Investment Practices of Commercial Banks in Nepal

(A Comparative Study of Nabil Bank Ltd, Himalayan Bank Ltd, Everest Bank Ltd, and Nepal SBI Bank Ltd)

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RECOMMENDATION

This is to certify that the Thesis:

Submitted By:

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(A Comparative Study of Nabil Bank Ltd, Himalayan Bank Ltd, Everest Bank Ltd and Nepal SBI Bank Ltd)

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

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VIVA-VOCE SHEET

We have conducted the viva-voce examination of the

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Investment Practices of Commercial Banks in Nepal

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And found the Thesis to be the original work of the student and written according to the prescribed format. We recommend the thesis to be accepted as partial fulfillment of the requirement for

Master Degree in Business Studies (M.B.S.)

VIVA –VOCE COMMITTEE

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Declaration

I hereby declare that the work reported in this thesis entitled **Investment Practices of Commercial Banks in Nepal (A Comparative Study of Nabil Bank Limited, Himalayan Bank Limited, Everest Bank Limited and Nepal SBI Bank Limited)**. Submitted to the Balkumari College, Tribhuvan University is my original work done in the form of partial fulfillment of the requirements for the Master degree in Business studies under the supervision and guidance of Thesis advisor & Chairman of Research Committee Mr. Baburam Panthi of Balkumari College, T.U.

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ABBREVIATIONS

C.V.	=	Coefficient of Variation
CB	=	Commercial Bank
EBL	=	Everest Bank Limited
FY	=	Fiscal Year
HBL	=	Himalayan Bank Limited
JVBs	=	Joint Venture Banks
L.C	=	Letter of Credit.
NABIL	=	Nabil Bank Limited
No.	=	Number
NRB	=	Nepal Rastra Bank
NSBI	=	Nepal SBI Bank Limited
OBS	=	Off-Balance Sheet
P.Er	=	Profitable Error
RBB	=	Rastriya Banijaya Bank
ROA	=	Return on Assets
Rs.	=	Rupees
S.D	=	Standard Deviation
T.U.	=	Tribhuvan University

CHAPTER 1

INTRODUCTION

1.1 General Background:

Nepal is one of the stamped developing country which are under poverty line and development is taking in tortoise pace rather in the context of commercialization. National development of any country depends upon the economic development of that country and economic development is supported by financial infrastructure of that country. Banks constitute an important segment of financial infrastructure of any country. “Banking when properly organized, aids and facilitates growth of trade and industry and hence of national economy. In modern economy banks are to be considered not as dealers in money but as the leaders of development. Banks are not just the storehouse of the country’s wealth but are the reservoirs of resources necessary for economic development.” (Radhaswami & Vasurdevan, 1984,29). It has since long been realized that domestic savings are required to be increased in order to meet the development needs of the country. Financial institutions like bank serve as prime and most efficient intermediaries for generating such savings.

Simply saying, bank is an institution that deals in money and its substitutes and provides other financial services. Bank accepts deposits and makes loans and derives a profit from the difference in the interest rates paid and charged. Bank is an establishment which extends services to individual such as advances of money as may be required and safety made to and to which individuals entrust money when and required by them for their use. Bank collects unused money from public by providing attractive interest and can earn profit by lending it on mainly in business organization, industrial and agricultural sectors. So, we can say that the main task of commercial bank is to mobilize idle resources in productive areas by collecting it from scattered sources and generate profit. The commercial bank attracts the customers providing effective banking services. Banks play role as intermediaries channeling between saving and investment and fulfill the credit needs of customer as well as investment requirement of savers.

The origin of commercial bank can be traceable in the early times of human history. As early as 2000 B.C., certain people have developed a system of bank in Babylonia. In ancient Greece and Rome, the practice of granting credit was widely prevalent. At the same time, some rich people used to practice storing of precious metal and coins at safe places and loaning out money for public and private purposes on interest. The word 'Bank' is used in the sense of a commercial bank. The word 'Bank' is itself derived from the French word "Banque" and "Italian" word "Banca", which referred as a bench. At that time, there were some moneylenders sitting in the bench for keeping, lending and exchanging of money in the market place and that was the origin of commercial bank in the banking history.

