

CHAPTER – I

INTRODUCTION

1.1 Background

Nepal is one of the least developed and landlocked mountainous country in the world, which is located between two gigantic countries China, and India. Nepal is a small country with an area covering 147181 square kilometer and has population 23151423 according to the census of 2001. Nepal is divided into three parts Plain, Hills and Himalayan. Above-mentioned natural geographical regions of the country differ from each other especially climate condition, living pattern, cultural heritage, religion etc. Nepal is also divided into 5 development regions, 14 zones and 75 districts.

Nepal has high population growth rate of 2.21%, low per capita income in fiscal year 2003/2004 is \$276. It has poor economic status and low rate of capital formation as well as limited resources. The various factors that effected for the development of the nation are landlocked position, poor resources endowment, institution weakness and lack of appropriate economic policies, due to political instability as well as lack of political commitment. The main reason of Nepal's underdeveloped economy is due to improper utilization of the available resources in the efficient manner. Every country has its own fiscal and monetary policies, which stabilize and supervise the economy. The development of any country largely depends upon the economic health and conditions of the country. Nowadays the financial institutions are viewed as catalyst in the process of the economic growth. The mobilization of the domestic resources is one of the key factors in the economic development of the country. The central bank and commercial bank play a significant role in the economic development of the country, as they are main sources of the capital. The most of the money they collect immobilized money in the form of deposits from every corner and part of the country whether it is big or small. This will provide capital for the development of the industry, trade and business and other resources deficit sectors. The central bank monitors the spread rates i.e. deposit rate and other bank rate, establishment of branches and many other aspect of financial institution. Central bank almost governs all function of the financial institutions. Commercial banks formulate sound investment policies to make it more effective, which eventually contribute to the economic development of the country. The main function of the commercial bank is to mobilize the deposits of the public in the different sector to get the productive use to earn profit. Commercial bank is providing certain interest rate to depositors and

certain percent interest is charged on the bank loan facilities, which we call as the spread rate.

Investment means to mobilize the capital in profitable sector or to move the scattered saving for future financial gain. Investment involves real assets and financial assets. Real assets are tangible assets such as buildings, automobiles and textbooks. Financial assets are pieces of paper representing indirect claim on assets hold by someone else. These pieces of paper represent debt or equity commitments in the form of stock. Investment has to suffering from various types of risk e.g., business risk, competition, uncontrollable costs, change in demand etc. therefore simply making an investment is not sufficient. One should follow sound investment policy. There is much competition in banking market but less opportunity. In this condition, if bank and financial institution can search of new opportunities than they can move in the competitive market and earn profit. Investment is very risky job, so bank mostly follows sound investment and fund mobilizing policy.

1.2 Origin of Banking

There are different views about the origin of bank. It is difficult to say that where the word 'bank' came from. According to one view, the word 'bank' is derived from the Latin word 'Bancus' which means a bench. In the early days, these activities were done by sitting in bench & thus that activities were known as banking activities. Similarly, others view that the word 'Bank' derived from German Word 'Bach' which a joint fund. Some believe that it was originated from French word 'Banque' or Italian word 'Banca' all of means bench, where a banker would sit and keep a record of his money and financial transactions .Later when they were unable to meet the obligations, their benches were broken to pieces. Thus, the word Bankruptcy came from those circumstances.

Before the concept of modern banking was developed in Italy in 2001 B.C., the Babylonians already developed banking. In ancient Greece and Rome, the practice of granting credit was widely prevalent. Hence, whatever be the origin of the word, it has been used from the middle ages in connection with the business of money lending.

It is very difficult to find the correct history of bank in Nepal. The historical records show that Guna Karna Dev, the king of kathmandu borrowed money to rebuild his kingdom in 1728 AD. In 11th century, during Malla regime there was evidence of

professional moneylenders and bankers. During the regime of Jyasthiti Malla, caste system was introduced based on profession. Tankadari were such caste, who used to provide loans and used to perform exchange trades. It is further being lived that money-lending business particularly for financing the foreign trade with Tibet became quite popular during reign of Mallas. Tejarath adda was established in 1877A.D. with fully subscribed by government of Kathmandu valley 'Tejarath adda' may be regarded as the father of modern banking institution in Nepal, which play a vital role in the banking system. It helped the public by providing credit facilities at a very low rate of 5%. It provided a credit especially on collateral of gold and silver. It ran successfully for four decades. Hence, the establishment of 'Tejarath Adda' could be regarded as the foundation stone of banking in Nepal. Tejarath Adda was replaced by a commercial bank with the establishment of Nepal Bank Ltd in 1937 A.D. it was a new era in the history of modern banking in Nepal.

Nepal Rastra Bank was established in 2013 B.S. as a central bank of the country. The main purpose of this bank was to develop banking system in the country in order to promote trade, industry and agricultural as well as to circulate Nepalese currency all over the country. Rastriya Banijya Bank, another commercial bank was established in 2022 B.S. with an initial capital of one corer. It is fully owned by the government. In 2016 B.S. Nepal Industrial Development Bank was established with an objective to provide loan to industrial personnel invest in share etc. being agricultural based economy, the government established co-operative banks. It was established in 2024 B.S. with an objective of develop agricultural sector of Nepal. Later due to lack of funds and activities, it was converted into Agricultural Development Bank with an initial capital of five corers. After sometime, the government to operate the open policy with a view to develop the economy of the country, which allowed joint venture banks in Nepal. The first joint venture bank was established as Nepal Arab Bank ltd. In 2041 B.S. under the commercial act 2031 with a paid up capital of Rs. 30 million. It was started with the allocation of 50% share of Emirates Bank ltd, Dubai 20% share of Nepalese financial institution and 30% share of public. Nowadays the bank is known as Nabil Bank Ltd. The second joint venture commercial bank is Nepal Indosuez Bank, which is established in 1985 A.D. with 50% share of France. Nowadays it is known as Nepal Investment Bank Ltd. The third joint venture commercial bank is Nepal Grindlays Bank Ltd., which was established in 1987 A.D. now it is known as Standard Chartered Bank Nepal Ltd. It was started with the agreement between Nepal Bank Ltd. and ANZ Grindlays with 30 million paid up

capital. In the starting 15% share was hold by general public, 35% share held by Nepal Bank Ltd. and 50% share hold by Grindlays Bank, London.

There are 17 commercial bank, 24 development banks including 5 Gramin Bikas Banks, 59 finance companies, 116 hulasacharya Banks in Nepal. After adopting the open policy in the financial sector, it has helped in establishing many commercial banks and financial institutions in the country.

1.3 An Overview of Related Commercial Banks

Nabil Bank Limited, the first foreign joint venture bank of Nepal, started its operations in July 1984. Nabil was incorporated with the objective of extending international standard modern banking services to various sectors of the society. Pursuing its objectives, Nabil provides a full range of commercial banking services through its 28 points representation across the kingdom and over 170 reputed correspondent banks across the globe.

Operations of the bank including day-to-day operations and risk management are managed by highly qualified and experienced management team. Bank is fully equipped with modern technology, which includes ATMs, credit cards, state of art, world-renowned software from Infosys technologies System. Bangalore, India, internet banking system and telebanking system.

Everest Bank Limited (EBL) started its operation in 1994 with a view and objectives of extending professionalized and efficient banking services to various segments of the society. The bank is providing customer friendly services through a network of 29 branches across the nation. Punjab National Bank (PNB) the joint venture of EBL (holding 20% equity in the bank) is the largest nationalized bank in India having 113 years of banking history. PNB is a technology driven bank serving over 35 billion customers through a network of over 4500 branches spread all over the country with a total business of around INR 2178.74 billion.

Himalayan bank Limited (HBL) was established in 1993 in joint venture with Habib Bank Limited of Pakistan. Despite the cutthroat competition in Nepalese banking sector, HBL has been able to maintain a lead in the primary banking activities loans and deposits. The bank is providing customer friendly services through a network of 19 branches across the nation. Products such as premium saving accounts, HBL property card, and millionaire deposit scheme besides services such as ATMs and telebanking were first introduced by HBL. HBL very recently introduced several new

products and services. Millionaire deposit scheme, small business enterprises loan, pre-paid visa card, international travel quota credit card, consumer finance through credit card and online TOEFL, SAT, IELTS, etc free payment facility are some of the product and services of HBL.

1.4 Statement of the Problem

The main objectives of the commercial banks are to improve the economic condition of the country. For that, they provide facilitate loan and other banking services to upward the economic activities and strength welfare of the general people. Therefore, this study concentrates with the trend of deposit, lending and earning of the financial institution.

Investment decision is the main instrument of financial institution. If financial institution should adopted good investment policy then they can reach into their target. Therefore, investment policy is an important asset. Various parts of the country have effect the investment decision of the commercial bank. Commercial banks have played a vital role by accepting deposits and providing various types of loan in different sector. Mostly commercial banks providing loan in agricultural sector, industrial sector but these sector is not satisfactory to meet the present growing need. Nepotism and political pressure also effect the investment decision of the commercial bank. Loan affects the overall development of the country. Commercial banks give too many loans, advances, overdraft and many other facilities to encourage deposit to their customer they spend big amount of deposit as office operation expenses and for staffs.

In banking sector, there is different type of risk like liquidity risk, purchasing power risk, interest rate risk, credit risk, market risk, operational risk, system risk etc. from this type of risk; the commercial banks are unable to invest the deposit collections on profitable sectors and opportunities.

Commercial banks have lots of deposit but they are not utilizing their deposits due to lack of sound investment policy. There is much competition in banking market but less opportunity of the investment. The opportunity of investment has been found to have lower productivity and uncertainty sector due to the lack of supervision regarding whether there is proper utilization of their investment or not. Therefore, the commercial banks invest their deposits or in limited areas to achieve higher amount of profit.

The commercial banks are totally depends upon the directions and guidelines of central bank. They always move under the rules and regulation of Nepal Rastra Bank. Every bank must have profit to survive in the competitive market where a lot of money and very little investment policy is the basic function of all the commercial banks and other financial institution.

The focus of the study mainly seeks the answer of the following specific problems related to the present trend and future scenario of deposit, lending and earning of joint venture commercial banks:

-) How efficiently banks are managing their liquidity position, assets and capital structure etc.?
-) How far have banks been able to convert the mobilized resources into investment?
-) How the banks are preparing in terms net income?
-) Is amount of non-performing asset and loan loss provision is in increasing trend?
-) Which credit collection policy should be followed by the banks to decrease loan loss provision and non-performing loan?
-) How can the banks maximize the profit and minimize the credit risk?

1.5 Objectives of the Study

The basic objective of the study is to analyze the present trend and predict the future scenario of deposit, lending and earning of selected commercial banks and following are the specific objectives:

- (i) To analyze the present trend and predict the future scenario of deposit, lending and earning of selected commercial banks.
- (ii) To analyze the loan and advances, profitability and deposit position of the commercial banks.

- (iii) To examine the level of non-performing loan that exists within the banking industry.
- (iv) To suggest measures to improve the investment policy of the banks.

1.6 Significance of the Study

The significance of the study is as follows:

- i) This study would provide clear picture how bank are investing its collected fund.
- ii) The analysis would a useful feedback for further improve to the policy maker of the banks.
- iii) Depositors can take decision to deposit their surplus money.
- iv) All stockholders of the banks will be benefited from this research.
- v) It will prove to be an important value for the entire individual interested value for commerce and banking fields.
- vi) This study also becomes a useful reference for the other commercial banks of Nepal and central bank for the formulation of the appropriate strategies.

1.7 Limitations of the Study

Every study has its own limitation and the pointed limitations of this study are as follows:

- (i) This study is limited only on the factors that are related with credit practices.
- (ii) Whole study is based on data of six-year period.
- (iii) The study has focused on the trend analysis of three banks only.

- iv) The basic purpose of the study is to fulfill the requirement for the Masters of Business Studies, the study lacks sufficient time to collect information and analyze them.

1.8 Organization of the Study

To make research work better, it is needed to organize the whole things and divide the work as related chapter. Therefore, this thesis is organized in the following sequences:-

Chapter 1: Introduction

Chapter 2: Review of literature

Chapter 3: Research methodology

Chapter 4: Data presentation and analysis

Chapter 5: Summary, recommendations and conclusion.

First chapter includes background of the study, size of the study, statement of the problem, objectives of the study and limitation of study.

In second chapter, review of literature is divided into many parts which include the issue related to the study which are already published such as in articles, journals, unpublished thesis etc.

Third chapter covers the methods to be used in analysis of collected data or tools and techniques required to analyze and present the collected data.

Fourth chapter deals with systematic presentation and analysis of the data where various financial and statistical tools and techniques are used to analyzed and interpret the collected data.

Finally, the fifth chapter covers the summary of the study, the main conclusion that flows from the study and offers some recommendations as well as suggestions for further improvement. Bibliography and other appendixes used in analysis of data are attached at the end of the study.

CHAPTER – II

REVIEW OF LITERATURE

2.1 Introduction

“Review of literature means reviewing research studies of other relevant preposition in the related area of the study so that all part studies, their conclusions and deficiencies may be know and further research can be concluded.” This chapter deals with the review of materials and it is an analytical expression on the concerned topic. It provides the basis for developing a comprehensive framework. Review of literature refers to analyzing, assessing, revaluating and reexamining the previously written works.

Review of literature gives the framework to the researchers on their own field. The other major purpose of review of the literature is to develop some expertise knowledge in one area to see what new contribution can be made, to receive some idea for the development of research design.

2.1 Review of conceptual framework

2.1.1 Investment Policy

Banks are important for under developed economy as they promote capital formation by developing banking habit of people and collection saving. Banks are mobilizing the deposit of the public in different sector to get the productive use. The development of the country highly depends upon its economic condition. In the modern economy, banks are considered not as a dealer in money but as the leaders of development.

Bank is a resource mobilizing institution, which accept deposit from various sources and invests such accumulated resources in the field of agriculture, trade, commerce, industry, tourism etc. bank plays a vital role in developing the economy of any country.

“A commercial bank is a business organization that receives and holds deposits of funds from others, makes loan and extends credits and transfer funds by written order of deposits.” (Encyclopedia “**The word book, American Grolier Incorporated**” Vol 3, 1987)

“The banking sector is largely responsible for collecting house hold saving in terms of different types of deposits and regulating it in the society by lending in different sector

of economy. By lending their resources in small scale industries under intensive banking program has enabled the banks to share in the economic growth of the economy.” (**Peter S. Rose, Commercial bank management, 2002**)

“The business of banking is collection of funds from the community and extension of credit to people for useful purposes. Banks have played a pivotal role in making money from lenders to borrowers. Banking is a profit seeking business not a community to carry profit seekers, expected to pay dividend and otherwise, add to the wealth of shareholders.” (**Robert O. Edmister “Financial Institution”1980**)

“Commercial banks are the vital aspects in accelerating the pace of the economic development of a country. Banking institution is inevitable for the resource mobilization and all round development of the country. It is a resource for economic development; it maintains economic confidence of various segments and extends credit to people.” (**Ronald Grywinshki, The new fashioned banking Harvard business review: May-June 1993, p.87**)

Investment means spending aside money for future financial gain. It is a commitment of funds made in the expectation of the some positive rate of returns. Investment takes place at present but return can be expected in future. In other words, investment can be defined as the management of an investor’s wealth, which is the sum of current income and invested to increase wealth. Investment policy is an important factor for every organization. The sound knowledge of investment policy is the most important for the commercial banks and other financial institutions. The sound investment policies help commercial banks to maximize quality and quantity of investment and there by achieve the own objective of profit maximization and social welfare.

“An investment is a commitment of money that is expected to generate additional money. Every investment entails some degree of risk, it requires a present certain sacrifice for a future uncertain benefit.” (**J.K.Francis ,1991**)

“Investment is the sacrifice of current dollars for future dollars and time and risk is involved in investment. Sacrifice takes place in the present and is certain. The reward comes later, is at all magnitude is generally uncertain. In some case, the element of time predominates. In other cases risk is the dominant attribute.”(**William F. Sharpe, Alexander, Gordon J. and Jeffery V. Bailey 1994**)

A good investment policy attracts both buyers and lenders, which increase both the volume and quality of deposits, loan and investment. In the investment policies and procedures, it is always taken in mind that greater the credit created by bank the higher will be the profitability. A sound lending and investment policy is not only prerequisite for banks profitability but also crucially significant for the promotion of commercial saving of developing country like ours. Sound policy helps commercial banks maximize both the quality and quantity of investment and there by achieve their objective of profit maximization and social welfare.

2.2 Functions of the Commercial Bank

Generally, the function of commercial bank is collecting the immobilized money in the form of deposit from every corner and parts of country and to invest the deposit in the profitable sector. Commercial bank collects money on various kinds of deposits, current, saving and fixed. Under current deposit the banker incurs the obligations of playing legal tender on demand, while on fixed deposits the bankers incurs the obligations of playing legal tender after the expiry of a fixed period.

Commercial bank is to mobilize the scattered saving of the public through current, saving and fixed deposit account. Then it provide capital for the development of industry, trade business and other by granting overdrafts or fixed loan or by discounting bills of exchange or promissory notes. The main functions of commercial banks are as follows:

-) They accept custody of funds with or without interest and open fixed accounts and savings in the name of depositors.
-) They supply loans (short-term debt as well as long-term debts whatever necessary for trade and commerce) or make investment.
-) They help to issue shares and debentures of any company or any others corporate body, guarantee or underwrite such shares or debentures and undertake any agency business but not become a managing agent.
-) Conduct transactions in bonds, provisional notes or bills of exchange foreign exchange relating to commerce or cooperative as are redeemable with in the kingdom.
-) They grant over draft.
-) They issue letter of credit, draft and traveler's check.
-) They remit or transit fund to different place with in or outside the kingdom.
-) They purchase, sell or accept the securities of Nepal's Government.

2.3 Features of Investment Policy

Every commercial bank has their own objective. Banks are inspired with the objective of earning more profit. There are many reasons after the goal of gaining profit because it needs a great amount of expenses to run the bank for long-term. To operate banking the daily activities with success for long term, many employees are appointed. The shareholders are the owner of the bank. The aim of any person or institution to invest the money to bank is to earn more profit only. Without investment, a bank cannot gain profit. The bank cannot be successful until it gains profit. After the establishment of the bank it collects much deposits, gets the deposits, from the current, saving and fixed deposit account. Commercial banks have a great role to help the economic development of the country and to take the social responsibility. Therefore, to the continuous or successful of the bank, it has needed to earn more profit. The income and profit of a bank largely depends upon its lending procedure policies and investments of its funds in different securities. They should have the ability to use the policy of banking investment and to implement it much more carefully other wise a bank may be unsuccessful in its goals.

Thus, the profit of a bank largely depends upon its investment policy. There is always a positive relation between the credit and the profitability of the bank. The greater the credit created by the bank the higher will be its profitability. A sound lending and investment policy is not only the prerequisite for banks profitability, but also crucial for the promotion of commercial saving of a backward country like ours. Hence, some of the main characteristics of the investment policy are as follows:

1. Liquidity

Liquidity means banks ability to meet its good financial situation or to satisfy its short-term obligations when they become due for payments. The liquid properly means cash stock of the commercial banks the amount of short term, current accounts, short-term government and business security. Bank collects the money in the accounts of currency, saving and fixed deposit from different peoples. People deposit money in bank on different accounts with the confidence that it will be able to repay their money when they need. In order to maintain this confidence and loyalty depositors the bank must keep this point in mind while investing its excess funds in different securities, so that it can meet current or short-term obligations when they become due for payments.

Liquidity is the most important for the success of the bank. The commercial banks have liability to the deposits and they immediately should give it in time when the depositors asked. For this purpose, the bank should keep adequate liquid funds. In addition, they should gain profit by utilizing the deposits as a loan and advances. If the bank cannot return the deposits at the time of demand it may lost the customers and their trust. If adequate liquid fund is kept, they can return the deposits at will of depositors but such bank cannot run for a long time. In the same way, if they invest the whole deposit loan and advances, they cannot give it at the time of demand by the depositors. Therefore, the commercial banks try to move the liquidity and profit together. It is a great challenge for the managers of the bank. The central bank pays attention to this reality to give direction on liquidity to the commercial banks.

2. Safety

A bank should always be careful about the safety of its investment while it is following its investment policy. Safety is the important to the bank for the investment. Bank should pay special emphasis on safety because if the invested area is unsafe, it is not good for the bank. Bank should always invest its fund in those securities, which are volatile, i.e. which are subject to too much depreciation and fluctuation because a little different may cause a great loss. It invest in an unsafe sector with the hope of gaining much is to accept the security of low quality. To invest large loan against less securities by receiving commission to invest in new places without care, observation and to follow the long-term loan including these all various reasons will make unsafe of the banks investment. Therefore, the bank should gravely study whether there is possibility of good quality. If the asset taken as the securities is low, quality low or low valued and if there is, no possibility of safe of the security the bank suffers from the loss. Therefore, bank should always invest its fund in good securities like gold, silver, diamond, company's share certificates, debenture, development bond and other. Similar type of securities of immovable property like house, land cannot be sold in time.

3. Profitability

Every organization has own special goal or objectives. The main objective of the commercial bank is to earn more profit. Profit is an income from an investment. It is the excess of income over the expenditure during a period. To achieve goal, the bank should adopt the theory of profitability in its investment policy. Profitability is the

important for the success of the bank. The bank can maximize its profit through maximization of return on their investment and lending. They must invest their funds in these sectors, which will maximize their profit. The bank can get much profit from the safe and long- term investment. Bank should also invest its fund in risky area because we know where more risk there is much profit. However, sometime it may create a situation where the bank should face the great economic loss, by loss of investment in such a risky sector. The profit of commercial banks depend on interest rate, bank charge, volume of loan, its time period and nature of investment on different sector. In the investment policies and procedure, it is always keep on mind that greater the credit created by the bank, higher will be the profitability. Therefore, the bank should always think to apply the appropriate investment policy in such sector from which can earn more.

4. Diversification

Diversification means dived one part into various different parts. In banking sector, diversification means bank should invest its fund in different sector not only in one or two sector. It means bank should diversify it's invest in various sector. If the bank should adopt theory of diversification, certainly its investment policy will be successful. Diversification helps to minimize risk and uncertainties. If bank should diversify its investment in many sector, it become successful to keep it in balance. There will be less profit from investment of some sector and there will be maximum profit from some another sector. The bank should diversify its investment fund in gold, silver, diamond, development bond, share of company, debenture, goods import and export bills and other appropriate securities. The bank always gets success in their working capacities from such investment.

5. Security

Finance company should accept that kind of security, which is commercial, durable, marketable and high market price. In those cases, "MAST" should be applied for the investment.

Where,

M = Marketability

A = Ascertain ability

S = Stability

T = Transferability

6. Legality

Legality is also one of the features of investment policy of the bank. The bank should invest its fund in legal activities of business but not in any kinds of illegal activities. Illegal securities will bring out many problems for the investor. The bank must follow the rules, regulations, and different directions issued by Nepal Rastra Bank and other concern bodies while mobilizing its funds.

2.4 Principle of Banking Investment Policy

The main function of bank is to accept the deposits of public and to earn more profit from advancing loan. The loan investment policy and deposit collection policy affects the performance of the banks and financial institutions. Bank should determine every year its investment policy to achieve maximum profit by utilizing its financial resources. Bank always focused on lending loans in the investment program. The main principle of bank's investment policy is as follows:

Principle of Security

Security is an important principle of bank's investment policy. Bank always invest its funds in those sector, where it feel safe and its repayment guarantee. It calls for careful review of economic and industrial trends before choosing any type of investment or the time to invest.

Principle of Liquidity

Liquidity means to convert the bank's assets into cash immediately at full market value. When the bank converted its assets into cash, then it will not suffer from losses. Therefore, the bank should always invest its fund in those securities, which are converted into cash immediately. So that the bank repayment easily to the depositors.

