followed more aggressive policy in raising the capital. ON the other hand capital structure of EBL seems less risky. Form the CV analysis, it can be noticed that the ratios of NSBIBL varied considerably throughout the review period.

The calculated value of t was less than the table value at 5% level of significance (1.3092<2.306). Hence null hypothesis has been accepted i.e. two banks do not differ significantly with respect to the debt-asset ratio maintained by them in immediate past five years.

c) Debt to total capital ratio

$$= \frac{\text{Total debt}}{\text{Total capital}}$$

Annex 9 highlights that the ratios of NSBIBL remained 81.31%, 88.37% and 90.72%, 91.92% and 90.02% in the respective years of study period. Mean of the ratios came 88.47% and CV came 4.25%. In the similar way, the ratios of EEL for the corresponding years remained 84.59%, 81.28%, 91.96%, 88.24% and 91.81%. Average of ratios was 87.58% and CV was 7.74%.

Up to the third year of the period, the ratio of NSSBIBL showed rising trend and them, remained almost constant. But the ratios did not follow any particular trend in EBL. The analysis makes it obvious that debt capital i.e. outsider's fund was dominant in the capital structure of both of the banks. NSBIBL seems ahead of EBL in rising the capital through debt as per the higher mean ratio CV of the ratio remained nominally lower in NSBIBL. Which indicates greater uniformity in the ratios of different years?

The calculated value of t came 0.3186, which is less than fable value i.e. 2.306 at 5% level of significance. That's why null hypothesis has been accepted i.e. the mean ratio of two banks does not differ significantly.

D) Interest coverage ratio

$$= \frac{\text{Net profit before interest and tax}}{\text{Interest charge}}$$

Annex 10 reveals that the ratios of NSBIBL remained 1.11, 1.53, 1.40, 1.35 and 1.08 in the respective year of review period. Mean and CV of the ratios seemed

1.34 and 10.96% respectively. Accordingly, the ratios in EBL were maintained - 1.34, -0.13, 0.49, 1.34 and 1.33 in the corresponding years. Mean of the ratios in the bank was 0.26 whereas CV was 0.442, 0.48%.

The ratio in NSBIBL depicted increasing trend up to the second year and then declined gradually in the latter years. In all the years of study period, the fund available for the payment of interest remained more than the requirement; however the margin was not satisfactorily high. It remained negative in EBL for first two year. In the third year, it became positive but less than one. In last two years it remained greater than one and showed almost static nature. Mean ratio of NSBIBL came much higher than that of EBL, which reveals the better debt servicing capacity of NSBIBL. By comparing the CV of the ratio, it can be concluded that the ratio of EBL for different five years varied considerably.

The calculated value of t remained less than the table value 5% level of significance (2.0982 < 2.0306). That's why, null hypothesis has been accepted i.e. debt-servicing capacity of the sampled banks does not differ significantly.

From the analysis of leverage ratios, both of the banks seemed levered. But in comparison, NSBIBL appeared more levered than EBL. Debt servicing capacity of EBL remained poor in the beginning years. However, the difference in the position of two banks did not appear significant.

#### 4.1.3 Capital Adequacy ratio

Capital adequacy ratios of the banks have been tested to find whether they are successful to reassure the depositors and creditors about their soundness; and also to maintain general confidence in the banking system. These include net worth to total deposit ratio, net worth to total asset ratio and net worth to total credit ratio.

a) Net worth to total deposit ratio

$$= \frac{\text{Net Profit}}{\text{Total deposit}}$$

Annex 11 reveals that the ratios of NSBIBL were 19.46%, 9.67%, 8.33%, 7.00% and 7.33% in the respective years of study period. Mean of the ratios appeared 1.36% and CV appeared 44.84%. Accordingly, the ratios for EBL remained 17.70%, 20.89%, 8.12%, 11.33% and 7.45% in the corresponding years. Mean CV of the ratio were 13.10% and 40.64% in that order.

The ratio of NSBIBL showed sharp decline in the second year and then gradual decline up to the fourth year and fifth year, it slightly grew from the level of proceeding year. But the ratio of EBL showed fluctuation over the period, it ranged from 20.89% in the year 002/003 to 7.45% in 006/2007. Average ratio of EBL appeared higher than that of NSBIBL, which means the former is better with respect to the capital adequacy position. Higher CV of the ratios in NSBIBL shows less consistency in maintaining net worth with respect to deposits.

The calculated value of t (0.8673) was less than the tabulated value at 5% level of significance (2.306). Therefore, null hypothesis has been accepted that is average ratio of two banks does not differ significantly.

b) Net worth to total assets ratio

$$= \frac{\text{Net profit}}{\text{Total deposit}}$$

Annex12 demonstrates that the ratios in NSBIBL remained 15.59%, 8.40, 7.31%, 6.36% and 6.67% form 2001/2002 respectively. Mean and CV of the ratios came 8.87% and 38.73% respectively. In EBL, the ratios were maintained 13.67%, 15.82%, 6.45%, 8.98% and 6.33% in the respective years. Average ratio appeared 10.25% whereas CV appeared 37.57%.

The ratio in NSBIBL remained highest in the last year. It drastically decreased in the second year and then decreased gradually up to the fourth year whereas it showed a nominal use in last year. IN EBL, it depicted fluctuating trend, which appeared maximum in second year and minimum in last year. Mean ratio in EBL seemed higher which indicates that net worth in it has covered comparatively greater portion of total assets in other words, EBL is superior to NSBIBL to check the possible risk that might arise due to high leverage. CV of the ratios remained slightly greater in NSBIBL. Which means that the ratios in the bank highly as against EBL.

The calculated value of t was less than the table value at 5% level of significance (0.5422<2.306). Therefore, null hypothesis has been accepted i.e. sampled banks do not differ significantly regarding this ratio.

c) Net worth to total credit ratio

$$= \frac{\text{Net worth}}{\text{Total credit}}$$

Annex13 demonstrates that the ratios of NSBIBL remained 22.87%, 13.37%, 11.43%, and 11.10% in the respective year of study period. Mean and CV of the ratios appeared 13.06% and 32.05% respectively. Similarly the ratios in EBL seemed 129.25%, 75.50%, 12.68%, 14.62% and 10.64% in the corresponding years. Mean of the ratios came 470.94% and CV came 97.66%.

The ratios of NSBIBL revealed decreasing trend throughout the review period it declined to 11.03% in last year form 22.87% in the base year, in EBL, it declined drastically to 10.64% in the final year form 129.25% in the base year. The ratio showed declining trend in EBL in spite of little rise in the fourth year. Mean ratio of EBL appeared abundantly higher which signifies that the capital adequacy position of EBL is far better than that of NSBINL. But uniformity in maintaining the ratio of different years seems higher in NSBIBL as per the lower CV.

The calculated value of t i.e. 1.444 came less than the tabulated value at 5% level of significance i.e. 2.306. That is why, null hypothesis has been accepted i.e. there is no significant difference between the two banks with respect to tins ratio.

In totality, capital adequacy position of EBL appeared stronger than that of NSBIBL. In tins sense, EBL is more successful to reassure creditors and depositor about its soundness. However, the banks did not differ significantly with respect to capital adequacy position.

#### 4.1.4 Turnover ratios

Turnover ratios have been used to evaluate the efficiency with have managed and utilized their assets. These, include loans and advances to total deposit ratio, loans and advances to fixed deposit ratio, loans and advances saving deposit ratio, investment total deposit ratio, performing assets to total ratio and performing assets to total debt ratio.

a) Loans and advances to total deposit ratio

$$= \frac{\text{Loans and advance}}{\text{Total deposit}}$$

Total deposit

Annex14 exhibits that the ratio of NSBIBL remained 85.10%, 72.5%, 72.86%, 63.12% and 67.65% in the respective years of study period. Mean and CV of the ratios appeared 72.22% and 10.18% in that order. The ratios of EBL were 13.70%, 28.81%, 64.07%, 77.49% and 70.30% in the corresponding years. Mean of the ratios came 50.82% and CV came 49.14%.

The ratio in NSBIBL fluctuated throughout the study period. It descended to 67.55% in the last year from 85.01% in the base year. It depicted increasing trend in EBL up to the fourth year of review period and marginally declined in the last year. Mean ratio of NSBIBL appeared considerably higher which signifies that NSBIBL is more successful in utilizing the resources in profitable sectors than EBI “The trend of the ratio in EBI showed that in spite of decrease in the final year, there remained higher utilization capacity in each succeeding year. In last year, fall in the ratio could be noticed due to the increase in the amount of deposit by large volume than the volume of loans and advances. CV of the ratios depicted that the ratio remained more consistent in NSBIBL as compared to EBL.

The calculated value of t i.e. 1.6438 remained less than the tabulated value at 5% level of significance i.e. 2.306. So that null hypothesis has been accepted i.e. two banks do not differ to the significantly with respect to this ratio.

b) Loans and advances to fixed deposit ratio

$$= \frac{\text{Loans and advance}}{\text{Fixed deposit}}$$

Annex 15 highlights that the ratio in NSBIBL arrived 128.48%, 126.76%, 112.15%, 99.16% and 141.08% in respective order from fiscal year 2001/2002 to 2006/2007. Mean of the ratio appeared 121.53%, and CV appeared 11.90%. Similarly, the ratios of EBI remained 189.22%, 38.02%, 91.28%, 120.83% and 120.56% in the corresponding years. Average and CV of the ratios appeared 111.98% and 43.78% respectively.

The ratio of NSBIBL revealed decreasing trend up to the fourth year and in fifth year of review period, it increased sharply. It showed fluctuating trend in EBL for the period. The ratio in EBL ranged from 189.22% in the first year to 91.28% in the third year. With respect to this ratio, both of the banks have shown good performance in other words, both of these banks have well utilized the high interest bearing fixed deposit in the sector yielding satisfactory return. NSBIBL seems more efficient in utilizing the fixed deposit between two banks as revealed by higher mean ratio CV analysis showed the lesser uniformity of ratios in it EBL as against the Nabil Bank.

The calculated value of t came less than the tabulated value at 5% level significance ( $0.2744 < 2.306$ ). Therefore; null hypothesis has been accepted i.e. the difference noticed in the mean ratio of two banks is not significant.

c) Loan and advance to saving deposit ratio

$$= \frac{\text{Loans and advance}}{\text{Saving deposit}}$$

Annex 16 depicts that the ratios in NSBIBL remained 824.95%, 684.39%, 49.30%, 448.29% and 376.64% in the respective years of study period. Mean and CV of the ratios appeared 566.31% and 29.07%, respectively. According to the ratio in EBL came 162.80%, 193.37%, 382.37%, 400.15% and 300% in the corresponding years. Mean of the ratios came 288.67% and CV came.

The ratio in NSBIBL obviously showed decreasing trend whereas with respect to EBI, is showed increasing trend up to the fourth year and then dropped in the last year average of the ratios in NSBIBL seemed almost double the same in EBL which indicates that NSBIBL has more successfully utilized the interest bearing deposit in terms of loans and advances moreover, turnover position of NSBIBL is better than that EBL with respect to this ratio. The consistency in the ratio was found higher in NSBIBL from the CV analysis.

The calculated value of t i.e.2.9111 remained greater than the tabulated value i.e. 2.306 at 5% level of significance. Hence null hypothesis has been rejected i.e. turnover of saving deposit in terms of loans and advances significantly differ between two banks. It indicates insufficient utilization of saving deposit in form of loans and advance in EBL. But it necessarily does not mean that the turnover position of the bank is really poor because the portfolio management of the bank depends upon its lending policy, risk analysis and diversification. The bank might have allocated its most of the deposits in other assets with low risk.

d) Investment to total deposit ratio

$$= \frac{\text{Investment}}{\text{Total deposit}}$$

Annex17 exhibits that the ratio of NSBIBL remained 4.53%, 23.04%, 16.82%, 18.20% and 4.63% respectively. Mean of the ratios appeared 13.44%, and CV appeared 55.98%. In the similar way the ratios of EBL were 64%, 82%, 55.87%, 28.05%, 19.38% and 14.25% in the corresponding years of the review period. Mean ratio appeared 35.93% and CV appeared 53.72% in the bank.

The ratio showed fluctuating pattern in NSBIBL. It ascended to 23.04% in 2002/2003 from 4.53% in 2006/2007. After some ups and downs up to the fourth year, tin ratio dropped to 4.63%, very close to that of first year in the year 006/2007. In EBL it showed declining trend. It arrived to 14.25% in the last year from 61.82% beginning year of the review period. Mean ratio came much higher in EBL, which signifies that EBL has more successfully allocated its deposit in investment portfolio. Conversely, EBL has given less importance to this issue. CV of the ratios appeared slightly greater in NSBIBL, which indicates lesser uniformity in its ratios.

The calculated value of t came less than the tabulated value is 5% level of significance ( $2.1708 < 2.306$ ). Hence, null hypothesis has been accepted which means the difference noticed in the mean ratio of two banks for the study period is not significant.

e) Performing assets to assets ratio

64.14%, 73.11%, 76.74% and 71.84% in the corresponding years of the period. Mean of the ratios appeared 68.91% whereas CV appeared 9.52%.

The ratio in NSBIBL increased in the second year as compared to the base year and then, it declined in the latter years. The ratio showed rising trend in EBL up to the fourth year and then decreased fell in last. Mean of the ratio appeared greater in NSBIBL, which means it has used more proportion of the assets for income generating purpose. Throughout the study period, NSBIBL utilized its assets in terms of loans and advances, investment and bill discounting and purchasing more effectively than EBL. CV of the ratios in EBL exceeded the same in NSBIBL which clarifies that the ratios remained less consistent in the former.

The calculated value of t remained less than the tabulated value at 5% level of significance ( $1.3140 < 2.306$ ). Hence, null hypothesis has been accepted i.e. turnover position of two banks with respect to tins ratio is not significantly different.

j) Performing assets to total debt ratio

$$= \frac{\text{Performing assets}}{\text{Total debt}}$$

Total debt

Annex, 19 depicts that the ratios to NSBIBL remained 105.86%, 129.78%, 110.15%, 102.09% and 109.36% in the respective years of study period. Mean and CV of the ratios appeared 111.45% and 3.61% respectively. In the similar way, the ratios in EBI were

77.71%, 93.40%, 99.07%, 113.92% and 101.22% in the corresponding years. Mean and CV of the ratios came 97.06% and 12.13% in that order.

The ratio in NSBIBL showed fluctuating trend throughout the review period whereas it remained in rising trend in EBL up to the fourth year and decreased in the final year. Mean of the ratios came greater in NSBIBL than in EBL, which indicates that NSBIBL remained more successful regarding the use of the cost bearing debt in profitable sectors. In other words, NSBIBL seemed at upper level with respect to the wise and beneficial use of outsiders fund CV analysis showed that the variation in the performing assets to total debt of NSBIBL was more uniform than that of EBL.

The calculated value of t was less than the tabulated value at 5% level of significance ( $1.893 < 2.306$ ). Therefore, null hypothesis has been accepted i.e. the difference in the mean ratios of the sampled banks is not significant. In totality, NSBIBL seemed more efficient to utilize the resources in profitable sectors. But the performance of the banks did not appear significantly different except in mobilizing saving deposit in terms of loans and advances.

#### 4.1 Asset qualify ratios

Asset quality ratios intend to measure the quality of assets owned by the banks. These include loan loss coverage ratio, loan loss provision to total income ratio, loan provision to total deposit ratio and accrued interest to total interest income ratio.

##### a) Loan loss coverage ratio

$$= \frac{\text{Loan loss provision}}{\text{Total risk assets}}$$

Annex 20 exhibits that the ratios for the different year of the review period remained 1.46%, 0.61%, 1.10%, 1.34% and 1.22% respectively in NSBIBL. Mean of the ratios came 1.15% whereas CV came 25.62%. Accordingly, the ratios of EBL remained 1.00%, 1.59%, 0.58%, 0.66% and 0.61%, in the corresponding year. Mean of the ratios appeared 0.89% and CV 43.01%.

The ratio in both of the banks showed fluctuation over the period of study. It reached maximum in the first year and reduced in the second in NSBIBL. But with respect to EBL, it reached highest in the second year and fell the lowest in third. Mean ratio of NSBIBL exceeded that of EBL. It indicates that EBL has been more successful to foresee the quality of loans lent. Conversely, the asset possessed by NSBIBL has higher degree of risk as compared to that of EBL. That's why,



the former bank has maintained comparatively higher ratio to prevent itself from possible default in payment by borrowers. CV of the ratio seemed less in NSBIBL, which reveals to lat the consistency in ratios greater in NSBIBL.

The calculate value of t i.e. 1.071 came less than the tabulated value i.e. 2.306% at 5% level of significance therefore, null hypothesis has been accepted, that is , the mean ratio of the sampled banks does not differ significantly.

a) Loan loss provision to total income ratio

$$= \frac{\text{Loan loss provision}}{\text{Total income}}$$

Annex, 21 highlights that the ratios in NSBIBL for the respective years of the analysis period remained 10.46%, 3.54%, 6.42%, 7.61% and 7.19%. Mean and CV of the ratios came 7.04% and 31.54% respectively. Similarly, the ratios in EBL were 8.05%, 5.62%, 5.31%, 4.11% and 3.80% in the corresponding years. Mean is the ratios seemed 5.38% and CV seeded 27.95%.

The ratio in NSBIBL decreased in the second year and slightly increased in the succeeding year. In fourth and fifth year, it showed almost static nature and remained below the level of first year. IN EBL, it depicted the decreasing trend. Mean ratio remained higher in NSBIBL than in EBL, which signifies that NSBIBL held comparatively greater portion of risky assets. Moreover, NSBIBL has been forced to retain greater portion of its income idle as the cushion against loans of inferior quality. CV analysis signifies that the ratios of NSBIBL remained less uniform throughout the period of study.

The calculated value of t remained less than the tabulated value at 5% level of significance (1.2121<2.306). Therefore, null hypothesis has been accepted i.e. the average of the ratios does not significantly between the sampled banks.

b) Loan loss provision to total deposit ratio

$$= \frac{\text{Loan loss provision}}{\text{Total deposit}}$$

Annex22, highlight that the ratios of NSBIBL were 1.24%, 0.44%, 0.8%, 0.85% and 0.74% in the respective years of review period. Mean ratio appeared 0.81%,

0.51% and 0.43% for the corresponding years Mean and CV of the ratio come 0.38% and 33.83% respectively.

- The ratio in both of the banks showed fluctuation over the period of study, the ratio in NSBIBL. Declined to 0.44 in the year 2003/2004 from 1.24% in the pervious year whereas it ranged from 0.14% in the first year to 0.51% in fourth in EBL. Average ratio in NSBIBL in oilier words, NSBIBL has lent greater portion of the loans in riskier sector. Lower CV of the ratios in NSBIBL means that the consistency in the loan loss provision with respect to the deposits as higher in NSBIBL.

The calculated value of t is 3.016 remained greater than the tabulated value i.e. 2.306 at 5% level of significance. So, null hypothesis has been rejected i.e. the mean ratio of the sampled banks differs significantly from each other<sup>4</sup> in the portfolio management, NSBIBL might have given more preference to loans and advances because they yield higher return. Due to the greater default in payment of loans by borrowers, the bank needed to hold higher portion of its income in form of loan loss provision. Therefore, loans and advances of the bank were not effectively operated.

c) Accrued interest to total interest income ratio

$$= \frac{\text{Accrued interest}}{\text{Total interest income}}$$

Annex 23 shows that the ratios in NSBIBL remained 29.07%, 23.70%, 25.16%, 35.79% and 36.62% in the respective years of the review period. Mean and CV of the ratios came 30.07% and 17.68% respectively. In EBL, the ratios were 0%, 19.01%, 7.57%, 31.35% and 26.287% in the corresponding years. Mean of the ratios appeared 16.84% and CV appeared 68.93%.