The history of modern banking system is not so long in Nepal. It was introduced only in 1937 with the establishment of Nepal Bank Limited with semi government equity. In depth, evidence of money lending functions are also found in practice before 8^{th} century. In 14^{th} century, "Tanka Dhari" practiced monetary transaction. During the period of Rana Rule, Prime Minister Ranodip established a financial institution "Tejarath Adda". Prior to establishment of Nepal Bank Limited, the institution fulfilled certain extent of banking need of people, who supply credit at 5% rate of interest against security of gold, silver and ornament. After establishment of Nepal Bank Limited, it replaced "The Tejarath Adda" by undertaking over its operation and over its limitations. Nepal Bank Limited has done pioneering function in spreading banking habits among people. To manage and control banking system development, monetary policy development, to regulate issue of currency and to mobilize capital for economic development "Nepal Rastra Bank" came into existence as central bank of Nepal in 1956 under Nepal Rastra Bank Act, 2012 B.S. After that, NRB diverted it attention towards the development of banking system by formulating relevant policies and procedure.

The financial scenario has changed with the introduction of commercial banks. The number of commercial banks has been increasing so is the investment volume and opportunity in various sectors that extends to agriculture industry, commercial and social sectors. The financial scenario has changed with the introduction of joint ventures banks in 1984. The number of commercial banks has been increasing so is the investment volume and opportunity in various sectors that extends to agriculture industry, commercial and social

sectors. Today each and every managerial decision-making is based on financial analysis. It covers the acquisition, utilization, control and administration of fund. "Managerial finance is an interesting, existing and dynamic area of study, and its importance to the long run success of today's business is unquestioned. Financial management leads to the decision-making most skillfully. Finance has become an important branch of any economy of which share market is leading sector. Securities raise funds in capital market that certainly helps to expand the national economy. After 2041 BS the government made & implemented the liberal policy in banking and allowed joint venture banks to accelerate the pace of the economic development of the nation. As a result, numbers of joint ventures are established in the country.

The definitions of bank can be varying according to its functions, services and role. "A Bank can be defined as a 'financial department store' which renders a host of financial service besides taking deposits and giving loans." (Dahal & Dahal, 2002, 7). A Bank is an establishment of the custody of money which it pays out on customer order"(Concise Oxford Dictionary)."Bank is an establishment which makes to individuals such as advantages of money as may be required and safety made to and to which individual's entrust money when not requires by them for use"(The Encyclopedia American Vo 13,1984).

By these definitions, bank can easily be defined as custodian of deposits, which regulates the money of people by making some charge. The banking system helps business entrepreneurs, industrialists and other people to get loan as they need. Therefore a bank is an institution which accepts deposits from the public by providing certain rate of interest and advances loans to needy customers charging them certain rate of interest and earns some profit by doing this intermediation. Investment policy is one of the fact of overall range of policies that guide banks investment operation. A healthy development of any bank depends upon its investment policy. A good policy attracts both borrowers and lenders, which helps to increase the volume and quality of deposits, loan and investment. The commercial banks have several guided principles to provide loan such as profitability, liquidity, safety, purpose, length of time etc. These fundamental principles of commercial bank's investment are considered while making investment policy.

Effective and efficient fund mobilization and investment policy are two major factors for any developing country aspiring for a sustainable economic development. Investment activity is the one of the major activity of any financial institution because only deposit collection carries no meaning. The success and prosperity of the bank relies heavily upon the successful investment of collected resources to the important sectors of economy. Successful formulation and effective implementation of investment policy is the prime requisite for the successful performance of commercial bank. Good investment policy has a positive impact on economic development of the country and vice versa. So, the investment policy of commercial bank should be in accordance with the spirit of the economic upliftment of the people.

There is much impression in the investment policies of commercial bank, which affects their performance to the great extent. It becomes everybody's concern when their performance does not seem so satisfactory in terms of utilization of its resources efficiently in productive sectors. The study of commercial bank investment policy focusing on interest rate structure, portfolio management and credit management will strive to disclose the internal weakness and furnish the ideas for improvement. Therefore the study has undertaken to analyze the performance of a commercial bank and point out the defects inherent in it and provide package of suggestions for its improvement.