Principle of Diversification

The bank accepts the risk when it provides loan. There is a statement, "Higher the risk, higher the profit." It means lending of loan without risk is not effective for the investors. Therefore, bank always think how to minimize its risk. For that, the bank should adopt the principle of diversification. It means bank invest its fund in different

sectors or areas not only in one or two sectors. From that, the risk may be converted into one area. Thus, the bank should prepare diversified loan portfolio, which helps to minimize the risk.

Principle of Income Earning

In the present situation, the main objective of the bank is to earn more profit and to maximize the value of shareholders. Therefore, the bank always should invest its fund in profitable sector. Without profit, the bank cannot achieve success and it cannot run for long term. To achieve the goal, the bank should adopt the theory of earning income in its investment policy.

Principle of National Economic Policy

National economic policy is also affect the investment policy of bank. When the bank prepares its investment, policy it always thinks about the national economic policy. A profitable bank helps to develop the financial and social economy of the country.

2.5 Review of Books

Bank is a financial organization that offers the widest range of financial services specially credit saving and perform the widest range of financial function of any organization in the economy. Bank should properly utilize its fund in various investment and venues with a view to sustain and earn profit.

In the words of **Gitman and Jochnk** “Investment is a vehicle into which funds can be placed with the expectation that will preserve of increase in value and generate positive returns”(L.J. Gitman & Jochnk, “Fundamental of investment” 4th edition)

“Investment in its broadest sense means sacrifice of certain value for possible uncertain future value” (**William F. Sharpened, Gordon J. Alexander, “Investment” 5th edition March 1999**)

“Investment policy fixes responsibilities for the investment disposition of the bank asset in terms the allocating for investment and loan and establishing responsibility for day to day to management of those assets.”(**James B. Baxley, “Banking Management” 1987**)

“The investment policies of banks are conditional to grate extent by the national policy frame work of every bank has to apply his own judgment for arriving at credit decision, keeping of course his bank credit policy also in mind.”(**S.P Singh & S.Singh “Financial Analysis For Credit Management in Bank”1983**)

Frank K. Rellay has define investment as, “Investment may be defined as the current commitment of funds for a period of time to derive future flow of funds that will compensate the investing unit for the of funds are committed for the expected rate inflation and also the uncertain to involve in the future follow up funds”(**Frank K. Relly “Investment”**)

According to L.V. Chandler” A banker seeks optimum combinations of earning liquidity and safety while formality investment policy”(**L.V Chander “The Economic of Money and Banking “6th edition 1973**)

“The rate of return on asset is a valuable measure when comparing the profitability of one bank with another or with the commercial banking system. A low rate mite is the result of conservative lending and investment policy or excessive operating expenses. Bank could of course attempt to offset this by adopting more aggressive lending and investment policies to generate more income”. (**Ibid, p195**)

Dr. Mrs. Pretti Singh has defined investment as “investment is the employment of funds with the aim archiving additional income or growth in value, the essential quality of an investment is that it involves “waiting, for reward.” (**Preeti Singh Investment management”**)

Mr. Charles P. Jhones defined investment as “The commitment of funds to one or more asset that will be held over some future time period.” Investment is the study of the investment process and its concern with the management of an investor wealth.

2.6 Review of Rules, Regulations and Directives of NRB

Various rules, regulations, acts and directives are reviewed while preparing the concept of this study. In this section, the legalistic framework under which the commercial banks are operating has been discussed. This legalistic environment has significant impact on the commercial bank’s establishment, their mobilization and utilization of resources. All the commercial banks have to confirm to the legalistic

provisions specified in the commercial bank act 2031 B.S. and the rules regulations formulated to facilitate the smooth running of commercial banks. Different types of directives, which are issued for the commercial banks to manage credit in proper way, obviously, these directives and actions towards the commercial banks by NRB are playing the great role for the comparative analysis of credit management of the commercial banks. NRB is the leader of the money market. It is the chief of all the banks operating in the country. It supervises, regulates and controls the functions of commercial banks and other financial institutions. Various directives must have direct or indirect impact while making decisions to discuss those rules and regulations, which are formulated by NRB in terms of investment and credit to priority sector, deprived sector, other institutions, single borrower limit, CRR, loan loss provision, capital adequacy ratio, interest spread, productive sector investment etc. A commercial bank is directly related to the fact that how much fund must be collected as paid up capital while being established at a certain place of the nation, how much fund to expand the branch and counters, how much flexible and helpful the NRB rules are important but we discuss only those, which are related to investment function of commercial banks. The main provision established by NRB in the form of prudential norms in above relevant are briefly discussed here:

2.6.1 “Regulation to Maintain Minimum Capital Fund by the Commercial Bank as per NRB Directive”

Capital adequacy ratio is the relationship between capital funds to total risk weighted assets of the bank. The higher the CAR, the less levered the bank and safer from depositor’s point of view because the proportion of shareholders’ stake to the risk weighted asset is also high.

Risk weight is assigned to various assets and off balance sheet items of the bank to arrive at the risk weighted assets. Banks in Nepal are required to have minimum 6% core capital and 12% total capital fund of total risk weighted assets.

Classification of capital:

To calculate the capital fund, commercial banks should classify the capital in two parts;

- a) core capital
- b) supplementary capital

And,

Capital fund = core capital+ supplementary capital

Provision for pass loan made up 1.25% of total risk weighted assets is treated as supplementary capital.

$$\text{Capital fund ratio} = \frac{\text{Core capital} + \text{Supplementary capital}}{\text{Sum of weighted risk assets}} \times 100$$

Where, sum of weighted risk assets = Total WRA appeared in balance sheet + Total WRA appeared outside the balance sheet

2.6.2 Loan Classification and Loan Loss Provisioning”

A bank is required to classify their loan based on overdue aging schedule and provide on a quarterly basis as follows:

A. Pass Loan

All loan and advances whose principal amount is past due for period up to three months should be included in this category. These loans are classified as performing loans.

B. Substandard

All loans and advances that are past due for a period up to six months should be included in this category. Sub standard loan is classified as non-performing loan.

C. Doubtful

All loan and advances that are due for a period of six months to one year should be included in this category. Doubtful loan is also from the category of non-performing loan.

D. Loss

All loan and advances, which are due for a period of more than one year, should be included in this category.

) Provision for loss loan :

Loan should be classified as loss in the following cases,

- a. No security of security not as per contract.

- b. Borrower as been declared as bankrupt.
- c. In the case of borrower not found.
- d. Purchased or discounted bill are not repayable within 90 days from due date.
- e. Loans amount has not been used for taken purpose.
- f. Loan provided for blacklisted borrowers.

2.6.3 Loan Loss Provision

The loan loss provision based on outstanding loans and advances and bills purchased classified as per directives, which is as follows:

-) Bank can reschedule and restructuring loan if nonperforming loan receiver submit the external/internal reasons. If loan is restructured and rescheduled, provision requirement for such loan is minimum 12.5%.
-) If priority and deprived sector loan is restructured and rescheduled, such loan will have to be provisioned at 25% of the provision percentage to loan loss.
-) Provision requirement in case of loan given against personal guarantee only is additional 20% for pass, substandard and doubtful loans.
-) Loss provision for performing loan is called general loan loss provision and loss provision for non-performing loan is called specific loan loss provision.

2.6.4 “Directives Relating to Single Borrower Credit Limit

With the objectives of lowering the risk of over concentration of bank loans to a few big borrowers and to increase, the access of small and middle size borrowers to the bank loans. NRB has directed commercial bank to set an upper limit for single borrower limit. According to the directive, commercial banks may extend credit to single borrower or group of related borrowers in such way that the amount (if fund based loan, 9 overdraft, trust receipt, term loan etc) and advances up to 25% of core capital and non fund off the balance sheet facilities like letters of credit, guarantees, acceptances, commitments is up to 50% of its core capital fund but in case of advances and facilities to be used for the purpose of importing specified merchandize by the following public corporations, the exemption in the limit of credits and facilities is not applicable.

2.6.5 Directives Regarding Investment in Shares and Securities by Commercial Banks

1) Arrangement as to implementation of investment K policy under approval of the board of directors

Bank should prepare written policy relating to investments in the shares and securities of organized institutions. Such policies should be implemented only under the approval of restrictions as to investment by the banks securities by NRB.

2) Arrangement relating to investment in shares and securities of organized institutions.

a) Bank may invest in shares and securities of any organized institution not exceeding 10% of the paid up capital of such organized institution. Any amount of investment made in excess of this limit for the purpose of calculation of the capital fund should be deducted from the core capital fund.

b) The total amount of investment should be restricted to 30% of the paid up capital of the bank. Any amount of investment made on excess of 30% of paid up capital of the bank, for the purpose of calculation of the capital fund should be deducted from the core capital fund.

c) Banks should invest in the X shares and securities of organized institutions, which are already listed in the stock, bank exchange.

d) Where the shares and securities are not listed within the period prescribed, provisioning equivalent to the whole amount of such investment be provided and credited to investment adjustment reserve. The outstanding amount in such reserve should not be utilized for any other purpose until the sold shares and securities of the organized institution are listed. The outstanding amount in investment adjustment reserve should be included supplementary capital.

e) Banks should not invest in any shares, securities and hybrid capital instruments issued by any banks and financial institutions licensed by NRB where such investment exists prior to issuance of this directive such investment should be brought within the strives limitations imposed by this directive within 3 years.

2.6.6 Directives Regarding Interest Rate Spread

The interest rate spread is the difference between the interest taken from loan and advance or investment and the interest given to the depositor. As NRB direction lending rate and deposit rate should not exceed 5%. Such rates are calculated as under:

WALR = interest income for a month/ Total interest-earned asset

WADR= Interest expense for a month/ Total deposit outstanding

Interest spread = WALR – WADR

Where,

WALR= Weighted average lending rate

WADR= Weighted average deposit rate

2.6.7 Requirements to extend loans and advances to productive and priority sector (Including Deprived Sector)

Commercial banks are requires to extend loans and advances in the productive, priority and deprived sector as follows:

Of total advances,

-) 40% to productive sector
-) 12% to priority sector
-) 0.25-3% to deprived sector

Productive Sector Credit

Productive sector credit includes advances to priority sector and other productive sector.

Priority Sector Credit

Priority sector is defined to include micro and small enterprises, which help to increase production, employment and income a prioritized under the national development plans with an objective to uplift the living standard of low-income people, are progressively reducing the prevalent unemployment, poverty, economic inequality and backwardness. Micro and small enterprises are classified as agriculture enterprises, cottage and small industries and services. All credit extended to priority sector up to the limit specified by NRB are termed as priority sector credit.

Commercial banks extend credit under priority sector programs specified by NRB time to time.

Deprived Sector Credit

Deprived sector includes low income and particularly low income and particularly socially backward women, tribes, lower caste, blind, hearing impaired and physically handicapped persons and squatter family. All credit extended for the enticements of the economic and social status of deprived sector unto the limit specified by NRB is termed as “Deprived sector credit.”

Examination of the fulfillment of priority or deprived sector lending shall be made at the end of each quarter (i.e. mid Oct, mid Jan, mid April and mid July) on the basis of total outstanding loan and advances (except investments) as of immediately preceding six months. On the failure of fulfilling such lending, penalty in shortfall amount at the maximum prevailing lending rate of the bank during the examination period shall be imposed under sub section 2 of section 32 of NRB act, 2012. If the priority sector lending is fulfilled, but the deprived sector is not, the penalty is imposed on shortfall amount and if both sector lending is not fulfilled then the penalty is imposed on greater shortfall amount for one sector only.

2.7 Review of Previous Studies

This part of the study deals with the examination and reviewing of some related research papers, articles and journals published in different magazines, newspaper. However, there is not much articles published related to present trend of deposit, lending and earning in Nepal.

Pradhan Radhe Shyam(1994), “ Financial management and practices in Nepal”in 1992, dealt mainly with financial function, sources and types of financing decision involving debt effect of change in taxes on capital structure, financial distress, dealing with banks and dividend policy. The main findings of the study connected with financial management are as follows:

-) Banks are retained earnings are the two most widely used financing sources.
-) The enterprises have a definite performance for bank loans at a lower level of debts.

- J Generally, there is no definite time to borrow the issue stocks. The majorities of respondents are unable to predict when interest rate will lower or group is unable to predict when the stock will increase or decrease.
- J Most expertise does not borrow from one bank only and they do switch between banks whichever offer best interest rates.
- J Most expertise finds that banks are flexible in interest rates and convenient.

Thus, it can be said that, out of numerous studies in the capital market of Nepal, this study has established itself as a milestone.

Shrestha Shiva Raj,(1998) has given an insight on the, “ Portfolio management in commercial banks: theory and practice.” He has highlighted following issues in the article. The portfolio management is essential both for individuals and for institutional investors. Investors would like to select a best mix of investment assets subject to following aspects;

-) Good liquidity with adequate safety of investment.
-) Flexible investment
-) Maximum tax concession
-) Certain capital gains
-) Economic, efficient and effective investment mix
-) Higher return compared with alternative opportunities available according to the risk class of investors.

In view of above aspects, following strategies can be adopted:

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

However, Mr. Shrestha has also presented following approach to be adopted for designing a good portfolio and its management:

- 7) To identify securities for investment to refuse volatility return risk.

-) To find out the inevitable assets(generally securities) having scope for better returns depending upon individuals characteristics like age, health, need liquidity, tax liability, disposition.
-) To develop an alternative investment strategy for selecting a better portfolio that will ensure a trade off between risk and return with a view to attach the primary objective of wealth maximization at lower risk.
-) To find out the risk of the securities depending upon towards risk.

Mr. Shrestha has presented two types of investment analysis techniques i.e. fundamental analysis and technical analysis to consider any securities such as equity, debenture or bonds and other money capital market instruments. He has suggested that the bank having international network can also offer access to global financial markets. He has suggested that the banks having international network can also offer access to global financial market. He has pointed out the requirements of skilled workforce, research and analysis team and proper management information system (MIS) in any commercial bank to get success in portfolio management and customer's confidence.

According to Mr. Shrestha, the portfolio management activities of Nepalese commercial bank at present are in promising stage. However, on the other hand, most of the banks are not doing such activities so far because of the following reason:

-) Unawareness of the clients about the service available.
-) Hesitation of taking risk by the clients to use such facilities.
-) Lack of proper techniques to run such activities in the best and successful manner.
-) Less developed capital market and availability of fewer financial instruments in the financial markets.

Pradhan Shekhar Bahadur (1996 p 9) has presented a glimpse on investment in different sectors, its problems and prospects through his article, "Deposit mobilization, its problem and prospects." On his article, he has expressed that, "Deposit is the lifeblood of any financial institution, and be it commercial bank, finance company, co-operative non-government organization." He also added in consideration of 10 commercial banks and nearly three dozens of finance companies, the latest figure does produce a strong feeling that a serious review must be made of

problems and prospects of deposit sector. Except few joint venture banks, other organization heavily on the business deposit receiving and credit disbursement.

In the light of this, Mr. Pradhan has pointed out following problems of deposit mobilization in Nepalese perspective.

-) Due to the lesser hours of banking system, people prefers for holding the each in the personal possession.
-) Unavailability of the institutional services in the rural areas.
-) No more mobilization and improvement of the employment of deposits in the loan sectors.
-) Due to the lack of education, most Nepalese people do not go for saving in institutional manner. Their reluctance to deal with institutional system are governed by their low level of understanding about financial organization, process requirements, office hours with drawl system, availability of deposits facilities and so on.

Mr. Pradhan mentioned that deposit mobilization carried on effectively is in the interest of the depositor's society, financial sector and the nation. Lower level of deposit rising allows squeezed level of loan delivery more room to informal sector. That is why higher priority to deposit mobilization has all the relevance.

Kishi Dev Lal (Vol.25, 1996 p.27-32) in his article, "The changing face of the banking sector and the HMG/N recent budgetary policy," concluded that following an introduction of the reform in the banking sector as an integrate part of the liberal economic policy. More banks and finance companies have come up as a welcome measure of competition slowly and steadily. The two government controlled banks, Nepal Bank Ltd. and Rastriya Banijya Bank have also shown an improvement of non-performing loans and are taking steps to adopt improved technology. However, higher economic growth with social justice brings a significant benefit to the poor are yet to be achieves as envisaged by the government of Nepal.

Shrestha Sunity (1998 p 23-27) in her article, "Lending operation of commercial banks of Nepal and its impact on GDP," has presented with the objectives to make an analysis of contribution of commercial bank's lending to the gross domestic product(GDP) of Nepal. She has set hypothesis that there has been positive impact of lending commercial banks to the GDP. In research methodology, she has considered GDP as the dependent variable and various sector of lending like agriculture, industry,

commerce, service, and general and social sectors as the independent variables. A multiple regression technique has been applied to analyze the contribution. The multiple regression analysis has shown that all the variables except service sector lending have a positive impact on GDP. Thus, in conclusion she has accepted that there has been positive impact by lending of commercial banks in various sectors economy, except service sector investment.

2.8 Reviews from Unpublished Thesis

Mahat Susil Chandra(2004) conducted a study on “ Investment policy of Nepal Bangladesh Bank Ltd.” with the objective of:

-) To find out the non-performing assets position of the bank.
-) To evaluate the portfolio management of the bank.
-) To find out the bank’s investment on priority sector.
-) To analyze the deposit utilization and its relationship with total investment and net profit of the bank.
-) To suggest measures to improve the investment policy of the bank.

The study was conducted based on secondary data:

The research findings of the study are:

-) The proportion of non-performing assets on total loan and advances of the bank is more than the satisfactory level. It should be less than 5% to be regarded as internationally A-grade commercial bank. For the Nepalese context, NPA level of the bank is higher than these standards. So, the management of the bank should give its attention in time to manage NPA level with in the satisfactory level.
-) The loan and advances portfolio of the bank is not satisfactory. The leading is not properly diversified. Half of the loan from total portfolio is given to industrial sectors. Bank is unable to explore the new and profitable sectors for the lending purpose: so, the bank has very risky portfolio of loan and advances. If industrial sector will not function properly, its impact to the bank will be huge.
-) Bank is not fulfilling priority sector investment requirement every year, during the study period. In the course of failure to fulfill the directive credit requirement, bank is subject to penalty, which affects the profitability of the

bank. The average priority sector lending of the bank is less than required 12% landmark.

-) The relation of total deposit is positive to total investment i.e. if total deposit increases, bank's loan and advances, investment on government securities, shares and debentures of other companies also increases. However, the bank's investment has not positive relation to total net profit of the bank. Bank's total profit is irrespective to its total investment.

Shrestha Shrijana (2004) conducted a study on, "Nepal Rastra Bank guidelines on investment policy of commercial banks in Nepal (A case study of Nepal Investment Bank Ltd.)" with the objectives of

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

To find out whether NRB guidelines are actually being implemented.

The study was conducted on the basis on secondary data.

The main findings of the study are:

-) Bank is in good position to meet the daily cash requirement as bank has maintain the average cash and bank balance in respect to total deposit.
-) The performance of NIBL regarding deposit collection, granting loan and advances and investment in quite satisfactory but does not seem to follow a definite policy.
-) NIBL has not efficiently utilized its equity capital hence return on equity is not satisfactory because of lack of sound investment policy for mobilization of its equity capital.
-) Interest earned a total operating income of NIBL is high. However, bank failed to maintain net profit on the study.
-) From the analysis of coefficient of correlation, there is positive and significant relation between total deposits and loan and advances and current assets and

current liabilities is negative and no significant relationship between outside assets and net profit.

-) Trend analysis and projection for next five year of total deposits, loan and advance, investment and net profits are in increasing trend.

Joshi Jyoti (2005) conducted a study on “Investment policy of commercial banks in Nepal. A comparative study of Everest Bank Limited with NABIL Bank Ltd. and Bank of Kathmandu” with the objective of:

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

The study was conducted based on secondary data.

The research findings of the study are:

-) The liquidity position of the EBL is comparatively better than NABIL and BOK, EBL has the highest cash and bank balance to current assets ratio. NABIL has the lowest liquidity position than that of other two banks. EBL has good deposit collection and has made enough investment on government securities but it has maintained moderate investment policy on loan and advances.
-) From the analysis of assets management ratio or activity ratio, it can be concluded that EBL is average or in between successful in compared to NABIL and BOK. The total investment of EBL is in between in compared to other two banks.
-) In the study, loan and advances to total deposit is higher in BOK but total investment on shares and debentures to total working fund ratio is higher in BOK. However, the coefficient of variation is higher in EBL.
-) In analysis of profitability, total interest earned to total outside assets of EBL is lowest at all but overall analysis of profitability ratios, EBL is average profitable in comparison to other compared banks i.e. NABIL and BOK. From

the viewpoint of risk ratio, EBL has higher capital risk ratio but average of credit risk ratio in compared to NABIL and BOK.

Khanal Dharma Raj (1987) in his thesis entitled, “Investment in priority sector by commercial banks (A study of commercial banks of Kathmandu valley)” has pointed out the following objectives:

-) To analyze the trend of investment in priority sector.
-) To find out the extent of profitability affected in this sector.
-) To measure the efficiency of the program in the rural and urban sector.
-) To evaluate the banking procedures and services in disbursing loans.
-) To explore the reasons for low investment.

The main findings of the research were as follows:

-) The investment in priority sector has an increasing trend.
-) Banks are giving due consideration to increase investment in priority sector.
-) Due to low interest rate, overhead cost increased in administration and showed low profitability.
-) The regression analysis had shown a negative relationship between profit and investment.
-) The chi square test has shown that the investment program in rural and semi urban areas is more effective than in urban areas.
-) Banking procedure regarding loan disbursement in priority sector is much more complicated.
-) There is wide gap between demand and supply of loan.
-) Due to security and lack of proper legal documents most loan request have been rejected and even cancelled some of the projects in different sectors.

CHAPTER – III

RESEARCH METHODOLOGY

This chapter highlights the research methodology used in the study for the analysis of credit management of joint venture commercial banks and the study will try to come at conclusion regarding what position the three commercial banks have got in the commercial banking sector in Nepal.

Research means a search or study about a related subject. It means a careful investigation or enquiry especially search for new fact in any branch of knowledge in a scientific manner. It tries to find out the main fact by defining and redefining problems, formulating hypothesis, collecting and evaluating data, making deduction and determine the conclusions. According to **John W. Best**, “Research may be defined as the systematic and objective analysis and recording of controlled observations that may lead to the development of generalizations of principles or theories resulting in prediction and possibly ultimate control of events.”

Method means different way to find at the solution of problems. It means methodology refers to the various ways to solve the problems. Research methodology describes the methods and process applied in the entire subject of the related study. Thus, “Research methodology refers to the various sequential steps to be adopted by a researcher in studying a problem with certain objectives in view.” It means research methodology is away to solve the research problem systematically and scientifically. Every research should adopt the systematic research methodology to solve the research problem. The research methodology is wider concept. It considers the logic behind the methods or technique is used. The main objectives of the research methodology are to analyze examine, highlight and interpret the investment situation of the bank. For that it concerned about various fact like what data have been collected what are the purpose and problem of research, why hypothesis has been formulated etc. Hence, research methodology is a way to analysis for the study, which deals with research design, sources of data, data collection, population and sample, processing and tabulating procedures.

3.1 Research Design

Research design is a plan or way for study that give a direction for the collection and analysis of data. In other words, research design is the arrangement of collections for

collection and analysis of data in a systematic. It is concerned with various steps to collect the data for analysis and procedures for acquiring the information including from which sources and by what procedure it is obtained. Hence, both analytical and descriptive methods have been used to attain the overall objectives. The main objectives of this study are to analyze the present trend and future scenario of deposit, lending and earning of Nepalese joint venture commercial banks. For that, it includes all the process of collecting, verifying and evaluating of past evidence systematically and objectively to reach the conclusion. Various financial tools and effective research techniques are employed to identify the strength and weakness of the three banks. Thus, research design is a plan structure and strategy of investigation conceived to obtain answers to research question and to control variance and it gives a clear picture of the bank's investment circumstances with the help of available data and with some useful suggestions and recommendation.