The ratio in NSBIBL descended in the second year as compared to that in first year and then increased gradually in latter years whereas it revealed fluctuating trend in EBL. Mean of the ratios appeared greater in NSBIBL, which signifies that comparatively more portion of total interest income in the bank remained accrued. Moreover, the loans advanced by NSBIBL seemed less effective higher CV of the ratios in EBL indicates greater variability of the ratios in it.

The calculated value of t was less than the tabulated value at 5% level of significance ( $2.0716 < 2.306$ ). Therefore, null hypothesis has been accepted average ratio of two banks does not differ significantly.

In totality, the assets possessed by NSBIBL seemed less effective in the sense that the greater default in payment occurred in them. However, sampled banks did not differ significantly except in the case of loan loss provision to total deposit.

#### 4.1.6 Profitability ratios

Profitability ratios have been employed to measure the operating efficiency of the sampled banks. For the purpose return on asset, return on net worth return on total deposit total interest expenses to total interest income ratio interest earned to total asset ratio, staff expenses to total income ratio and office operation expenses to total income ratio have been analyzed and interpreted.

##### a) Return on asset

$$\text{Return on net worth} = \frac{\text{Net profit after tax (NPAT)}}{\text{Total Assets}}$$

Annex 24 demonstrates that the ratio in NSBIBL remained 0.83%, 2.03% and 1.67%, 1.43% and 0.35% in the respective years of review period. Mean and CV of the ratios appeared 1.26% and 47.66% respectively. Accordingly, the ratios of EBL in the corresponding years were -2.08%, -4.27%, -1.86%, 1.76% and 1.10%. Mean of the ratios came -1.07% and CV came -207.31%.

In NSBIBL, the ratio showed fluctuating trend. It rose astonishingly in the second year but declined gradually and reached least i.e. 0.35% in the final year of the review period. It means profitability position of NSBIBL remained quite poor in the last year. In EBL it remained negative up to the third year and then tended to positive later on. The reason of the loss in first three years may be insufficient operation or poor utilization of the resources. Anyway, the banks made improvement in its position in the fourth year but there appeared little slackness in the fifth year. Mean ratio was considerably higher in NSBIBL, which signifies that the profitability position of the bank in relation to this ratio is far better than that of EBL. CV of the ratios in EBL exceeded the same in NSBIBL by a large amount, which indicates that the variability of the ratios in EBL was much higher.

The calculated value of t i.e. 2.0295 was found less than tabulated value at 5% level of significance. Hence, null hypothesis has been accepted i.e. observed difference in the4 mean ratio of the sampled banks is not significant.

b) Return on net worth

$$\text{Return on net worth} = \frac{\text{Net profit after tax (NPAT)}}{\text{Net worth}}$$

Net worth

Annex 25 depicts that the ratios in NSBIBL for the respective years of the study period were 5.29%, 24.12%, 22.86%, 22.49% and 5.22%. Mean ratio appeared 16% and CV appeared 5.93%. On the similar way, the ratios of EBL remained -15.15%, 26.97%, -28.84%, 19.645 and 17.38% in the corresponding year. Mean and CV of the ratios seemed -6.79% and -312.24% respectively.

The ratio in NSBIBL ascended dramatically in the second year as compared to that in the first year and then slightly declined in the following dropped even low the level of the base year. In EBL, it remained negative, for first three years of the study period and increases satisfactorily in fourth year. But it declined slightly in the last year. Mean ratio of NSBIBL appeared much more than that of EBL. Which indicates that the earning of time former with respect to the shareholder's fund is appreciably high? Contrary to it, return on net worth of EBL appears unsatisfactory as per the mean ratio. Higher CV of the ratios in EBL signifies that lesser uniformity in the ratio.

The computed value of t came less than the tabulated value at 5% level of significance ( $1.9861 < 2.306$ ). Hence, null hypothesis has been accepted profitability position of two banks with respect to this ratio is not significantly different.

c) Return on total deposit

$$\text{Return on total deposit} = \frac{\text{Net profit after tax (NPAT)}}{\text{Total deposit}}$$

Total deposit

Annex 26 exhibits that the ratios in NSBIBL remained 1.03%, 2.34%, 1.90%, 1.58% and 0.38% for the respective years of research period. Mean and CV of the ratios appeared 1.45% and 47.24% respectively in EBL, the ratios were -2.38%, -5.63, 2.23% and 1.29% in the corresponding years. Mean of the ratios came -1.43% and CV came -200.38%.

The ratios in NSBIBL followed increasing trend up to the second year and then decreased in the coming years. The ratio in the final year arrived even below the level of base year. In EBL, it remained negative with little fluctuation up to the third year and then went positive later on. It declined in the last year as compared to the preceding year. Mean of the ratio was higher in NSBIBL than in EBL. It signifies that

the profitability of EBL is unsatisfactory with respect to NSBIBL the ratio is seems better in spite of sharp decline in the final year. Future more, EBL has made noticeable improvement in its position in the last two years. As depicted by CV analysis, the ratios widely varied in EBI than NSBIBL.

The calculated value of t i.e. 1.955 came less than the tabulated value i.e. 2.306 at 5% level of significance. So, null hypothesis has been accepted, that is, there is no significant difference between the positions of sampled banks as far this ratio is concerned.

d) Total interest expenses to total interest income ratio

$$= \frac{\text{Total interest expenses}}{\text{Total interest income}}$$

Annex 27 Highlights that the ratio of NSBIBL for the respective years of study period remained 53.48%, 57.76%, 62.15%, 65.95 and 77.03%. Mean and CV of the ratios appeared 63.27% and 12.72% respectively. In EBL, the ratios were 59.15%, 74.71%, 77.47%, 71.28% and 67.47% in the corresponding years means of the ratio came 70.04% and CV came 8.86%. The ratios in NSBIBL reflected rising trend, which readied 77.03% in the final year from 53.48% in the base year in EBL, it depicted increasing trend up to the third year and then decreased in the following years. Lower mean ratio in NSBIBL indicates better profitability position as compared to EBL. Overall picture shows that NSBIBL is more successful in allocating the interest bearing debt in profitable sectors. On the other hand, it is also obvious that interest spread rate is high in the bank CV of the ratios appeared greater5 in NSBIBL, which mean that were relatively less uniform throughout the review period.

The computed value of t i.e. 1.3307 remained less than the tabulated value i.e. 2.306 at 5% level of significance. Hence null hypothesis has been occupied accepted i.e. mean ratio of the sampled banks does not differ significantly.

e) Interest earned to total assets ratio

$$= \frac{\text{Interest earned}}{\text{Total assets}}$$

Annex 28 exhibits that the ratios of NSBIBL remained 7.34%, 9.34%, 9.73%, 8.85% and 8.39% in the respective years of review period. Mean of the ratios appeared 8.73% and CV appeared 9.49%. In EBL, the ratios were maintained 1.28%, 5.08%, 4.75%,

7.34% and 7.67% in the corresponding years. Mean and CV of the ratios came 5.22% and 43.87% respectively.

In NSBIBL, the ratio showed slight fluctuation whereas in EBL, it followed rising trend except in the third year of the study period. In NSBIBL, the ratio ranged from 7.34% in the base year to 9.73% in the third year. In EBL, it ranged from 1.28% in the base year to 7.67% in the last year. Mean ratio was higher in NSBIBL, which leads us to the conclusion that BSBIBL managed the assets more effectively to earn interest. Further more, interest earned to the total assets in different years of the study period remained more uniform in NSBIBL as revealed by lower CV.

The calculated value of t appeared greater than the tabulated value at 5% level of significance i.e.  $2.8773 > 2.306$ . That's why, null hypothesis has been rejected i.e. profitability position of two banks with respect to this ratio differs significantly it means that the earning in form of interest in relation to the total assets remained really poor in EBL. In other words, EBL could not manage the assets of the bank efficiently in form of loans, advances and investment.

f) Staff expenses to total income ratio

$$= \frac{\text{Staff expenses}}{\text{Total income}}$$

Annex 29 demonstrates that the ratios of NSBIBL were 2.38%, 20.2%, 2.01%, 2.46% and 3.12% in (the respective years of the study period). Mean and CV of the ratios appeared 2.43% and 15.47% respectively. In the similar way, the ratios of EBL for the corresponding years remained 70.27%, 18.22%, 13.11%, 5.52% and 6.10%. Mean of the ratios seemed 22.61% whereas the CV seemed 107.09%.

On examining the ratios of different year in NSBIBL, it seems that staff expenses to total income remained almost constant. But it showed sharp decrease in EBL despite slight increase in the final year with respect to the preceding years. Mean ratio appeared significantly higher in EBL, from this, it can be concluded that considerably large portion of the income was spent for staff in EBL which might have affected the profitability position of the bank adversely. In another angle, it deems more successful to attract the efficient manpower and take the advantage of their talent. Higher level of facilities and incentive provided to the employees raise their moral; and confidence which reduces the labor absenteeism and turn over. On the others hand, NSBIBL seemed to personnel. Higher CV of the ratios in EBL signifies lesser uniformity in maintaining this ratio.

The calculated value of t i.e. 1.6651 was less than the tabulated value 2.306 at 5% level of significance. Hence null hypothesis has been accepted i.e. observed difference in the mean; ratio of the sampled banks is not significant.

g) Office operation expenses to total income ratio

=  $\frac{\text{Office operation expenses}}{\text{Total income}}$

Total income

Annex 30 demonstrates that the ratios of NSBIBL were 26.59%, 13.98%, 11.59%, 9.67% and 9.89% in the respective years of the study period. Mean and CV of the ratios appeared 14.34% and 44.02% respectively. The ratios of EBL remained 121.83%, 65.60%, 36.62%, 12.55% and 13.28% in the corresponding years. Mean of the ratios came 49.98% and CV came 81.69%.

The ratios of NSBIBL seemed to decline every year up the fiscal year 2002/2003 and rise nominally in the final year. In EBL, it sharply decreased each year except in the final year. The ratio in the base year remained even greater than 100%. Mean ratio of NSBIBL was considerably less than that of EBL, which means that the profitability position of the bank is sound enough in comparison to EBL conversely almost half of the total income in average was spent for office operation in EBL. It might have affected the profitability of the bank adversely. CV analysts showed that the ratio in EBL were less consistent as compared to that in NSBIOL.

The calculated value of t i.e. 1.7525 remained less than the t i.e. 2.306 at 5% level of significance. Therefore, null hypothesis has been accepted i.e. mean ratio of two banks does not differ significantly.

Overall position of NSBIBL appeared better than that of EBL. NSBIBL is more successful in utilizing the resources effectively. But the banks did not differ significantly except in earning interest with respect to the assets.

#### 4.1.7 Others indicators

Besides the above- analyzed ratios, some indicators have been tested to have the broader knowledge of financial performance of the banks. For this, EPS, DPS, TPS, DPR, P/E ratio and MVPS to BVPS have been analyzed.

#### 4.1.7.1 Earning per share (EPS)

= Earning available to common shareholders (EAC)

No. of equity shares outstanding

Annex 31 depicts that the ratios in NSBIBL were 6.15, 31.58, 37.45, 49.17 and 13.97 in the respective years of review period. Mean of the ratios was 27.66 and CV was 56.56% similarly the ratios in EBL remained -6.58, -10.01, -9.21, 21.29 and 21.30 in the same period. Mean of the ratios appeared 3.36 and CV appeared 437.45%.

EPS in NSBIBL depicted rising trend up to the fourth year of review period but it dropped in the final year. The ratio remained negative in EBL for the first three years and then remained almost same in ending years. The negative ratio in EBL is the result of loss suffered by the bank for the period. Mean ratio was much higher in NSBIBL is contrast to EBL, which indicates that the profitability position of the formed is far better than that of the latter. In this sense, NSBIBL seems more successful to attract the investors. CV of the ratio in EBL exceeded the same in NSBIBI by a large amount, which shows lack of consistency in EBL in the different years.

The calculated value of t remained less than the tabulated value  $2.2651 < 2.306$  at 5% level of significance. Hence null hypothesis has been accepted i.e. noticed difference in average EPS of the sampled banks is not significant.

#### 4.1.7.2 Dividend per share (DPS)

= Earning paid to shareholders

No. of equity shares outstanding

Annex 32 highlights that the ratio of NSBIBL remained 0.00, 20.00, 20.01, 20.01 and 10.00 in the respective years of the study period. Mean and CV of DPS came 14.00 and 57.05% respectively. Accordingly, the ratios in EBL were nil for first four years and 15.00 in the final year. Mean of the ratios 3.00 and CV appeared 200%.

NSBIBI paid no dividend in the first year. Dividend per share in following three years remained constant and in the final year it declined to almost half of in preceding year. But EBL did not pay dividend for first four years and in the last year it paid RS 15 per share. Mean DPS of NSBIBL came remarkably higher in NSBIBL which signifies that NSBIBI is more successful to win the confidence of the investors. As dividend is the direct return received by the shareholders, they evaluate the organization paying high dividend as the better one. This means NSBIBL can sell its shares more easily than EBL



Higher CV of the ratios in EBL depicts that income not pay dividend in the consistent manner.

The calculated value of i.e. 2.2003 appeared less than the tabulated value i.e. 2.306 at 5% level of significance. That's why, null hypothesis has been accepted i.e. average DPS does not differ significantly between the sampled banks.

#### 4.1.7.3 Tax per share (TPS)

$$= \frac{\text{Tax paid to the government}}{\text{No. of equity shares outstanding}}$$

Annex 33 depicts that the IPS of NSBIBL in the respective years of the analysis period remained 3.37, 12.87, 16.53, 21.36 and 7.29. Mean and CV of the ratios came 12.28 and 52.14% respectively. In the similar way, the ratios in EBL were nil for first three years and then 0.16 and 11.37. Mean of the ratios appeared 2.31 and CV appeared 196.53%.

The ratios in NSBIBI followed increasing trend for first four years and then it declined in the final year. In EBL, it remained nil up to the third year and it considerably ascended in the final year. Mean ratio in NSBIBL was much higher which indicates that it might have realized sufficiently good return from investment in contrast to EBL. As a result, shareholders of NSBIBI have contributed more in the revenue of the country as compared to those of EBI; CV analysis signifies that investors of NSBIBL have contributed for the welfare of the nation more ultimately throughout the study period.

The calculated value of t was greater than the tabulated value i.e. 2.5432 > 2.5132 at 5% level of significance. Hence null hypothesis has been rejected i.e. mean ratio of the sampled banks with respect to this indicator significantly differs. The reason behind the significant difference might be the loss suffered by EBL for first three years of the study period. As tax per share is the consequence of the profit, shareholders of NSBIBL seemed to contribute more than the shareholders of EBL.

#### 4.1.7.4 Dividend payout ratio (DPR)

$$= \frac{\text{DPS}}{\text{EPS}}$$

Annex 34 highlight that the ratios in NSBIBL remained 0.00%, 63.33%, 53.43% and 71.58% in respective years of the study period. Mean DPR and CV appeared 45.81% and 54.83% respectively. Same indicator in EBL remained nil for first four years and in the

last year, it was 10.42%. Mean and CV of the indicators came 14.08% and 20.0% in respective order.

The indicator in NSBIBL remained nil in the beginning year and showed decreasing trend from second to the fourth year. In the last year, it reached highest. In EBL, the indicator was nil for first four years and 70.42% in the final year Mean DPR appeared greater in NSBIBL, which signifies that it distributed comparatively more proportion of dividend out of its earning. In other words, it remained more successful of attract the investors. CV of the indicators came much higher in FBI, which indicates that dividend payout for different years of the period was more variable.

The calculated value of t remained less than the tabulated value at 5% level of significance i.e.  $1.6813 < 2.306$ . Therefore, null hypothesis has been accepted i.e. mean DPR of two banks does not differ significantly.

#### 4.1.7.4 Price-earning ratio

$$= \frac{\text{Market value per share (MVPS)}}{\text{Earning per share (EPS)}}$$

Annex 35 depicts that P/E ratios of NSBIBL for the respective year of the study period were 83.25, 13.05, 11.00, 8.95 and 40.23 Mean of the ratio: came 31.30 and CV came 0.64%. Similarly, the ratios of EBL were 0.00, 12.19, 13.79, 8.64 and 19.11 in the corresponding years of the period Mean of the ratios appeared 0.35 and CV appeared 3526.67%.

The ratios in NSBIBL did not reveal particular direction of change. The ratios in the first year remained very high as compared to the rest of the years. In EBL, it remained negative up to the third year of the study period. Then it went positive and increased gradually later on. Mean ratio of NSBIBL appeared significantly higher which mean the investors are well satisfied with the performance of the bank. In other words, market has positively judged the performance of NSBIBI higher CV of the ratios in EBI indicates that the ratio varied widely in the bank.

The calculated value of t was, less than the tabulated value at 5% level of significance i.e.  $1.9970 < 2.306$ . So, null hypothesis has been accepted i.e. mean P/E ratio of the sampled banks does not differ significantly.

#### 4.1.7.4 Market value per share to book value per share (MVPS/BVPS)

$$= \frac{\text{Market value per share (MVPS)}}{\text{Book value per share (BVPS)}}$$

Annex 36 exhibits that the indicators in NSBIBL for the respective years of the study period arrived 4.41, 3.15, 2.51, 2.01 and 2.10. Mean and CV of the indicators appeared 2.84 and 31.17 respectively. Same indicators of EBL were 0.00, 3.38, 3.98, 1.70 and 3.32 for the corresponding years. Mean of the ratio came 2.40 and CV come 58.60%.

The indicator in NSBIBL depicted decreasing trend up to the fourth year of study period and then slightly rose in the final year. In EBL, it did not reveal any particular direction of change. Mean value of the indicators appeared greater in NSBIBL, which indicates comparatively stronger management and organization in NSBIBL than in EBL. CV of the indicators came less in NSBIBL, which means the indicator, varied less over the period of study.

The calculated value of t was less than the tabulated value at 5% level of significance. Hence, null hypothesis has been accepted mean value of the indicators does not differ significantly between the sampled banks.

Other indicators show that the performance of NSBIBI is better than that of EBL. But the banks did not seem to differ significantly except in the; case to tax per share.

#### 4.1 Income and Expenditure Analysis

Income and expenditure analysis evaluates major sources of income and expenses. Tines help the analyst to conclude the areas to be focused for investment and tin possibilities for affective control over expenses. The analysis cover is the followings.

- ) Income analysis
- ) Expenditure analysis

##### 4.2.1 Income analysis

Commercial banks generate income form the investment made in various sectors. The banks, being service-oriented organizations, do not produce physical goods they produce loans and advances and innovations and sell the same. In the courses of carrying out their functions, they receive income form various sources which been split up into the following major headings.

- Interest
- Commission and discount
- Foreign exchange fluctuation income
- Other income

a) Interest income

Interest is the main and major source of income in the commercial banks. These banks charge interest on loan and advances provided by them they also receive interest from investment made in government securities, debentures and inter- bank lending.

Annex 37 shows that interest income in NSBIBL remained 77.03%, 86.41%, 89.18%, 87.76% and 89.18% in the respective years of study period. Interest income ranged from 77.03% in the first year to 89.18% in the last. In each year, more than three- fourth of the income was occupied by the interest.

Annex 38 depicts that the interest income in EBL registers 96.21%, 82.55%, 85.72%, 74.83% and 8.17% over the study period from the fiscal year 2002/2003 to 2006/2007 respectively. Interest income ranged from 74.38% in the fourth year of the study period to 96.21% in the beginning year. It showed slightly fluctuating trend. In each year, interest income seemed to cover almost four-fifth of the total income. Hence, interest income remained dominant in the total income.

Average of the income appeared 85.91% and 83.98% in NSBIBL and EBL respectively. It indicates that the average interest covered slightly greater proportion in NSBIBL. In other words, NSBIBL might have focused more of its activities towards the lending and the investment in government securities. Due to interest income came 5.31% in NSBIBL and 8.64% in EBL. It signifies that interest income remained more uniform in NSBIBL.

b) Commission and discount

Commercial banks render various types of services to their customers. They provide remittance facility, guarantees, standing instructions, open letter of credit, purchase and discount bill of exchange along with other agency functions for making such facilities available, they receive certain charges in form of commission and discount. It also covers significant portion of total income.