1.2 Brief Introduction to Commercial Banks

Not so very long ago, there were more temples than houses in Nepal. Times, however, have changed. Nepal is no longer just a country of temples, it’s a land where financial institutions are rapidly mushrooming. Nearly three dozen commercial banks, five dozen development banks, over six dozen finance companies and several hundred cooperatives are chugging ahead full steam. Currently, there are 160 licensed deposit-taking institutions and at least two dozen financial institutions including five A-class commercial banks are in the pipeline. It’s a mystery how a small economy like Nepal’s which is largely dependent on imports, with little industrial base, is sustaining so many financial institutions. Commercial Bank is a financial institution, which transfer monetary sources to users to users. In the process of such intermediation, Commercial Bank deploys funds raised from different sources into different assets with a prime objective of profit generation and administration assistance. Commercial

banks are those financial institutions that play immense important role in the economic development of the industry, trade and business. According to commercial bank act 2031, “A Commercial Bank means the bank which deals in exchanging currency, accepting deposit, giving loan and doing commercial transaction”. The Commercial Banks pool together the savings of the community and arrange for their productive uses. They supply financial needs of modern business.

The main purpose of establishing Commercial banks was to contribute to the development of banking system, particularly in the remote and hilly regions, providing more banking facilities to the public.

All commercial banks barely follow the directives and policies of Nepal Rastra Bank. NRB functions as the central bank of Nepal. NRB formulates financial and monetary policies under which commercial banks and financial institution are functioning.

Finally we can make an inference that generally bank here refers to a commercial bank at present. Commercial bank refers to the bank which deals with accepting deposits, advancing loans and accelerating money exchanges facilities etc. even the pace of time has changed the portfolio of banking business from its primary function to others like merchant banking, credit card business, debit card, documentary credit, traveler’s cheques, home banking etc. Commercial bank are expected to make investment in all commercial and even in agriculture field and to all qualified customers and thereby aid the communities they serve to grow and to improve their living standards and eventually gear up the sound economy of the nation. So, we cannot imagine prosperity of the nation without sound economy and commercial bank can help a lot in such. Without the development of sound commercial banking, underdeveloped countries cannot hope to join the rank of the advanced countries. The commercial bank play following role:-

- Collecting deposit
- Safe keeping of values
- Help in business formation
- Necessary for trade and industry
- Transfer of surplus funds to needy regions
- Promotion of capital formation

- Remittance
- Extension of credit
- Encouragement for the right type of industries
- Facilitating for the financing of foreign trade

1.3 Statement of the problem

Investment policy, which is the most important factor from financial sector, shareholder and banks management point of view. Subsequent development of Commercial Banks in quality has not been satisfactory. Commercial banks in Nepal have been facing various challenges and problems and sufficient return could not been earned and strong stable and appropriate investment policy has not been followed by commercial banks. Due to throat cut competition of financial environment, banks seems to grant much more loan, advance and other facilities against their client's insufficient deposits. Unsecured loan and investment may cause the liquidation of those commercial banks. Investment policy may differ from one bank to another but there is no optimum utilization of shareholders return in any bank. If the funds are wrongly invested without thinking any financial risk, business risk and other related facts, bank cannot obtain profitable returns as well as sometimes it will lose its principle.

The lending policies have become major problems for developing economic condition of the country. Nepalese commercial bank has not formulated its investment policy in an organized manner not even properly utilizing their deposits because of lack of sound lending policy and investment opportunities. They depend upon the instructions and guidelines of Nepal Rastra Bank. They do not have clear view towards investment policy and have not formulated their own organized investment policy. Lack of foresightedness in policy formulation and absence of strong commitment towards its proper implementation has caused many problems to commercial bank. Furthermore, the implementation of policy is not practiced in an effective way.

Commercial banks give much loan and advances, overdraft and many other kinds of facilities to encourage deposits in bank. But the bank has utilized insufficient deposits to their customer and spent large amount of deposits as office operation expression and welfare.