3.2 Sources of Data

A source of data is a step to collect the necessary data and information relevant for the analysis of the study. Simply, there are two sources of data i.e. primary data and secondary data. Primary data are those data that are collected by the researcher from related fields and possess originality and authenticity. To collect primary data there are various methods like direct personal investigation (observation), indirect and investigation, telephone interviews, schedule questionnaire, mailed questionnaire etc. On the other hand, secondary data are those data that are collected by someone else or used already and made available to others in the form of published statistics. This study is mainly based on primary as well as on the secondary data. The data relating to investment e.g. loans and advances, deposits and profit loss are directly obtained from bank's annual reports and financial statements of this bank. Likewise, newspaper, journals, periodicals, magazines, reports & unpublished thesis have been taking as other sources of data during the study. Thus, the primary and secondary data both were helpful obtain the additional information of the related problem.

3.3 Population and Sample

The population refers to the total numbers of organizations of the same nature, services & its product. Population is the collection of objects or the set of results of an operation. The objective of the population may be finite or infinite in number & hypothetical or existence in character. Sample is a representative part of population

for the study. Sample means types of elements that are selected with the intentions of finding out something about the population. In the other hand, sample is just a portion of the universe under study. At present, there are 17 commercial banks, I have selected only three banks for the purpose of the study as a sample and they are as follows:

- A. Nabil bank Ltd.
- B. Himalayan Bank Ltd.
- C. Everest Bank Ltd.

3.4 Methods of Analysis

The methods of analysis are the focal part of the study, which give us the real situation of the three JVCBs. Generally, financial & statistical tools are used to analyze the collected data & to achieve the objectives of the study. In the same way, some statistical tools such as mean, standard deviation, coefficient of determination, hypothesis tests are adopted in this study. Hence, method of analysis is a way to find out the true picture of the bank.

3.5 Data Analysis Tools

Data analysis tools are also a main part of the study. Presentation and analysis of the collected data is the core of research work. It is the study of tabulated material in order to determine the inseparable facts. The collected raw data are first presented in the systematic manner in the tabular forms and analyzed by applying different financial and statistical tools to achieve the objective of the study. In addition to this, some graphs, charts & tables will be presented to analyzed and interpret the findings of the study. The various tools applied are:

3.5.1 Financial Tools

Financial tools are instruments that help to analyze and interpret the financial performance of a organization. In other words, financial tools help to analyze the strength and weakness of a firm. Ratio analysis is a most important part of financial analysis, which is used in this study that gives us financial statement of three JVCBs. It helps to show the quantities relationship between two numbers. It may be expressed in terms of proportion, rates and times or in percentage. It is used to compare a firm's financial performance and status with other firms.

“Ratio analysis is such a powerful tool of financial performance and status to that of other firms or its overtime.”(Lawrence, J. Gitman, **“Principle of managerial finance,”** 5th edition, 1998)

Hence, ratio analysis is a part of financial analysis that evaluates the performance of an organization by creating the ratios from the figure of different accounts consisting in balance sheet, income statement. It is the process of determining and interpreting numerical relationship between the items of financial statements. Although there are various types of ratio to analyze and interpret the financial statement, among those some are relevant for the study, which are as follows:

A) Liquidity Ratios

Liquidity ratio is a tool of financial analysis, which helps to find the liquidity of an organization. In other words, difference between current assets and current liabilities is known as working capital, which provides the liquidity in business organization. It measures the liquidity position of the firm. Liquidity ratio measures the speed with which banks assets can be converted into cash to meet the deposit withdrawal and other current obligation, it reflected the short-term financial strength and weakness of the firm.

The firm should maintain proper liquidity over the immediate future. Liquidity should be neither too low nor too high. A high degree of liquidity shows inability of proper utilization and low degree of liquidity shows the poor credit worthiness and less creditor’s confidence. Hence, the firm should maintain adequate balance between in adequate liquidity and unnecessary liquidity for the survival and to avoid the risk of insolvency. To measure the liquidity position of banks, the following ratios have been used in the study.

i) Current Ratio:

Difference between current assets and current liabilities is known as current ratio. It shows the banks short-term solvency. It is also called liquidity solvency ratio and working ratio. The main objective of the current ratio is to measure the payment capacity of the firm.

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

Where, current assets includes cash and near cash assets i.e. marketable accounts receivable, inventories, balance with banks, accrued account, prepaid expenses, short term investments. Current liabilities includes sundry creditors, bills payable, notes payable, bank overdraft, outstanding expenses, income received in advance, provision for taxation, proposed dividend, unclaimed dividend, loan maturing in a year. The proportion of current ratio is 2:1. The natural rule is based on the assumption that even if half decrease in current assets, the firm can meet its current obligations.

ii) Quick Assets Ratio

The total deposit constitutes the major part of the banks liquidity. Flow of this liquidity is always uncertain in the banks fund management. Hence, the ratio of liquid fund to current liabilities indicates the bank's strength to meet uncertain outflow or deposits.

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

Liquid fund consists of cash in hand in hand, balance with NRB, balance with other banks and money at call.

iii) Cash and Bank Balance to Current Asset Ratio:

Cash and bank balance to current ratio refers the portion of cash and bank balance in total of current assets of the bank. It measures the proportion of liquidity assets. Highly liquidity assets show the higher banks ability to meet its payment capacity of cash. It represent total of local currency, foreign currency, cheque in hand and various banks balances in local as well as foreign banks. This ratio can be calculated by using following formulas.

$$\text{Cash \& bank balance to current assets ratio} = \frac{\text{Cash \& bank balance}}{\text{Current assets}}$$

Hence, the ratio shows the percentage of current available fund with in the bank.

iv) Cash and Bank Balance to Total Deposit Ratio

Cash and bank balance to total deposit ratio measures the percentage of liquid fund with the bank to meet immediately payment to the depositors. Higher ratio shows

liquidity position and ability to cover the deposits and vice-versa. It is liquid current assets. This ratio computed by dividing the amount of cash and bank balance by the total deposit. This ratio can be calculated by using the following formula.

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

When cash and bank balance includes cash in hand, cheque and other cash items, balance with domestic and foreign banks. Total deposit includes current deposits, saving deposits and fixed deposits, call deposits and other deposits.

v) Loan and Advances to Current Assets Ratio

Loan and advances to current assets ratio shows the banks liquid capacity of discounting and purchasing the bills and loan, cash credit and overdraft facilities to the customers. This ratio can be computed by dividing loan and advances by total current assets.

$$\text{Loan and advances to current assets ratio} = \frac{\text{Loan \& advances}}{\text{Current assets}}$$

Hence, it shows the percentage of loan and advances in the total current assets. It includes local and foreign bills purchased and discounted and loans, cash credit and overdraft in local currency as well as inconvertible foreign currencies.

B) Assets Management Ratio

Assets management ratio is also known as activity ratio. It shows the efficiency with of any firm. It is employed to evaluate the efficiency with which the firm manages and utilizes its assets. It measures the proportion of various assets and liabilities in balance sheet. This ratio is used to measure how effectively a firm is managing its assets and the firm's ability to utilize its available resources. The ratio is expressed on percentage. Greater the rate of turnover, the more efficient is the utilization of assets. Assets management ratio measures its efficiency by multiplying various liabilities into performing assets. These ratios are concerned with measuring the efficiency in assets management. If available assets are not utilized efficiently, the investment upon them will be idle and profitability decreases and also if the investment is not sufficient, then adequate production and revenue can not be made and profitability decreases. So, proper balance between revenue and assets is desired for the reflection of optimum

utilization of assets. Here, some of those ratios are computed to assess the bank's efficiency in utilization of available assets.

i) Total Assets to Total Liabilities Ratio

Total assets to total liabilities ratio measures the volume of total liabilities in total assets of the bank. This ratio measures the bank's ability to multiply its liabilities into assets. It is always recommended to have higher ratio since it signifies overall increases of credit. The higher ratio indicates the higher productivity.

$$\text{Total assets to total liabilities ratio} = \frac{\text{Total assets}}{\text{Total liabilities}}$$

ii) Loan and Advances to Total Deposit Ratio

This ratio is used to calculate to find out how successfully the banks utilizing their total deposits on loan and advances for profit generating purpose. Higher the ratio, the better is the utilization of total deposits. This ratio is computed by dividing the amount of loans and advances by total deposit. This ratio can be calculated by applying formula.

$$\text{Loan and advances to deposit ratio} = \frac{\text{Loan \& advances}}{\text{Total deposit}}$$

Here, loan and advances includes loan, advances and overdraft and total deposit includes current deposits, saving deposit and fixed deposits, call deposits and other deposits.

iii) Total Investment to Total Deposit Ratio

Investment is one of the major forms of credit created by the bank to earn income. It is the use of money for future profit. A firm can earn more profit by investing its fund on government securities, shares and debentures or bonds of other companies. Thus, investment is the utilization of firm's deposit on different securities. This ration is calculated by applying following formula.

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

Here, total investment includes investment on government securities, debenture and bonds, share in subsidiary companies, share in other companies and other investments.

iv) Loan and Advances to Working Fund Ratio

Loan and advances is an important part of total working fund. This ratio measures the volumes of loans and advances in the structure of total assets. It indicates the ability of banks to channel its deposits in the form of loan and advances to earn more profit. A higher ratio indicates better mobilization of funds as loans and advances and vice-versa. This ratio is calculated by applying the formula.

$$\text{Loan and advances to working fund ratio} = \frac{\text{Loan and advances}}{\text{Total assets}}$$

Where, total working fund includes total amount of assets given in balance sheet like, current assets, net fixed assets, total loans for development banks and other sundry assets excepts off balance sheet i.e. letter of credit, letter of guarantee etc.

v) Investment to Loan and Advances and Investment Ratio

This ratio measures the contribution made by investment in total amount of loan and advances and investment. The ratio indicates the mobilization of funds in safe area and vice versa.

$$\text{Investment to loan and advances and investment} = \frac{\text{Investment}}{\text{Loan \& advances \& investment}}$$

C) Activity or Performing Ratios

Activity ratio measures the performance efficiency of an organization from various angles of its operation. It indicates the efficiency of activity of an enterprise to utilize available funds, particularly short-term funds. These ratios are used to determine the efficiency, quality and contribution of loans and advances in total profitability. Activity ratios are used to measure the performance and efficiency of the bank.

i) Loan Loss Provision to Total Loans and Advances

The ratio of loan loss provision to total loans and advances describes the quality of assets that a bank is holding. Nepal Rastra Bank has given directives to commercial

banks to classify its loans and advances into the category of pass, sub-standard, doubtful and loss on the basis of maturity of principal, to make provision of 1,25, 50, and 100 respectively. The provision for loan loss reflects the increasing probability of non-performing loan in the volume of total loan and advances. The ratio is calculated by dividing loan loss provision by total loans and advances.

$$\text{Loan loss provision to total loans and advances} = \frac{\text{Loan loss provision}}{\text{Total loans and advances}}$$

ii) Non-performing Loans to Total Loans and Advances Ratio

It measures the proportion of non-performing loans on the total volume of loans and advances. Thus, it reflects the quantity of quality assets that the banks possess. Higher ratio reflects the bad performance of the bank in mobilizing loans and advances and bad recovery rate and vice-versa. It is calculated by dividing the non-performing loans by total loans and advances.

$$\text{Non performing loans to total loans and advances} = \frac{\text{Non-performing loan}}{\text{Total loan \& advances}}$$

iii) Interest Expenses to Total Deposit Ratio

This ratio measures the percentage of total interest paid against total deposit. A high ratio indicates higher interest expenses on total deposit.

$$\text{Interest expenses to total deposit ratio} = \frac{\text{Interest expenses}}{\text{Total deposit}}$$

iv) Interest Expenses to Total Expenses Ratio

It measures the portion of total interest expenses in the volume of total expenses. The high ratio indicates the low operational expenses and vice-versa. It is calculated by dividing interest expenses by total expenses.

$$\text{Interest expenses to total expenses ratio} = \frac{\text{Interest expenses}}{\text{Total expenses}}$$

v) Total Interest Expenses to Total Working Fund Ratio

It is calculated to find out the percentage of interest paid on liabilities with respect to total working fund. It is calculated by dividing total interest paid by total working fund.

$$\text{Total interest expenses to total working fund ratio} = \frac{\text{Total interest expenses}}{\text{Total working fund}}$$

vi) Deposit Mobilization per Branch

This ratio shows the average mobilization of deposit. This ratio is calculated dividing total deposit by no. of branches. Higher ratio shows the higher collection of deposit per branch.

$$\text{Deposit mobilization per branch} = \frac{\text{Total deposit}}{\text{No. of branches}}$$

vii) Credit Mobilization per Branch

This ratio measures the average mobilization of credit. This ratio is calculated by dividing total loan and advances by no. of branches. Higher ratio indicates the higher lending per branch.

$$\text{Credit mobilization per branch} = \frac{\text{Total loan and advances}}{\text{No. of branches}}$$

D) Profitability ratio

The main objectives of the commercial banks are to earn more profit. It measures the overall efficiency of a firm in term of profit and financial performance. It shows the effect of liquidity, assets management and debt management on operating results. It is used to indicate public acceptance of the service of bank and run competitively. Higher the profitability ratio better is the performance of the bank. In this study, the various types of profitability ratios are used to compute the profit of banks to their investment.

i) Interest Income to Total Income Ratio

This ratio measures the volume of interest income in total income of the bank. Higher the ratio higher is the contribution made by the lending and investment activities and vice-versa. It is calculated by dividing interest income by total income.

$$\text{Interest income to total income ratio} = \frac{\text{Interest income}}{\text{Total income}}$$

ii) Interest Income to Interest Expenses Ratio

This ratio measures the gap between interest rate offered and interest rate charged. The credit creation power of commercial banks has high impact on this ratio.

$$\text{Interest income to interest expenses ratio} = \frac{\text{Interest income}}{\text{Interest expenses}}$$

iii) Operating Profit to Loan and Advances Ratio

Operating profit to loan and advances ratio measures the earning capacity of commercial banks. This ratio is calculated by dividing operating profit by loan and advances.

$$\text{Operating profit to loan and advances} = \frac{\text{Operating profit}}{\text{Loan and advances}}$$

iv) Return on Total Working Fund Ratio

Return on total assets ratio is measures the profitability with respect to the total assets. It provides as idea of the overall return on investment earned by the firm. The return on total assets ratio is measure of the overall profitability of total assets. A higher ratio usually indicates efficiently in utilizing its overall resources and vice-versa. It is calculated by dividing net profit by total assets.

$$\text{Return on total working fund ratio} = \frac{\text{Net profit}}{\text{Total working fund}}$$

v) Return on Loans and Advances Ratio

Return on loan and advances ratio shows how efficiently the banks and other financial institutions have utilized their resources to earn good return for providing loan and

advances. It is computed by dividing net profit/loss by the total amount of loan and advances. This ratio is calculated by applying following formula.

$$\text{Return on loans and advances ratio} = \frac{\text{Net profit}}{\text{Loan and advances}}$$

vi) Total Interest Earned to Total Working Fund Ratio

It is calculated to find out the percentage of interest earned to total assets. Higher the ratio, the performance of the bank is better in terms of interest earning on its total working fund. It is calculated by dividing total interest by total working fund.

Total interest earned to total working fund ratio

$$\text{Total interest earned to total working fund ratio} = \frac{\text{Total interest earned}}{\text{Total working fund}}$$

vii) Return on Equity Ratio

Equity capital is an owned capital of any bank. If bank can mobilize its equity capital properly, they can earn high profit. The return on equity capital measures the extent to which a bank is successful to mobilize its equity.

$$\text{Return on equity} = \frac{\text{Net profit}}{\text{Total capital}}$$

D) Growth Ratio

Growth ratio represents how well the banks are maintaining their economic and financial condition. It is related to the fund mobilization and investment management of the bank. The higher ratio represents the superior performance. Thus, in order to examine and analyze the expansion and growth of the banking business, following growth ratios are calculated.

i) Growth Ratio of Total Deposits

ii) Growth Ratio of Loans and Advances

iii) Growth Ratio of Total Investment

iv) Growth Ratio of Net Profit

3.5.2 Statistical Tools

Statistical tools help to analyze the financial position of the bank. Statistical tools are the mathematical techniques used to facilitate the analysis and interpretation of numerical data. It also helps to analyze the relationship between variables and helps bank to make appropriate investment policy regarding to profit maximization and deposit collection. Statistical tools are used to analyze the objectives of the study. With the use of statistical tools, it becomes easy to convert abstract problems into figures and complex data in the form of tables. Some of the statistical tools used in this study are as follows:

i) Arithmetic Mean

An arithmetic mean is also called as “the mean”, average or the arithmetic average. A mean is the average value of the sum of all observations divided by the number of observations. An arithmetic mean is used in a situation of studying practical problems relating to production, price, income, expenditure, temperatures etc. but it is not useful for qualitative characteristics open-ended classes etc. it is denoted and given by the formula:

$$\text{Mean } (\bar{X}) = \frac{X_1 + X_2 + X_3 + \dots X_n}{N}$$

Where,

X = Variable

$\bar{X}$ = Arithmetic mean

N = Number of observation

ii) Standard Deviation

Standard deviation measures the absolute dispersion and gives uniform correct and stable results. It is the positive square root of the average sum of square of deviation of given observation from the arithmetic mean of the distribution. Higher the value of standard deviation higher will be the variability and vice-versa. A standard deviation is always a positive number and is superior to mean deviation, quartile deviation and the ranges as it is used for the measurement. It is denoted by a small Greek letter (σ) (sigma). Standard deviation is calculated by using following formula:

$$\sigma = \sqrt{\frac{\sum \epsilon^2}{n} - \frac{(\sum \epsilon)^2}{n^2}}$$

iii) Coefficient of Variation

Coefficient of variation (C.V.) measures the percentage of coefficient of standard deviation. It is used in such problems where the researcher should to compare the variability of more than two years. It is the most commonly used measure of relative variation. It is used for comparing homogeneity, uniformity, and variability of two or more distributions. The coefficient of variation (C.V.) is given by the following formula.

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

iv) Coefficient of Correlation

Coefficient of correlation is the mathematical method of measuring the degree of association between the two variables i.e. one dependent and another is independent. This analysis identifies the relationship between two or more variables. The effect of none variable may have on other correlated variable in the case of highly correlated variables. This topic deals with the study to find out relationship between the mentioned variables:

- i) Coefficient of Correlation Between Deposits and Loan Advances
- ii) Coefficient of Correlation Between Loan and Advances and Net Profit
- iii) Coefficient of Correlation Between Deposits and Investment
- iv) Coefficient of Correlation Between Investment and Net Profit

v) Coefficient of Determination

Coefficient of determination provides the variation in the dependent variable that is explained by the independent variables. According to the value that is computed from the coefficient of determination, we can conclude that the percentage variation in the dependent variable is due to the variation in the independent variable and the remaining portion of the variation is due to the other factors. It is the square of coefficient of correlation. It is denoted by r^2 .

vi) Probable Error

Probable error of the correlation by PE is the measure of testing the reliability of the calculated value of correlation. If r be the calculated value of correlation of a sample of n pair of observations, then PE is defined by

$$PE = r \times \frac{1}{\sqrt{n}}$$

If correlation (r) > PE, it is significant

If correlation (r) < PE, it is insignificant

vii) Trend Analysis

The least square is mostly used for determining the trend of time series and it is commonly used for the estimation of the future trend values of different variables. Hence, for the estimation of linear trend line, the following formula is used:

$$Y_c = a + bx$$

Where,

Y_c = Dependent variable

X = Independent variable

A = y intercept

b = Slope of the trend line

Hence, using this method, trend analysis of following variable is conducted

- a) Trend Analysis of Total Deposit**
- b) Trend Analysis of Loan and Advances**
- c) Trend Analysis of Investment**
- d) Trend Analysis of Net Profit**

viii) Hypothesis t-test Analysis

Student's t -test values are computed in order to test whether the difference between the financial ratios of the two groups is statistically significant or not. When a sample

is less than 30, we use t-test. The basic fundamental assumption of this test is as follows:

In order to fulfill the objectives of this research study, following hypothesis is formulated for testing:

Null hypothesis (H_0 : $\mu_1 = \mu_2$ “There is no significant difference between the mean ratios of two banks”).

Null hypothesis (H_1 : $\mu_1 \neq \mu_2$ “There is significant difference between the mean ratios of two banks”).

The t- value is calculated as:

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{S^2 \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

Where,

$\bar{x}_1$ = the mean of the first bank

$\bar{x}_2$ = the mean of second bank

n_1 = number of observation in the first bank

n_2 = number of observation in the second bank

S^2 = combined variance

The value of variance is calculated as follows:

$$S^2 = \frac{\sum (x_1 - \bar{x}_1)^2 + \sum (x_2 - \bar{x}_2)^2}{n_1 + n_2 - 2}$$

The degree of freedom is calculated as $n_1 + n_2 - 2$, if the calculated value of ‘t’ is greater, the table values of the ratios of the two groups is statistically significant.

ix) Hypothesis F-test Analysis

F-test value at 5% level of significance is computed to test whether the financial ratios of three banks differ significantly or not. In order to fulfill the objectives of research study, null hypothesis and alternative hypothesis are formulated as follows:

Null hypothesis, H_0 : $\mu_1 = \mu_2 = \mu_3$ “The ratios of three banks are not significantly different”

Alternative hypothesis, H_1 : $\mu_1 \neq \mu_2 \neq \mu_3$, “The ratios of three banks are significantly different”

3.5.3 Respondent Profile for Primary Data Analysis

Primary data is collected in order to fulfill the objective of this study and data is collected through questionnaire method. Objective questions were raised for this purpose.

Simple 6 questions are raised to know about the awareness of deposit, lending and earning. Survey carried among 60 people.

CHAPTER – IV

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

This is an analytical chapter, which contains data collected from various sources. These are presented and analyzed to measure the various dimension of the problems of the study and measurement of the study are presented systematically. These data concerns the measurement of investment management and fund mobilization. In this chapter, comparative analysis and interpretation of related joint venture commercial banks has been done by using research methodology as mentioned in the previous chapter. This chapter is heart of the whole study. The main objective of this chapter is to present and analyze the collected data. To fulfill the objectives of the study, tabulation have been presented from the collected information and financial statement of JVCBs and based on these table and relevant ratios of each bank are computed and analyses.

4.2 Financial Tools

Financial tools are an instrument that helps to analyze and interpret the financial performance of an organization. In other words, financial tools help to analyze the strength and weakness of a firm. Ratio analysis is a most important part of financial analysis. It helps to show the quantities relationship between two numbers. It may be expressed in terms of proportion, rates and times or percentage. It is used to compare a firm's financial performance and status with other firms.

4.2.1 Liquidity Ratios

Liquidity ratio is a tool of financial analysis, which helps to find the liquidity of an organization. In other words, difference between current assets and current liabilities is known as working capital, which provides the liquidity in business organization. It measures the liquidity position of the firm. Liquidity ratio measures the speed with which banks can be converted into cash to meet the deposit withdrawal and other current obligations. It also measures the ability the firm to meet its short-term obligation; it reflected the short-term financial strength and weakness of the firm.

4.2.1.1 Current Ratio

The calculation of current ratios based on a simple comparison between current assets and current liabilities. It shows the bank's short-term solvency. It indicates bank's ability to meet its current obligation. It indicates the extent to which assets expected to be converted to cash in near future cover current liabilities. The main objective of the current ratio is to measure the payment capacity of a firm. It is the broad measure of liquidity position of the bank. Thus, the ratio shows the relationship between current assets and current liabilities.