Annex 37 depicts that commission and discount earned by NSBIBL in the respective years of the study period remained 9.98%, 5.48%, 6.64%, 5.31%, 6.01%. In the first year it stood slightly more as compared to the references ranged between 5% and 10% in all the year of the period.

Annex 38 depicts that the commission and discount be 2.45%, 4.35%, 5.36%, 10.58% and 10.74% respectively from 2002/2003 to 2006/2007. It ranged from

2.45% in the first year to 10.74% in the final year. It revealed increasing trend throughout the study period.

Average of the income in NSBIBL and EBL remained 6.68% and 6.70% respectively. It signifies that commission and discount covered almost same proportion in the total income of both of the banks. CV of the incomes in NSBIBL came 25.61% whereas it came 50.37% in EBL. This shows that the proportion commission and discount in total income remained less uniform in EBL.

c) Foreign exchange fluctuation income

One of the major functions of the commercial bank is transaction of foreign currency. Joint venture banks are allowed to purchase and sell foreign currencies under the directives of NRB and rules, regulations and laws in effect. Income under this heading encompasses them trading gain derived form the exchange of foreign currencies due to the fluctuations in the exchange rate.

Annex 37 depicts that the foreign exchange fluctuation income shared 0.34%, 0.02%, 5.05% and 4.41% of total income of NSBIBL in the respective year of the study period. Proportion of this income remained least in the year 2004/005 and most in 2005/2006. In the latter years, this income seemed to contribute more as compared to the previous years.

From the annex 38, the income of EBL appeared 0.66%, 4.91%, 1.80%, 1.70% and 1.01 from the year 2002/2003 to 2006/2007 respectively. The percentage of income showed fluctuation over the years. Minimum percentage of income was noticed in the year 2002/2003, whereas the maximum percentage in 2003/2004.

On the average, income remained 2.40% in NSBIBL and 2.11% in EBL. From this result, it can be concluded that foreign exchange fluctuation income occupied comparatively greater portion in NSBIBL. The income in various years remained more uniform in EBL as depicted by lower CV i.e. 69.27 % < 85.35%.

d) Other income

Income not included in any of the above heading comes under this heading. Other income comprises revaluation gain and non-operating income such as dividend.

Annex 37 highlight that other income in NSBIBL in the respective years of the study period recorded 12.65%, 5.92%, 4.16%, 1.88% and 0.40%. The income in different years of the study period revealed declining trend. It sharply decreased from 12.65% in the first year to 0.40 in the last year.

From the Annex38, other income in EBL appeared 0.27%, 8.19%, 7.12%, 12.05% and 7.65% in the respective years of the period. It remarkably rose in the second year and then slightly fluctuated in the latter years. In the bank, income under this heading has also covered significant portion.

Mean of the incomes in NSBIBL came 5.02% and 7.22 in EBL. Greater mean in EBL signifies that other income contributed slightly more portion of total income. CV of the incomes remained higher in NSBIBL (85.27% > 55.87). EBL in the income received turn this source appeared less consistent in NSBIBL.

#### 4.2.2 Expenses analysis

Expenses are the cost incurred in course of operating various activities the banks need to pay interest for the deposits and borrowings to handle all other resources, there is a term of per4sonnel whom the bank pays lagans and provide other facilities. Besides, a significant potion of income is spent for daily operation. For the study purpose evaluation of the following form of expenses been made.

- ) Interest expenses
- ) Staff expenses
- ) Office operation expenses
- ) Bonus facility

##### a) Interest expenses

It is one of the major parts of operation expenses. Commercial banks pay interest on various types of deposit, loans and advances taken from other banking and financial institution, government etc. Since transfer of the money from the excess units to the deficit units is the significant function of the commercial banks, interest occupies more than three fourth of the total operating expenses.

Annex 39 depicts that interest expenses remained 56.57%, 72.31%, 77.55%, 80.17% and 83.45% in the respective years of the study period in NSBIBL. Interest expenses showed rising trend over the period. It ranged from 56.77% in the first year to 83.45% in the last. It shows the increasing success of the bank, to attract the deposit loans and advances.

AS observed in Annex 40, the interest expenses out of total expenses in EBI recorded 23.05%, 42.29%, 57.17%, and 72.76% respectively from 2002/2003 to 2006/2007. The proportion of expenses showed increasing trend up to the fourth year and slightly declined in the final year of study period. In each year, it remained dominant and the highest percentage reached in the fourth year.

Mean of the interest expenses in NSBIBL and EBL appeared 74.01% and 53.39% respectively. This shows that interest expenses covered more portions in NSBIBL as compared to that in EBI and CV of the expenses came 12.77% in NSBIBL whereas it came 35.21% in EBL. It signifies that interest expenses in the total mix of the operation expenses remained more consistent in NSBIBL.

b) Staff expenses

In any organization, manpower plays vital role in the success of failure so that organization. Well-motivated staffs are the ornaments of the organization. In return of the service provided by them, they need to be paid remuneration which is included under this heading. Staff expenses; include salary, different, forms of allowances incentives, fringes benefits etc.

Annex 40 reveals that the staff expenses in NSBIBL remained 3.27%, 3.19%, 2.81%, 3.41% and 3.79% in the respective years of the study period. It ranged from 2.81% in the third year to 3.79% in the final year of the study period. It showed declining trend up to the third year and then increased later on.

From the Annex 40 it is seen that the staff expenses in EBL were 28.15%, 12.55%, 11.29%, 7.49% and 8.08% respectively from the year 2002/2003 to 2006/2007 it occupied significantly high portion of total expenses in the first year and the mean gradually up to the fourth year. In the final year, it slightly grows on.

Average of the staff expenses came 3.29% and 13.51% in NSBIBL and EBL respectively it means the proportion of staff expenses in EBL, was more than four times the same in NSBIBL. From the staff point of view, EBL seems more attractive but NSBIBL seems more efficient in its operation. CV of the expenses appeared 9.65% and 55.96% in NSBIBL and EBL respectively. Hence, the ratio of staff expenses to total expenses varied more in EBL.

c) Office operation expenses

For the routine work of the commercial banks, considerable amount of expenses is incurred. All the expenses made for the operation of the bank such as rent, hire,

telephone charge, electricity charge, administrative expenses etc come under this heading. Generally, these expenses occupy second major portion in the composition of total expenses.

Annex 39 reveals that the office operation expenses in NSBIBL remained 36.52%, 20.25%, 16.22%, 13.40% and 12.01% in the respective years of the study period. It showed decreasing trend over the period. It declined to 12.01% in the last year from 36.52% in the beginning year. In other words, the efficiency of the bank increased latter year.

Annex 40 shows that the office operation expenses covered 48.8%, 45.16%, 31.54%, 17.02% and 17.59% in the respective years of the review period in EBL. In the first year, it reached almost half of the total expenses. But, in the latter years, it gradually decreased in spite of the marginal increase in the last year. The trend of the expenses shows that the bank gradually improved its operational efficiency.

Mean expenses came 19.68% and 32.02% in NSBIBL and EBL respectively. Lower mean expenses in NSBIBL signifies that it is more successful to perform its operation efficiently, CV of the expenses appeared higher in EBL (122.50% > 39.83%) which means it maintained less consistency in making office operation expenses over the study period.

#### d) Bonus facility

When the bank earns profit, dividend is paid to the owners. Similarly, a part of the profit is paid to the staff as bonus, which is as the reward for their service. Generally, staffs prefer that bank which pays greater percentage of bonus. It acts as the motivator for them but it increases the volume of operating expenses.

Annex 40 shows that NSBIBL spent 3.64%, 4.25%, 3.42%, 3.02% and 0.75% respectively for staff bonus. The bonus showed fluctuating trend in the period, it ranged from 0.75% in the last year to 4.25% in the second year. The bonus expenses dropped to low level in the final year because of decreased profit in the year.



Annex 41 depicts that expenses for bonus in EBL remained 0%, 0%, 0%, 2.73% and 2.67% in the respective years of the study period. The bank could not pay bonus for first three years because loss suffered by it. In the last two years its expenses came 3.02% and 1.08% in NEBIBL and EBL respectively. It reveals that NSBIBL is more efficient in updating and encouraging its staff CV of the expenses appeared 39.82% in NSBIBL whereas it appeared 122.50% in EBL. It signifies that NSBIBL paid bonus to its staffs more consistently as compared to EBL.

#### 4.2 Correlation Analysis

It is a useful statistical for measuring the intensity of the magnitude of linear relationship between two series. Karl Pearson's coefficient of correlation is most common and useful tool to measure the relationship between two variables in the bank. The correlation coefficient (r) between two variables X and Y can be obtained by using following formula.

$$r = \frac{n \sum XY - \sum X \sum Y}{\sqrt{n \sum X^2 - (\sum X)^2} \sqrt{\sum Y^2 - (\sum Y)^2}}$$

Where,

n = Number of observations in series X and Y

$\sum X$  = Sum of observations in series X

$\sum Y$  = Sum of squared observations in series Y

$\sum X^2$  = Sum of squared observations in series X

$\sum Y^2$  = Sum of squared observations in series Y

$\sum XY$  = Sum of the product of observations in series in X and Y

Here,  $r = 1$  implies that two variable are positively and perfectly correlated.

$r = -1$  implies that two variable are negatively and perfectly correlated

$r = 0$  does not necessarily mean that the variable are independent. They may, however, be related in some other form such as quadratic, logarithm or exponential.

Under the correlation analysis, the intensity of linear relation between the following variables has been measured.

- ) Total deposit and net profit
- ) Performing assets and net profit
- ) Net worth and net profit
- ) Total deposit and investment
- ) Total deposit and loans and advance
- ) EPS and MVPS
- ) DPS and MVPS
- ) DPR and MVPS

a) Correlation analysis between deposit and net profit

Annex 42 shows that the coefficient of correlation and probability distribution of correlation coefficient between total deposit and net profit in NSBIBL 0.3195 and 0.2689 in the review period respectively correlation coefficient less than six times the probable error<sup>4</sup> i.e.  $0.3295 < 6 \times 0.2689$ . It deposit and net profit of the bank are positively correlated but the correlation is not highly significant.

Annex 43 depicts that the coefficient of correlation and probable error of the coefficient between the same variables in EBI were 0.8849 and 0.0655 respectively. Correlation coefficient came greater than six times the probable error i.e.  $0.8849 > 6 \times 0.0655$ , 11 implies that the total deposit and net profit in the bank are highly and positively correlated in other word, net profit of the bank increases almost to the same degree with increase in the amount of deposit.

Between two banks, EBL seems more efficient regarding the utilization of the deposit for income generating purpose as revealed by greater coefficient of correlation in EBI. In the review period, net profit of EBL seemed to increase in line with increase in deposit that's why; it retains potentiality of increasing net profit by accumulating more despite.

b) Correlation between performing assets and net profit

Annex44 highlights that the coefficient of correlation and probable error of the coefficient between performing assets and net profit in NSBIBL remained 0.4754 and 0.2004 respectively correlation coefficient came less than six times the probable error i.e  $0.4753 > 0.2004$ . I t signifies that the net profit and performing assets of the bank are positively related, however, the correlation is not much significant. Band can raise its net profit bye investing the fund in performing assets

but the increase in the profit will not be proportionate to the increase in the performing assets.

Annex 45 depicts that the coefficient of correlation and probable error of the coefficient between performing assets and net profit in EBL were 0.98081 and 0.0529 respectively. Correlation coefficient appeared greater than six times the probable error i.e.  $0.98081 > 6 \times 0.0529$ . It indicates that the net profit and performing assets of the bank are highly and positively related. Furthermore, the bank can raise its net profit by increasing the performing assets.

From the above analysis, there seems a significant correlation between the performing assets and net profit in EBL whereas a low degree of correlation in NSBIBL. It means EBL can gear its profitability in greater speed by raising the volume of performing assets.

c) Correlation between net worth and net profit

Annex 46 shows that the correlation coefficient and probable error of correlation coefficient between net worth and net profit in NSBIBL were 0.1501 and 0.2948 respectively. Correlation coefficient appeared less than probable error. Hence it implies that the relation between net worth and net profit in the bank is very poor i.e. there does not seem a specific relationship.

From Annex 47 the correlation coefficient and probable error of correlation coefficient between net worth and net profit in EBL, were 0.9695 and 0.0189 respectively. Coefficient of correlation appeared greater than six times the probable error i.e.  $0.9695 > 6 \times 0.0189$  it implies that the correlation between the stated components is positive at a significant level. Net profit in the bank seems to rise almost to the same degree as rise in the net worth.

On comparing two banks, net profit in EBL seemed to rise continuously with increase in the amount of net worth. In other words, EBL is successful to utilize the investors' fund more prudently and effectively to realize the return. Therefore EBL retains the capacity of uplifting the net profit by increasing the net worth. In contrast, a poor relation is observed between net worth and net profit in NSBIBL.

d) Correlation between total deposit and investment

Annex 48 depicts that the coefficient of correlation and probable error of correlation coefficient between total deposit and investment in NSBIBL remained 0.4667 and 0.2359 in the study period. Correlation coefficient came less than six times the probable error i.e.  $0.4667 < 6 \times 0.2359$ . It signifies that a positive relation occurs between the two components but the degree of relation is not much significant.

From the Annex 49, the coefficient of correlation and probable error of coefficients between the variable in EBL are seen 0.993 and 0.0042 respectively. Coefficient of correlation came greater than six times the probable error i.e.  $0.9081 < 6 \times 0.0529$ . It indicates that the correlation between total deposit and investment of the bank are correlated at significant level. With the increase in the amount of deposit, investment of the bank seems to increase between the tow banks, it seems that EBL allocated greater portion of the fund collected form depositors in investment. In contrast, it seems that investment of NSBIBL increased or decreased in slow pace with respect to the increase or decrease in the deposit.

e) Correlation between total deposit and loans and advances

Annex 50 depicts that the coefficient of correlation between the total deposits and loans and advances in NSBIBL remained 0.9968 whereas the probable error of coefficient remained 0.0019. Correlation coefficient appeared greater than six times the probable error i.e.  $0.9968 > 6 \times 0.0019$ . It implies that the correlation between deposit and loans and advances of the bank is highly positively. Loans and advance seem to rise with the rise with the rise in the volume of total deposit.

Annex 51 shows that coefficient of correlation between the total deposits and loans and advances in EBI remained 0.9964, whereas the probable error of coefficients remained 0.0022 correlation coefficient came greater than six times; the probable error i.e.  $0.9961 > 6 \times 0.0022$ . It signifies that the deposit and loans and advance of the bank are positively correlation at significant. The bank may raise the volume of loans advances with rise in the volume of total deposit.

From the above analysis, high degree of correlation seems to occur between loans and advance and total deposit in both of the banks. Both other seems increase or decreases the investment. In loan and advances portfolio with increase and decrease in the deposit.

f) Correlation between EPS and MVPS

Annex 52 highlight that lays correlation coefficient and probable error of coefficient between EPS and MVPS were -0.7701 and 0.1228 respectively throughout the study period. Correlation coefficient appeared greater than six times the probable error I .e  $0.7701 > 6 \times 0.1228$ . It means MVPS and EPS of the bank are negatively correlated at significant level. In other words, market price of share seems to fall with increase in the earning per share.

Annex 53 depicts that the correlation coefficient and probable error of the correlation coefficient between EPS and MVPS in EBL were 0.71 and 0.1312 in the respective order. It signifies that EPS and MVPS of the bank are positively correlated moreover; market price of the share seems to increase with the increase in earning per share thought the degree.

The result of correlation seems contradictors between the two banks, the correlation between EPS and MVPS seemed negative in NSBIBL, which is quiet illogical and absurd. This is purely mechanical interpretation and does not consider other influencing factors. But various other factors are affecting in the real market. Besides, market price of the share changes because of signaling factors. ON the other hand, market price of this share in EBL seems to increase with increase in EPS.

g) Correlation between DPS and MVPS

Annex 54 shows that coefficient of correlation and probable error of the coefficient between DPS and MVPS in NSBIBL were -0.7682 and 0.1236 respectively. Coefficient of correlation came greater than six times the probable error i.e.  $0.7682 > 6 \times 0.1236$ . From the result, it can be concluded that correlation between DPS and MVPS is highly negative with the decrease in DPS, MVPS seems to increase.

Annex55 shows that correlation coefficient and probable error coefficient between the stated variable remained respectively 0.8938 and 0.0607 in EBL. Correlation coefficient came greater than six times the probable error i.e.  $0.7682 > 0.0607$ . It implies that correlations between DPS and MVPS are highly positive in the bank. Moreover, market price per share per share seems to increase with respect to the increase in dividend per share.

From the above analysis, the relation between DPS and MVPS seems completely conflicting between two banks. In EBL, MVPS appears to use along with increase in DPS. Present and potentials investors of the bank are responding positively for the dividend per share. But MVPs seems to fall with rise in DPS of NSBIBL, which is generally illogical. The result observed in NSBIBL may simply be confidential or the result of signaling factors.

#### h) Correlation between DPR and MVPS

Annex 56 depicts that the coefficient of correlation between DPR and MVPS in NSBIBL remained -0.1175 whereas probable error of the correlation coefficient remained 0.2975. Correlation coefficient came to less than the probable error i.e.  $0.1175 < 0.2075$ , which indicates that the calculated value of coefficient is not significant. Hence market value of the share seems to change independently with DPR.

Annex 57 depicts that the coefficient of correlation and probable error of coefficient between DPR and MVPS in EBL remained 0.5629 and 0.2061 respectively. The result indicates that DPR and MVPS are positively correlated but the degree of correlation is not highly significant.

Above analysis signifies that DPR seems to render no effect on the market price of the share in NSBIBL whereas it seems to affect the MVPS of EBL to some extent. In other words, potential shareholders of NSBIBL seem to invest in the shares of NSBIBL without considering dividend payout ratio but the investor of the EBL seem to consider DPR to some extent at the time of investment.

#### 4.3 Least Square liner Trend Analyses

Trend analysis is very useful to predict the future events on the basis of the past tendencies. This method is based on the assumption that past tendency continues in the future.

The future trend of any variable is forecasted using the equation,

Where,

$Y_c$  = the dependent variable

$a$  = Y-intercept

$b$  = the slope of trend line

$X$  = Year-2002/2003 (with regard to the date used in the study). The normal equations on fitting the trend equation are;

$$Y = Na + b X$$

$$XY = a X + b X^2$$

$$X = 0, a = \frac{\sum Y}{N}, b = \frac{\sum XY}{\sum X^2}$$

With the help of trend equation, future value of the following variable for coming five year, have been predicated.

- ) Total deposit
- ) Net worth
- ) Total investment
- ) Loans and advance
- ) EPS
- ) MVPS

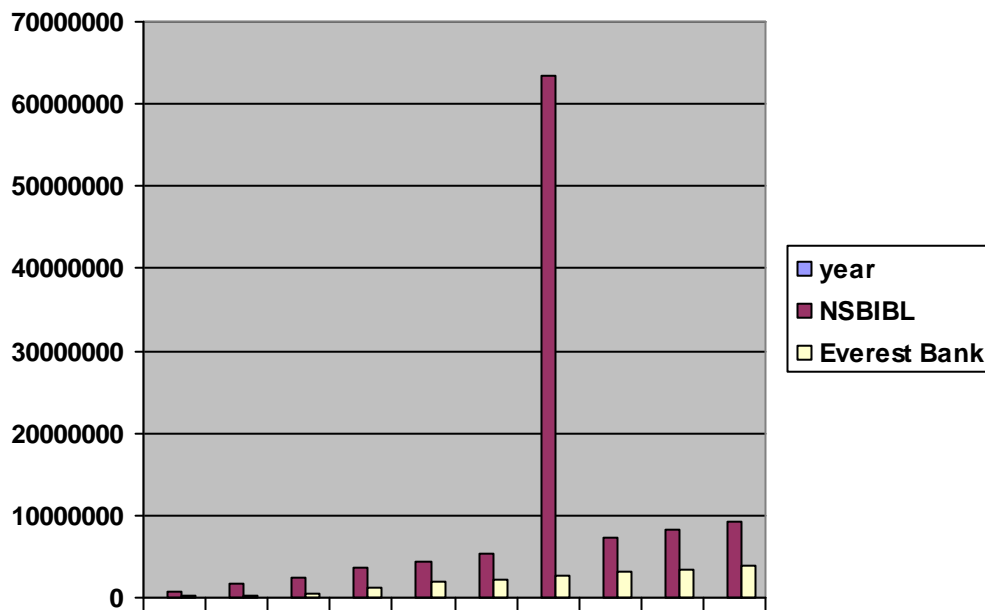
a) Least square linear trend of total deposit

Annex 58 depicts that  $a$  i.e. y-intercept and  $b$  i.e. slope of the trend line of the total deposit in NSBIBL appeared Rs 2564774.88 and 944825.99 thousands respectively. Throughout the review period, total deposit showed increasing trend on an average, total deposit increased by Rs 944825.99 per year in the past period. Therefore, trend equation of the total deposit is.

$$Y_c = 2564774.88 + 944825.99 X$$

On the basis of trend equation, forecasted total deposit for coming five years would be Rs 5399252.85, 634407.84, 7288904.83, 8233730.82 and 917851 thousand respectively.

year	NSBIBL	Everest Bank	Average
2002/2003	715844.35	147212.38	4315258.365
2003/2004	1624595.93	170522.63	897559.28
2004/2005	2358908.40	471661.67	1415285.035
2005/2006	3744506.86	1124903.12	2434704.99
2006/2007	4380018.84	1948946.58	3164482.74
2007/2008	5399252.85	2140000.95	271032643
2008/2009	63444078.84	2595782.84	4469930.84
2009/2010	7288904.83	3051564.73	5170234.78
2010/2011	8233730.82	3507346.62	5870538.72
2011/2012	9178510	3963128.51	6570819.255



Annex 59 depicts that a i.e. y-intercept and b i.e. slope of the trend line of the total deposit in EBL were Rs772655.28 and 455781.89 thousands respectively. Total deposit revealed increasing trend throughout the study period. On an average total deposit increased by 455781.89 per year

Therefore, trend equation of the total deposit is,

$$Y_c = 772655.28 + 455781.89 X$$



On the basis of the above trend equation, telecasted total deposit for coming five years would be 2140000.95, 2595782.84, 3051564.73, 3507346.62 and 3963128.51 thousand respectively.

The above chart shows the trend behavior of total deposits in NSBIBL and Everest along with a trend line of average of these two banks. In the first year of trend NSBIBL line has possessed the highest area but due to the lowest degree of slope in its trend line. It has obtained lowest area on 2001. Between two banks, average deposit and rate of the increase in total deposit both seem higher in NSBIBL. In other words, total deposit if NSBIBL will increase in higher rate for coming five years if the post trend continues.

1) Least square linear trend of loans and advances

Annex 60 highlights that a i.e. y-intercept and b i.e. slope of the trend line of the loans and advances in NSBIBL were Rs 1755578.28 and Rs 579192.07 thousands respectively. Throughout the review period, loans and advances revealed increasing trend. On an average, loans and advances increased by Rs 579192.07 thousands per year in the past period.

Therefore, trend equation of the loans and advances is

$$Y_c = 1755578.28 + 579192.07 X$$

As per the trend equation obtained above, forecasted loans and advances for coming five years would be Rs 3493154.49, 4072346.56, 4651538.63, 5230730.70 and 5809922.77 thousands respectively.

As shown by Annex 60, a i.e. Y-Intercept and b i.e. slope of the trend line of loan and advances are EBL were Rs 521606.90 and 351199.62 thousands respectively. In the study period loans and advances revealed increasing trend and the rate of increase was Rs 351199.62 thousands per year.

Therefore, trend equation of the loans and advances is,

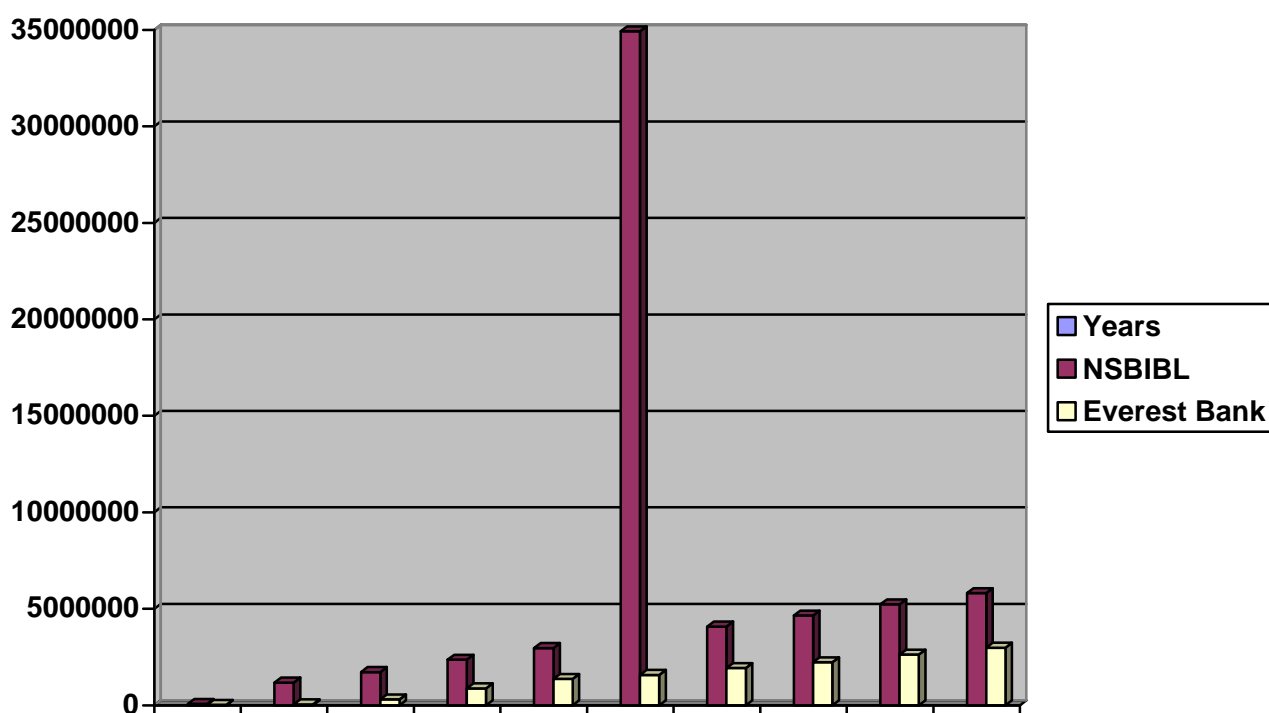
$$Y_c = 521606.90 + 351199.62 X$$

On the basis of the above trend equation, forecasted loans and advances for coming five years would be Rs 1575205.76, 1926405.38, 2277605.00, 2628804.62 and 2980004.24 respectively.

## Loan and advance

( Amount in Rs .thousand)

Years	NSBIBL	Everest Bank	Average
2002/2003	69194.07	20161.18	44677.625
2003/2004	1175314.83	49127.93	12221.38
2004/2005	1718791.00	302183.18	1010487.09
2005/2006	2363559.29	871677.98	1617618.635
2006/2007	2963032.29	1364884.23	2163958.26
2007/2008	34931540.49	1575205.76	2534180.26
2008/2009	4072346.56	1926405.38	2999375.97
2009/2010	4651538.63	2227605	346571.815
2010/2011	5230730.7	2628804.62	3929767.66
2011/2012	5809922.77	2980004.24	4394963.505



The above chart shows the trend behaviors of loans and advances in NSBIBL Everest bank along with a trend line of average of these two banks. Between two banks average loans and advances and rate on increase the increase both seem higher in NSBIBL. In other words, loan and advances will increase with higher rate in NSBIBL for coming five years if the past trend continues.

b) Least square linear trend of investment

As depicted by Annex 62 a i.e. y-intercept and b i.e slope of trend line of investment in NSBIBL remained Rs 337554.98 and 64755.03 respectively. Throughout the study period, investment of the bank showed increasing trend. It increased by an average amount of Rs 64755.03 thousand per year.

Therefore, trend equation of investment is,

$$Y_c = 337554.98 + 64755.03 X$$

On the basis of above trend equation, forecasted investment of NSBIBL for coming five years would be Rs. 531820.07, 596575.10, 661330.13, 726085.16 and 790840.19 thousands respectively.

Annex63 depicts that a i.e. y-intercept and b i.e. slope of trend line of investment in EBL were Rs 163924.61 and 50681.87 thousands respectively. Investment of the bank showed increasing trend throughout the study. It increased by an average amount of Rs 50681.87 thousand per year.

Therefore, trend equation of investment is,

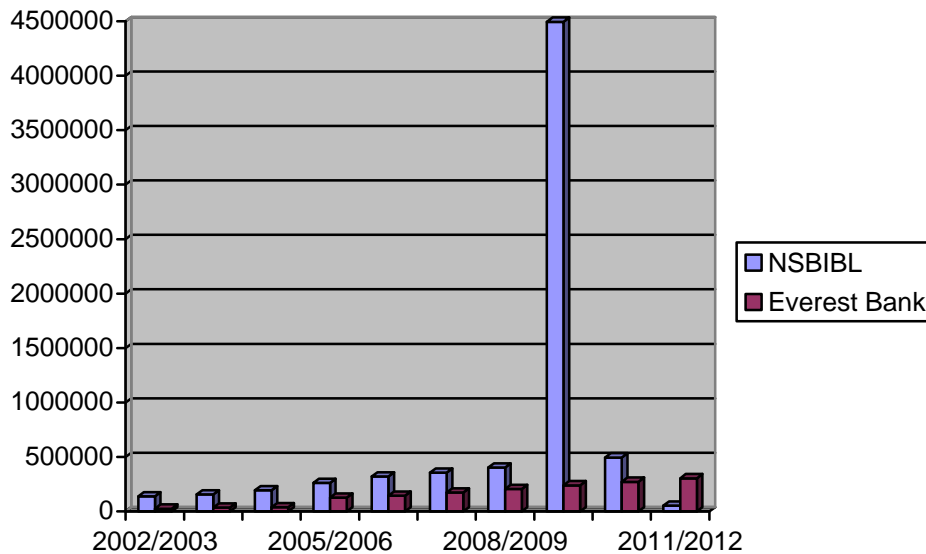
$$Y_c = 163924.61 + 50681.87 X$$

As per the trend equation obtained above, forecasted investment of the bank for coming five years would be Rs 315970.22, 366652.09, 417333.00, 468015.83 and 518697.70 thousand respectively.

Trend value of Net worth

(Amount in Rs. Thousand)

Year	NSBIBL	Everest Bank	Average
2002/2003	139309.10	26057.58	82683.34
2003/2004	157088.54	35617.43	96352.985
2004/2005	195227.33	38320.17	117923.75
2005/2006	262270.85	127435.67	194853.26
2006/2007	321059.82	145157.02	233108.42
2007/2008	355856.27	173522.70	264689.985
2008/2009	402724.65	206524.41	304624.53
2009/2010	4495596.03	239526.12	2367561.075
2010/2011	496461.41	272527.83	384494.62
2011/2012	54332.79	305529.54	179931.165



The above chart shows the trend behaviors of Investment in NSBIBL and Everest bank along with a trend line of average these two banks. On comparing two banks average investment and rate of the increase in total investment both appear higher in NSBIBL. It means investment will increase in higher rate in NSBIBL for coming years if past trend continues.

c) Least square linear trend of net worth

Annex 64 highlights that a i.e. y-intercept and b i.e. slope of trend line of net worth in NSBIBL remained Rs 215251.13 and 46868.38 thousands respectively. Net worth revealed increasing trend in review period. Average rate of increase in the amount of net worth came Rs 46868.38 thousands per year.

Hence, trend equation of net worth is

$$Y_c = 215251.13 + 46868.38X$$

From the trend equation obtained above, forecasted net worth for coming five years would be Rs 355856.27, 402724.65, 4495593.03, 496461.41 and 54332.79 respectively.

From the Annex 65 a i.e. y-intercept and b i.e. slope of trend line of net worth in EBL seems Rs 745117.57 and 33001.71 thousand respectively. Net worth amount of Rs 33001.71 thousand per year.

Therefore, trend equation of net worth is,

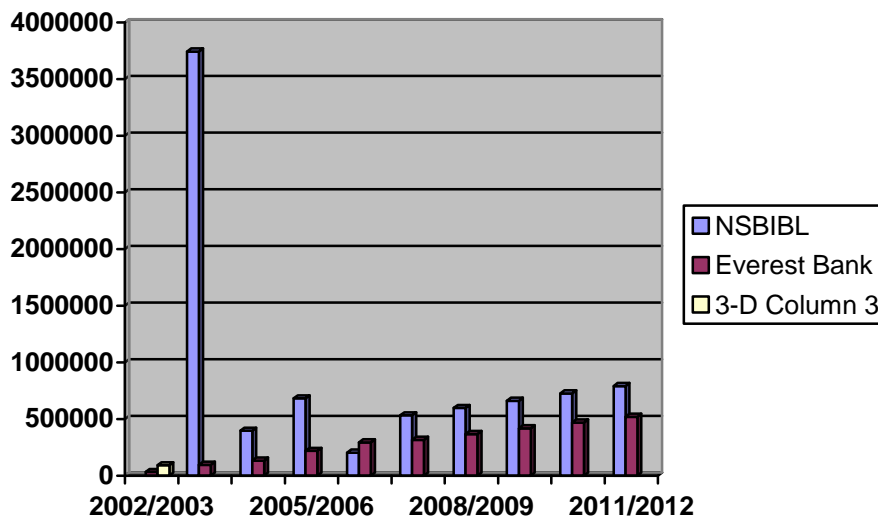
$$Y_c = 745117.57 + 33001.71 X$$

On the basis of trend equation obtained above, the forecasted net worth of EBL for coming five years would be Rs 173522.70, 206524.41, 239526.12, 272527.83 and 305529.54 respectively.

Trend value of Investment

(Amount in Rs. thousand)

Year	NSBIBL	Everest Bank	Average
2002/2003	32408.84	91000	61704.42
2003/2004	3743378.04	95295.40	234836.72
2004/2005	396820.30	132294.40	529114.7
2005/2006	681589.15	217954.88	449772.01
2006/2007	202578.30	293079.02	242828.75
2007/2008	531820.07	315970.22	423895.145
2008/2009	596575.10	366652.09	481613.95
2009/2010	661330.13	417333.00	539331.565
2010/2011	726085.16	468015.83	597050.495
2011/2012	790840.19	518697.70	654768.945



The above chart shows the trend behaviors of net worth in NSBIBL and Everest bank along with a trend line of average of these two banks. On observing the past trend, both average and rate of increase of net worth seems higher in NSBIBL. Therefore, net worth of NSBIBL will increase in higher speed for coming year of trend of past trend continues. Least square linear trend of net profit

Annex 66 depicts that a i.e. y-intercept and b i.e. slope of trend line of net profit in NSBIBL were Rs 33183.05 and 3986.91 thousands respectively. Throughout the study period, net profit showed increasing trend. It increased by the rate of Rs 3986.91 thousands per year.

Therefore, trend equation of net profit is

$$Y_c = 33183.05 + 3986.61 X$$

On the basis of trend equation obtained above, the forecasted net profit for coming five years would be Rs 45143.78, 40130.69, 53117.60, 57104.51 and 61051.42 thousands respectively.

As shown by Annex 67 a i.e. y-intercept and b i.e. slope of trend line net profit in EBL were Rs 5131.75 and 9299.63 thousands respectively. Net profit showed increasing trend throughout the study period. It increased by Rs 9299.63 per year.

Therefore, trend equation of net profit is,

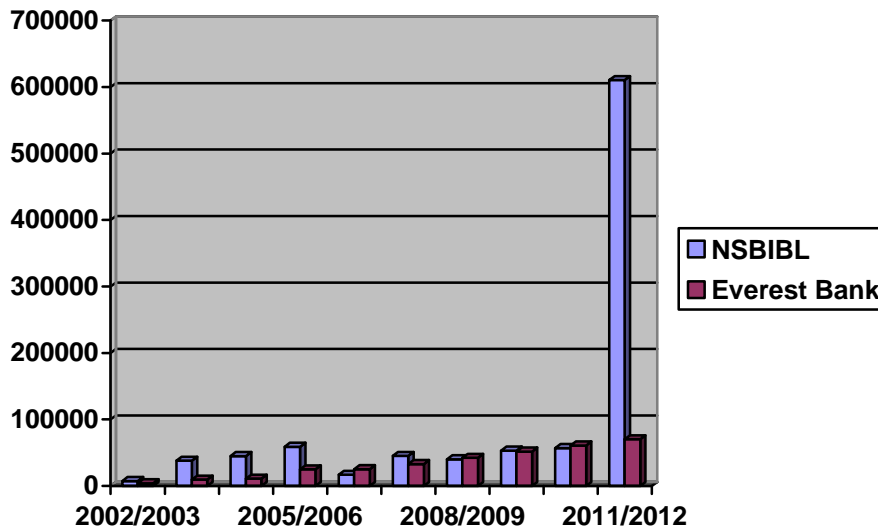
$$Y_c = 5131.75 + 9299.63 X$$

As per the trend equation obtained above, forecasted net profit of the bank coming five year would be Rs 33030.64, 42330.27, 51629.90, 60929.53, 70229.16 thousands respectively.

Trend value of Net Profit

( Amount in Rs. Thousand)

Year	NSBIBL	Everest Bank	Average
2002/2003	7370.83	3947.91	1711.46
2003/2004	37886.58	9606.41	14140.055
2004/2005	44926.94	11050.90	16935.02
2005/2006	58976.52	25033.90	42005.21
2006/2007	16760.39	25230.30	20995.345
2007/2008	45143.78	33030.64	39087.21
2008/2009	40130.69	42330.27	41230.48
2009/2010	53117.60	51629.90	52373.75
2010/2011	57104.51	60929.53	59017.02
2011/2012	610501.42	70229.16	340365.29



The above chart shows the trend behaviors of net profit in NSBIBL and Everest bank along with a trend line of average of these two banks. Between two banks, average of net profit appeared higher in NSBIBL but the rate of increase appeared higher more in EBL. If this trend continues, net profit of EBL will exceed that of NSBIBL after three years i.e.2005/2006 onwards.

d) Least square linear trend of EPS

Annex 68 shows that a i.e. y-intercept and b i.e. slope of trend line of EPS in NSBIBL were Rs 27.66 and 3.32 respectively. EPS revealed increasing trend through out the study period. It increased with the rate of Rs 3.32 per year.

Hence, trend equation of EPS is

$$Y_c = 27.66 + 3.32X$$

On the basic of trend equation obtained above, forecasted EPS of NSBIBL for coming five years would be Rs 37.62, 40.94, 44.26, 47.58 and 50.90 respectively.

As shown by Annex 69 a i.e. y-intercept and b i.e. slope of trend of EPS in EBL were Rs 3.378 and 3.72 respectively. EPS revealed increasing mean and the period of study. It increased with the rate of Rs 3.72 per year.