Table-4.1
Current Ratio

Year Bank	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
NABIL	0.9162	0.94	1.055	1.12	1.03	1.20	1.043	0.098	9.42
HBL	0.7708	0.8030	0.8046	0.802	0.845	0.81	0.806	0.0306	3.81
EBL	1.0560	0.9498	1.133	1.1023	1.079	1.23	1.092	0.0828	7.58

Source: Appendix II

The above table shows the liquidity position of three banks in terms of current assets to current liability ratio. The analysis shows NABIL has increasing trend of ratios but HBL and EBL have fluctuating trend. The mean ratio of NABIL, HBL and EBL are 1.043, 0.806 and 1.092 respectively. The mean current ratio of EBL indicates the good liquidity position of the bank than others.

The coefficient of variation between the current ratio of NABIL is 9.42, which is higher than other two banks. Thus, it can prove that current ratio of NABIL is less consistent than HBL and EBL.

4.2.1.2 Liquid Assets to Current Liabilities Ratio

The total deposit constitutes the major part of the banks liquidity. Flow of this liquidity is always uncertain in the banks fund management. Hence, the ratio of liquid fund to total deposit indicates the bank's strength to meet uncertain outflow or deposits. The measurement of this ratio is presented in table below:

Table 4.2
Liquid Fund to Current Liability Ratio

Year Bank	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
NABIL	0.3097	0.2778	0.09222	0.1503	0.1222	0.2907	0.21	0.088	42.04
HBL	0.3943	0.3784	0.32915	0.3136	0.3476	0.3099	0.344	0.0396	11.5
EBL	0.1726	0.1078	0.1608	0.1489	0.2006	0.2963	0.1811	0.058	32.42

Source: Appendix II

Above table shows the ratio of all the banks have fluctuating trend throughout the year. The mean ratio of NABIL, HBL and EBL are 0.21, 0.344 and 0.1811 respectively. The co-efficient of variation between liquid fund and current liabilities ratio of NABIL is higher than other banks, the ratio is less consistent than HBL and EBL. The CV of NABIL is 42.04.

4.2.1.3 Cash and Bank Balance to Total Deposit Ratio

This ratio measures the ability of the bank that they meet unexpected demand made by the depositors. This ratio indicates the ability of bank's immediate funds to cover their current margin, call and other saving deposits. A high ratio represents the greater ability to cover their deposits and vice-versa.

Too high ratio of cash and bank balance to total deposits may be unsuitable and harmful because it affects their profitability position. Too low ratio is unfavorable as capital will be tied up and opportunity cost will be higher.

Table 4.3
Cash and Bank Balance to Total Deposit Ratio

Year Bank	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
NABIL	0.0851	0.068	0.038	0.0326	0.060	0.084	0.0613	0.0204	33.27
HBL	0.0942	0.0909	0.0811	0.065	0.058	0.044	0.0722	0.0169	23.41
EBL	0.1702	0.0783	0.1043	0.1183	0.1315	0.1190	0.1203	0.028	23.28

Source: Appendix II

The above table shows that, the ratio of NABIL, HBL and EBL have fluctuating trend. Based on mean, EBL has higher average than others do. Therefore, EBL has ability to meet unexpected demand made by depositors.

The coefficient of variation between cash and bank balance to total deposit ratio of NABIL is 33.27, which is comparatively higher than other banks. Similarly, CV of HBL and EBL are 23.41 and 23.28 respectively. Thus, the cash and bank balance to total deposit ratio of NABIL is less consistent than other banks.

4.2.1.4 Cash and Bank Balance to Current Assets Ratio

Cash and bank balance to current assets ratio measures the ability of paying current deposits as well as other deposits. In the present study cash and bank balance represents total of local currency, foreign currency, cheque in hand and various bank balances in local as well as foreign banks. This ratio measures the percentage of liquid fund with the current assets. High ratio indicates the bank's sound ability to meet daily cash requirement of their customer's deposit. If bank maintain low ratio, bank may not able to make the payment against cheques. Therefore, bank has to maintain cash and bank balance to current assets ratio properly.

Table 4.4
Cash and Bank Balance to Current Assets Ratio

Year Bank	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
NABIL	0.0825	0.0681	0.0338	0.0358	0.0847	0.1391	0.074	0.035	47.27
HBL	0.1172	0.1081	0.0944	0.0799	0.0786	0.065	0.091	0.018	19.66
EBL	0.1454	0.0672	0.0872	0.1349	0.186	0.206	0.137	0.0501	36.61

Source: Appendix II

Above table shows, that EBL has highest cash and bank balance to current assets ratio throughout the year. The ratios of NABIL and EBL have fluctuating trend. The ratios of HBL have decreasing trend. The mean ratio of NABIL, HBL and EBL are 0.074, 0.091 and 0.137 respectively. The mean ratio of EBL has been successful in maintaining its higher cash and bank balance to current assets ratio in comparison to others.

The coefficient of variation between cash and bank balance to current ratio of NABIL is higher than HBL and EBL. It shows that the variability of the ratios of HBL and EBL is uniform.

4.2.1.5 Loan and Advances to Current Assets Ratio

Loan and advances to current assets ratio shows the banks liquid capacity of discounting and purchasing the bills and loan, cash credit and overdraft facilities to the customers. This ratio can be computed by dividing loan and advances by total current assets.

Table 4.5
Loan and Advances to Current Assets Ratio

Year Bank	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
NABIL	0.5592	0.5749	0.670	0.7548	0.923	1.134	0.769	0.203	26.48
HBL	0.5924	0.6461	0.5825	0.738	0.796	0.9441	0.716	0.1272	17.74
EBL	0.6263	0.6259	0.6546	0.839	1.001	1.304	0.84	0.2486	29.59

Source: Appendix II

Above table shows that NABIL and EBL have increasing trend. HBL has fluctuating trend. In case of mean ratio, EBL has maintained high ratio i.e. 0.84. The mean ratio of NABIL and HBL are 0.769 and 0.716 respectively.

The coefficient of variation between loan and advances to current ratio of HBL is lower than NABIL and EBL, which shows the ratio is more consistent than NABIL and EBL.

4.2.2 Assets Management Ratio

Assets management ratio is also known as activity ratio. It shows the efficiency with of any firm. It is employed to evaluate the efficiency with which the firm manages and utilizes its assets. It measures the proportion of various assets and liabilities in balance sheet. This ratio is used to measure how effectively a firm is managing its assets and the firm's ability to utilize its available resources. The ratio is expressed on percentage. Greater the rate of turnover, the more efficient is the utilization of assets. Assets management ratio measures its efficiency by multiplying various liabilities into performing assets. These ratios are concerned with measuring the efficiency in assets management. If available assets are not utilized efficiently, the investment upon them will be idle and profitability decreases and also if the investment is not sufficient, then adequate production and revenue can not be made and profitability decreases. So, proper balance between revenue and assets is desired for the reflection of optimum utilization of assets. Here, some of those ratios are computed to assess the bank's efficiency in utilization of available assets.

4.2.2.1 Loan and Advances to Total Assets Ratio

Loan and advances is an important part of total working fund. This ratio measures the volumes of loans and advances in the structure of total assets. It indicates the ability of banks to channel its deposits in the form of loan and advances to earn more profit. Higher ratio indicates better in mobilization of funds as loans and advances and vice-versa.

Table 4.6
Loan and Advances to Total Assets Ratio

Year Bank	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
NABIL	0.4682	0.4890	0.604	0.5822	0.5760	0.5807	0.550	0.05	9.09
HBL	0.4282	0.4826	0.4462	0.5083	0.5125	0.5360	0.486	0.038	7.84
EBL	0.6095	0.6123	0.6464	0.6202	0.6445	0.6774	0.635	0.024	3.78

Source: Appendix II

Above table shows the ratio of NABIL has in increasing trend. The ratio of HBL has increasing trend throughout the year. The ratio of EBL has also in increasing trend throughout the year.

Based on mean ratio of loan and advances to total assets, it can be said that EBL has highest mean ratio i.e. 0.635, it shows EBL has satisfactory mobilize its assets as loan and advances than other.

The coefficient of variation of NABIL and HBL are 9.09 and 7.84 respectively, which shows less consistency in comparison to EBL.

4.2.2.2 Total Assets to Total Liabilities Ratio

Total assets to total liabilities ratio measures the volume of total liabilities in total assets of the bank. This ratio measures the bank's ability to multiply its liabilities into assets. It is always recommended to have higher ratio since it signifies overall increases of credit. The higher ratio indicates the higher productivity.

Table No. 4.7
Total Assets to Total Liabilities Ratio

Year Bank	2002/0 3	2003/0 4	2004/0 5	2005/0 6	2006/0 7	2007/0 8	Mean	S.D.	C.V.
NABIL	1.0861	1.0970	1.1690	1.1115	1.0805	1.0809	1.104 2	0.030 7	2.78

HBL	1.0476	1.0564	1.0499	1.0675	1.0659	1.0804	1.0613	0.0122	1.154
EBL	1.0623	1.0595	1.1233	1.0687	1.0582	1.0785	1.0751	0.023	2.112

Source: Appendix II

Above table shows the trend of total assets to total liabilities ratio. NABIL has its ratio in fluctuating trend the highest ratio of NABIL in year 2004/05 is 1.1690. The ratio of HBL has in increasing trend and the ratio of EBL has increased in year 204/05, started to decline thereafter for two years, and increased in year 2007/08.

In case of mean ratio, NABIL has highest mean ratio of 1.1042, EBL and HBL has maintained nearly equal ratio. HBL has lowest mean ratio of 1.0613 in comparison to others.

The coefficient of variation of NABIL has higher than other banks i.e.2.78, which shows less consistency. HBL has lowest C.V. of 1.154, which shows more consistency than NABIL and EBL.

4.2.2.3 Total Investment to Total Deposit Ratio

Investment is one of the major forms of credit created by the bank to earn income. It is the use of money for future profit. A firm can earn more profit by investing its fund on government securities, shares and debentures or bonds of other companies. Thus, investment is the utilization of firm's deposit on different securities.

Table 4.8
Total Investment to Total Deposit Ratio

Year Bank	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
NABIL	0.4484	0.4033	0.2984	0.3192	0.3832	0.3199	0.361	0.06	16.62
HBL	0.4844	0.4221	0.4711	0.4143	0.3935	0.3992	0.4308	0.03	6.96
EBL	0.2470	0.3144	0.2099	0.3046	0.2741	0.2053	0.2592	0.04	16.40

Source: Appendix II

The above table shows the ratio of NABIL, HBL and EBL has fluctuating trend.

The mean ratio of investment to total deposit of HBL shows the capacity to mobilize on total investment, mean ratio of HBL is 0.4308. The mean ratio of NABIL and EBL are 0.361 and 0.2592 respectively.

Similarly, the coefficient of variation of NABIL is highest i.e. 16.62, which shows less consistency. HBL has lowest C.V. of 6.69, which shows more consistency than others do.

From above analysis, we can say that HBL is more successful in utilizing its resources on investment than that of others.

4.2.2.4 Loan and Advances to Total Deposit Ratio

This ratio is used to calculate to find out how successfully the banks utilizing their total deposits on loan and advances for profit generating purpose. Higher the ratio, the better is the utilization of total deposits. This ratio is computed by dividing the amount of loans and advances by total deposit.

Table 4.9
Loan and Advances to Total Deposit Ratio

Year Bank	2002/0 3	2003/0 4	2004/0 5	2005/0 6	2006/0 7	2007/0 8	Mean	S.D.	C.V.
NABIL	0.5767	0.5800	0.7594	0.6863	0.6813	0.6821	0.6610	0.0642	9.71
HBL	0.4761	0.5430	0.5007	0.6007	0.5922	0.6318	0.5574	0.559	10.02
EBL	0.7331	0.7296	0.7837	0.7357	0.7744	0.7856	0.7570	0.24	3.17

Source: Appendix II

The above table shows that the loan and advances to total deposit ratio of HBL and EBL has fluctuating trend and the ratio of NABIL has increasing trend.

Based on mean ratio of loan and advances to total deposit ratio, it can be said that EBL has highest mean ratio of 0.7570, it represents the greater efficiency to utilize the funds provided by outsiders. The mean ratios of NABIL and HBL are 0.6610 and 0.5574 respectively.

Similarly, the coefficient of variation between the ratios of EBL is lower (3.17) than others, it shows the ratio is more consistent than others are. The ratios of NABIL and HBL are less consistent as they have higher C.V.

From above analysis, it can be concluded that NABIL and HBL has lower position to mobilize their total deposit as loan and advances in comparison to EBL.

4.2.2.5 Investment to Total Loan and Advances and Investment Ratio

This ratio measures the contribution made by investment in total amount of loan and advances and investment. The higher ratio indicates the mobilization of funds in safe area and vice versa.

Table 4.10
Investment to Total Loan and Advances and Investment Ratio

Year Bank	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
NABIL	0.4716	0.4167	0.2820	0.3174	0.3599	0.3138	0.360	0.07	18.11
HBL	0.5043	0.4373	0.4848	0.4082	0.3992	0.3872	0.4368	0.044	10.11
EBL	0.2520	0.301	0.2112	0.2926	0.2614	0.2072	0.2542	0.036	14.19

Source: Appendix II

The above table shows NABIL and HBL has decreasing trend of ratios during study period. EBL has fluctuating trend of ratios.

The mean ratio of HBL is 0.4368; it shows the bank has strong position to mobilize its fund in safe areas than others. EBL has lower mean ratio i.e. 0.2542.

Similarly, the coefficient of variation of NABIL is higher (18.11) than others, it shows lower consistency. The C.V. of HBL is low than others, which means the ratio of HBL is more consistent.

4.2.3 Activity Ratio

Activity ratio measures the performance efficiency of an organization from various angles of its operation. These ratios indicate the efficiency of activity of an enterprise to utilize available funds. These ratios are used to determine the efficiency, quality and contribution of loan and advances in the total profitability.

4.2.3.1 Loan Loss Provision to Total Loan and Advances Ratio

The ratio of loan loss provision to total loans and advances describes the quality of assets that a bank is holding. Nepal Rastra Bank has given directives to commercial

banks to classify its loans and advances into the category of pass, sub-standard, doubtful and loss on the basis of maturity of principal, to make provision of 1,25, 50, and 100 respectively. The provision for loan loss reflects the increasing probability of non-performing loan in the volume of total loan and advances. The ratio is calculated by dividing loan loss provision by total loans and advances.

Table 4.11
Loan Loss Provision to Total Loans and Advances Ratio

Year Bank	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
NABIL	0.0440	0.0407	0.0039	0.02667	0.0224	0.0186	0.026	0.013	51.76
HBL	0.0771	0.0749	0.0763	0.0639	0.0448	0.0337	0.062	0.017	27.09
EBL	0.0279	0.0347	0.0356	0.012	0.0091	0.0064	0.021	0.012	57.59

Source: Appendix II

The above table shows the ratio of NABIL, HBL and EBL has fluctuating trend.

From the mean point of view, it can say that HBL has highest mean ratio i.e. 0.062 in comparison. The mean ratios of NABIL and EBL are 0.026 and 0.021 respectively.

The coefficient of variation of EBL is higher (57.59), which is higher in comparison to other and the ratio shows less consistency. The ratio of HBL shows more consistency because of lower C.V.

From above analysis, we can say that highest C.V. of EBL indicates more risky assets in total volume of loan and advances.

4.2.3.2 Non- performing Loan to Total Loan and Advances Ratio

It measures the proportion of non-performing loans on the total volume of loans and advances. Thus, it reflects the quantity of quality assets that the banks possess. Higher ratio reflects the bad performance of the bank in mobilizing loans and advances and bad recovery rate and vice-versa.

Table 4.12
Non-performing Loan to Total Loan and Advances Ratio

Year	2002/0	2003/0	2004/0	2005/0	2006/0	2007/0	Mean	S.D.	C.V.
------	--------	--------	--------	--------	--------	--------	------	------	------

Bank	3	4	5	6	7	8			
NABIL	0.0554	0.0335	0.0132	0.0125	0.0112	0.0079	0.0223	0.0179	75.69
HBL	0.1007	0.0888	0.0744	0.0614	0.0361	0.0236	0.0632	0.028	43.09
EBL	0.0220	0.0171	0.0163	0.012	0.0091	0.0064	0.0138	0.0045	32.40

Source: Appendix II

Above table shows, that the ratios of NABIL, HBL and EBL has decreasing trend. The highest mean ratio of HBL is 0.0632, it shows increased volume of non-performing loan. The mean ratio of NABIL and EBL are 0.0223 and 0.0138 respectively.

Observing the coefficient of variation of the ratio, we can conclude that the ratio of EBL has been more consistent during the study period. NABIL and HBL shows less consistency because of their higher C.V. and their C.V. are 75.69 and 43.09 respectively.

4.2.3.3 Interest Expenses to Total Deposit Ratio

This ratio measures the percentage of total interest paid against total deposit. A high ratio indicates higher interest expenses on total deposit and vice versa.

Table 4.13
Interest Expenses to Total Deposit Ratio

Year	2002/0	2003/0	2004/0	2005/0	2006/0	2007/0	Mean	S.D.	C.V.
Bank	3	4	5	6	7	8			
NABIL	0.0235	0.0200	0.0166	0.0185	0.0238	0.0238	0.0210	0.0071	33.84
HBL	0.0263	0.0223	0.0226	0.0242	0.0255	0.0258	0.0244	0.0032	13.07
EBL	0.0457	0.0389	0.0296	0.0291	0.0284	0.0264	0.0330	0.0062	18.69

Source: Appendix II

Above table shows, that the ratios of EBL has decreasing trend. NABIL and HBL has fluctuating trend.

EBL has highest mean ratio i.e. 0.033, it shows that the bank has high interest expenses and is not successful to collect cheaper deposit in comparison. NABIL and HBL have nearly equal mean ratio (i.e. 0.210 and 0.0244 respectively) and it shows satisfactory level than EBL i.e. they are successful to collect cheaper deposit than EBL.

NABIL has higher C.V.(i.e.33.84), it shows the loess consistency. The ratio of HBL shows more consistent because of its lowest C.V.(i.e.13.07).

4.2.3.4 Interest Expenses to Total expenses Ratio

This ratio measures the percentage of interest paid against total expenses. The high ratio indicates the low operational expenses and vice versa. The ratio indicates the costly sources of funds.

Table 4.14
Interest Expenses to Total Expenses Ratio

Year Bank	2002/0 3	2003/0 4	2004/0 5	2005/0 6	2006/0 7	2007/0 8	Mean	S.D.	C.V.
NABIL	0.3907	0.3677	0.3234	0.4832	0.5647	0.6139	0.457 3	0.106	23.1 2
HBL	0.5063	0.4472	0.4538	0.5326	0.5556	0.5633	0.509 8	0.046	9.00
EBL	0.6134	0.5478	0.4988	0.6539	0.6623	0.6163	0.598 8	0.058 3	9.74

Source: Appendix II

Above table shows, that the ratios of HBL has increasing trend and the ratios of NABIL and EBL have fluctuating trend.

The mean ratios of NABIL, HBL and EBL are 0.4573, 0.5098 and 0.5988 respectively. The mean ratio of NABIL is lower. It is successful to decrease cost of deposit because of its lower mean ratio.

The ratio of NABIL shows less consistency because of its higher C.V.(23.12). the ratio of HBL and EBL show more consistency than NABIL. C.V. of these banks are 9.00 and 9.74 respectively.

4.2.3.5 Interest Expenses to Total Working Fund Ratio

This ratio measures the percentage of total interest paid against the total working fund. A high ratio indicates the higher interest expenses and vice versa.

Table 4.15
Interest Expenses to Total Working Fund Ratio

Year Bank	2002/0 3	2003/0 4	2004/0 5	2005/0 6	2006/0 7	2007/0 8	Mean	S.D.	C.V.
NABIL	0.0191	0.0168	0.0132	0.0157	0.0201	0.0202	0.0175	0.0045	25.56
HBL	0.0237	0.0198	0.020	0.0205	0.0221	0.0219	0.0213	0.0026	12.42
EBL	0.0380	0.0327	0.0244	0.0245	0.0237	0.0228	0.0277	0.0053	19.24

Source: Appendix II

Above table shows, that the ratios of EBL has decreasing trend. The ratios of NABIL and HBL have fluctuating trend.

EBL has highest mean ratio and mean ratio of EBL is 0.0277. Similarly, the mean ratios of NABIL and HBL are 0.0175 and 0.0213 respectively.

During the study period NABIL ratio shows less consistency than others because of its higher C.V.(i.e. 25.56). The C.V. of HBL and EBL are 12.42 and 19.24 respectively.

From the analysis, we can say that NABIL and HBL shows better performance, as they are successes to decrease interest expenses. The mean ratio of EBL indicates the higher interest expenses on total working.

4.2.3.6 Deposit Mobilization per Branch

Deposit mobilization per branch shows the average mobilization of deposit. Higher deposit mobilization per branch shows the higher collection of deposit per branch.

Table 4.16
Deposit Mobilization per Branch

(Rs. In Million)

Year Bank	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	Mean
NABIL	840.43	830.43	858.04	841.19	897.78	1139.82	901.30
HBL	1750.61	1693.10	1908.77	1769.05	1767.55	1681.05	1761.68
EBL	478.21	575.99	673.18	575.10	727.45	826.77	642.78

Source: Appendix II

The above table shows HBL has highest deposit mobilization per branch (i.e. 1761.68), it indicates the higher collection of deposit per branch and EBL has lowest deposit mobilization per branch ratio i.e. 642.78. The mean value of NABIL is 901.30

4.2.3.7 Credit Mobilization per Branch

Credit mobilization per shows the average mobilization of credit. Higher credit mobilization per branch shows the higher lending per branch.

Table 4.17
Credit Mobilization per Branch

(Rs. In Million)

Year Bank	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	Mean
NABIL	484.74	481.76	651.64	603.58	636.12	777.49	605.89
HBL	833.48	919.37	955.73	996.23	1046.69	1062.08	968.93
EBL	350.6	420.29	572.60	423.12	563.30	649.53	496.57

Above table shows, that HBL has highest credit mobilization per branch as it has highest mean amount and the mean is 968.93. EBL has lowest credit mobilization per branch (i.e. 496.57) and the mean value of NABIL is 605.89.

4.2.4 Profitability Ratio

The main objectives of the commercial banks are to earn more profit. It measures the overall efficiency of a firm in term of profit and financial performance. It shows the effect of liquidity, assets management and debt management on operating results. It is used to indicate public acceptance of the service of bank and run competitively. Higher the profitability ratio better is the performance of the bank. In this study, the various types of profitability ratios are used to compute the profit of banks to their investment.

4.2.4.1 Interest Income to Total Income Ratio

This ratio measures the volume of interest income in total income. The high ratio indicates that the bank's performance on other fee-based activities and high contribution made by lending and investing activities.

Table 4.18
Interest Income to Total Income Ratio

Year Bank	2002/0 3	2003/0 4	2004/0 5	2005/0 6	2006/0 7	2007/0 8	Mean	S.D.	C.V.
NABIL	0.7593	0.751	0.7568	0.7611	0.7799	0.8148	0.7705	0.0227	2.95
HBL	0.834	0.8216	0.8220	0.7938	0.8217	0.8103	0.8172	0.0157	1.84
EBL	0.8203	0.8392	0.8512	0.8472	0.8424	0.8380	0.8400	0.0141	1.69

Source: Appendix II

Above analysis shows, that NABIL has increasing trend of ratios. HBL and EBL have fluctuating trend of ratios.