Therefore, trend equation of EPS is

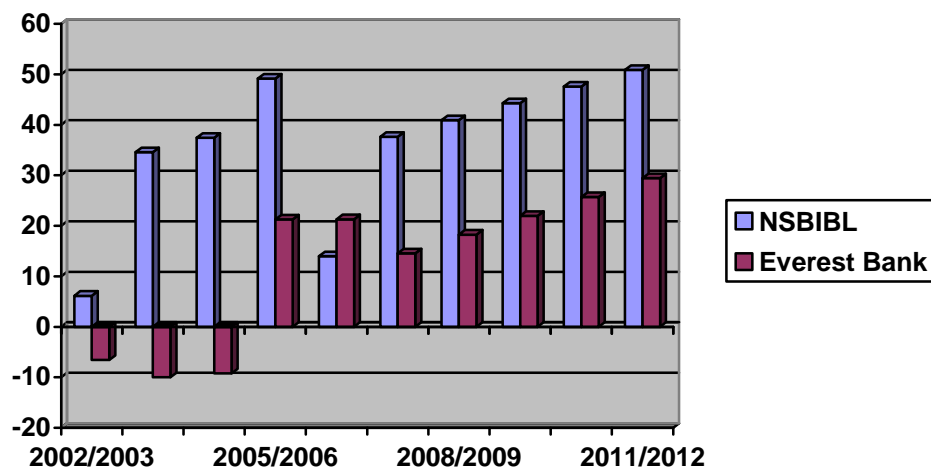
$$Y_c = 3.378 + 3.72X$$

As per the trend equation obtained above, forecasted EPS of EBL for coming five years would be Rs 14.54, 18.26, 21.98, 25.70 and 29.42 respectively.

Trend value of EPS

( Amount in Rs Thousand)

Year	NSBIBL	Everest Bank	Average
2002/2003	6.15	-6.58	-0.215
2003/2004	34.58	-10.01	10.785
2004/2005	37.45	-9.21	14.12
2005/2006	49.17	21.29	35.23
2006/2007	13.97	21.30	17.635
2007/2008	37.62	14.54	26.08
2008/2009	40.94	18.26	29.6
2009/2010	44.26	21.98	33.12
2010/2011	47.58	25.70	36.64
2011/2012	50.90	29.42	40.16



The above chart shows the trend behaviors of earning per share in NSBIBL and Everest Bank along with a trend line of average of these two banks. Between two banks, average EPS appeared much higher in NSBIBL but rate of increase was slightly greater in EBL. Therefore, EPS of NSBIBL will be higher in coming five years if past trend continues.

e) Lest square linear trend of MVPS

Annex 70 depicts that a i.e. y- intercept and b i.e. slope of trend line of MVPS in NSBIBL remained Rs 467.60 and 12.80 respectively. MVPS revealed increasing trend throughout the period of study. It increased with the rate of Rs 12.8 per year.

Therefore, trend equation of MVPS is,

$$Y_c = 467.6 + 12.8X$$



On the basis of trend equation obtained above, forecasted MVPS of NSBIBL for coming five years would be Rs 506, 518.8, 531.6, 644.40 and 557.2 respectively.

As depicted by Annex 71, a i.e. y-intercept and b i.e. slope of trend line of MVPS in EBL were Rs 168 and 87.6 respectively. MVPS showed increasing trend over the period of study. It increased by the amount is Rs 87.6 per year.

Therefore, trend equation of MVPS is,

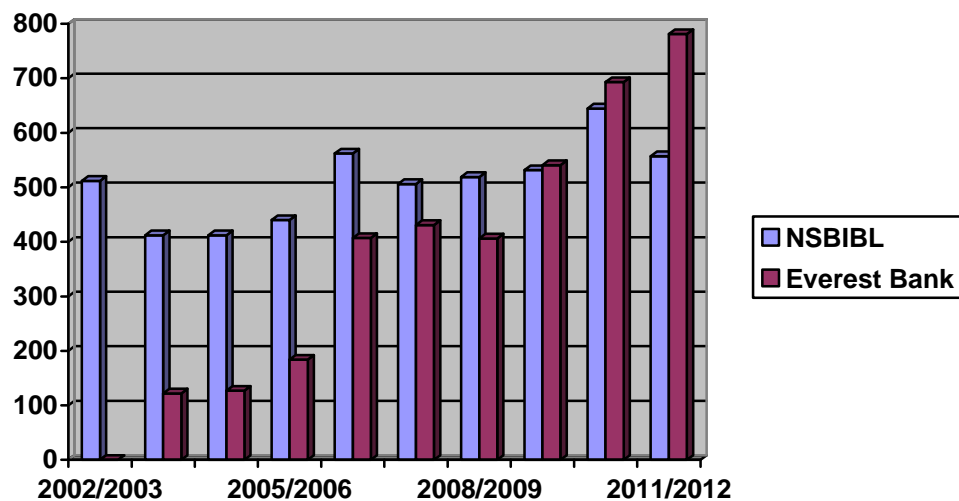
$$Y_c = 168 + 87.6X$$

On the basis of trend equation obtained above, forecasted MVPS of the bank for coming five years would be Rs 430.80, 606.00, 693.60 and 781.20 respectively.

Trend value of MVPS

(Amount in Rs. Thousand)

Year	NSBIBL	Everest Bank	Average
2002/2003	512	0.00	256
2003/2004	412	122	267
2004/2005	412	127	269.5
2005/2006	440	184	312
2006/2007	562	407	484.5
2007/2008	506	430.80	468.4
2008/2009	518.8	406.06	462.43
2009/2010	531.60	540.60	1154.20
2010/2011	644.40	693	668.7
2011/2012	557.20	781.20	669.2



The above chart shows the trend behaviors of market value per share in NSBIBL and Everest bank along with a trend line of average of these two banks, average MVPS appeared higher in NSBIBL but the rate of increase was more in EBL if this trend continues, MVPS of EBL will exceed that of NSBIBL after two years.

## MAJOR FINDINGS

The following findings have been derived from the analysis and interpretation of data.

- 1) Current ratio of both of the banks showed slightly fluctuating trend. Both of the banks could not maintain the conventional standard of 2.1. However, the average of the ratios appeared higher in NSBIBL, which signifies that NSBIBL is more capable of meeting immediate liabilities in contrast to EBL. The ratio was found more consistent in NSBIBL. Hypothesis test showed that the mean ratio of two banks did not differ significantly.
- 2) Average cash and bank balance to current and saving deposits ratios of EBL appeared greater than that NSBIBL. It indicates that of EBL is better than that of NSBIBL. Conversely, EBL seems less successful to utilize the fund raised from the current and saving deposits that may ultimately affect the profitability adversely. The ratio appeared less uniform in EBL. Hypothesis test showed that the sampled bank does not differ significantly with respect to this ratio.
- 3) Mean cash and bank balance to total deposit ratio remained higher in EBL which reveals that the greater portion of the deposit was held for immediate payment in EBL. The ratio remained more consistent in EBL. Hypothesis test showed that the mean ratio of the sampled bank does not differ significantly.
- 4) MRB balance to current and saving deposit ratio remained sufficiently above the standard set by NRB i.e. 8% in each year of the review period in both of the banks average of ratios appeared higher in NSBIBL which indicates that NSBIBL has thicker cushion of liquidity against the possible deposit withdrawal. The ratio remained more consistent in NBL. Hypothesis test showed that the bank does not differ significantly with respect to this ratio.
- 5) Both of the banks maintained NRB balance to fixed deposits ratios above the standards prescribed by NRB i.e. 6% in each year of the study that EBL has maintained greater portion of fixed deposit as liquid asset. The ratio showed less

- consistency in EBL. Hypothesis test showed that the mean ratio of two banks does not differ significantly.
- 6) Mean fixed deposit to the total deposit ratio came higher in NSBIBL. It means that NSBIBL can grasp the opportunity of investing the fund in more profitable sectors like long-term loans. On the other hand, EBL can utilize less cost bearing fund in current assets and hence to strengthen the liquidity position.
  - 7) Debt-equity ratio in both of the banks depicted the employment of debt to tie greater extent in their capital comparatively, capital financial market and nature of competitions.
  - 8) The banks have employed considerably greater portions of debt in their capital. Therefore, they should be aware of the possible risk that may arise due to slackness in the business activities. In this regard, NSBIBL should adopt more precaution so as to check the risk factors.
  - 9) Debt servicing capacity of EBL appears poor. So, it is better to search for the profitable sectors for investment and utilization of the deposits collected.
  - 10) Capital adequacy position of NSBIBL seems less satisfactory than that of EBL that's why; NSBIBL needs to raise its net worth. It will be better for the bank to distribution stock dividend rather than cash dividend. As per the directive of NRN, both of the banks need to raise their paid up capital to 500 million rupees by the year 2004
  - 11) Turnover of the fund raised form the outsider's appears less satisfactory in EBL. So, EBL has a challenge to allocate the deposit in income generation sectors. It will be better for both of the banks, especially for EBL to open the branches in other cities and rural areas in order to find the profitable opportunities.
  - 12) The quality of assets owned by NSBIBL seems poorer in comparison to EBL. Therefore, NSBIBL is suggested to advance the loans only after the proper analysis of customers.
  - 13) Greater portion of the income has been spent for staff and office operation in EBL. Through the use of capacity building programs, seminars, conferences, training etc. staff's can be made more efficient. It is also suggested to minimize the office operation expenses by searching the loopholes.
  - 14) In NSBIBL, earning compared to the total deposit accumulated could not grow proportionately. Therefore, NSBIBL is suggested to invest in other current assets rather than in the low yielding Treasury bill on which interest has significantly

declined at present. If the liquidity position does not appear weaker, it will be better for the bank to increase the investment in long- term loans after analyzing risk.

- 15) Both of the banks are suggested to review their investment portfolio to see if there is any better mix than the present one.
- 16) Although, Profit needs to be earned for survival and growth of any institution, it should not be the one and only one goal. The country has expected service form the financial sectors in such a way that it encompasses the balanced development. Economic level of the country can be raised only when the level of the people depending upon the agriculture increases. So the banks are suggested to diversify their loans in priority and deprived sectors as per the directive of NRB. Structure of NSBIBL seemed more leveled i.e. more risky. The ratio remained more consistent in NSBIBL. Hypothesis test showed that the sampled banks do not differ significantly respect to this ratio.
- 17) Debt asset ratio remained higher EBL than in NSBIBL which reveals that the greater portion of asset in EBL was financed through the outsider cost bearing fund the ratio appeared more uniform in EBL. Hypothesis test showed that the mean ratio of the banks does not differ significantly.
- 18) Interest coverage ratio in EBL remained embarrassing in first three years of study period. In later years, it remained satisfactory. The ratio in NSBIBL appeared satisfactory in ill the years of study period. The ratio widely fluctuated in EBL throughout the study period and showed rising trend. Hypothesis test showed that the sampled banks do not differ significantly with respect to this ratio.
- 19) Average net worth to total deposit ratio was higher in EBL and above 8% in both of the banks. The ratio showed loss consistency in EBL. Hypothesis test showed that the mean ratio of two banks does not differ significantly.
- 20) Net worth to total asset ratio was greater in EBL than in NSBIBL. It means that EBL is more successful to build up confidence among creditors. The ratio remained more consistent in EBL. Hypothesis test showed that the mean ratio of two banks does not differ significantly.
- 21) Net worth to total credit ratio appeared much higher in EBL, which signifies that EBL, has used significantly larger extent of net worth for credit creation but ratio widely dispersed in EBL as compared to that in NSBIBL.

- 22) Loans and advances to fixed deposit ratio were higher in NSBIBL. Which indicates that turnover of fixed deposit in form of loan and advances is better in NSBIBL. The ratio varied less in the same bank.
- 23) Loans and advances to saving deposit ratio appeared significantly higher in NSBIBL. It indicates the better utilization of saving deposits NSBIBL than in EBL. The ratio remained more uniform in NSBIBL. As depicted by higher investment to total deposit in EBL. EBL seems more successful to utilize the deposits fund in investment. The slightly to greater extent in NSBIBL
- 24) NSBIBL utilize the resources more efficiently and prudently for income generation as shown by higher performing assets to total assets ratio of the bank. The ratio seemed to vary less in the same bank.
- 25) Performing assets to total debt ratio of NSBIBL exceeded the same of EBL on the average. From this, it can be concluded that NSBIBL allocated the cost-bearing fund more successfully than EBL. The ratio of this utilization remained more uniform in NSBIBL.
- 26) Loan loss coverage ratio of EBL over the period remained lesser which indicates that asset financed by the bank are superior in contrast to NSBIBL but the consistency in maintaining the quality of asset appeared better in NSBIBL.
- 27) With respect to loan loss provision to total income ratio, EBL seems more aware in quality while advancing loans as the ratio is less in the bank. Portion of loan loss provision in total income varied less in the same bank.
- 28) Loan loss provision to total deposit ratio came to be less in EBL and hence it can be concluded that loan and advances granted by the bank are less risky. In consistency of the ratios, NSBIBL came to be better.
- 29) Accrued interest to total interest income ratio was lower in EBL. It implies that EBL granted the loans and advance in more secured sector. But the greater variability in the ratio of the EBL indicates less consistent policy.
- 30) Average return on assets in NSBIBL was much higher than in EBL. It implies that the profitability position of EBL in the study period proved to be weaker in spite of improvement in latter two years. The ratio varied adequately in EBL from 2002/2003 to 2006/2007.
- 31) Return as total deposit was considerably higher in NSBIBL, which signifies that NSBIBL is more successful to utilize deposit for making profile. The ratio in the past five years showed almost no consistency in EBL.

- 32) Interest expenses to interest income ratio, on an average was lower in NSBIBL. Which reveals that NSBIBL invested the fund rouse from more successfully to earn the interest rather paying the interest for the debt.
- 33) As revealed by higher interest earned to total asset ratio in NSBIBL, NSBIBL seemed to be in better position for income generation. The ratio fluctuated minimum in NSBIBL as shown by less CV.
- 34) Staff expenses to total income ratio remained significantly lower in NSBIBL. It indicates that NSBIBL carried out its operation more efficiently with lesser expenses on staff. On the other hand EBL spent more for staff so as to motivate them. The ratio varied considerably in EBL.
- 35) NSBIBL was found to perform its day today operation more efficiently as revealed by lower office operation expenses to total income ratio in NSBIBL the EBL. Almost half of the total income was spent for office operation in EBL. The ratio showed greater variation in EBL.
- 36) Greater EPS in NSBIBL shows that earning on per share basis is much higher in NSBIBL than in EBL. EPS greatly varied in the latter.
- 37) NSBIBL seemed more successful to win the confidence of investors as depicted by higher DPS. DPS remained more consistent in NSBIBL than in EBL.
- 38) Tax per share is considerably higher in NSBIBL and hence the shareholders of NSBIBL have contributed more for the welfare of the nation. It has greatly fluctuated in EBL.
- 39) NSBIBL distributed greater portion of its earnings to share holders as depicted by higher DPR. EBL distributed dividend only in the year 2002/2003.
- 40) Income analysis shows that interest income remained dominant in both of the banks. More than three-fourth of the income was occupied by interest. Commission and discount occupied second major portion of the income in NSBIBL whereas other income occupied this portion in EBL. In both of the banks, interest expenses remained dominant and then overhead expenses.
- 41) Total deposit and net profit, performing assets and net profit, net worth and net profit, total deposit and investment, total deposit and loans and advances and DPS and EPS seemed positively correlated at significant level in EBL throughout the study period.
- 42) Total deposit and loans and advances were found positively correlated at significant level in NSBIBL but poor degree of correlation existed between

following variable in the bank total deposit and net profit. Pert run assets and net profit, total deposits and investment.

- 43) There did not appear significant relation between net worth and net profit and DPR and MVPS in NSBIBL. Correlation between EPS and MVPS was found significantly negative in the bank. But it is illogical and unreliable. Such a relation might have appeared because of merely mechanical interpretation. In practice, these two variables are related positively.
- 44) Total deposit loan and advances, investment, net worth, net profit, EPS and MVPS showed the increasing trend in both of the banks over the study period. Total deposit, loans and advances, investment and net worth increased with faster rate in NSBIBL whereas the speed of increment of net profit. MVPS and EPS remained greater in EBL.

## CHAPTER - 5

### SUMMARY, CONCLUSION AND RECOMMENDATION

#### SUMMARY AND CONCLUSION

Joint venture banks have played significant role in the economic development of country. They have introduced new technology in the banking system mobilized the saving of community. They have focused their services on commerce, trade and industry along with general public. But the intense competition and lack of sufficient investment opportunities have created threats to the bank. Therefore the study has been conducted to evaluate the performance of joint venture banks especially, that of Nepal SBI Bank and Everest Bank in order to find out their strengths and weakness. Null hypothesis for the purpose of study is "there is no significant difference between the financial performance of Nepal SBI and Everest Bank.

To avoid the chances of duplication in the study and confirm whether the study is in accordance with the principles and doctrines, supportive text and the previous dissertation have been reviewed. For analyzing the financial data of the sampled banks the financial tools- ratio analysis, income and expenditure analysis and the statically tool-mean, CV correlation, least square liner trend analysis have been used. From the analysis and interpretation of the data, the investor arrives at following conclusion.

Liquidity position of both of the banks seems satisfactory. Overall liquidity position of EBL appears slightly stronger than that of NSBIBL. It shows that EBL can meet its current liabilities more efficiently than NSBIBL. However, looking up more funds in form of current assets is also not wise because it has negative impact on profitability. Both of the banks have used higher proportion of debt in their capital structure. Overall capital structure of NSBIBL appears more levered than that of EBL. Hence, NSBIBL follows this strategy can yield fair return to shareholders. Debt servicing capacity of EBL appears poor. Capital adequacy position of EBL appears stronger than that of NSBIBL. NSBIBL is found more successful to utilize its deposit in profitable sector. Turnover of deposits, debt and assets in performing assets seems better in NSBIBL. On analyzing the assets owned by the banks. EBL is found superior because assets possessed by EBL are less risky than that of NSBIBL.



Income and expenses is how rising trend in both of th4e banks. Interest seems to occupy major part of the both income and expenses. Comparatively, interest remained more dominant in the total income and expenses of NSBIBL than that of EBL.

Correlation analysis reveals that the coefficient of correlation between total deposit and net profit; performing assets and net profit; net worth and net profit, total deposit and investment; total deposits and loans and advances remained highly significant in EBL. It signifies that EBL is successful to utilize its resources more efficiently than NSBIBI as strong positive relation did not appeal between above stated components in NSBIBL. DPS and DPR do not seem to render strong effect on MVPS of NSBIBL but they have affected the MVPS of EBL to some extent.

Trend analysis depicts that total deposit, total investment, loans and advances and net worth have been growing in faster pace in NSBIBL than in EBL. Therefore, estimated amount of the above variable for coming five years will be higher in NSBIBI. But the growth late of net profit seems faster in EBI, which made net profit of EBL will exceed than that of NSBIBL after three years if the past trend continues, the higher growth rat of EPS and MVPS will make MVPS of EBL exceed than that of NSBIBL after three years.

## RECOMMENDATION

On the basis of major findings some important suggestions have been forwarded so that they will help the sampled banks to strengthen weaker aspects of financial activities.

- a) Both of the banks have maintained NRB balance to deposit ratio remarkably higher than the standard prescribed by NRB. The fund tied up in NRB balance cannot yield good return. So, both of the banks are suggested to lower this ratio and invest the surplus fund in other current assets such as loans and advances, bills purchase and discount, money at call and short notice.
- b) It is suggestive that these banks should hold the fund in form of cash or cash equivalent items only to the extent of requirement. Though it is difficult to know the exactly suitable liquidity ratio, estimation can be done on the basis of past experience, nature of depositors, situation of financial market and nature of competition.
- c) The banks have employed considerably greater portion of debt in their capital therefore, they should be aware of the possible risk that may arise due to slackness in the business activities. In this regard, NSBIBL should adopt more precaution so as to check the risk factors.
- d) Debt servicing capacity of EBL appears poor. So, it is better to search for the profitable sectors for investment and utilization of the deposits collected.
- e) Capital adequacy position of NSBIBL seems less satisfactory than that of EBL that's why; NSBIBL needs to raise its net worth. It will be better for the bank to distribute stock dividend rather than cash dividend. As per the directive of NRM, both of the banks need to raise their paid up capital to 500 million rupees by the year 2004.
- f) Turnover of the fund raised from the outsiders appears less satisfactory in EBL. So, EBL has a challenge to allocate the deposit in income generating sectors. It will be better for both of the banks, especially for EBL to open the branches in other cities and rural areas in order to find the profitable opportunities.
- g) The quality of assets owned by NSBIBL seems poorer in comparison to EBL. Therefore, NSBIBL is suggested to advance the loans only after the proper analysis of customers.
- h) Greater portion of the income has been spent for staff and office operation in EBL. Through the use of capacity building programmes, seminars, conference, training

etc. staffs can be made more efficient. It is also suggested to minimize the office operation expenses by searching the loopholes.

- i) In NSBIBL, earning, compared to the total deposit accumulated could not grow proportionately. Therefore, NSBIBL is suggested to invest in other current assets rather than in the low yielding Treasury bill on which interest has significantly declined at present. If the liquidity position does not appear weaker, it will be better for the bank to increase the investment in long-term loans after analyzing risk.
- j) Both of the banks are suggested to review their investment portfolios to see if there is any better mix than the present one.
- k) Although, profit needs to be earned for survival and growth of any institution, it should not be the one and only one goal. The country has expected services from the financial sectors in such a way that it encompasses the balanced development. Economic level of the country can be raised only when the level of the people depending upon the agriculture increases. So the banks are suggested to diversify their loans in priority and deprived sectors as per the directive of NRB.

ANNEX 1						
Current Ratio						
Amount in Rs. Million						
Bank	NSBIBL			EBL		
Year	Current Assets	Current Liabilities	Ratio	Current Asset	Current liabilities	Ratio
2002/2003	866	751.43	1.15:1	165.33	153.52	1.07:1
2003/2004	1818.4	1695.35	1.07:1	193.34	175.43	1.07:1
2004/2005	2594.17	2439.74	1.06:1	547.2	530.11	1.03:1
2005/2006	4053.53	3851.69	1.05:1	1282.26	1287.61	1:1
2006/2007	4747.21	4487.67	1.06:1	2277.32	2127.09	0.98:1
MEAN	1.08:1			1.04:1		
S.D	0.04			0.04		
C.V	3.39			4.26		
COMBINED S.D				0.04528		
CALCULATED VALUE OF t				1.4666		

ANNEX 2						
Cash and Bank Balance to Current and Saving Deposit Ratio						
Amount in Rs. Thousand						
Bank	NSBIBL			EBL		
Year	Cash & Bank balance	Current and Saving Deposit	Ratio(%)	Cash & Bank balance	Current and Saving Deposit	Ratio(%)
2002/2003	20294.31	241705.35	83.97	44469.57	136557.38	32.57
2003/2004	220396	688554.43	32.01	43696.47	41298.48	105.81
2004/2005	320021	826258.72	38.73	87329.94	140605.71	62.11
2005/2006	761558.06	1360884.26	55.96	255150.35	403524.21	63.23
2006/2007	1357797.23	2279800.29	59.56	460719.04	816864.04	56.4
MEAN	54.05			64.02		
S.D	18.16			23.66		
C.V	33.61			36.96		
COMBINED S.D				23.578		
CALCULATED VALUE OF t				0.669		

ANNEX 3						
Cash and Bank Balance to total Deposit Ratio						
Amount in Rs. Thousand						
Bank	NSBIBL			EBL		
Year	Cash & Bank balance	Total Deposits	Ratio(%)	Cash & Bank balance	Total Deposits	Ratio(%)
2002/2003	202948.31	715844.35	28.35	44469.57	147212.38	32.57
2003/2004	220396	162595.93	13.57	43696.47	170522.63	25.63
2004/2005	320021	2358908.4	13.57	87329.94	471661.67	18.52
2005/2006	761558.06	3744506.86	20.34	255150.35	1124903.12	22.68
2006/2007	1357797.23	4380018.84	31	460719.04	1948946.58	23.64
MEAN	21.37			24.14		
S.D	7.27			3.82		
C.V	34.02			15.83		
COMBINED S.D				6.4926		
CALCULATED VALUE OF t				0.6746		

ANNEX 4						
NRB Balance to Current and Saving Deposit Ratio						

Amount in Rs. Thousand						
Bank	NSBIBL			EBL		
Year	NRB balance	Current and Saving Deposit	Ratio(%)	NRB balance	Current and Saving Deposit	Ratio(%)
2002/2003	143018.15	241705.35	59.17	6599.52	136557.38	4.83
2003/2004	144107.26	688554.43	20.93	21044.6	41298.48	50.96
2004/2005	235505.03	826258.72	28.5	47260.02	140605.71	33.61
2005/2006	574125.66	1360884.26	42.19	121474.05	403524.21	30.1
2006/2007	693064.21	2279800.29	30.4	168150.35	816864.04	20.58
MEAN	36.24			28.02		
S.D	13.34			15.2		
C.V	36.81			54.25		
COMBINED S.D					15.9865	
CALCULATED VALUE OF t					0.8132	

ANNEX 5						
NRB Balance for Fixed Deposit Ratio						
Amount in Rs. Thousand						
Bank	NSBIBL			EBL		
Year	NRB balance	Fixed Deposit	Ratio(%)	NRB balance	Fixed Deposit	Ratio(%)
2002/2003	143018.15	474139	30.16	6599.52	10655	61.94
2003/2004	144107.26	927205.85	15.54	21044.6	129224.15	16.29
2004/2005	235505.03	1532649.69	15.37	47260.02	331055.96	14.28
2005/2006	574125.66	2383622.6	24.09	121474.05	721378.91	16..84
2006/2007	693064.21	2100218.55	33.33	168150.35	1132082.54	14.85
MEAN	23.63			28.84		
S.D	7.27			18.57		
C.V	30.77			74.77		
COMBINED S.D					15.7684	
CALCULATED VALUE OF t					0.1211	

ANNEX 6						
Fixed Deposit to Total Deposit Ratio						
Amount in Rs. Thousand						
Bank	NSBIBL			EBL		
Year	Fixed Deposit	Total Deposit	Ratio(%)	Fixed Deposit	Total Deposit	Ratio(%)
2002/2003	474139	715844.35	66.23	10655	147212.38	7.24
2003/2004	927205.85	1624595.93	57.07	129224.15	170522.63	75.78
2004/2005	1532649.69	2358908.4	64.97	331055.96	471661.67	70.19
2005/2006	2383622.6	3744506.86	63.66	721378.91	1124903.12	75.78
2006/2007	2100218.55	4380018.84	47.65	1132082.54	1948946.58	58.09
MEAN	59.98			55.09		
S.D	6.79			24.64		
C.V	11.33			44.74		
COMBINED S.D					20.2087	
CALCULATED VALUE OF t					0.3826	

Annex-7						
Dept-Equity Ratio						
Amount in Rs. Thousand						
Bank	NSBIBL			EBL		
Year	Total Dept	Equity	Ratio(%)	Total Dept	Equity	Ratio(%)

2002/2003	606064.29	139309.10	435.05	14039.08	26057.58	548.93
2003/2004	1194133.26	157088.54	760.17	154631.76	35617.43	434.15
2004/2005	1920714.52	196527.33	977.33	438554.25	38320.17	1144.45
2005/2006	2982824.56	262270.85	1137.31	956496.41	127435.67	750.57
2006/2007	2894575.8	321059.82	901.57	1628031.96	145157.02	1121.57
MEA	842.29			799.93		
S.D	237.22			290.3		
C.V	28.16			36.29		
COMBINED S.D				296.729		
CALCULATED VALUE OF t				0.2235		

ANNEX 8						
Dept-Assets Ratio						
Amount in Rs. Thousand						
Bank	NSBIBL			EBL		
Year	Total Dept	Total Assets	Ratio(%)	Total Dept	Total Assets	Ratio(%)
2002/2003	606064.29	833590.85	67.82	14039.08	189441.23	75.5
2003/2004	1194133.26	1869814.49	63.86	154631.76	225171.2	68.67
2004/2005	1920714.52	2688734.31	71.44	438554.25	594306.31	73.79
2005/2006	2982824.56	4122575.7	75.35	956496.41	1419981.95	67.36
2006/2007	2894575.8	4812000.97	60.15	1628031.96	2293136.58	71
MEAN	1.08:1			1.04:4		
S.D	0.04			0.04		
C.V	3.39			4.26		
COMBINED S.D				4.36		
CALCULATED VALUE OF t				1.3092		

ANNEX 9						
Dept to Total Capital Ratio						
Amount in Rs. Thousand						
Bank	NSBIBL			EBL		
Year	Total Dept	Total Capital	Ratio(%)	Total Dept	Total Capital	Ratio(%)
2002/2003	606064.29	745373.39	81.31	14039.08	169096.66	84.59
2003/2004	1194133.26	1351221.8	88.37	154631.76	190249.19	81.28
2004/2005	1920714.52	2117241.85	90.72	438554.25	476874.42	91.96
2005/2006	2982824.56	3245095.41	91.92	956496.41	1083932.08	88.24
2006/2007	2894575.8	3215635.62	90.02	1628031.96	1773188.98	91.81
MEAN	88.47			87.58		
S.D	3.76			4.15		
C.V	4.25			4.74		
COMBINED S.D				4.427		
CALCULATED VALUE OF t				0.3086		

ANNEX 10						
Interest Coverage Ratio						
Amount in Rs. Thousand						
Bank	NSBIBL			EBL		
Year	EBIT	Interest	Ratio(%)	EBIT	Interest	Ratio(%)
2002/2003	46500.07	35087.51	1.33	2507.41	1440.5	-1.74
2003/2004	154201.18	100875.23	1.53	1089.88	8515.58	-0.13
2004/2005	227116.23	162646.26	1.4	10824.96	21875.86	0.49
2005/2006	324278.85	240745.68	1.35	99938.51	74721.13	1.34

2006/2007	335810.49	310795	1.08	157395.27	118702.2	1.33
MEAN	1.34			0.26		
S.D	0.15			1.14		
C.V	10.96			442.48		
COMBINED S.D				0.9099		
CALCULATED VALUE OF t				2.0982		
ANNEX 11						
Net Worth to Total Deposit Ratio						
Amount in Rs. Thousand						
Bank	NSBIBL			EBL		
Year	Net Worth	Total Deposits	Ratio(%)	Net Worth	Total Deposits	Ratio(%)
2002/2003	139309.1	715844.35	19.46	26057.58	147212.38	17.7
2003/2004	157088.54	1624595.93	9.67	35617.43	170522.63	20.89
2004/2005	196527.33	2358908.4	8.33	38320.17	471661.67	8.12
2005/2006	262270.85	3744506.86	7	127435.67	1124903.12	11.33
2006/2007	321059.82	4380018.84	7.33	145157.02	1948946.58	7.45
MEAN	10.36			13.1		
S.D	4.65			5.32		
C.V	44.84			40.64		
COMBINED S.D				5.5854		
CALCULATED VALUE OF t				0.8673		

ANNEX 12						
Net Worth to Total Assets Ratio						
Amount in Rs. Thousand						
Bank	NSBIBL			EBL		
Year	Net Worth	Total Assets	Ratio(%)	Net Worth	Total Assets	Ratio(%)
2002/2003	139309.1	893590.85	15.59	26057.58	189441.23	13.76
2003/2004	157088.54	1869814.49	8.4	35617.43	225171.2	15.82
2004/2005	196527.33	2688734.31	7.31	38320.17	594306.31	6.45
2005/2006	262270.85	4122575.7	6.36	127435.67	1419981.95	8.98
2006/2007	321059.82	4812000.97	6.67	145157.02	2293136.58	6.33
MEAN	8.87			10.25		
S.D	3.43			3.85		
C.V	38.73			37.57		
COMBINED S.D				4.0883		
CALCULATED VALUE OF t				0.5422		

ANNEX 13						
Net Worth to Total Credit Ratio						
Amount in Rs. Thousand						
Bank	NSBIBL			EBL		
Year	Net Worth	Total Credit	Ratio(%)	Net Worth	Total Credit	Ratio(%)
2002/2003	139309.1	609194.07	220.87	26057.58	20127.18	129.25
2003/2004	157088.54	11753140.83	13.37	35617.43	49127.93	72.5
2004/2005	196527.33	1718791	11.43	38320.17	302183.18	12.68
2005/2006	262270.85	2363559.15	11.1	127435.67	871677.98	14.62
2006/2007	321059.82	2911.32.29	11.03	145157.02	13648840.23	10.64
MEAN	13.96			47.94		
S.D	4.54			46.82		
C.V	32.5			10.64		

COMBINED S.D	37.1857
CALCULATED VALUE OF t	1.4447

ANNEX 14						
Loan and Advances to Total Deposit Ratio						
Amount in Rs. Thousand						
Bank	NSBIBL			EBL		
Year	Loan And Advances	Total Deposits	Ratio(%)	Loan And Advances	Total Deposits	Ratio(%)
2002/2003	69194.07	715844.35	85.1	20161.18	147212.38	13.7
2003/2004	117531483	1624595.93	72.35	49127.93	170522.63	28.81
2004/2005	1718791	2358908.4	72.86	302183.18	471661.67	64.07
2005/2006	2363559.29	3744506.86	63.12	871677.98	1124903.12	77.49
2006/2007	2963032.29	4380018.84	67.65	1364884.23	1948946.58	70.03
MEAN	72.22			50.82		
S.D	7.35			24.97		
C.V	307710.18			49.14		
COMBINED S.D					20.5798	
CALCULATED VALUE OF t					1.6438	

ANNEX 15						
Loan and Advances to Fixed Deposit Ratio						
Amount in Rs. Thousand						
Bank	NSBIBL			EBL		
Year	Loan And Advances	Fixed Deposit	Ratio(%)	Loan And Advances	Fixed Deposit	Ratio(%)
2002/2003	69194.07	474139	128.48	20161.18	10655	189.22
2003/2004	117531483	927205.85	126.76	49127.93	129224.15	38.02
2004/2005	1718791	1532649.69	112.15	302183.18	331055.96	91.28
2005/2006	2363559.29	2383622.6	99.16	871677.98	721378.91	120.83
2006/2007	2963032.29	2100218.55	141.08	1364884.23	1132082.54	120.56
MEAN	121.53			111.98		
S.D	14.47			49.02		
	11.9			43.78		
COMBINED S.D					40.4085	
CALCULATED VALUE OF t					0.3734	

ANNEX 16						
Loan and Advances to Saving Deposit Ratio						
Amount in Rs. Thousand						
Bank	NSBIBL			EBL		
Year	Loan And Advances	Saving Deposit	Ratio(%)	Loan And Advances	Saving Deposit	Ratio(%)
2002/2003	69194.07	73846.39	824.95	20161.18	12384.08	162.8
2003/2004	117531483	181732.37	624.39	49127.93	25407.61	193.36
2004/2005	1718791	345623.24	497.3	302183.18	79029.47	382.37
2005/2006	2363559.29	527237.24	448.29	871677.98	217839.8	400.15
2006/2007	2963032.29	786711.25	376.64	1364884.23	1364884.23	304.66
MEAN	566.31			288.67		
S.D	164.62			96.32		
C.V	29.07			33.37		
COMBINED S.D					150.787	
CALCULATED VALUE OF t					2.9111	



ANNEX 17						
Investment to Total Deposit Ratio						
						Amount in Rs. Thousand
Bank	NSBIBL			EBL		
Year	Investment	Total Deposit	Ratio(%)	Investment	Total Deposit	Ratio(%)
2002/2003	32408.84	715844.35	4.53	20161.18	147212.38	61.82
2003/2004	374378.04	1624595.93	23.04	49127.93	170522.63	55.87
2004/2005	396820.3	2358908.4	16.82	302183.18	471661.67	28.05
2005/2006	681589.15	3744506.86	18.2	871677.98	1124903.12	19.38
2006/2007	202578.3	4380018.84	4.63	1364884.23	1948946.58	14.52
MEAN	13.44			35.93		
S.D	7.53			19.3		
C.V	55.98			53.72		
COMBINED S.D				16.3765		
CALCULATED VALUE OF t				2.1708		

ANNEX 18						
Performing Assets to Total Assets Ratio						
						Amount in Rs. Thousand
Bank	NSBIBL			EBL		
Year	Performing Assets	Total Assets	Ratio(%)	Performing Assets	Total Assets	Ratio(%)
2002/2003	641602.91	833590.85	71.8	111161.18	189441.23	58.68
2003/2004	1549692.87	1869814.49	82.88	144422.52	225171.2	64.14
2004/2005	2115611.3	2688734.31	78.68	434477.57	594306.31	73.11
2005/2006	3045148.56	4122575.7	73.87	1089632.86	1419981.95	76.74
2006/2007	3165610.59	4812000.97	65.79	1647963.83	2293136.58	71.84
MEAN	74.6			68.91		
S.D	5.85			6.56		
C.V	7.84			9.52		
COMBINED S.D				7.335		
CALCULATED VALUE OF t				1.314		

ANNEX 19						
Performing Assets to Total Dept Ratio						
						Amount in Rs. Thousand
Bank	NSBIBL			EBL		
Year	Performing Assets	Total Dept	Ratio(%)	Performing Assets	Total Dept	Ratio(%)
2002/2003	641602.91	606064.29	105.86	111161.18	14039.08	77.71
2003/2004	1549692.87	1194133.26	129.78	144422.52	154631.76	93.4
2004/2005	2115611.3	1920714.52	110.15	434477.57	438554.25	99.07
2005/2006	3045148.56	2982824.56	102.09	1089632.86	956496.41	113.92
2006/2007	3165610.59	2894575.8	109.36	1647963.83	1628031.96	101.22
MEAN	111.45			97.06		
S.D	9.6			11.78		
C.V	8.61			12.13		
COMBINED S.D				12.0121		
CALCULATED VALUE OF t				1.893		

ANNEX 20						
Loan Loss Coverage Ratio						
						Amount in Rs. Thousand
Bank	NSBIBL			EBL		

Year	Loan Loss Provision	Total Risk Assets	Ratio(%)	Loan Loss Provision	Total Risk Assets	Ratio(%)
2002/2003	8907.46	609194.07	1.46	201.53	20161.18	1
2003/2004	7161.65	1175314.83	0.61	779.95	49127.93	1.59
2004/2005	18830.23	1718791	1.1	1750.38	302183.18	0.58
2005/2006	31659.24	2363559.15	1.34	5720.38	871677.98	0.66
2006/2007	35521.05	2911023.29	1.22	8333.78	1364884.23	0.61
MEAN	1.15			0.89		
S.D		0.29			0.38	
C.V		25.62			43.01	
COMBINED S.D				0.3809		
CALCULATED VALUE OF t				1.071		

ANNEX 21						
Loan Loss provision to Total Income Ratio						
Amount in Rs. Thousand						
Bank	NSBIBL			EBL		
Year	Loan Loss Provision	Total Income	Ratio(%)	Loan Loss Provision	Total Income	Ratio(%)
2002/2003	8907.46	85173.74	10.46	201.53	2503.53	8.05
2003/2004	7161.65	202100.11	3.54	779.95	13866.33	5.62
2004/2005	18830.23	293457.53	6.42	1750.38	32944.67	5.31
2005/2006	31659.24	415929.58	7.61	5720.38	139247.6	4.11
2006/2007	35521.05	452415.33	7.19	8333.78	129457.65	3.8
ME3N	7.04			5.38		
S.D		2.22			1.5	
C.V		31.54			27.95	
COMBINED S.D				2.1207		
CALCULATED VALUE OF t				1.0421		

ANNEX 22						
Loan Loss provision to Total Deposit Ratio						
Amount in Rs. Thousand						
Bank	NSBIBL			EBL		
Year	Loan Loss Provision	Total Deposits	Ratio(%)	Loan Loss Provision	Total Deposits	Ratio(%)
2002/2003	8907.46	715844.35	1.24	201.53	147212.38	0.14
2003/2004	7161.65	162595.93	0.44	779.95	170522.63	0.46
2004/2005	18830.23	2358908.4	0.8	1750.38	471661.67	0.37
2005/2006	31659.24	3744506.86	0.85	5720.38	1124903.12	0.51
2006/2007	35521.05	4380018.84	0.74	8333.78	1948946.58	0.43
MEAN	0.81			0.38		
S.D		0.26			0.13	
C.V		31.48			33.83	
COMBINED S.D				0.2269		
CALCULATED VALUE OF t				3.0106		