EBL has highest mean ratio of 0.8400 and NABIL has lowest mean ratio of 0.7705. The mean ratio of HBL has 0.8172. The mean ratio of NABIL shows lower contribution in total income than other.

4.2.4.2 Interest Income to Interest Expenses Ratio

This ratio measures the gap between interest rate offered and interest rate charged. The credit creation power of commercial bank has high impact on this ratio.

Table 4.19
Interest Income to Interest Expenses Ratio

Year Bank	2002/0 3	2003/0 4	2004/0 5	2005/0 6	2006/0 7	2007/0 8	Mean	S.D.	C.V.
NABIL	3.2074	3.5400	4.2428	3.6298	2.8572	2.6090	3.3480	0.5359	16.01
HBL	2.1677	2.5434	2.5739	2.4539	2.3137	2.4015	2.4075	0.1367	13.67
EBL	1.6976	2.0900	2.4060	2.2502	2.2128	2.4468	2.1839	0.2479	11.36

Source: Appendix II

Above table shows, that NABIL has highest mean ratio of 3.3480. the mean ratio of EBL is lowest i.e. 2.1839 in comparison. The mean ratio of HBL is 2.4075. the ratio of NABIL shows the better position.

Similarly, the ratio of NABIL shows less consistency because of its C.V. of 16.01. EBL seems more consistent because of its C.V. of 11.36. HBL has C.V. of 13.67. From the above analysis, it can be said that NABIL has charging high interest rate to borrowers and offering low interest rate to the depositors in comparison to other banks.

4.2.4.3 Operating Profit to Loan and Advances Ratio

Operating profit to loan and advances ratio measures the earning capacity of commercial banks. Higher ratio indicates higher earning capacity from loan and advances and vice-versa.

Table 4.20
Operating Profit to Loan and Advances Ratio

Year Bank	2002/0 3	2003/0 4	2004/0 5	2005/0 6	2006/0 7	2007/0 8	Mean	S.D.	C.V.
NABIL	0.0681	0.0689	0.0727	0.0675	0.0652	0.0518	0.0657	0.0078	11.8
HBL	0.0334	0.0349	0.0418	0.0473	0.0387	0.0459	0.0403	0.0049	12.1
EBL	0.0274	0.0355	0.0311	0.0375	0.0347	0.0384	0.0341	0.0038	11.12

Source: Appendix II

Above table shows, that the ratios of NABIL, HBL and EBL have fluctuating trend. From mean point of view, the mean ratio of NABIL shows better earning capacity and mean ratio of NABIL is 0.0657. EBL has lowest mean ratio of 0.0341 and it indicates that EBL has lower earning capacity than other banks. The mean ratio of HBL is 0.0403.

We can say that HBL ratio during the study period has been seen less consistent because of its higher C.V. i.e. 12.1 and the ratio of EBL has seen more consistent because of its lower C.V. i.e.11.12.

From above analysis, it can be said that NABIL and HBL have better earning capacity from loan and advances and the mean of EBL shows the lower earning capacity from loan and advances.

4.2.4.4 Return on Loan and Advances Ratio

This ratio measures the earning capacity of commercial banks through its fund mobilization as loan and advances. Higher ratio indicates greater success to mobilize fund as loan and advances and vice versa.

Table 4.21
Return on Loan and Advances Ratio

Year Bank	2002/0 3	2003/0 4	2004/0 5	2005/0 6	2006/0 7	2007/0 8	Mean	S.D.	C.V.
NABIL	0.0536	0.0555	0.0467	0.0474	0.024	0.0345	0.047	0.005 3	11.2 9
HBL	0.0212	0.022	0.0169	0.0136	0.0276	0.0324	0.022 3	0.006 3	28.3 3
EBL	0.0191	0.0243	0.0348	0.0229	0.0210	0.0240	0.024 0	0.006 6	27.6 4

Source: Appendix II

The above table shows all the ratios of all the banks have fluctuating trend.

NABIL has highest mean ratio of 0.047. We can say that NBL has better earning capacity. HBL has lowest mean ratio of 0.0223 and the lowest mean ratio indicates lower success to mobilize funds as loan and advances. The mean ratio of EBL is 0.024.

The ratios of HBL and EBL have been seen less consistent because they have higher C.V. then other i.e. 28.33 and 27.64 respectively.

From above analysis, we can say that NABIL has higher earning capacity through fund mobilization as loan and advances. Lower mean ratio of HBL and EBL indicates lower success to mobilize fund as loan and advances.

4.2.4.5 Return on Total Working Fund Ratio

This ratio is very much crucial for measuring the profitability of funds invested in bank's assets. It measures the returns in assets. Net profit refers profit after interest and taxes. Total asset means those assets, which appear on the assets side of balance sheet.

Table 4.22
Return on Total Working Fund Ratio

Year Bank	2002/0 3	2003/0 4	2004/0 5	2005/0 6	2006/0 7	2007/0 8	Mean	S.D.	C.V.
--------------	-------------	-------------	-------------	-------------	-------------	-------------	------	------	------

NABIL	0.0251	0.0271	0.0282	0.0276	0.0244	0.0200	0.0254	0.0030	14.08
HBL	0.0090	0.0106	0.0270	0.0069	0.0142	0.0174	0.0142	0.0071	49.80
EBL	0.0116	0.0149	0.0225	0.0140	0.0136	0.0162	0.0155	0.0042	27.68

Source: Appendix II

Above table shows, that the ratios of NABIL, HBL and EBL have fluctuating trend. NABIL has highest mean ratio of 0.0254, it indicates better position and we can say that NABIL has better earning capacity. HBL has lowest mean ratio of 0.0142 and the lowest mean ratio indicates lower success to mobilize funds as total assets.

NABIL has lowest CV of 14.08, which shows more consistency of ratios than that of others.

From above analysis, it can be said that total working fund of NABIL is well managed and effectively utilized to occur higher return and the return from mobilization of total working fund of HBL is lower than other banks.

4.2.4.6 Total Interest Earned to Total Working fund Ratio

This ratio shows the bank's success in mobilizing their assets to generate high income. A high ratio is an indicator of high earning power of the bank on its total working fund and vice versa.

Table 4.23
Total Interest Earned to Working Fund Ratio

Year Bank	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
NABIL	0.0614	0.0598	0.0563	0.057	0.058	0.0530	0.058	0.0048	8.26
HBL	0.0514	0.0503	0.0519	0.0502	0.057	0.0530	0.0523	0.0064	12.19
EBL	0.0645	0.0684	0.0588	0.0550	0.0523	0.056	0.0590	0.0057	9.60

Source: Appendix II

The above table shows the ratio of NABIL, HBL and EBL have maintained fluctuating trend during study period. The highest mean ratio of EBL (0.059) shows that EBL is trying to mobilize its fund to earn high profit. The mean ratios of NABIL and HBL are 0.058 and 0.0523 respectively.

NABIL has lowest CV of 8.26, which shows more consistency than that of others. The ratio of HBL has been seen less consistent because of its higher CV.

4.2.4.7 Return on Equity Ratio

Return on shareholder's equity is another effective measure of the profitability of a bank. Return means the fund after subtraction of all expenses including tax, which is actually belongs to the owners. Return on shareholders equity reveals how the company will use the resources of owners.

Table 4.24
Return on Equity Ratio

Year Bank	2002/0 3	2003/0 4	2004/0 5	2005/0 6	2006/0 7	2007/0 8	Mean	S.D.	C.V.
NABIL	0.3167	0.3073	0.3700	0.2750	0.3280	0.2670	0.311 0	0.031 4	10.1 1
HBL	0.1995	0.1986	0.1999	0.1090	0.2290	0.2330	0.195 0	0.040 4	20.7 4
EBL	0.1991	0.2657	0.5440	0.2780	0.2470	0.2220	0.293 0	0.115 6	39.4 5

Source: Appendix II

Above table shows NABIL, HBL and EBL have fluctuating trend of ratios. NABIL has highest mean ratio of 0.3110, it shows that NABIL has more efficiently utilized its equity capital than that of others. HBL has lowest mean ratio of 0.1950, it indicates lower capacity of utilizing the owner's fund. The mean ratio of EBL is 0.2930; it shows average performance in comparison.

The coefficient of variation between the ratios of EBL is 39.45, it is higher than others are and it shows the variability of the ratios EBL is less uniformed. The CV of NABIL is lower than others are which shows more consistency of ratios. NABIL has CV of 10.11%.

4.2.5 Growth Ratio

Growth ratio represents how well the banks are maintaining their economic and financial condition. It is related to the fund mobilization and investment management of the bank. The higher ratio represents the superior performance. Thus, in order to

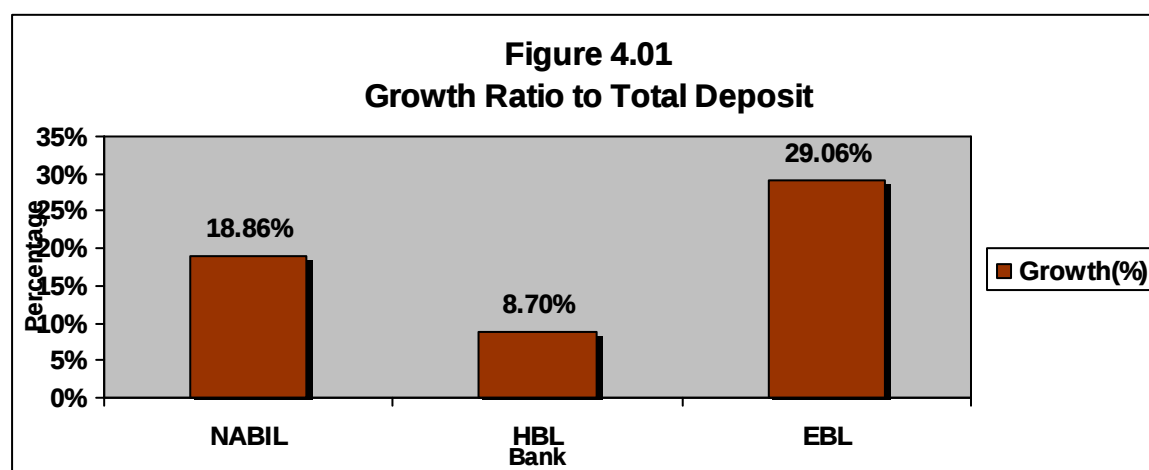
examine and analyze the expansion and growth of the banking business, following growth ratios are calculated.

Table 4.25
Growth Ratio of Total Deposit

(Rs. In Million)

Year Bank	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	Growth
NABIL	13447.7	14119	14586.8	19347.4	23342.3	31915.1	18.86 %
HBL	21007.37	22010.3	24814.01	26535.72	30048.4	31939.8	8.7%
EBL	6694.95	8063.9	10097.8	13802.4	18186.3	23976.3	29.06%

Source: Appendix II



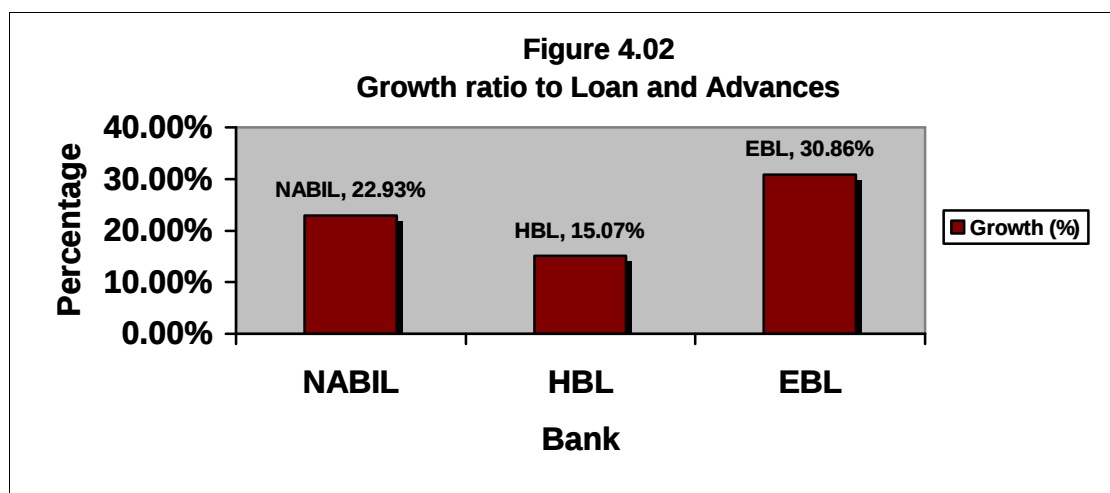
Above table shows, that EBL has highest growth rate of 29.06%, which shows highest growth rate of total deposit. HBL has lowest growth rate of 8.7%. The growth rate of NABIL is 18.86%.

Table 4.26
Growth Ratio of Loan and Advances

(Rs. In Million)

Year Bank	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	Growth
NABIL	7755.95	8189.99	11078	13278.78	15903	21769.8	22.93%
HBL	10001.85	11951.87	13451.16	15939.60	17793.70	20179.6	15.07%
EBL	4908.46	5884.12	7900.00	10154.9	14082.7	18836.4	30.86%

Source: Appendix II

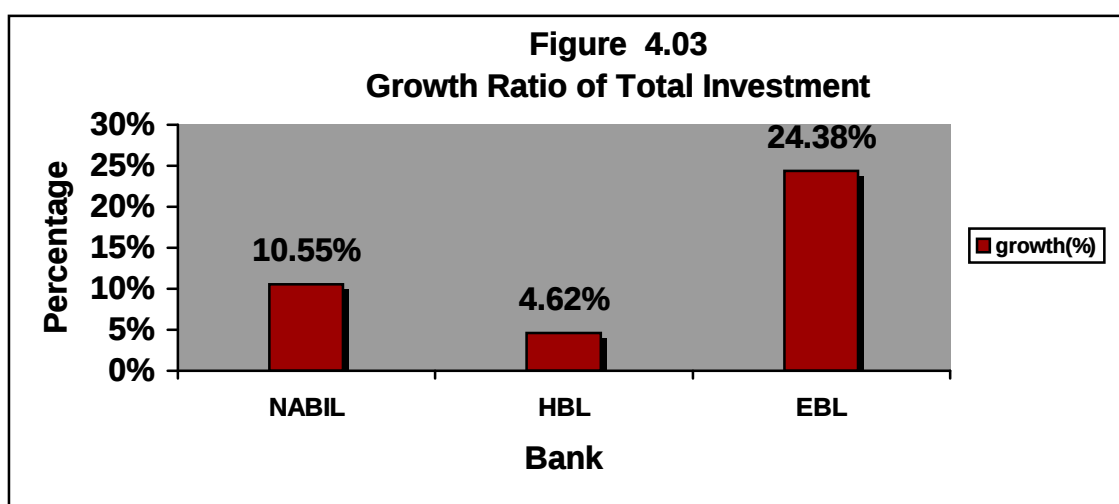


The growth ratio of EBL is higher than NABIL and HBL, it has growth ratio of 30.86% and it shows higher utilization of loan and advances.

Table 4.27
Growth Ratio of Total Investment

(Rs. In Million)

Year Bank	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	Growth
NABIL	6031.17	5836.07	4267.3	6174.80	8945.30	9957.04	10.55%
HBL	10175.4	9292.11	11692.34	10995.05	11822.9	12751.97	4.62%
EBL	1653.97	2535.65	2128.90	4201.30	4984.30	4922.80	24.38%

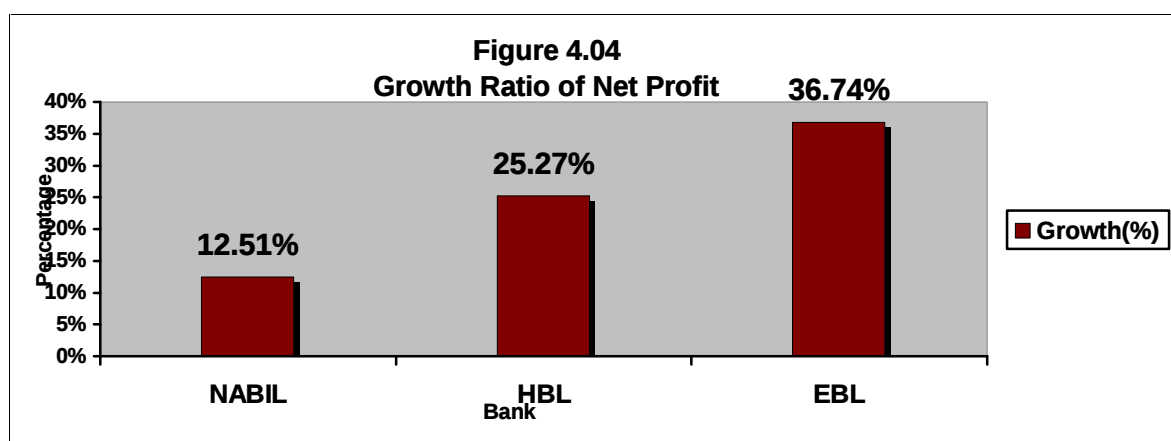


Above table shows, that EBL has highest growth rate of 24.38%, which shows highest growth rate of total investment. HBL has lowest growth rate of 4.62%. The growth rate of NABIL is 10.55%.

Table 4.28
Growth Ratio of Net Profit

Year Bank	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	Growth (%)
NABIL	416.25	455.32	518.64	629.89	673.96	750.36	12.51%
HBL	212.12	143.05	214.27	216.24	491.82	654.39	25.27%
EBL	94.17	143.57	170.81	232.93	296.41	450.13	36.74%

Source: Appendix II



Above table shows, that the EBL has highest growth rate of 36.74%, which shows highest growth rate of net profit. NABIL has lowest growth rate of 12.21%. The growth rate of HBL is 25.27%.

4.3 Statistical Tools

Under this section correlation analysis, trend analysis and hypothesis test have been used for the different variables.

4.3.1 Coefficient of Correlation Analysis

Coefficient of correlation is the mathematical method of measuring the degree of association between the two variables i.e. one dependent and another is independent. This analysis identifies the relationship between two or more variables. The effect of none variable may have on other correlated variable in the case of highly correlated variables. It is commonly used to measure the linear association of two variables. The result of coefficient of correlation is always between +1 to -1. When $r = +1$, it means there is perfect relationship between two variables and vice versa. When $r = 0$, it means there is no relationship between two set of figures.

4.3.1.1 Coefficient of Correlation between Total Deposit and Loan and Advances

Total deposit is independent variable and loan and advances is dependent variable. The coefficient of correlation between them measures the degree of relationship between these two variables. The main objective of computing r between these two variables is to justify whether deposits are significantly used as loan and advances in a proper way or not.

Table 4.29

Coefficient of Correlation between Total Deposit and Loan and Advances

Bank	Correlation	Coefficient of Determination	P.E. ratio	6*P.E. ratio
NABIL	0.8961	0.8031	0.0542	0.325
HBL	0.9800	0.9780	0.0061	0.036
EBL	0.9900	0.9802	0.0055	0.033

Source: Appendix IV

The above table shows that the coefficient of correlation between total deposit and loan and advances of NABIL, HBL and EBL are 0.8961, 0.9800 and 0.9900 respectively. Since the correlation coefficient of these banks are than $6*PE$, the values of r of these banks are significant and these value also shows the positive relationship between total deposit and loan and advances.

Here, the value of coefficient of determination of NABIL, HBL and EBL are 0.8031, 0.9780 and 0.9802 respectively, which implies that respective percentage of variation in loan and advances due to the variation in the total deposit.

4.3.1.2 Coefficient of Correlation between Investment and Loan and Advances

The coefficient of correlation between total investment and loan and advances measures the degree of relationship between these two variables. The purpose of computing r between these two variables is to find out whether the investment is significant in mobilizing funds and in contributing in total amount of loan and advances or not.

Table 4.30

Coefficient of Correlation between Investment and Loan and Advances

Bank	Correlation	Coefficient of Determination	P.E. ratio	6*P.E. ratio
NABIL	0.7941	0.630	0.102	0.610
HBL	0.8345	0.696	0.084	0.502
EBL	0.8398	0.71	0.081	0.4869

Source: Appendix IV

The above table shows that correlation coefficient between total investment and loan and advances of NABIL, HBL and EBL are 0.7941, 0.8345 and 0.8398 respectively and which are higher than 6*PE. It indicates that the relationship between total investment and loan and advances of these banks are significant. Therefore, it can be said that these three banks are able to contribute its investment in total amount of loan and advances.

Here, the value of coefficient of determination (r^2) of NABIL, HBL and EBL are 0.630, 0.696 and 0.71 respectively, which implies that respective percentage 63.0%, 69.6%, 71% of variation in loan and advances is due to variation in the investment. The degree of relationship between two variables of EBL is highly significant than NABIL and HBL. So the investment of EBL has been seen significant in mobilizing funds.

4.3.1.3 Coefficient of Correlation between Total Income and Loan and Advances

Loan and advances is independent variable and total income is dependent variable. The correlation between total income and loan and advances measures the relationship between these two variables. The relationship between these two variables describes the degree of relationship. The value of r explains whether percentage change in loan and advances contribute to increase the percentage of income.

Table 4.31
Coefficient of Correlation between Total Income and Loan and Advances

Bank	Correlation	Coefficient of Determination	P.E. ratio	6*P.E. ratio
NABIL	0.099	0.0098	0.2727	1.64
HBL	0.99	0.987	0.0036	0.0215
EBL	0.995	0.990	0.0025	0.015

Source: Appendix IV

The above table shows that the correlation coefficient between total income and loan and advances of NABIL, HBL and EBL are 0.099, 0.99 and 0.995 respectively. As comparing these r -values with 6*PE r , it can be said that there is significant relationship between total income and loan and advances of HBL and EBL. The correlation coefficient of NABIL is less than its 6 PE r , so it can be said that there is no significant relationship between two variables. The coefficient of determination (r^2) of NABIL, HBL and EBL are 0.0098, 0.987 and 0.990 respectively, which implies

that respective percentage of variation in loan and advances is due to variation in the total income.

4.3.1.4 Coefficient of Correlation between Investment and Net Profit

The correlation between investment and net profit measures the relationship between these two variables.

Table 4.32

Coefficient of Correlation between Investment and Net Profit

Bank	Correlation	Coefficient of Determination	P.E. ratio	6*P.E. ratio
NABIL	0.73	0.53	0.1285	0.771
HBL	0.708	0.50	0.1372	0.823
EBL	0.8178	0.6689	0.0912	0.547

Source: Appendix IV

The above table shows that the correlation coefficient between investment and net profit of NABIL, HBL and EBL are 0.73, 0.708 and 0.8178, which shows the significant relationship between these two variables. Since the value of 6*P.E. r of NABIL and HBL are greater than the value of r, it shows there is no significant relationship between investment and net profit.

The coefficient of determination of NABIL, HBL and EBL are 0.53, 0.50 and 0.6689 respectively, which implies that respective percentage i.e. 53%, 50%, 66.89%, of variation in net profit due to variation in interest income of these banks.

4.3.2 Trend Analysis

Trend analysis is a statistical tool, which highlights the previous trend of the financial performance, and it helps in forecasting the future financial results of commercial banks. Trend analysis informs to various persons who are directly or indirectly related to JVCBs. It gives the information about the expected future return, which helps in present investment or search for alternative opportunities. The trend assures about the financial capability of the banks to furnish their loan and advances in future and helps to continue the present trend.

4.3.2.1 Trend Analysis of Total Deposit

Under this topic, an effort has been made to calculate the trend values of deposits of three JVCBs for four years from mid July 2008/09 to 2011/12. The following table shows the trend value of deposit for ten years 2002/03 to 2011/12 of three JVCBs.