ANNEX 23						
Accrued Interest to Total Interest Income Ratio						
Amount in Rs. Thousand						
Bank	NSBIBL			EBL		
Year	Accrued Interest	Total Interest Income	Ratio(%)	Accrued Interest	Total Interest Income	Ratio(%)
2002/2003	19072	65612.98	29.07	0	241.91	0
2003/2004	41381.69	174640.99	23.7	2175.48	413.56	19.01

2004/2005	65848	261697.93	25.16	2137.01	161.77	7.57
2005/2006	130646.55	365030.3	35.79	32662.57	10239.71	31.35
2006/2007	147752.15	403488.62	36.62	46233.82	12150.24	26.28
MEAN	30.07			16.84		
S.D		5.32			11.61	
C.V		17.68			68.93	
COMBINED S.D				10.0945		
CALCULATED VALUE OF t				2.0716		

ANNEX 24						
Return on Total Assets						
Amount in Rs. Thousand						
Bank	NSBIBL			EBL		
Year	Net Profit After Tax	Total Assets	Ratio(%)	Net Profit After Tax	Total Assets	Ratio(%)
2002/2003	7370.83	833590.85	0.83	(3947.91)	189441.23	-2.08
2003/2004	37886.58	1869814.49	2.03	(9606.47)	225171.2	-4.27
2004/2005	44920.94	2688734.31	1.67	(11050.9)	594306.31	-1.86
2005/2006	58976.52	4122575.7	1.43	25033.9	1419981.95	1.76
2006/2007	16760.39	4812000.97	0.35	25230.3	2293136.58	1.1
MEAN	1.26			-1.07		
S.D		0.6			2.22	
C.V		47.66			-207.31	
COMBINED S.D				1.8168		
CALCULATED VALUE OF t				2.0295		

ANNEX 25						
Return on Net Worth						
Amount in Rs. Thousand						
Bank	NSBIBL			EBL		
Year	Net Profit After Tax	Net Worth	Ratio(%)	Net Profit After Tax	Net Worth	Ratio(%)
2002/2003	7370.83	139309.1	0.83	3947.91	26057.58	-2.08
2003/2004	37886.58	157088.54	2.03	9606.47	35617.43	-4.27
2004/2005	44920.94	196527.33	1.67	11050.9	38320.17	-1.86
2005/2006	58976.52	262270.85	1.43	25033.9	127435.67	1.76
2006/2007	16760.39	321059.82	0.35	25230.3	145157.02	1.1
MEAN	1.26			-1.07		
S.D		0.6			2.22	
C.V		47.66			-207.31	
COMBINED S.D				1.8168		
CALCULATED VALUE OF t				2.0295		

ANNEX 26						
Return on Total Deposits						
Amount in Rs. Thousand						
Bank	NSBIBL			EBL		
Year	Net Profit After Tax	Total Deposits	Ratio(%)	Net Profit After Tax	Total Deposits	Ratio(%)
2002/2003	7370.83	715844.35	1.03	3947.91	147212.38	-2.68
2003/2004	37886.58	1624595.93	2.34	9606.47	170522.63	-5.63
2004/2005	44920.94	2358908.4	1.9	11050.9	471661.67	-2.34
2005/2006	58976.52	3744506.86	1.58	25033.9	1124903.12	2.23
2006/2007	16760.39	4380018.84	0.38	25230.3	1948946.58	1.29
MEAN	1.45			-1.43		

S.D	0.68	2.86
C.V	47.24	-200.38
COMBINED S.D		2.3226
CALCULATED VALUE OF t		1.9551

ANNEX 27						
Total Interest Income to Total Interest Expenses Ratio						
Amount in Rs. Thousand						
Bank	NSBIBL			EBL		
Year	Total Interest Expenses	Total Interest Income	Ratio(%)	Total Interest Expenses	Total Interest Income	Ratio(%)
2002/2003	35087.51	65612.98	53.48	1440.5	2419.05	59.55
2003/2004	100875.23	174640.99	57.76	8516.58	19.01	74.41
2004/2005	162646.26	261697.93	62.15	21875.86	7.57	77.47
2005/2006	240745.68	365030.3	65.95	74721.13	31.35	71.28
2006/2007	310795	403488.62	77.03	118702.2	26.28	67.47
MEAN	63.27			70.04		
S.D	8.05			6.2		
C.V	12.72			8.86		
COMBINED S.D		8.0348				
CALCULATED VALUE OF t		1				

ANNEX 28						
Total Interest Income to Total Interest Assets Ratio						
Amount in Rs. Thousand						
Bank	NSBIBL			EBL		
Year	Total Interest Income	Total Assets	Ratio(%)	Total Interest Income	Total Assets	Ratio(%)
2002/2003	65612.98	833590.85	7.34	2419.05	189441.23	1.28
2003/2004	174640.99	1869814.49	9.34	19.01	225171.2	5.08
2004/2005	261697.93	2688734.31	9.73	7.57	594306.31	4.75
2005/2006	365030.3	4122575.7	8.85	31.35	1419981.95	7.34
2006/2007	403488.62	4812000.97	8.39	26.28	2293136.58	7.67
MEAN	8.73			5.22		
S.D	0.83			2.29		
C.V	9.49			43.87		
COMBINED S.D		1.9266				
CALCULATED VALUE OF t		2.8773				

ANNEX 29						
Staff Expenses to Total Income Ratio						
Amount in Rs. Thousand						
Bank	NSBIBL			EBL		
Year	Staff Expenses	Total Income	Ratio(%)	Staff Expenses	Total Income	Ratio(%)
2002/2003	2046.45	85173.74	22.38	1759.32	2503.53	70.27
2003/2004	4446.61	202100.11	2.2	2526.92	13866.33	18.22
2004/2005	5901.08	293457.53	2.01	4320.33	32944.67	13.11
2005/2006	10231.33	415929.58	2.46	7689.51	139247.6	5.52
2006/2007	14123.53	452415.33	3.12	13389.6	129457.65	6.1
MEAN	2.43			22.64		
S.D	0.38			24.27		
C.V	15.47			107.19		
COMBINED S.D		19.191				
CALCULATED VALUE OF t		1.6651				

ANNEX 30						
Office Operation Expenses(Exp.) to Total Income Ratio						
Amount in Rs. Thousand						
Bank	NSBIBL			EBL		
Year	Office Operation Exp.	Total Income	Ratio(%)	Office Operation Exp.	Total Income	Ratio(%)
2002/2003	22648.68	85173.74	26.59	3050.09	2503.53	121.83
2003/2004	28257.27	202100.11	13.98	9096.15	13866.33	65.6
2004/2005	34016.02	293457.53	11.59	12064.8	32944.67	36.62
2005/2006	40234.46	415929.58	9.67	17481.87	139247.6	12.55
2006/2007	44750.13	452415.33	9.89	29145.77	129457.65	13.28
MEAN	14.34			49.98		
S.D	6.31			40.82		
C.V	44.02			81.69		
COMBINED S.D				32.6576		
CALCULATED VALUE OF t				1.7252		

ANNEX 31						
Earning Per Share-EPS						
Amount in Rs. Thousand						
Bank	NSBIBL			EBL		
Year	EAC	No. of Ordinary Shares	Ratio(%)	EAC	No. of Ordinary Shares	Ratio(%)
2002/2003	7370.83	1199.71	6.15	3947.91	600	-6.58
2003/2004	37886.58	1199.77	31.58	9606.47	960	-10.01
2004/2005	44920.94	1199.46	37.45	11050.9	1200	-9.21
2005/2006	58976.52	1199.46	49.17	25033.9	1175.65	21.29
2006/2007	16760.39	1199.46	13.97	25230.3	1184.27	21.3
MEAN	27.66			3.36		
S.D	15.65			14.69		
C.V	56.56			437.45		
COMBINED S.D				16.9664		
CALCULATED VALUE OF t				2.2651		

ANNEX 32						
Dividend Per Share-EPS						
Amount in Rs. Thousand						
Bank	NSBIBL			EBL		
Year	Earning Paid to Share holder	No. of Ordinary Shares	Ratio(%)	Earning Paid to Share holder	No. of Ordinary Shares	Ratio(%)
2002/2003	0	1199.71	0.00	0	600	0
2003/2004	24000	1199.77	20.00	0	960	0
2004/2005	24000	1199.46	20.01	0	1200	0
2005/2006	24000	1199.46	20.01	0	1175.65	0
2006/2007	12000	1199.46	10	17764.05	1184.27	15
MEAN	14			3		
S.D	8			6		
C.V	57.15			200		
COMBINED S.D				7.9076		
CALCULATED VALUE OF t				2.2003		

ANNEX 33						
Tax Per Share-EPS						
Amount in Rs. Thousand						

Bank	NSBIBL			EBL		
Year	Tax Paid	No. of Ordinary Shares	Ratio(%)	Tax Paid	No. of Ordinary Shares	Ratio(%)
2002/2003	4041.73	1199.71	3.37	0	600	0
2003/2004	15439.36	1199.77	12.87	0	960	0
2004/2005	19830.41	1199.46	16.53	0	1200	0
2005/2006	8744.58	1199.46	21.36	183.63	1175.65	0.16
2006/2007	12000	1199.46	7.29	13462.78	1184.27	11.37
MEAN	12.28			2.31		
S.D	6.41			4.53		
C.V	52.14			196.55		
COMBINED S.D				6.2031		
CALCULATED VALUE OF t				2.5132		

**ANNEX 34**

**Dividend Payout Ratio**

Amount in Rs. Thousand

Bank	NSBIBL			EBL		
Year	DPS	EPS	Ratio(%)	DPS	EPS	Ratio(%)
2002/2003	0	6.15	0.00	0	-6.58	0
2003/2004	20	31.58	63.33	0	-10.01	0
2004/2005	20.01	37.45	5.343	0	-9.21	0
2005/2006	20.01	49.17	40.7	0	21.29	0.16
2006/2007	10	13.97	71.58	15	21.3	11.37
MEAN	45.81			14.08		
S.D	25.11			28.17		
C.V	54.83			200		
COMBINED S.D				29.8349		
CALCULATED VALUE OF t				1.6813		

**ANNEX 35**

**Price Earning Ratio-P/E Ratio**

Amount in Rs. Thousand

Bank	NSBIBL			EBL		
Year	MPVS	EPS	Ratio(%)	MPVS	EPS	Ratio(%)
2002/2003	512	6.15	83.25	0.00	-6.58	0
2003/2004	412	31.58	13.05	122	-10.01	-12.19
2004/2005	412	37.45	11	127	-9.21	-13.79
2005/2006	440	49.17	8.95	184	21.29	8.64
2006/2007	562	13.97	40.23	407	21.3	19.11
MEAN	31.3			0.35		
S.D	28.37			12.47		
C.V	90.64			3526.64		
COMBINED S.D				24.498		
CALCULATED VALUE OF t				1.997		

**ANNEX 36**

**Market Value Per Share to Book Value Per Share-MVPS/BVPS**

Amount in Rs.Thousand

Bank	NSBIBL			EBL		
Year	MPVS	EPS	Ratio(%)	MPVS	EPS	Ratio(%)
2002/2003	512	116.19	40.41	0	43.43	0
2003/2004	412	130.93	3.15	122	36.08	3.38
2004/2005	412	163.84	2.51	127	34.93	3.39

2005/2006	440	218.65	2.01	184	108.4	1.7
2006/2007	562	267.66	2.1	407	122.57	3.32
MEAN	2.84			2.48		
S.D	0.88			1.45		
C.V	31.17			58.6		
COMBINED S.D					24.498	
CALCULATED VALUE OF t					1.997	

ANNEX 37  
Income Analysis  
NSBIBL

Year		2002/2003	2003/2004	2004/2005	2005/2006	2006/2007	Mean %	S.D.%	C.V.
Income									
Interest income	RS.	665612.98	174640.99	261697.30	365030.30	403488.62	85.91	4.56	5.34
	%	77.03	86.41	89.18	87.76	89.18			
Commission & discount	RS.	8503.75	11073.94	19482.51	22073.95	27199.76	6.68	1.71	25.64
	%	9.98	5.48	6.64	5.31	6.01			
Foreign Exchange income	RS.	287.53	4432.12	70.79	20997.80	19931.29	2.4	20.5	85.35
	%	0.34	2.19	0.02	5.05	4.41			
Other income	Rs.	10769.48	11953.07	12206.30	7827.53	1795.66	5.02	4.27	85.22
	%	12.65	5.92	5.62	1.88	0.40			

ANNEX38  
Income Analysis  
NSBIBL

Year		2002/2003	2003/2004	2004/2005	2005/2006	2006/2007	Mean %	S.D.%	C.V.
Income									
Interest income	RS.	2419.05	11445.99	28238.64	104200.93	175938.56	83.91	7.25	8.64
	%	96.62	82.55	85.72	74.83	80.17			
Commission & discount	RS.	61.34	603.64	1765.24	14733.22	23561.72	6.70	3.37	50.32
	%	2.45	4.35	5.36	10.58	10.74			
Foreign Exchange income	RS.	16.47	680.53	592.60	2389.99	3176.47	2.11	1.46	69.22
	%	0.66	4.91	1.80	1.72	1.44			
Other income	Rs.	6.67	1136.19	2348.19	17923.46	16780.91	7.22	4.03	55.82
	%	0.27	8.19	7.12	12.87	7.65			

ANNEX39  
Income Analysis  
NSBIBL

Year		2002/2003	2003/2004	2004/2005	2005/2006	2006/2007	Mean %	S.D.%	C.V.
Income									
Interest Expenses	RS.	35087.51	100875.23	162646.26	240745.6	245897.8	75.34	4.56	5.34
	%	56.57	72.31	77.55	80.17	89.18			
Staff Expenses	RS.	2026.45	4446.61	5901.08	10231.33	15635.3	26.5	1.71	25.64
	%	3.27	3.19	2.81	3.41	5.32			
Office Operation Expense	RS.	22648.68	28257.27	34016.02	40234.46	45946.84	16.5	20.5	85.35
	%	36.52	20.25	46.22	43.40	49.35			
Bonus facility	Rs.	2257.78	5925.11	7163.33	9095.06	10965.32	912.5	4.27	85.22
	%	3.64	4.25	3.42	3.02	5.2			

ANNEX40  
Income Analysis  
NSBIBL

Year		2002/2003	2003/2004	2004/2005	2005/2006	2006/2007	Mean %	S.D.%	C.V.
Income									
Interest Expenses	RS.	1440.5	8516.58	21875.86	74721.13	118702.2	53.39	18.8	35.2
	%	23.05	42.29	57.17	72.76	71.66			
Staff Expenses	RS.	1759.32	2526.92	4320.33	7689.51	13389.00	13.51	7.56	55.90
	%	28.15	12.55	11.29	7.49	8.08			
Office Operation Expense	RS.	3050.09	9096.15	12064.80	17481.87	29145.77	32.02	13.32	41.6
	%	48.80	45.16	31.54	17.02	17.59			
Bonus facility	Rs.	0.000	1641.48	1942.52	2801.93	4415.27	1.08	1.33	122.5
	%	0.00	0.75	1.50	2.73	3.2			



ANNEX41  
Correlation analysis between total deposit and net profit  
NSBIBL

Year	Deposit (X)	Net profit(Y)	$\Sigma XY=46700000000$
2002/2003	715844	7370.83	$\Sigma X^2 = 4190000000000$
2003/2004	1624595.93	37886.58	
2004/2005	2358908.40	44920.94	
2006/2007	3744506.86	58976.52	$\Sigma Y^2 = 7270000000$
2007/2008	4380018.8	16760.39	
		$\Sigma X=12820000.00$	$\Sigma Y=165915.26$
	R	0.3295	
	P.E.(R)	0.2689	

ANNEX42  
Correlation analysis between Total deposit and net profit

Year	Deposit (X)	Net profit(Y)	$\Sigma XY=69900000000$
2002/2003	147212	-3947.91	$\Sigma X^2 = 5337000000000$
2003/2004	170552.63	-9606.47	
2004/2005	471661.67	44920.94	
2006/2007	1124903.12	25033.74	$\Sigma Y^2 = 1493000000$
2007/2008	19489.58	25230.30	
		$\Sigma X=3863000$	$\Sigma Y=25660$
	R	0.8847	
	P.E.(R)	0.0655	

ANNEX43  
Correlation analysis between Performing assets and net profit  
NSBIBL

Year	Deposit (X)	Net profit(Y)	$\Sigma XY=391100000000$
2002/2003	641602.91	7370.83	$\Sigma X^2 = 2658000000000$
2003/2004	1549692.87	37886.58	
2004/2005	2115611.30	44920.94	
2006/2007	3045148.56	58976.32	$\Sigma Y^2 = 1493000000$
2007/2008	3165610.59	16760.39	
		$\Sigma X=10518000$	$\Sigma Y=165900$
	R	0.4754	
	P.E.(R)	0.2335	

ANNEX44  
Correlation analysis between Performing assets and net profit  
EBL

Year	Performing assets (X)	Net profit(Y)	$\Sigma XY=62230000000$
2002/2003	111161.18	-3947.91	$\Sigma X^2 = 412500000000$
2003/2004	14444422.52	-9606.47	
2004/2005	434477.57	-11050.90	
2006/2007	1089632.86	25033.74	$\Sigma Y^2 = 1493000000$
2007/2008	1128564.23	26042.7	
		$\Sigma X=3428000$	$\Sigma Y=25660$
	R	0.9081	
	P.E.(R)	0.0529	

ANNEX45  
Correlation analysis between performing assets and net profit

NSBIBL

Year	Performing assets (X)	Net profit(Y)	$\Sigma XY=36660000000$
2002/2003	139309.10	7370.83	$\Sigma X^2 = 25460000000$ $\Sigma Y^2 = 7267000000$
2003/2004	157088.54	37886.58	
2004/2005	196527.33	44920.94	
2006/2007	262270.85	58976.52	
2007/2008	283478.20	63254.98	
		$\Sigma X=1076000$	$\Sigma Y=165900$
	R	0.0504	
	P.E.(R)	0.2948	

ANNEX46

Correlation analysis between Performing assets and net profit

EBL

Year	Deposit (X)	Net profit(Y)	$\Sigma XY=3521450000$
2002/2003	26057.58	-3947.91	$\Sigma X^2 = 41250000000$ $\Sigma Y^2 = 1493000000$
2003/2004	35617.43	-9606.47	
2004/2005	38320.17	-11050.90	
2006/2007	127435.67	25033.74	
2007/2008	14157.02	26042.7	
		$\Sigma X=372600$	$\Sigma Y=25660$
	R	0.9695	
	P.E.(R)	0.0181	

ANNEX48

Correlation analysis between Performing assets and Net profit

EBL

Year	Deposit (X)	Net profit(Y)	$\Sigma XY=88890000000$
2002/2003	147212.38	91000.00	$\Sigma X^2 = 53370000000$ $\Sigma Y^2 = 162500000000$
2003/2004	170552.63	95294.59	
2004/2005	471661.67	132294.40	
2006/2007	1124903.12	217954.88	
2007/2008	1565478.34	254642.65	
		$\Sigma X=3863000$	$\Sigma Y=819600$
	R	0.993	
	P.E.(R)	0.0042	

ANNEX49

Correlation analysis between Performing assets and net profit

NSBIBL

Year	Deposit(X)	Investment(Y)	$\Sigma XY=28230000000$
2002/2003	715844.35	609194.07	$\Sigma X^2 = 41920000000$ $\Sigma Y^2 = 190700000000$
2003/2004	1624595.93	11753140.83	
2004/2005	2358908.4	1718791.00	
2006/2007	3744506.86	2363559.15	
2007/2008	4065478.34	254642.65	
		$\Sigma X=12820000$	$\Sigma Y=8830000$
	R	0.9968	
	P.E.(R)	0.0019	