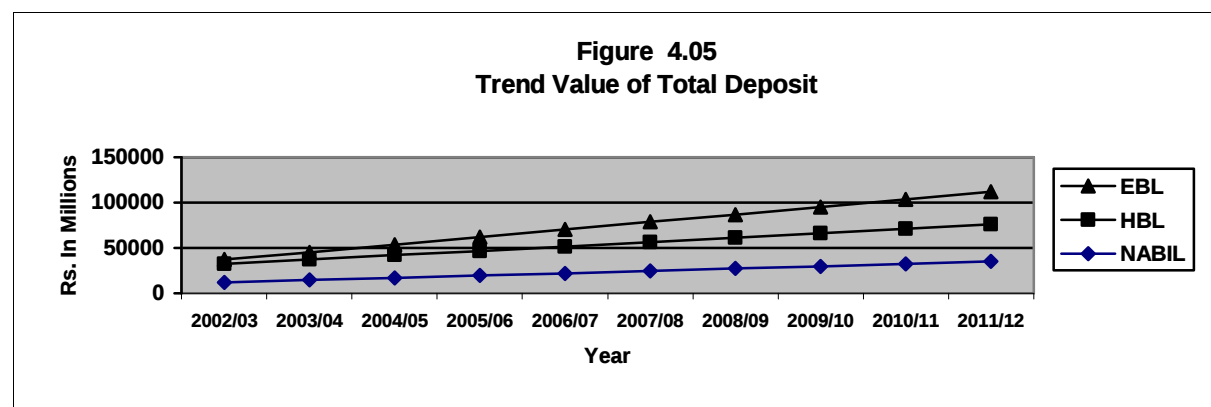
Table 4.33
Trend Value of Total Deposit

(Rs. In Million)

Years	NABIL	HBL	EBL
2002/03	11888.75	20310.38	4864.70
2003/04	14447.79	22609.90	8306.90
2004/05	17006.83	24909.50	11749.16
2005/06	19565.87	27209.10	15191.41
2006/07	22124.91	29508.62	18633.70
2007/08	24683.95	31808.20	22075.91
2008/09	27242.99	34107.74	25518.16
2009/10	29802.03	36407.30	28960.40
2010/11	32361.07	38706.86	32402.70
2011/12	34920.11	41006.42	35844.91

Source: Appendix V

The above table shows that all the banks have increasing trend of deposit. The total deposits of NABIL, HBL and EBL in year 2011/12 are predicted to be Rs. 34920.11, 41006.42 and 35844.91 respectively, which are the highest amount of deposit of respective banks under the study period. The above calculated trend values of total deposit of three banks are fitted in the lines given as follows;



4.3.2.2 Trend Analysis of Loan and Advances

Lending is one of the major functions of commercial bank; its trend is determined by various factors. Under this topic, an effort has been made to represent the loan and advances of three banks and average of these banks for five years and forecast for next four years.

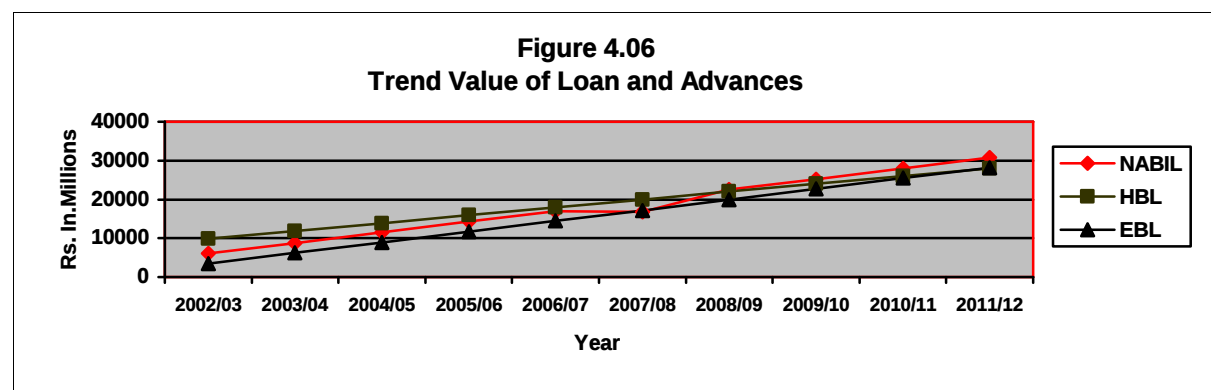
Table 4.34
Trend Value of Loan and Advances

(Rs. In Million)

Years	NABIL	HBL	EBL
2002/03	6063.82	9821.80	3402.20
2003/04	8803.82	11847.63	6159.10
2004/05	11534.82	13873.40	8916.00
2005/06	14283.80	15899.21	11672.90
2006/07	17023.82	17924.99	14429.80
2007/08	19763.82	19950.80	17186.70
2008/09	22503.82	21976.58	19943.60
2009/10	25243.82	24002.40	22700.50
2010/11	27983.82	26028.20	25457.40
2011/12	30723.82	28053.90	28214.30

Source: Appendix V

The above table shows that, all three banks have increasing trend of loan and advances. Other things remain constant, the trend values of loan and advances of NABIL, HBL and EBL in 2011/12 are predicted be 30723.82, 28053.90 and 28214.30 respectively. The trend value of NABIL in 2011/12 will be highest as compare of other banks and it indicates that the loan and advances position of NABIL is increasing higher than that of others. Therefore, it is found that NABIL has good lending position of its deposit as loan and advances. The above calculated value of loan and advances of three banks are fitted in the trend line are given as follows;



4.3.2.2 Trend Analysis of Net Profit

Net profit measures the success of a firm in every aspect of its operation and strategy, its trend is determined by various factors. Under this topic, other things remain same, trend values of net profit of three banks for ten years are tried to calculate. The following table shows the trend of net profit of three banks.

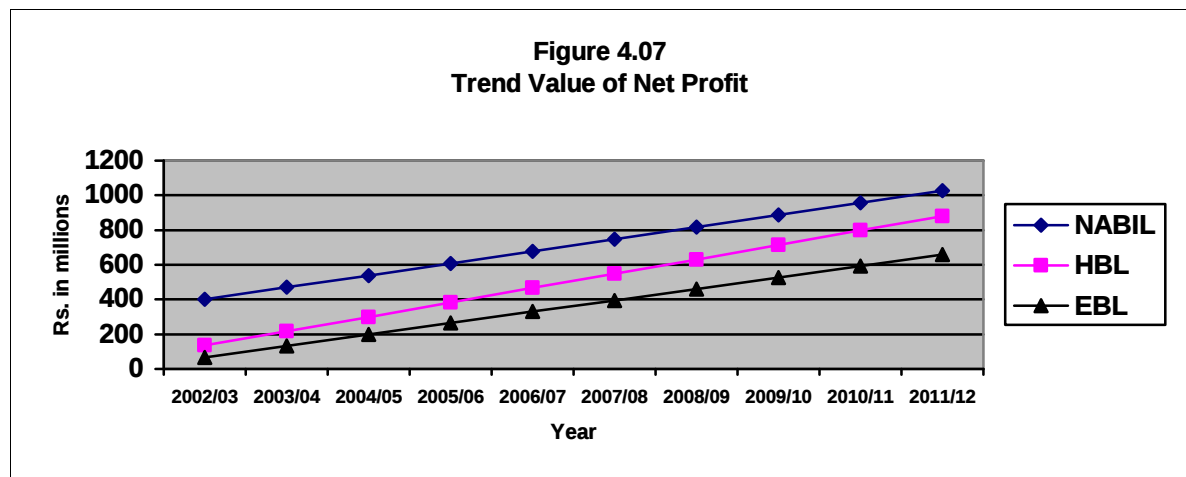
Table 4.35
Trend Value of Net Profit

(Rs. In Million)

Years	NABIL	HBL	EBL
2002/03	399.82	134.86	66.83
2003/04	469.50	217.71	132.60
2004/05	539.22	300.56	198.40
2005/06	608.92	383.41	264.23
2006/07	678.62	466.26	330.00
2007/08	748.30	549.11	395.83
2008/09	818.02	631.96	461.63
2009/10	887.72	714.81	527.40
2010/11	957.40	797.70	593.20
2011/12	1027.12	880.50	659.00

Source: Appendix V

The above table shows the trend behavior of net profit in three banks. All three banks have increasing trend values of net profit. Other things remaining the same, the trend values of net profit of NABIL, HBL and EBL in 2011/12 are predicted be Rs. 1027.12, 880.50 and 659.00 millions respectively. It is found that net profit position of NABIL is increasing higher than other banks. It indicates that NABIL will have better position in 2011/12 if other things remaining the same. The above calculated values of net profit of three banks are fitted in the trend line are given as follows;



4.3.3 Hypothesis t- Test

4.3.3.1 Test of Hypothesis in Loan and Advances to Total Assets Ratio

Student's t-test value at 5% level of significance computed for the mean values of loan and advances to total assets ratio of three banks comparing each other are as follows:

Table 4.36
Test of Hypothesis in Loan and Advances to Total Assets Ratio

Banks	t-values	DF	Table value	Result
NABIL & HBL	2.24	10	2.228	Not Significant
NABIL & EBL	3.34	10	2.228	Significant
HBL & EBL	3.95	10	2.228	Significant

Source: Appendix VI

Since t-values are greater than tabulated values $t_{0.05}$, the mean values of loan and advances to total assets ratio of NABIL, HBL and EBL. NABIL & HBL, NABIL & EBL, HBL & EBL are significantly different. Therefore, it is found that null hypothesis is rejected at 5% level of significance.

4.3.3.2 Test of Hypothesis in Loan and Advances to Total Deposit Ratio

Student's t- values at 5% level of significance computed for the mean values of loan and advances to total deposit ratio of three banks comparing each other are as follows:

Table 4.37
Test of Hypothesis in Loan and Advances to Total Deposit Ratio

Banks	t-values	DF	Table value	Result
NABIL & HBL	2.72	10	2.228	Significant
NABIL & EBL	3.12	10	2.228	Significant
HBL & EBL	7.33	10	2.228	Significant

Source: Appendix VI

Since, t-values are greater than tabulated values $t_{0.05}$ the mean values of loan and advances to total deposit ratio of NABIL& HBL, NABIL & EBL and HBL & EBL are significantly different. Therefore, it is found that null hypothesis h_0 is rejected at 5% level of significance.

4.3.3.3 Test of Hypothesis in Interest Income and Interest Expenses

Student's t-values at 5% level of significance computed for the mean value of interest income to interest expenses ratio of three banks comparing each other are as follows:

Table 4.38

Test of Hypothesis in Interest Income and Interest Expenses

Banks	t-values	DF	Table value	Result
NABIL & HBL	3.802	10	2.228	Significant
NABIL & EBL	4.41	10	2.228	Significant
HBL & EBL	3.1721	10	2.228	Significant

Source: Appendix VI

Since t-values are greater than $t_{0.05}$, the mean values of interest income to interest expenses ratio of NABIL & HBL, NABIL & EBL and HBL & EBL are significantly different. Therefore, it is found that null hypothesis is rejected at 5% level of significance.

4.3.4 Hypothesis F- Test

4.3.4.1 Test of Hypothesis in Loan and Advances to Total Assets Ratio

F-test value at 5% level of significance computed for the loan and advances to total assets ratio of five banks, comparing between and within the banks are as follows:

Table 4.39

F-test of Hypothesis in Loan and Advances to Total Assets Ratio

ANOVA Table

Sources of variation	Sum of squares	Degrees of freedom	Mean sum of squares	F ratio
Between banks	0.064	3-1=2	0.032	20.87
Within banks	0.023	18-3=15	0.0015	
	0.087	18-1=17		

Source: Appendix VI

Degrees of freedom $\mu_1=2$ and $\mu_2= 15$

Critical value: $F_{0.05} = 3.68$

Decision: Since the calculated value is greater than tabulated value, H_0 is rejected i.e. loan and advances to total assets ratio of three banks differ significantly.

4.3.4.2 Test of Hypothesis in Loan and Advances to Total Deposit Ratio

F-test value at 5% level of significance computed for the loan and advances to total deposit ratio of three banks, comparing between and within the banks are as follows:

Table 4.40

F-test of Hypothesis in Loan and Advances to Total Deposit Ratio

ANOVA Table

Sources of variation	Sum of squares	Degrees of freedom	Mean sum of squares	F ratio
Between banks	0.117	3-1=2	0.0585	17.91
Within banks	0.049	18-3=15	0.033	
		18-1=17		

Degrees of freedom $\mu_1=2$ and $\mu_2=15$

Critical value: $F_{0.05} = 3.68$

Decision: Since the calculated value is greater than tabulated value, H_0 is rejected i.e. loan and advances to total deposit ratio of three banks differ significantly.

4.3.4.3 Test of Hypothesis in Interest Income to Interest Expenses Ratio

F- Test value at 5% level of significance computed for the interest income to interest expenses ratio of three banks, comparing between and within the banks areas follows:

Table 4.41

F-test of Hypothesis in Interest Income to Interest Expenses Ratio

ANOVA Table

Sources of variation	Sum of squares	Degrees of freedom	Mean sum of squares	F ratio
Between banks	4.41	3-1=2	2.055	11.90
Within banks	2.59	18-3=15	0.173	
	7.00	18-1=17		

Source: Appendix VI

Degrees of freedom $\mu_1=2$ and $\mu_2=15$

Critical value: $F_{0.05} = 3.68$

Decision: Since the calculated value is greater than tabulated value, H_0 is rejected i.e. interest income to interest expenses ratio of three banks differ significantly.

4.4 Analysis of Primary Data

Primary data is collected in order to fulfill the objectives of this study and data is collected through questionnaire method. Objective question were raised for this purpose. Simple 6 questions are raised and the questionnaires are given to the respondents of sample three banks. Similarly, the customers are selected on the judgmental basis during visit of the organization and regarding the questionnaire, their opinions are analyzed. Ten staffs and ten respondents are selected on judgmental basis.

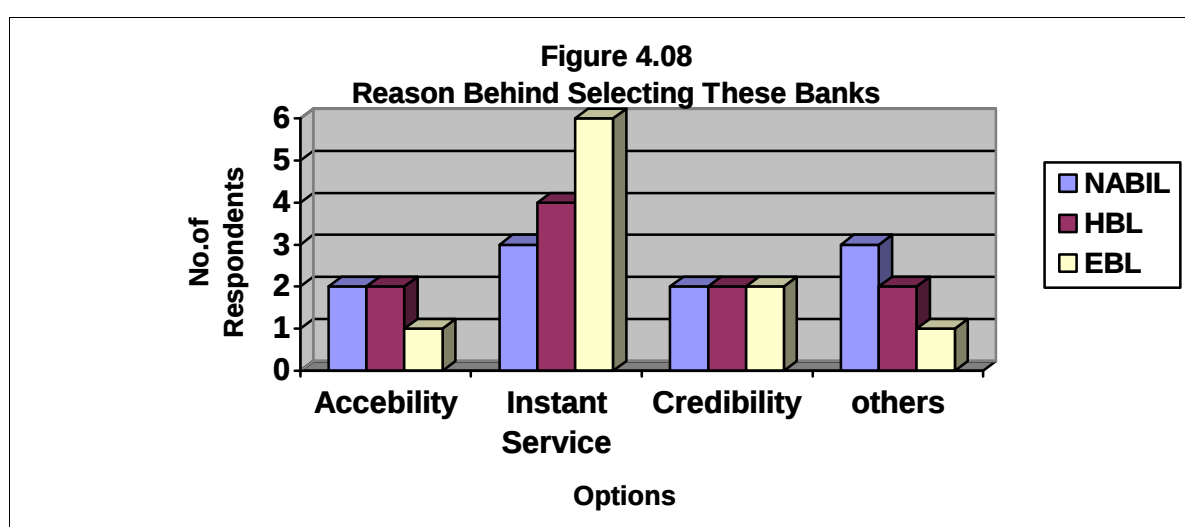
4.4.1 Customers Profile

4.4.1.1 The Reason behind Selecting these Banks

To know the reason behind selecting these banks, the multiple choices are given to 30 respondents. Respondents have given their opinion. In case of NABIL, out of ten respondents, 20% are in favor of accessibility, 30% are in favor of instant service, 20% are in favor of credibility and 30% have selected the bank for other reasons. In the case of HBL, out of 10 respondents 20% are in favor of accessibility, 40% are in favor of instant service, 20% are in favor of credibility and 20% have given other reasons. In case of EBL, out of 10 respondents, 10% are in favor of accessibility, 60% are in favor of instant service, 20% are in favor of credibility and 10% have given other reasons. From the above analysis, it is shown that the highest percentage i.e. 43.33% are selected these banks for instant service in total.

Table 4.42
Reason behind Selecting these Banks

Bank	Options	Accessibility	Instant Service	Credibility	Other	Total
NABIL	No.	2	3	2	3	10
	%	20	30	20	30	100
HBL	No.	2	4	2	2	10
	%	20	40	20	20	100
EBL	No.	1	6	2	1	10
	%	10	60	20	10	100
Total	No.	5	13	6	6	30
	%	16.67	43.33	20	20	100



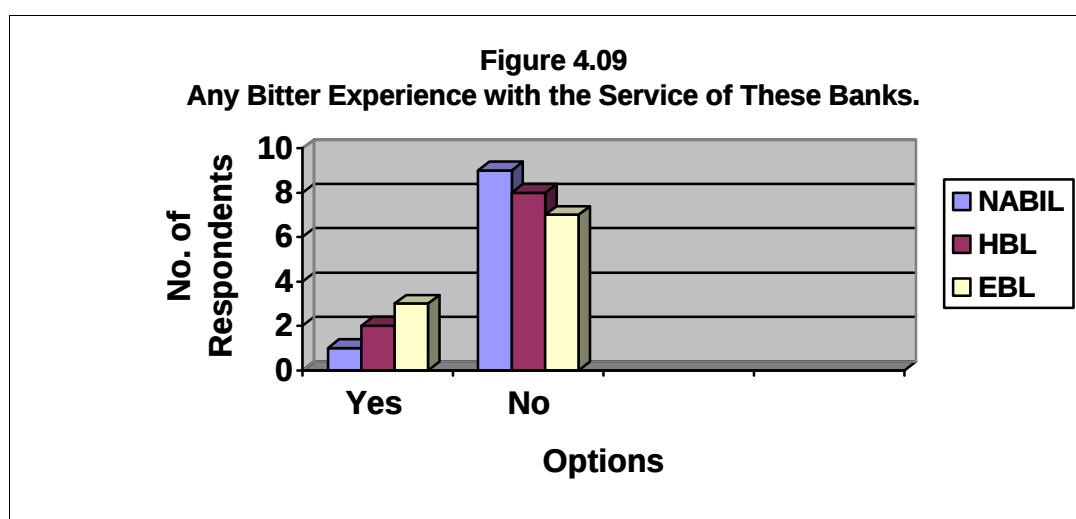
4.4.1.2 Any Bitter Experience with the Service of these banks

To know the opinion, respondents were asked whether they have any bitter experience with the service of these banks. They have a choice between Yes or No. Out of 10 respondents of NABIL, 10% are not satisfied and 90% are satisfied, they have not any bitter experience with the service. Similarly, out of 10 respondents of HBL, 20% have bitter experience with the services and 80% have not. Out of 10 respondents of EBL, 30% have bitter experience with the service and 70% have not. The research shows that most of respondents say that they are satisfied but in comparison to other banks, most of the respondents in EBL have bitter experience with the service and most of the respondents in NABIL have not any bitter experience.

Table 4.43**Any Bitter Experience with the Service of these banks**

Opinion	NABIL		HBL		EBL		Total	
	No.	%	No.	%	No.	%	No.	%
Yes	1	10	2	20	3	30	6	40
No	9	90	8	80	7	70	24	60
Total	10	100	10	100	10	100	30	100

Source: Appendix I

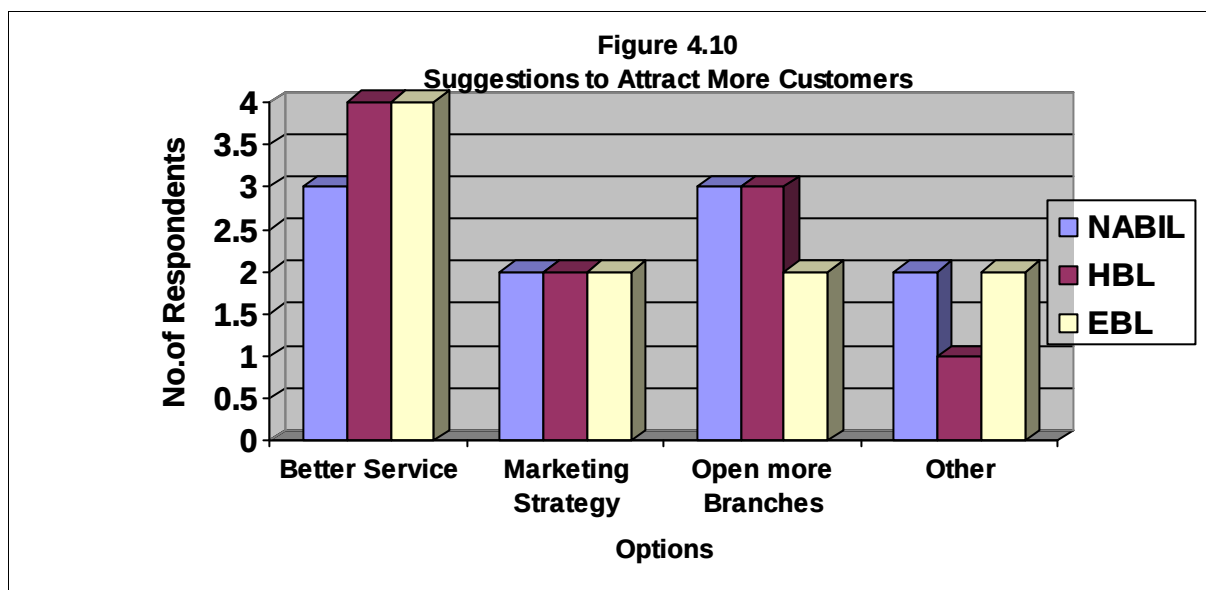
**4.4.1.3 Suggestion to Attract More Customers**

The respondents have given various types of suggestions to attract more customers. In case of NABIL, out of 10 respondents, 30% are in favor of better service, 20% given more priority to formulate marketing strategy, 30% have given suggestion to open more branches and 20% of the respondents have given other reasons. In case of HBL, 40% are in favor of better service, 20% have given more priority to formulate marketing strategy, 30% have given suggestion to open more branches and 10% have given other reason. In case of EBL, out of 10 respondents, 40% are in favor of better service, 20% have given more priority to formulate marketing strategy, 20% have given suggestion to open more branches and 20% have given other reason. The above analysis shows that, in total, most of the respondents are in favor of better service.

Table 4.44
Suggestion to attract more Customers

Opinions	NABIL		HBL		EBL		Total	
	No.	%	No.	%	No.	%	No.	%
Better Service	3	30	4	40	4	40	11	36.36
Marketing Strategy	2	20	2	20	2	20	6	20
Open more Branches	3	30	3	30	2	20	8	26.67
Other	2	20	1	10	2	20	5	16.67
Total	10	100	10	100	10	100	30	100

Source: Appendix I



4.4.2 Staffs Profile

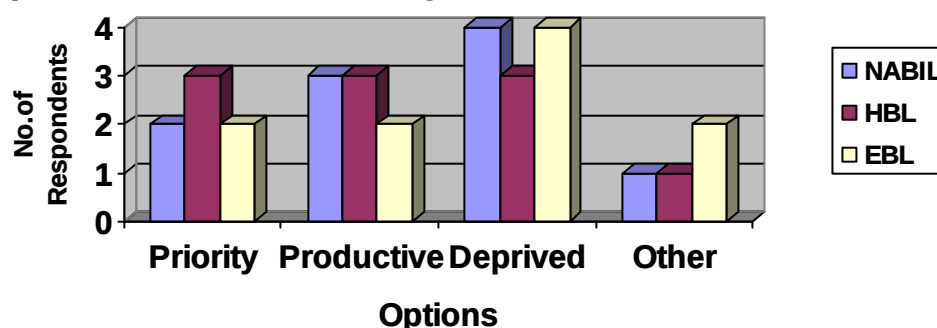
4.4.2.1 Opinions of Staffs for Selecting the Investment Sector

To know the opinion of staffs about selecting the investment sector, four options are given to choose. Out of 30 respondents, 36.67% are in favor of deprived sector, 23.33% are in favor of priority sector. Similarly, 26.67% and 13.33% are in favor of productive and other sectors respectively. Therefore, research shows that highest percentages of respondents are in favor of deprived sector to invest.

Table 4.45
Opinion of Staffs for Selecting the Investment Sector

Options	NABIL		HBL		EBL		Total	
	No.	%	No.	%	No.	%	No.	%
Priority	2	20	3	30	2	20	7	23.33
Productive	3	30	3	30	2	20	8	26.67
Deprived	4	40	3	30	4	40	11	36.67
Other	1	10	1	10	2	20	4	13.33
Total	10	100	10	100	10	100	30	100

Figure 4.11
Opinion of Staffs for Selecting the Investment Sector



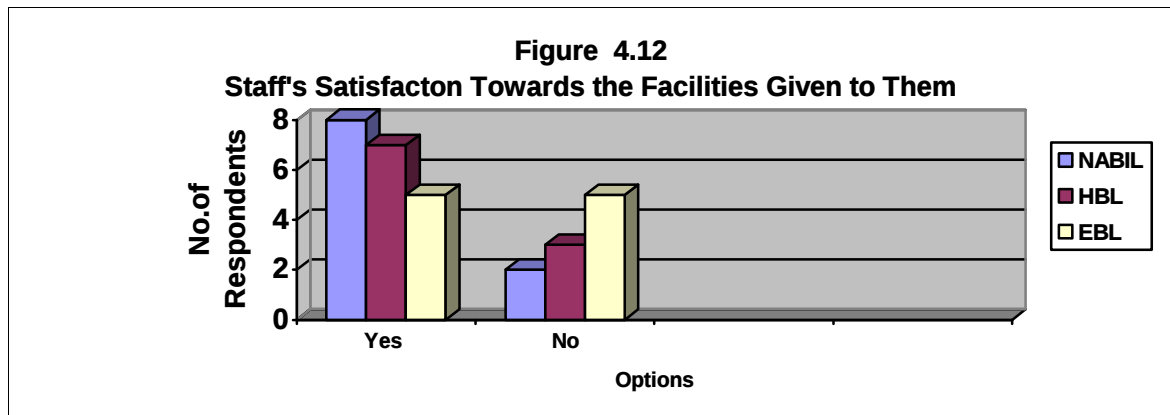
4.4.2.2 Staff's Satisfaction towards the Facilities Given to Them

Two option or choices are given to the respondents to know their opinion about satisfaction towards the facilities given to them. Out of 30 respondents, 66.67% have given positive answer, and 33.33% have given negative answer. The highest percentage of 80% of respondents is satisfied toward the facilities given to them.

Table 4.46
Staff's Satisfaction towards the Facilities given to them

Option	NABIL		HBL		EBL		Total	
	No.	%	No.	%	No.	%	No.	%
Yes	8	80	7	70	5	50	20	66.67
No	2	20	3	30	5	50	10	33.33
total	10	100	10	100	10	100	30	100

Source: Appendix I

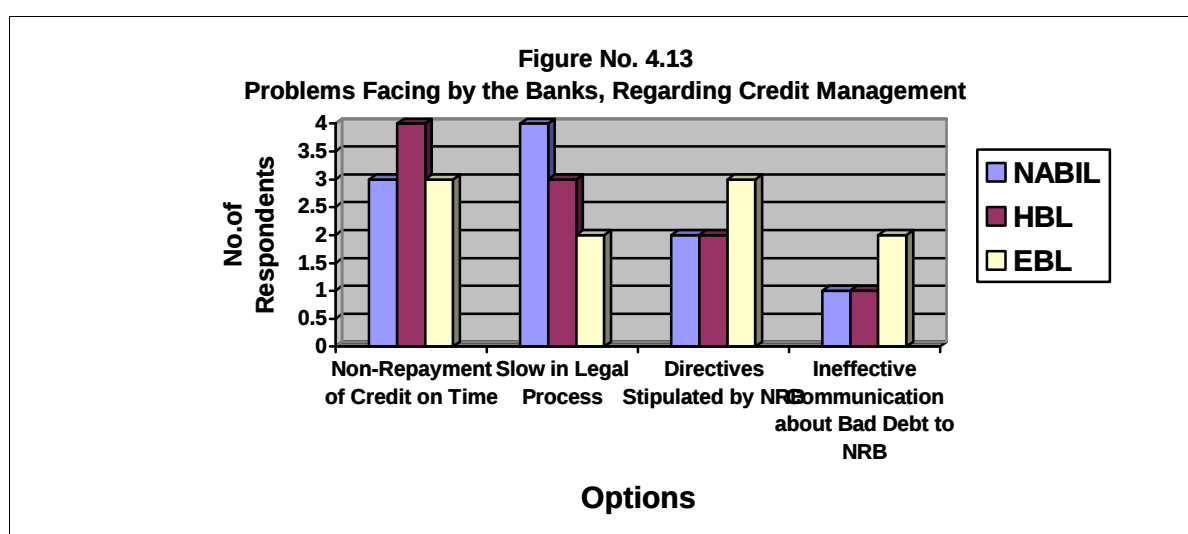


4.4.2.3 Problems Facing by the Banks Regarding Credit Management

To know the opinion of respondents about problems facing by the banks regarding credit management, multiple choices are given to them to select. Out of 30 respondents, 33.33% are in favor of non-payment of credit in time, 30% are in favor of slow in legal process, 23.33% are in favor of directives stipulated by NRB and 13.33% are in favor of ineffective communication about bad debt to NRB. From the above analysis, it can be said that non-repayment of credit in time by customer is main credit related problem, which is still facing by JVCBs.

Table No. 4.47
Problems Facing by JVCBs, Regarding Credit Management

Option	NABIL		HBL		EBL		Total	
	No.	%	No.	%	No.	%	No.	%
Non repayment of credit in line	3	30	4	40	3	30	10	33.33
Slow in legal process	4	40	3	30	2	20	9	30
Directives stipulated by NRB	2	20	2	20	3	30	7	23.33
Ineffective communication about bad debt to NRB	1	10	1	10	2	20	4	13.33
Total	10	100	10	100	10	100	30	100



From the above analysis, we can say that non-repayment of credit in time is the main problem facing by the banks, regarding credit management.

CHAPTER-V

SUMMARY, RECOMMENDATION AND CONCLUSION

This is the last chapter of the research, which includes summary, conclusion and recommendation from the fact-findings through analysis of various aspects of investment of commercial banks by using some important financials as well as statistical tools.

5.1 Summary of the Study

The development and expansion of financial institution is essential for economic growth of the country. JVCBs are such financial institutions, which collect funds from depositors and mobilize its fund as loan and advances according to the need of client. A term credit plays a vital role in the economy. Better management of the credit is essential to make high return for every JVCBs. JVCBs want to maximize return and minimize credit risk. When borrower will fail to meet its obligation in accordance with the agreed terms and conditions, then credit risk problem is arises. Therefore, to minimize such risk, all JVCBs should have to established and use standards in making credit decisions. Loans are risky assets though a bank invests most of its resources in granting loan and advances. The loan provided by JVCBs in different sector contributes to the society and whole economy, because credit function is the demand of economy but sometimes credit becomes dangerous too, if it is properly managed and controlled. Too much and too little credit is harmful. Too much credit leads to inflation which causes direct and immediate damage to creditors and customers and too little credit lead to deflation which bring down the level of output, employment and income. So, the directives stipulated by NRB for JVCBs become essential to manage credit in proper way and playing great role of the comparative analysis of JVCBs.

The researcher has identified the research problem of three JVCBs. The objectives, which are determined, based on the research problem. In order to carry out this study, the primary as well as secondary sources of data have been used. The analysis is performed with the help of financial and statistical tools. The presentation and analysis of data provides the clear picture in terms of financial strength and weakness of these JVCBs. The analysis is associated with comparison and interpretation. Various financial ratios of three commercial banks are analyzed such as liquidity ratio, assets management ratio, activity ratio, profitability ratio and growth ratio. Under statistical analysis, some relevant statistical tools such as trend analysis,

coefficient of correlation analysis and hypothesis test are used. This study helps to analyze the portfolio behavior of lending and measuring the ratio of loan and advances made in different sector.

The data which are used in this study, obtained from the annual reports of concerned commercial banks, SEBO, NRB and different journals and newspapers. The financial statement of six years of i.e. 2003-2008 has been examined for the purpose of study. Not all three banks are being able to maintain the appropriate standard of current ratio. From the analysis, it is found that NABIL & HBL have not able to satisfy the credit needs of the community; EBL has better efficiency to manage its assets in profitable manner. Similarly, HBL has high expectation of loan loss so greater loan loss provision has been made but EBL has been safe from loan loss. HBL has high and EBL has low percentage of non-recovery loan. NABIL is successful in collecting funds in the cheapest possible price but EBL has been paying high interest against total deposit. Similarly, NABIL shows better performance regarding profitability ratio. HBL has not better position regarding profitability ratio. According to the mean growth ratio, EBL is successful to maintain the economic and financial position in better way but HBL has not been seen well. The primary data are collected in the form of questionnaire and collected from respondents to concerned banks.

5.2 Major Findings of the Study

It is an analytical part, which is the most important function of the study. It makes an analysis of various aspects of the three joint venture commercial banks. From the analysis of primary data and secondary data, major findings of the study can be analyzed as follows:

A. Liquidity Position

-) From the analysis of current ratio, it is found that not all the three banks are able to maintain the appropriate standard of current ratio i.e. 2:1. it is indication of unsatisfactory liquidity position. However, comparatively EBL is found in better position than other banks as it has higher current ratio, cash and bank balance to total deposits ratio, cash and bank balance to current assets ratio, loan and advances to current assets ratio than that of others.
-) The mean ratios of NABIL and HBL shows low liquidity position and it also indicates that these banks have not able to satisfy the credit needs of the

community to meet demand for deposits, to oblige maturing obligation on time without unfavorable impact on longer projections on profitability in comparison.

B. Assets Management Ratio

-) Among the three sample commercial banks, in case of loan and advances to total assets, EBL has better position in comparison to other banks. In case of total assets to total liabilities, NABIL has maintained better position but in the case of total investment to total deposit ratio HBL maintained its position higher than other banks.
-) In the case of loan and advances to total deposit ratio EBL has higher mean ratio than that of others. In case of investment of total loan and advances and in investment ratio HBL has higher mean ratio than EBL and NABIL.

C. Activity Ratio

-) Greater loan loss provision is made in income statement if high loan loss is expected. This will lead to low profit and possible losses that produce low profit to shareholders but strengthen and stabilize financial position of the bank. The mean ratio of loan loss provision to total loan and advances of HBL is higher than that of others and loan loss provision to total loan and advances of EBL is lower. Therefore, it is found that HBL has high expectation of loan loss and greater loan loss provision has been made but EBL has been seen safe from loan loss.
-) The mean ratio of non-performing loan to total loan and advances of HBL is higher and of EBL is lower than NABIL. Therefore, it is found that HBL has high percentage of non-performing loan, which causes decrease in profit, but EBL has low percentage of non-performing loan.
-) EBL has highest and NABIL has lowest mean ratio of interest expenses to total deposits and interest expenses to total working fund. Again, EBL has highest and NABIL has lowest mean ratio of interest expenses to total expenses ratio. Therefore, it is found that NABIL is successful in collecting the fund in the

cheapest possible price. EBL has been paying high interest against total deposit and total working fund.

D. Profitability Ratio

-) Profitability is the best indicator of overall efficiency of any organization. NABIL shows better performance regarding profitability ratio. The mean ratio of interest income to interest expenses of NABIL is higher than EBL and HBL. The mean ratio of HBL is lower than that of others.
-) In the case of interest income to total income, EBL has highest mean ratio than that of others. NABIL has lowest mean ratio. So, it is found that NABIL has low rate of interest offered in deposit and high rate of interest charged in loan and advances.
-) Return on equity reflects the relative measure of profitability. NABIL has better performance regarding their ratio, but EBL has not better position in comparison. It is also found that NABIL has been seen able in better utilization of resources of owners.
-) EBL has higher and HBL has higher mean ratio of total interest earned to total working fund in comparison.
-) NABIL has highest and EBL has lowest mean ratio of operating profit to loan and advances. NABIL has highest and HBL has lowest mean ratio of return on loan and advances and return on total working fund. Therefore, it is found that NABIL has better position; it has better profitability of funds invested in bank's assets. NABIL has been seen able to mobilize their assets and able in better utilization of resources of owners.

E. Growth Trend

-) The growth rate of total deposit of EBL is higher and of HBL is lower than NABIL.
-) The growth rate of loan and advances of EBL is higher and growth rate of HBL is lower than NABIL.

-) The growth rate of net profit of EBL is higher and the growth rate of NABIL is lower than HBL.
-) The growth rate of investment EBL is higher and the growth rate of HBL is lower than NABIL.

Therefore, it is found that EBL is successful to maintain the economic and financial position in better ways as it has better growth rate of deposit, loan and advances, investment and net profit but HBL has not been seen better in terms of growth rate.

F. Co-efficient of Correlation Analysis

-) The degree of relationship between total investment and loan and advances of EBL, HBL and NABIL significant because coefficient of correlation value of three banks are highly positive and greater than $6*PE\ r$. The degree of relationship between total income and loan and advances of EBL and HBL are significant and greater than $6*PE\ r$ but the r of NABIL is less than $6*PE\ r$.
-) The degree of relationship between total deposit and loan and advances of EBL, HBL & NABIL are significant. EBL has highly positive value of r , which indicates that there is perfect relationship between these two variables.
-) The degree of relationship between investment & net profit EBL is perfectly correlated and highly significant because r is greater than $6*PE\ r$ but the degree of relationship between investment and net profit of NABIL & HBL shows imperfect relationship between these two variables.

G. Trend Analysis

-) Trend analysis of deposit shows that trend values of deposit of NABIL, HBL & EBL are found in increasing trend. It is also found that the deposit position of HBL is increasing higher than other banks. Therefore, trend value of HBL in 2011/12 will be higher in comparison.
-) Trend values of loan and advances of all three banks are found in increasing trend. The loan and advances position of NBL is increasing higher others so

the trend value of loan and advances of NBL will be higher in 2011/12 in comparison.

-) Trend value of net profit of three banks is found in increasing trend. It is found that the net profit position of NABIL is increasing higher than HBL & EBL, so the trend value of net profit of NABIL in 2011/12 will be higher in comparison.

H. Result of Hypothesis

-) From hypothesis test, it is found that the mean vales of loan and advances to total assets ratio of NABIL & EBL, HBL & EBL are significantly different but the mean values of loan and advances to total assets ratio of NABIL & HBL do not differ significantly.
-) It is found that the mean values of loan and advances to total deposit ratio of NABIL & HBL, NABIL & EBL, EBL &HBL are significantly different.
-) It is also found that the mean value of interest income to interest expenses ratio of NABIL & HBL, NABIL & EBL, HBL & EBL are significantly different.
-) Loan and advances to total assets ratios of three banks differ significantly. Similarly, loan and advances to total deposit ratios and interest income to interest expenses ratios of three banks are also differ significantly, so null hypothesis is rejected.

I. Customer's and Employee's Response

-) Most of the respondents of NABIL, HBL & EBL have selected these banks for instant service.
-) Out of 30 respondents, 60% have not any bitter experience with the service provided by these banks. In comparison, NABIL has provided more facilities but EBL has not provided in comparison. Therefore, it can be said that EBL should try its best to solve the problem of minority group.

-) From the above analysis, it is found that most of the respondents i.e. are in favor of better service to attract more customers. In comparison, most of the respondents of EBL & HBL have given more importance to the better service.
-) Highest percentage of staffs have selected deprived sector for investment. Out of 30 respondents, 36.67% are in favor of deprived sector for investment and 26.67% are in favor of productive sector for investment.
-) Out of 30 respondents 66.67%, staffs are satisfied by the facilities provided by these banks. In comparison, NABIL has provided more facilities to their staffs.
-) Out of 30 respondents, 33.33% have shown the problem of non-repayment of credit in time by customer. Therefore, it is found that non-repayment of credit in time by customer is main credit related problem, which is still facing by joint venture commercial banks.

5.3 Conclusion

From above analysis, the researcher has been able to draw following certain conclusion:

From the analysis, it is found that not all three banks are able to maintain the appropriate standard of current ratio but comparatively EBL has better liquidity position but NABIL and HBL have unsatisfactory liquidity position. It shows, EBL has made enough cash and bank balance and it can pay liabilities to its depositors and it has ability to satisfy credit needs of community but from the profit making point of view, holding higher level of amount is also not good for any bank and holding low level of amount creates negative impact on the goodwill and reputation of the bank. Therefore, these banks should try to maintain their liquidity position as standard.

Based on assets management ratio, it has been concluded that EBL has better position than NABIL & HBL. It has high total assets to total liabilities ratio, loan and advances to total assets ratio and loan and advances to total deposit ratio. The mean ratios of NABIL & HBL show their weakness in assets management. EBL is able to manage its assets.

Based on activity ratio, it has been concluded that HBL has been made greater loan loss provision but EBL is felling safe from loan loss than HBL & NABIL. HBL also

has high percentage of non-performing loan and EBL has low % of it. Therefore, these banks should try to adopt sound credit collection policy, which helps to control loan loss and decreases non-performing loan.

Based on profitability ratio, NABIL is comparatively better than EBL & HBL. NABIL is able to charge high interest rate but it has low rate of interest offered in deposit. So it can conclude that NABIL has better profitability of funds invested in banks assets and has been seen able to mobilize its assets and able to utilize its resources.

Based on growth ratio EBL is successful to maintain the economic and financial position in better way as it has better growth ratio of deposit and loan and advance and net profit.

From the analysis of primary data, it is found that NABIL has given comparatively more instant service and facilities to their customers than that of others. Most of the respondents have selected the bank for instant service.

From staff's point of view, it is found that these banks do not want to take any kind of risk related investment. NABIL has provided comparatively more facilities to their staffs and it is found that most of the banks have been facing credit related problem and the main credit related problem is non-payment of credit in time by customers.

5.4 Recommendations

Based on the analysis and the findings of the study, the following recommendations are suggested for the improvement of present financial performance of selected commercial banks.

) Maintain Optimum Liquidity Position

In commercial banks, the liquidity position affects external and internal facts such as the prevailing interest rate, supply and demand position of loans, central bank's requirements and the growth position of financial market. In this study, it has been seen that not all three banks are able to maintain the appropriate standard of current ratio but comparatively EBL has better liquidity position but NABIL and HBL have unsatisfactory liquidity position. We know that higher ratio indicates the bank's

ability to meet the daily cash requirements of their customer. So it is suggested to the banks to increase its liquidity capacity.

) Proper Investment and Utilization of Deposit

All commercial banks should have greater efficiency to utilize of funds provided by outsiders. The largest amount of the bank in the assets side is loan and advances. Negligence in administrating these assets could be the main cause of a liquidity crisis in the bank. The study has been reveals that EBL's loan and advances to total deposits ratio are higher than other banks. So, NABIL & HBL are strongly recommended to follow liberal lending policy and invest more and more amount of total deposit in loan and advances.

) Adopt Sound Credit Collection Policy

If high loan loss is expected, greater loan loss provision is made in income statement and this will lead to low profit and possible losses. If loan are not distributed properly then it may be main cause of the failure of the banks. From this study, it is found that HBL has high expectation of loan loss so it has been made greater loan loss provision and the non-performing loan to total loan and advances of HBL is higher than NABIL & EBL. So these banks are recommended to adopt sound credit collection policy. It helps them to decrease loan loss provision and non-performing loan. So these banks must be careful in strengthen credit collection policy.

) Utilization of Risky Assets and Shareholder's Fund

The focus of commercial banks is in profit. The management of the firm is interested in operating efficiently of the firm's profitability ratios. Comparatively, NABIL has been able to utilize its resources. The profitability position of NABIL is better than HBL and EBL. So, banks are recommended to utilize its risky assets and shareholder's fund to gain high profit margin.

) Follow NRB Directives

NRB directives help to reduce credit risk arising from borrowers, defaulter, and lack of proper credit appraisal, defaulter by black listed borrowers and professional defaulters. So, these banks are recommended to follow NRB directives.

) Formulate Marketing Strategy

The marketing strategy should be innovative that would attract and retain the customer. So these banks are recommended to develop as innovative approach to bank marketing for its well being and sustainability in the market.

) Improve the Efficiency by the Modern Technology

These banks should increase their operations and efficiency by mobilizing their resources in profit generating sector. By using modern technology, computer network experts and well-trained personnel, these banks should control operating expenses.

) Better and Instant Service to Customers and to Their Staffs

All joint venture should try to give better and instant service to their customer and to their staffs. Banks are recommended to concentrate about their service quality. It is very important to keep your staffs satisfied. Because of staffs are satisfied towards the facilities given to them, the quality of work increase, they become motivated to serve the customer in better way.

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Appendix – I

Questionnaire

Dear respondents,

I have been doing a research work on “Present Trend and Future Scenario of Deposit, Lending and Earning of Commercial Banks”. This questionnaire has been developed and presented before you to know your opinion about this subject matter as a part of this study and to fulfill the objective of the study.

I humbly request you to fill it up at the best of your knowledge. Your co-operation in this regard will be a great value for this study will be highly obliged for your prompt response as far as possible.

Thanking you,

Pitambar Pandey
Researcher
Kailali Multiple Campus
Dhangadhi

A. Sample of questionnaire

I am a student of MBS final year. I need your help for fulfillment of my research successfully. I put forward the questionnaire to know your opinions about the bank.

Please tick (✓) in appropriate place

1. What is the reason behind selecting these banks?
 - a) Accessibility
 - b) Instant Service
 - c) Credibility
 - d) Other
2. Have you had any bitter experience with the service?
 - a) Yes
 - b) No.
3. In your opinion, what should the bank do to attract more and more customer?
 - a) The bank should give better service
 - b) The bank should formulate marketing strategy
 - c) The bank should open more branches
 - d) Others

Sample questionnaire to the staff of the bank

1. In which sector your bank should give priority to invest.
 - a) Priority sector
 - b) Productive sector
 - c) Deprived sector
 - d) Other
2. Are you satisfied with the facilities provided by the bank?
 - a) Yes
 - b) No.
3. What are the problems facing by the JVCBs, regarding credit management?
 - a) Non-repayment of credit in time by customer
 - b) Slow in legal process
 - c) Directives stipulated by NRB
 - d) Ineffective communication about bad debt to NRB.