ANNEX50

Correlation analysis between Performing assets and net profit

EBL

Year	Deposit (X)	Loan&	$\Sigma XY=37950000000$
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		advance(Y)	
2002/2003	147212.37	202161.18	
2003/2004	170552.63	49127.93	$\sum X^2 =$ 533700000000
2004/2005	471661.67	302183.18	
2006/2007	1124903.12	871677.98	$\sum Y^2 =$ 2717000000000
2007/2008	1948946.58	1364884.23	
		$\sum X=3863000$	$\sum Y=2608000$
	R	0.9964	
	P.E.(R)	0.0022	

ANNEX51  
Correlation analysis between Performing assets and net profit  
NSBIBL

Year	EPS(X)	MVPS (Y)	$\sum XY=61080$
2002/2003	6.15	512	
2003/2004	31.58	412	$\sum X^2 = 45050$
2004/2005	37.45	412	
2006/2007	49.17	440	$\sum Y^2 =1111000$
2007/2008	13.97	562	
		$\sum X=138.3$	$\sum Y=2338$
	R	-0.7701	
	P.E.(R)	0.1228	

ANNEX52  
Correlation analysis between performing assets and net profit  
NSBIBL

Year	EPS(X)	MVPS (Y)	$\sum XY=10200$
2002/2003	-6.58	0.00	
2003/2004	-10.01	122	$\sum X^2 = 1135$
2004/2005	-60.21	127	
2006/2007	21.29	184	$\sum Y^2 =230500$
2007/2008	21.30	407	
		$\sum X=16.79$	$\sum Y=840$
	R	0.75682	
	P.E.(R)	0.1236	

ANNEX53  
Correlation analysis between performing assets and net profit  
NSBIBL

Year	EPS(X)	DPS (Y)	$\sum XY=30910$
2002/2003	0.00	512	
2003/2004	20.00	412	$\sum X^2 = 1301$
2004/2005	20.01	412	
2006/2007	20.10	440	$\sum Y^2 =1111000$
2007/2008	13.97	562	
		$\sum X=15.00$	$\sum Y=840$
	R	-0.7682	
	P.E.(R)	0.1236	

ANNEX54  
Correlation analysis between Performing assets and net profit  
NSBIBL

Year	EPS(X)	MVPS (Y)	$\sum XY=6105$
2002/2003	0.00	0.00	
2003/2004	0.00	122	$\sum X^2 = 225$
2004/2005	0.00	127	
2006/2007	0.00	184	$\sum Y^2 =230500$

2007/2008	15	407	
		$\sum X=15.00$	$\sum Y=840$
	R		
	P.E.(R)		

ANNEX55  
Correlation analysis between Performing assets and net profit  
NSBIBL

Year	DPS(X)	MVPS (Y)	$\sum XY=106200$
2002/2003	0.00	512	
2003/2004	63.33	412	$\sum X^2 = 13650$
2004/2005	53.43	412	
2006/2007	40.70	440	$\sum Y^2 = 1111000$
2007/2008	71.58	562	
		$\sum X=229$	$\sum Y=2338$
	R	-0.1175	
	P.E.(R)	0.2975	

ANNEX56  
Correlation analysis between Performing assets and net profit  
NSBIBL

Year	DPS(X)	MVPS (Y)	$\sum XY=28660$
2002/2003	0.00	512	
2003/2004	0.00	122	$\sum X^2 = 4959$
2004/2005	0.00	127	
2006/2007	0.00	184	$\sum Y^2 = 230500$
2007/2008	70.42	407	
		$\sum X=70.42$	$\sum Y=840$
	R	0.5629	
	P.E.(R)	0.2061	

ANNEX57  
Least Square liner trend of total deposit  
NSBIBL

Year	Deposit(y)	YEAR-	$Y_c=a+bx$	Year	$Y_c=a+bx$
2003/2004	715844.35	-2	675122.89	2003/2004	5399252.85
2004/2005	1624595.93	-1	1619948.89	2004/2005	6344078.84
2005/2006	2358908.40	0	2564774.88	2005/2006	7288904.83
2006/2007	3744506.86	1	3509600.87	2006/2007	823373.82
2007/2008	4380018.84	2	4454426.86	2007/2008	9178556.81
	$\sum Y=12823874.38$	$\sum X=0$	$\sum X^2 = 10$	$\sum XY=944825991$	
A=256774.876				b=944825.991	

ANNEX58  
Least Square liner trend of total deposit  
EBL

Year	Deposit(y)	YEAR-	$Y_c=a+bx$	Year	$Y_c=a+bx$
2003/2004	147212.38	-2	-138908.5	2003/2004	214000.95
2004/2005	170552.63	-1	316873.39	2004/2005	2595782.84
2005/2006	471661.67	0	772655.28	2005/2006	8051564.73
2006/2007	1124903.12	1	1228437.13	2006/2007	35073346.62
	$\sum Y=3863276.38$	$\sum X=0$	$\sum X^2 = 10$	$\sum XY=45578818.891$	
a=772655.28				b=455781.89	

Year	NSBIBL	EVEREST
2007/2008	5399252.85	2140000.95
2008/2009	6344078.84	2595782.84
2009/2010	7288904.83	3051564.73
2010/2011	8233730.82	3507346.62
2011/2012	9178510	3963128.51

ANNEX59

Least Square liner trend of total deposit

NSBIBL

Year	Deposit(y)	YEAR-	Yc=a+bx	Year	Yc=a+bx
2003/2004	609194.07	-2	597194.14	2003/2004	3493154.49
2004/2005	1175314.89	-1	1176386.21	2004/2005	4072346.56
2005/2006	1718791.00	0	1755578.28	2005/2006	4651538.63
2006/2007	2363559.15	1	23344770.35	2006/2007	5230730.70
2007/2008	2911032.29	2	2913962.42	2007/2008	5809922.77
	$\Sigma Y=87778910.40$	$\Sigma X=0$	$\Sigma X^2 = 10$	$\Sigma XY=5791920.70$	
a=1755578.28				b=579192.07	

ANNEX60

Least square liner trend of loan and advance

EBL

Year	Deposit(y)	YEAR-	Yc=a+bx	Year	Yc=a+bx
2003/2004		-2	597194.14	2003/2004	3493154.49
2004/2005	1175314.89	-1	1176386.21	2004/2005	4072346.56
2005/2006	1718791.00	0	1755578.28	2005/2006	4651538.63
2006/2007	2363559.15	1	23344770.35	2006/2007	5230730.70
2007/2008	2911032.29	2	2913962.42	2007/2008	5809922.77
	$\Sigma Y=87778910.40$	$\Sigma X=0$	$\Sigma X^2 = 10$	$\Sigma XY=5791920.70$	
a=1755578.28				b=579192.07	

ANNEX60

Least square liner trend of loan and advance

EBL

Year	Deposit(y)	YEAR-	Yc=a+bx	Year	Yc=a+bx
2003/2004	20161.18	-2	-180792.34	2003/2004	1575205.76
2004/2005	49127.93	-1	170407.28	2004/2005	1926405.38
2005/2006	302483.18	0	521606.90	2005/2006	2277605.00
2006/2007	871677.98	1	872806.52	2006/2007	262880.62
2007/2008	1364884.23	2	1224006.14	2007/2008	298004.24
	$\Sigma Y=2608034.5$	$\Sigma X=0$	$\Sigma X^2 = 10$	$\Sigma XY=2980004.24$	
a=521606.90				b=351199.62	

Year	NSBIBL	EVEREST
2007/2008	3493154.49	1575205.76
2008/2009	40723546056	1926405.38
2009/2010	4751538.63	2277605.00

2010/2011	5230730.70	2628804.62
2011/2012	5809922.22	2980004.24

ANNEX60  
Least square liner trend of loan and advance  
EBL

Year	Deposit(y)	YEAR-	Yc=a+bx	Year	Yc=a+bx
2003/2004	32408.84	-2	208044.92	2003/2004	531820.07
2004/2005	374378.04	-1	272799.95	2004/2005	596575.10
2005/2006	396820.30	0	337554.98	2005/2006	661330.16
2006/2007	681589.41	1	402310.01	2006/2007	726085.16
2007/2008	202578.3	2	647550.29	2007/2008	790840.19
	$\Sigma Y=1687774.89$	$\Sigma X=0$	$\Sigma X^2 = 10$	$\Sigma XY=647550.29$	
a=337554.89				b=64755.00	

Year	NSBIBL	EVEREST
2007/2008	531820.07	315970.22
2008/2009	596575.10	366652.09
2009/2010	661330.13	417333.00
2010/2011	726085.16	468015.83
2011/2012	790840.19	518697.70

ANNEX 62  
Least square liner trend of total Investment  
NSBIBL

Year	Deposit(y)	YEAR-	Yc=a+bx	Year	Yc=a+bx
2003/2004	91000.00	-2	62560.87	2003/2004	315970.72
2004/2005	95294.59	-1	113242.74	2004/2005	366652.09
2005/2006	132294.40	0	163924.61	2005/2006	417333.96
2006/2007	217954.88	1	214606.48	2006/2007	468015.83
2007/2008	283079.20	2	265288.35	2007/2008	518697.70
	$\Sigma Y=819623.07$	$\Sigma X=0$	$\Sigma X^2 = 10$	$\Sigma XY=506818.69$	
a=163924.61				b=50681.87	

ANNEX63  
Least square liner trend of Net Worth  
NSBIBL

Year	Deposit(y)	YEAR-	Yc=a+bx	Year	Yc=a+bx
2003/2004	139309.10	-2	121514.37	2003/2004	355856.27
2004/2005	157088.54	-1	168382.75	2004/2005	402724.65
2005/2006	196527.33	0	215251.13	2005/2006	449593.03
2006/2007	262270.85	1	262119.51	2006/2007	496461.41
2007/2008	321059.82	2	308987.89	2007/2008	543329.70
	$\Sigma Y=1076255.64$	$\Sigma X=0$	$\Sigma X^2 = 10$	$\Sigma XY=468693.75$	
a=215251.18				b=468683.38	

Year	NSBIBL	EVEREST
2007/2008	355856.27	173522.70
2008/2009	402724.65	206524.41
2009/2010	449593.03	239526.12
2010/2011	496461.41	272327.83

2011/2012	54332.79	305529.54
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ANNEX64  
Least square liner trend of Net Worth  
NSBIBL

Year	Deposit(y)	YEAR-	Yc=a+bx	Year	Yc=a+bx
2003/2004	26057.58	-2	8514.15	2003/2004	173522.70
2004/2005	35617.43	-1	41515.86	2004/2005	206524.41
2005/2006	38320.17	0	74517.57	2005/2006	239526.12
2006/2007	127435.67	1	107519.28	2006/2007	272527.83
2007/2008	145157.02	2	140520.99	2007/2008	305529.54
	$\sum Y=273587.87$	$\sum X=0$	$\sum X^2 = 10$	$\sum XY=330017.12$	
a=74517.57				b=33001.71	

ANNEX65  
Least square liner trend of Net Profit  
NSBIBL

Year	Net Profit(y)	YEAR-	Yc=a+bx	Year	Yc=a+bx
2003/2004	7370.83	-2	25209.23	2003/2004	45143.78
2004/2005	37886.58	-1	29196.14	2004/2005	49130.69
2005/2006	44920.94	0	33186.05	2005/2006	53117.60
2006/2007	58976.52	1	34169.96	2006/2007	57104.51
2007/2008	16760.39	2	41156.87	2007/2008	61091.42
	$\sum Y=273587.87$	$\sum X=0$	$\sum X^2 = 10$	$\sum XY=39869.06$	
a=33183.05				b=3986.91	

Year	NSBIBL	EVEREST
2007/2008	45143.78	33030.64
2008/2009	40130.69	42330.27
2009/2010	53117.60	51629.90
2010/2011	57104.51	60929.53
2011/2012	61051.42	70229.16

ANNEX66  
Least square liner trend of Net Profit  
EBL

Year	Net Profit(y)	YEAR-	Yc=a+bx	Year	Yc=a+bx
2003/2004	(3947.91)	-2	(13467.51)	2003/2004	33033.64
2004/2005	(9606.47)	-1	(4167.88)	2004/2005	42330.27
2005/2006	(11050.90)	0	5131.75	2005/2006	51629.90
2006/2007	25033.74	1	14434.01	2006/2007	60920.53
2007/2008	25230.30	2	23721.01	2007/2008	70229.16
	$\sum Y=25658.78$	$\sum X=0$	$\sum X^2 = 10$	$\sum XY=92996.63$	
a=5131.75				b=9299.63	

ANNEX67  
Least square liner trend of EPS

NSBIBL

Year	EPS(y)	YEAR-	Yc=a+bx	Year	Yc=a+bx
2003/2004	6015	-2	21.02	2003/2004	37.62
2004/2005	31.58	-1	24.34	2004/2005	40.94
2005/2006	37.45	0	27.66	2005/2006	44.26
2006/2007	49.17	1	30.98	2006/2007	47.58
2007/2008	13.97	2	34.30	2007/2008	50.90
	$\sum Y=138.32$	$\sum X=0$	$\sum X^2 = 10$	$\sum XY=33.23$	
a=27.66				b=3.32	

Year	NSBIBL	EVEREST
2007/2008	37.62	15.54
2008/2009	40.94	18.26
2009/2010	44.26	21.89
2010/2011	47.58	25.70
2011/2012	50.90	29.42

ANNEX68  
Least square liner trend of EPS  
EBL

Year	EPS(y)	YEAR-	Yc=a+bx	Year	Yc=a+bx
2003/2004	-6.15	-2	-4.06	2003/2004	14.54
2004/2005	-10.01	-1	-0.34	2004/2005	18.26
2005/2006	-9.21	0	3.38	2005/2006	21.98
2006/2007	21.29	1	7.10	2006/2007	25.70
2007/2008	21.30	2	10.82	2007/2008	29.42
	$\sum Y=138.22$	$\sum X=0$	$\sum X^2 = 10$	$\sum XY=87.16$	
a=3.378				b=3.72	

ANNEX69  
Least square liner trend of MPVS  
NSBIBL

Year	MPVS(y)	YEAR-	Yc=a+bx	Year	Yc=a+bx
2003/2004	512	-2	442	2003/2004	506.00
2004/2005	412	-1	454.80	2004/2005	518.80
2005/2006	412	0	467.60	2005/2006	531.60
2006/2007	440	1	480.40	2006/2007	544.60
2007/2008	562	2	493.20	2007/2008	557.20
	$\sum Y=2338$	$\sum X=0$	$\sum X^2 = 10$	$\sum XY=128$	



a=467.6				b=12.80
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Year	NSBIBL	EVEREST
2007/2008	506	430.80
2008/2009	518.8	540.00
2009/2010	531.6	606.00
2010/2011	644.40	693.6
2011/2012	504.2	781.20

ANNEX 70  
Least square liner trend of EPS  
EBL

Amount in

Rs.

Year	MVPS (Y)	Year-2002/2003	Yc= a+bx	Year	Yc= a+bx
2002/2003	0	-2	-7.2	2002/2003	430.8
2003/2004	122	-1	80.4	2003/2004	518.4
2004/2005	127	0	168.0	2004/2005	606.0
2005/2006	184	1	255.6	2005/2006	693.6
2006/2007	407	2	343.2	2006/2007	781.2
	Y = 840	X= 0	X <sup>2</sup> = 10	XY= 876	
a= 168			b= 87.6		

ANNEX 71  
Calculation of Mean, Coefficient of variation, Combined Standard Deviation and  
't'

Amount in  
thousand

Year	Ratio of NSBIBL X	(X- $\bar{X}$ )	(X- $\bar{X}$ ) <sup>2</sup>	Ratio of EBL Y	(Y- $\bar{Y}$ )	(Y- $\bar{Y}$ ) <sup>2</sup>
2002/2003	83.97	29.9	895.21	32.57	-31.45	989.10
2003/2004	32.01	-22.05	486.20	1105.81	-41.49	1476.4
2004/2005	38.73	-15.32	234.7	62.11	-1.91	3.65
2005/2006	55.96	1.91	3.36	63.23	-0.79	0.62
2006/2007	59.56	5.51	30.36	56.4	-7.62	58.06
n=5	X= 270.23		(X- $\bar{X}$ ) <sup>2</sup> =1650.12	Y =320.12		(Y- $\bar{Y}$ ) <sup>2</sup> = 2797.83

$$\text{Arithmetic Mean } (\bar{X}) = \frac{\sum X}{n1} = \frac{270}{5} = 54.05$$

$$\text{Arithmetic Mean } (\bar{Y}) = \frac{\sum Y}{n2} = \frac{320.12}{5} = 64.02$$

Standard Deviation (S.D.) ,

$$s = \sqrt{\frac{\sum (X - \bar{X})^2}{n1}} = \sqrt{\frac{1650.12}{5}} = 18.16$$

$$\text{Standard Deviation (S.D.) } s^2 = \sqrt{\frac{\sum (Y - \bar{Y})^2}{n1}} = \sqrt{\frac{2797.83}{5}} = 23.66$$

Coefficient of Variation,

$$CV1 = \frac{s}{\bar{X}} \times 100\% = \frac{18.16}{54.05} = 33.61\%$$

Coefficient of Variation,

$$CV2 = \frac{s}{\bar{Y}} \times 100\% = \frac{23.66}{64.02} = 36.99\%$$

Combined standard Deviation (Combined SD),

$$S = \sqrt{\frac{\sum (X - \bar{X})^2 + \sum (Y - \bar{Y})^2}{n1 + n2 - 2}} = \sqrt{\frac{1650.12 + 2797.83}{5 + 5 - 2}}$$

Test Statistic,

$$t = \frac{\bar{X} - \bar{Y}}{s \sqrt{\frac{1}{n1} + \frac{1}{n2}}} = \frac{54.05 - 64.02}{23.58 \sqrt{1/5 + 1/5}} = -0.669$$

$$|t| = -0.669$$

## ANNEX 72

Calculation of Karl Pearson's Coefficient of Correlation and Probable error of Coefficient of Correlation,

Year	EPS(X)	MPVS (Y)	XY	X <sup>2</sup>	Y <sup>2</sup>
2002/2003	6.15	512	3148.8	37.83	430.8
2003/2004	31.58	412	13010.96	997.30	518.4
2004/2005	37.45	412	15429.4	1402.50	606.0
2005/2006	49.17	440	21634.8	21634.8	693.6
2006/2007	13.97	562	7851.14	7851.14	781.2
n = 5	X = 138.3	Y = 2338	XY = 61080	X <sup>2</sup> = 5050	Y <sup>2</sup> = 1111000

Karl Pearson's Coefficient of correlation

$$r = \frac{n \sum XY - \sum X \sum Y}{\sqrt{n \sum X^2 - (\sum X)^2} \sqrt{\sum Y^2 - (\sum Y)^2}}$$

$$= \frac{5 \times 61080 - 138.3 \times 2338}{\sqrt{5 \times 5050 - (138.3)^2} \sqrt{1111000 - (2338)^2}}$$

$$= \frac{-17945.4}{23340} = -0.7701$$

Probable error of coefficient of correlation,

$$P.E. = 0.6745 \times 0.6745 \times \frac{1 - (-0.7701)^2}{\sqrt{5}}$$

## ANNEX 73

Least Square Linear trend of EPS

Year	EPS(Y)	Year-X	X <sup>2</sup>	XY	Y <sub>c</sub> = a + bx
2002/2003	6.15	-2		-12.30	262144
2003/2004	31.58	-1		-31.58	169744
2004/2005	37.45	0		0	169744
2005/2006	49.17	2		49.17	193600
2006/2007	13.97	1		27.94	315844
n=5	Y = 138.3	X = 0	X <sup>2</sup> = 10		
2007/2008		3	9		37.62
2008/2009		4	16		40.94
2009/2010		5	25		44.26
2010/2011		6	36		47.58
2011/2012		7	39		50.90

Here,

$$a = \frac{Y}{N} = \frac{138}{5} = 27.66$$

$$b = \frac{XY}{X^2} = \frac{133.23}{40} = 3.32$$