Appendix – II
From the Balance Sheet

A) Paid up Capital **(Rs. In million)**

Banks	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
NABIL	491.65	491.65	491.7	491.7	491.7	689.22
HBL	429.00	429	898.2	772.2	810.8	1013.5
EBL	399.32	455	455	518	518	931.4

b) Reserves and Surplus

(Rs. In million)

Banks	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
NABIL	822.53	990.2	1165.98	1795.69	1565.4	2118.14
HBL	634.13	787.92	898.24	1211.2	1335.7	1789.6
EBL	157.	225.33	314.6	534.9	683.5	1193.7

C) Total Deposits

(Rs. In million)

Banks	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
NABIL	13447.67	14119.03	14586.8	19347.4	23342.3	31915.1
HBL	21007.37	22010.34	24814.01	26535.7	30048.4	31939.9
EBL	6694.95	8063.9	10097.8	13802.4	18186.3	23976.3

D)Non- Performing Loan

(Rs. In million)

Banks	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
NABIL	449.63	144.51	286.68	165.98	178.3	171.98
HBL	1092.75	1147.47	1001.34	978.7	642.4	475.3
EBL	111.19	21.29	128.81	121.9	128.2	120.55

E) Loan Loss Provision

(Rs. In million)

Banks	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
NABIL	357.73	360.5	348.66	354.2	356.9	405.96
HBL	842.75	967.76	1026.64	1020.1	796.7	679.2
EBL	141.12	211.71	281.41	121.9	128.2	120.6

F) Cash and Bank Balance**(Rs. In million)**

Banks	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
NABIL	1144.77	970.49	559.5	630.24	1399.8	2671.14
HBL	1979.2	1151.87	2014.5	1727.8	1757.34	1396.72
EBL	1139.57	631.81	1049.98	1633.1	2391.42	2852.4

G) Total Assets**(Rs. In million)**

Banks	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
NABIL	16562.61	16745.6	17186.33	22807.06	27310.64	37487.67
HBL	23355.23	24762.04	28871.34	31359.95	34722.35	37648.34
EBL	8052.2	9608.56	12073.54	16373.60	21851.18	27805.48

H) Loan and Advances**(Rs. In million)**

Banks	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
NABIL	7755.95	8189.99	10586.17	13278.78	15903.02	21769.77
HBL	10001.85	11951.87	13451.17	15939.63	17793.72	20179.61
EBL	4908.46	5884.12	7900.1	10154.87	14082.69	18836.43

I) Investment**(Rs. In million)**

Banks	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
NABIL	6031.17	5836.07	4267.23	6174.85	8945.32	9957.045
HBL	10175.44	9292.11	11692.34	10995.05	11822.98	12751.98
EBL	1653.97	2535.65	2128.93	4201.32	4984.31	4922.76

Appendix – III

From Profit and Loss Account

A) Total Expenses

(Rs. In million)

Banks	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
NABIL	812.06	769.35	752.89	739.122	984.054	1235.45
HBL	1094.28	1099.05	1238.13	1204.26	1381.197	1462.29
EBL	499.45	573.94	600.4	613.82	780.83	1026.47

B) Interest Expenses

(Rs. In million)

Banks	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
NABIL	317.35	282.94	243.54	357.16	555.71	758.43
HBL	554.13	491.54	561.96	641.35	767.41	823.76
EBL	306.41	314.44	299.5	401.39	517.17	632.63

C) Total Interest Income

(Rs. In million)

Banks	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
NABIL	1017.87	1001.62	1068.3	1296.42	1567.78	1978.74
HBL	1201.23	1245.89	1446.46	1573.85	1775.58	1978.29
EBL	520.17	657.25	720.7	903.24	1144.41	1547.91

D) Operating Profit

(Rs. In million)

Banks	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
NABIL	528.45	564.3	769.74	696.69	1037.61	1128.42
HBL	349.26	417.24	577.81	754.67	688.89	926.23
EBL	134.63	209.25	280.80	380.78	487.97	722.83

E) Net Profit

(Rs. In million)

Banks	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
NABIL	416.25	455.32	518.64	629.89	673.96	750.35
HBL	212.12	263.05	214.26	216.24	491.82	654.39
EBL	94.17	143.57	170.81	232.93	296.41	450.12

Appendix – IV

Calculation of Correlation Coefficient

A) Correlation Between Total Deposit and Loan and Advances of NABIL

(Rs. In million)

Year	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
Total deposit	13447.6	14119.0	14586.8	19347.4	23342.3	31915.1
Loan & advances	7755.95	8189.99	10586.2	13278.7	15903.02	21769.77
r						0.896
P.E. _r						0.0542

B) Correlation Between Total Deposit and Loan and Advances of HBL

(Rs. In million)

Year	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
Total deposit	21007.3	22010.3	24814.0	26535.7	30048.4	31939.9
Loan & advances	10001.8	11951.8	13451.1	15939.6	17793.72	20179.61
r						0.98
P.E. _r						0.0061

B) Correlation Between Total Deposit and Loan and Advances of EBL

(Rs. In million)

Year	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
Total deposit	6694.95	8063.9	10097.8	13802.4	18186.3	23976.3
Loan & advances	4908.46	5884.12	7900.1	10154.8	14082.69	18836.43
r						0.99
P.E. _r						0.0055

F) Correlation Coefficient Between Total Investment and Loan and Advances of NABIL

(Rs. In million)

Year	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
Investment	6031.17	5836.07	4267.23	6174.85	8945.32	9957.045
Loan & advances	7755.95	8189.99	10586.2	13278.7	15903.02	21769.77
r						0.7941
P.E. _r						0.102

G) Correlation Coefficient Between Total Investment and Loan and Advances of HBL

(Rs. In million)

Year	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
Investment	10175.4	9292.11	11692.3	10995.1	11822.98	12751.98
Loan & advances	10001.8	11951.8	13451.1	15939.6	17793.72	20179.61
r						0.84
P.E. _r						0.084

H) Correlation Coefficient Between Total Investment and Loan and Advances of EBL

(Rs. In million)

Year	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
Investment	1653.97	2535.65	2128.93	4201.32	4984.31	4922.76
Loan & advances	4908.46	5884.12	7900.1	10154.8	14082.69	18836.43
r						0.84
P.E. _r						0.081

I) Correlation Coefficient Between Total Income and Loan and Advances of NABIL

(Rs. In million)

Year	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
Total income	1340.51	1333.65	1438.44	1703.3	2035.9	2428.4
Loan & advances	7755.95	8189.99	10586.2	13278.7	15903.02	21769.77
r						0.099
P.E. _r						0.2727

J) Correlation Coefficient between Total Income and Loan and Advances of HBL

(Rs. In million)

Year	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
Total income	1443.54	1516.32	1757.80	1982.66	2160.8	2441.5
Loan & advances	10001.8	11951.8	13451.1	15939.6	17793.72	20179.61
r						0.99
P.E. _r						0.0036

J) Correlation Coefficient Between Total Income and Loan and Advances of EBL

(Rs. In million)

Year	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
Total income	634.08	783.19	858.96	1066.2	1358.5	1847.1
Loan & advances	4908.46	5884.12	7900.1	10154.8	14082.69	18836.43
						r
						0.995
						P.E. _r
						0.015

K) Correlation Coefficient Between Total Investment and Net Profit of NABIL

(Rs. In million)

Year	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
Investment	6031.17	5836.07	4267.23	6174.85	8945.32	9957.045
Net profit	416.25	455.32	518.64	629.89	673.96	750.35
						r
						0.73
						P.E. _r
						0.128

L) Correlation Coefficient Between Total Investment and Net Profit of HBL

(Rs. In million)

Year	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
investment	10175.4	9292.11	11692.3	10995.1	11822.98	12751.98
Net profit	212.12	263.05	214.26	216.24	491.82	654.39
						r
						0.71
						P.E. _r
						0.1372

M) Correlation Coefficient Between Total Investment and Net Profit of EBL

(Rs. In million)

Year	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
Investment	1653.97	2535.65	2128.93	4201.32	4984.31	4922.76
Net profit	94.17	143.57	170.81	232.93	296.41	450.12
						r
						0.8178
						P.E. _r
						0.0812

Appendix – V

Trend Value

Trend Value of Total Deposit of NABIL (2003-2008)

(Rs. In million)

Year	Total deposit(y)	x = X- 2005.5	X ²	xy	y= a+bx
2002/03	13447.67	-2.5	6.25	-33619.2	11888.75
2003/04	14119.03	-1.5	2.25	-21178.55	14447.79
2004/05	14586.8	-0.5	0.25	-7293.4	17006.83
2005/06	19347.4	0.5	0.25	9673.7	19565.87
2006/07	23342.28	1.5	2.25	35013.42	22124.91
2007/08	24874.9	2.5	6.25	62187.25	24683.95
				44783.22	

$$a = \frac{\sum y}{N} = 18286.35 \quad b = \frac{\sum xy}{\sum x^2} = \frac{44783.22}{6} = - 2559.04$$

Trend Value of Total Deposit of NABIL (2008-2012)

Year	X	y = a + bx
2008/09	3.5	27242.99
2009/10	4.5	29802.03
2010/11	5.5	32361.07
2011/12	6.5	34920.11

Trend Value of Total Deposit of HBL (2003-2008)

(Rs. In million)

Year	Total deposit(y)	x = X- 2005.5	X ²	xy	y= a+bx
2002/03	21007.37	- 2.5	6.25	-52518.43	20310.38
2003/04	22010.34	- 1.5	2.25	-33015.51	22609.9
2004/05	24814	- 0.5	0.25	-12407	24909.5
2005/06	26535.7	0.5	0.25	13267.85	27209
2006/07	30048.4	1.5	2.25	45072.6	29508.62
2007/08	31939.9	2.5	6.25	79849.75	31808.2
Total			17.50	40249.75	

$$a = \frac{\sum y}{N} = 26059.28$$

$$b = \frac{\sum xy}{\sum x^2} = 2299.56$$

Trend Value of Total Deposit of NABIL (2008-2012)

Year	X	y = a + bx
2008/09	3.5	34107.74
2009/10	4.5	36407.30
2010/11	5.5	38706.86
2011/12	6.5	41006.42

Trend Value of Total Deposit of EBL (2003-2008)

(Rs. In million)

Year	Total deposit(y)	x = X- 2005.5	X ²	xy	y= a+bx
2002/03	6694.95	- 2.5	6.25	-16737.4	4864.7
2003/04	8063.9	- 1.5	2.25	-12095.9	8306.9
2004/05	10097.7	- 0.5	0.25	-5048.9	11749.16
2005/06	13802.5	0.5	0.25	6901.25	15191.41
2006/07	18186.3	1.5	2.25	27279.50	18633.70
2007/08	23976.3	2.5	6.25	59940.8	22075.91
	80821.65		17.50	60239.40	

$$a = \frac{\sum y}{N} = 13470.28 \quad b = \frac{\sum xy}{\sum x^2} = 3442.25$$

Trend Value of Total Deposit of EBL (2008-2012)

Year	X	y = a + bx
2008/09	3.5	25518.15
2009/10	4.5	28960.4
2010/11	5.5	32402.70
2011/12	6.5	35844.91

Trend Value of Loan and Advances of NABIL (2003-2008) (Rs. In million)

Year	Loan and advances (y)	x = X-2005.5	X ²	xy	y= a+bx
2002/03	755.95	- 2.5	6.25	-49389.9	6063.82
2003/04	8189.99	- 1.5	2.25	-12284.99	8803.82
2004/05	10586.20	- 0.5	0.25	-5293.1	11543.82
2005/06	13278.8	0.5	0.25	6639.40	14283.8
2006/07	15903	1.5	2.25	23854.4	17023.82
2007/08	21769.8	2.5	6.25	54424.5	19763.82
Total	77482.94		17.50	47950.44	

$$a = \frac{\sum y}{N} \quad b = \frac{\sum xy}{\sum x^2} = 2740$$

Trend Value of Loan and Advances of NABIL (2008-2012)

Year	X	y = a + bx
2008/09	3.5	22503.82
2009/10	4.5	25243.82
2010/11	5.5	27983.82
2011/12	6.5	30723.82

Trend Value of Loan & Advances of HBL (2003-2008) (Rs. In million)

Year	Loan & advances (y)	x = X-2005.5	X ²	xy	y= a+bx
2002/03	10001.85	- 2.5	6.25	-25004.63	9821.8
2003/04	11951.87	- 1.5	2.25	-17927.80	11847.63
2004/05	13451.2	- 0.5	0.25	-6725.60	13873.4
2005/06	15939.63	0.5	0.25	7969.815	15899.21
2006/07	17793.71	1.5	2.25	26690.55	17924.99
2007/08	20317.85	2.5	6.25	50449	19950.80
Total	89317.85		17.50	35451.34	

$$a = \frac{\sum y}{N} = 14886 \quad b = \frac{\sum xy}{\sum x^2} = 2025.79$$

Trend Value of Loan & Advances of HBL (2008-2012)

Year	X	y = a + bx
2008/09	3.5	21976.58
2009/10	4.5	24002.40
2010/11	5.5	26028.20
2011/12	6.5	28053.9

Trend value of loan and advances of EBL (2003-2008) (Rs. In million)

Year	Loan & advances(y)	x = X- 2005.5	X ²	xy	y= a+bx
2002/03	4908.46	- 2.5	6.25	-12271.15	3402.2
2003/04	5884.12	- 1.5	2.25	-8826.18	6159.1
2004/05	7900.10	- 0.5	0.25	-3950.05	8916
2005/06	10154.90	0.5	0.25	5077.45	11672.90
2006/07	14082.70	1.5	2.25	21124	11672.90
2007/08	18836.4	2.5	6.25	47091	14429.80
	61766.68		17.50	48245.12	17186.7

$$a = \frac{\sum y}{N} = 10294.45 \quad b = \frac{\sum xy}{\sum x^2} = 2756.90$$

Trend Value of Loan and Advances of EBL (2008-2012)

Year	X	y = a + bx
2008/09	3.5	19943.6
2009/10	4.5	22700.5
2010/11	5.5	25457.4
2011/12	6.5	28214.3

Trend Value of Net Profit of NABIL (2003-2008)

(Rs. In million)

Year	Net profit (y)	x = X - 2005.5	X ²	xy	y = a + bx
2002/03	416.25	- 2.5	6.25	-6.25	399.82
2003/04	455.32	- 1.5	2.25	-682.98	469.5
2004/05	518.64	- 0.5	0.25	-259.32	539.22
2005/06	629.89	0.5	0.25	314.95	608.92
2006/07	673.96	1.5	2.25	1010.94	678.62
2007/08	750.35	2.5	6.25	1875.9	748.3
Total	3444.41		17.50	1218.84	

$$a = \frac{\sum y}{N} = 574.07 \quad b = \frac{\sum xy}{\sum x^2} = 69.7$$

Trend Value of Net Profit of NABIL (2008-2012)

Year	X	y = a + bx
2008/09	3.5	818.02
2009/10	4.5	887.72
2010/11	5.5	957.40
2011/12	6.5	1027.12

Trend Value of Net Profit of HBL (2003-2008)

(Rs. In million)

Year	Net profit (y)	x = X - 2005.5	X ²	xy	y = a + bx
2002/03	212.12	- 2.5	6.25	-530.3	134.86
2003/04	263.05	- 1.5	2.25	-394.6	217.71
2004/05	214.27	- 0.5	0.25	-107.14	300.56
2005/06	216.24	0.5	0.25	108.12	383.41
2006/07	491.82	1.5	2.25	737.73	466.26
2007/08	654.39	2.5	6.25	1635.98	549.11
	2051.89		17.50	1449.82	

$$a = \frac{\sum y}{N} = 341.98 \quad b = \frac{\sum xy}{\sum x^2} = 82.85$$

Trend Value of Total Deposit of NABIL (2008-2012)

Year	X	y = a + bx
2008/09	3.5	631.96
2009/10	4.5	714.81
2010/11	5.5	797.7
2011/12	6.5	880.5

Trend Value of Net Profit of EBL (2003-2008)

(Rs. In million)

Year	Net profit (y)	x = X - 2005.5	X ²	xy	y = a + bx
2002/03	94.17	- 2.5	6.25	-235.43	66.83
2003/04	143.57	- 1.5	2.25	-215.36	132.6
2004/05	170.8	- 0.5	0.25	-85.40	198.4
2005/06	232.93	0.5	0.25	116.47	264.23
2006/07	296.41	1.5	2.25	444.62	330.
2007/08	450.12	2.5	6.25	1125.3	395.83
	1388		17.50	1150.2	

$$a = \frac{\sum y}{N} = 231.33 \quad b = \frac{\sum xy}{\sum x^2} = 65.80$$

Trend Value of Net Profit of EBL (2008-2012)

Year	X	y = a + bx
2008/09	3.5	461.63
2009/10	4.5	527.40
2010/11	5.5	593.20
2011/12	6.5	659.00

Appendix – VI

T – Test

1 – Test of Hypothesis in Loan and Advances to Total Assets Ratio

a) Between NABIL & HBL

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{S^2 \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

$$S^2 = \frac{f_{x_1} Z_{\bar{x}_1}^2 + f_{x_2} Z_{\bar{x}_2}^2}{n_1 + n_2 - 2}$$

$$t = \frac{0.55 - 0.486}{\sqrt{0.00082}}$$

$$= 2.24$$

$$= 0.01598 + 0.00855 / 10$$

$$= 0.00245$$

b) Between NABIL & EBL

$$t = \frac{0.55 - 0.635}{\sqrt{0.00065}}$$

$$= -3.34$$

$$|t| = 3.34$$

$$S^2 = 0.015984 + 0.03463 / 10$$

$$= 0.001939$$

c) Between HBL & EBL

$$t = \frac{0.486 - 0.635}{\sqrt{0.00426 \times 0.33}}$$

$$= -3.95$$

$$|t| = 3.95$$

$$S^2 = \frac{\sum (x_1 - \bar{x}_1)^2 + \sum (x_2 - \bar{x}_2)^2}{n_1 + n_2 - 2}$$

$$= 0.008552 + 0.03403 / 10$$

$$= 0.00426$$

2. Test of Hypothesis in Loan and Advances to Total Deposit Ratio

a) Between NABIL & HBL

$$t = \frac{0.661 - 0.5574}{\sqrt{0.00435 \times 0.33}}$$

$$= 2.72$$

$$S^2 = 0.02485 + 0.01865 / 10$$

$$= 0.00435$$

b) Between NABIL & EBL

$$t = \frac{0.661 - 0.7570}{\sqrt{0.0028 \times 0.33}}$$

$$S^2 = 0.02485 + 0.0036 / 10 \\ = 0.00284$$

$$t = -3.1$$

$$|t| = 3.1$$

c) Between HBL & EBL

$$t = \frac{0.5574 - 0.7570}{\sqrt{0.0022 \times 0.33}}$$

$$S^2 = 0.01865 + 0.0036 / 10 \\ = 0.0022$$

$$= -7.33$$

$$|t| = 7.33$$

2. Test of Hypothesis in Interest Income and Interest Expenses

a) Between NABIL & HBL

$$t = \frac{3.3480 - 2.4075}{\sqrt{0.18359 \times 0.333}}$$

$$S^2 = \frac{1.7237 + 0.11218}{10}$$

$$= 0.18359$$

$$= 3.802$$

b) Between NABIL & EBL

$$t = \frac{3.348 - 2.1839}{0.209 \times 0.33}$$

$$S^2 = 1.723 + 0.368 / 10 \\ = 0.20$$

$$= 4.41$$

c) Between HBL & EBL

$$t = \frac{2.4075 - 2.1839}{\sqrt{0.0191 \times 0.33}}$$

$$S^2 = 0.11218 + 0.368 / 10$$

$$= 0.0149$$

$$= 3.1721$$

F -Test

a) F- Test of Hypothesis in Loan and Advances to Total Assets Ratio

X_1	X_2	X_3	X_1^2	X_2^2	X_3^2
0.4682	0.4282	0.6095	0.219	0.183	0.371
0.4890	0.4826	0.6123	0.239	0.233	0.375
0.604	0.4462	0.6464	0.365	0.199	0.418
0.5822	0.5083	0.6202	0.339	0.258	0.385
0.5760	0.5125	0.6445	0.332	0.263	0.415
0.5807	0.5360	0.6774	0.337	0.287	0.459
$t = 3.3$	2.92	3.81	1.83	1.424	2.423

$$\text{Correction Factor (c.f.)} : \frac{T^2}{N} = \frac{10.03^2}{18}$$

$$\begin{aligned} \text{Total (T)} &= \sum x_1 + \sum x_2 + \sum x_3 \\ &= 10.03 \end{aligned}$$

Sum of squares between banks

$$SSC = \frac{(\sum x_1)^2}{n_1} + \frac{(\sum x_2)^2}{n_2} + \frac{(\sum x_3)^2}{n_3} - \frac{T^2}{N}$$

$$= 1.815 + 1.42 + 2.42 - 5.59$$

$$= 0.064$$

$$\text{Total Sum of Square (SST)} = \sum x_1^2 + \sum x_2^2 + \sum x_3^2 - \frac{T^2}{N}$$

$$= 1.83 + 1.424 + 2.423 - 5.59$$

$$= 0.087$$

Sum of Squares of Ratios within Banks (SSR) = SST – SSC

$$= 0.087 - 0.064$$

$$= 0.023$$

b) F- test of Hypothesis in Loan and Advances to Total Deposit Ratio

X_1	X_2	X_3	X_1^2	X_2^2	X_3^2
0.5767	0.4761	0.7331	0.3326	0.227	0.54
0.5800	0.5430	0.7296	0.336	0.295	0.53
0.7594	0.5007	0.7837	0.577	0.251	0.61
0.6863	0.6007	0.7357	0.471	0.361	0.54
0.6813	0.5922	0.7744	0.464	0.351	0.60
0.6821	0.6318	0.7856	0.465	0.399	0.62
3.966	3.34	4.54	2.646	1.88	3.44

$$\begin{aligned}\text{Total (T)} &= \sum X_1 + \sum X_2 + \sum X_3 \\ &= 11.85\end{aligned}$$

$$\text{Correction factor (c.f.)} = \frac{T^2}{N} = 7.80$$

Sum of squares between banks (SSC)

$$\text{SSC} = \frac{(\sum X_1)^2}{n_1} + \frac{(\sum X_2)^2}{n_2} + \frac{(\sum X_3)^2}{n_3} - \frac{T^2}{N}$$

$$= 2.622 + 1.86 + 3.44 - 7.80$$

$$= 0.117$$

$$\text{Total sum of squares (SST)} = \sum X_1^2 + \sum X_2^2 + \sum X_3^2 - \frac{T^2}{N}$$

$$= 2.646 + 1.88 + 3.44 - 7.80$$

$$= 0.166$$

$$\text{Sum of squares of ratios within banks (SSR)} = \text{SST} - \text{SSC}$$

$$= 0.166 - 0.117$$

$$= 0.049$$

c) F- test of Hypothesis in Interest Income to Interest Expenses Ratio

X_1	X_2	X_3	X_1^2	X_2^2	X_3^2
3.2074	2.1677	1.6976	10.29	4.70	2.88
3.5400	2.534	2.09	12.53	6.42	4.37
4.2428	2.5739	2.406	18	6.62	5.79
3.6298	2.4539	2.2502	13.18	6.02	5.06
2.8572	2.3137	2.2128	8.16	5.35	4.90
2.6090	2.4015	2.4468	6.81	5.77	5.99
20.10	14.45	13.10	68.97	34.89	28.99

$$\begin{aligned}\text{Total (T)} &= \sum x_1 + \sum x_2 + \sum x_3 \\ &= 47.65\end{aligned}$$

$$\text{c.f.} = \frac{T^2}{N}$$

$$= 126.16$$

Sum of squares between banks (SSC)

$$\text{SSC} = \frac{(\sum x_1)^2}{n_1} + \frac{(\sum x_2)^2}{n_2} + \frac{(\sum x_3)^2}{n_3} - \frac{T^2}{N}$$

$$= 67.34 + 34.80 + 28.60 - 126.64$$

$$= 4.11$$

$$\text{Total sum of squares (SST)} = \sum x_1^2 + \sum x_2^2 + \sum x_3^2 - \frac{T^2}{N}$$

Sum of squares of ratios within banks (SSR) = SST – SSC

$$= 6.69 - 4.11$$

$$= 2.59$$