They only depend upon the direction and guidelines of Nepal Rastra Bank but they do not have clear view and have not formulated their own organized investment policy. Commercial bank have provided loan only on a short term basis but they do not invest on long term projects because of safety and considering the profit potential of the projects. Due to this, they may have insufficient return and most of the commercial banks have to be collapsed due to poor investment policy.

Today, there is a tough competition in banking market but less opportunity to make investment. In this condition, commercial banks can take initiation in search of new opportunities; so that they can survive in the competitive market and earn profit. It is found that some of the commercial banks have diversified their investment in different fields like carpets, garments, distillery consumer goods, housing, hire purchase and institutions investment where some of them are not successful to invest their funds in different areas. In recent years, the industrial growth has not been encouraging so diversification of investment is good opportunity for banks. However, the facts the economy of a largely depends on economic sector should be considered and industrial sector loan and investment should also be given priority.

1.4 Objectives of the study

The basic objectives of this study is to analyze, examine and interpret the investment practices of commercial banks in Nepal. The main objectives of the study are:

- To analyze the investment practices of selected commercial banks.
- To analyze the relationship between the variables to measure the credit performance.
- To analyze the growth and trend of deposits, loan and advances and net profit.
- To study the liquidity, efficiency, profitability, risk position and growth position of sample commercial banks.
- To analyze the views of bankers & credit customers for any credit related problems.

1.5 Research Question

In this context, the deals study with the following issues:-

a. To what extent have the banks utilized the deposits on investment in government securities, shares and debentures of other companies and banks?
b. What is the trend of profit during the study period and what will be the profit for next five years?
c. Is the bank maintaining sufficient liquidity position? What are the risks associated with the liquid assets?
d. What is the relationship between loan and advance to net profit?
e. What are the difficulties in loan management?

1.6 Significance of the study

As Nepal is under developed country, rapid economic development is the basic need for the country's development. Most of the resources of the country are remained unused due to lack of effective banking management. Numbers of banks have been established in recent years. Basically, these banks have given a new horizon to the financial sector of Nepal. Therefore we can stress that commercial banks has affect the economic condition of whole nation. They have achieved tremendous success in terms of market share and profitability due to their prompt service and professionalism. The effort is made to highlight the investment policy of commercial banks expecting that the study can bridged the gap between deposits and investment. As investment activity is the circulatory system of any financial institution, since only accumulation of deposits has no meaning. Better returns can be ensured only when deposits are mobilized through sound investment policy.

Good investment policy has a positive impact on economic development of the country and vice versa. Successful formulation of fund investment policy and its effective implementation is the most important factor in a banking business. Therefore this study will be beneficial to management of the bank that would help them to take corrective action in the field of banking activities and also this study is very essential and would be helpful to all banking sector in mobilization of collected funds from public. The study on investment of bank would help shareholders about how bank is mobilizing their fund in correct place so

that they can make decision related to investment on shares of different banks. This study even helps depositors by providing required information which helps them to make decision about their deposits. Last but not the least this study will provide relevant and pertinent literature for future research on the area of investment policy of banking sector.

1.7 Limitation of the study

Easy availability of data and genuine data is the major problems in research study. Main sources of data collection is from the bank publications, which may not always reliable because they may publish the reports according to their market situation and profit policy. Usually there are some limitations which weaken the generalizations and affect the interpretations viz inadequate coverage of population, time factor, and other variables.

- This study concentrates only on those factors that are related with investment.
- This study deals with 4 banks due to lack of time and resources factor.
- This study is mostly based upon secondary data but some questionnaire survey will be made for primary data collection.
- The study covers only a period of five years.

1.8 Organization of the study

To make the research work better, it is needed to organize the whole things and divide the work as related chapter. So this thesis is organized into five chapters which are as follows:-

Chapter one: Introduction
Chapter two: Review of Literature
Chapter three: Research methodology
Chapter four: Data Analysis and Presentation
Chapter five: Summary, Conclusion and Recommendation

Chapter one deals with subject matter of the study consisting background of the study, profiles of the companies, statement of the problem, objective of the study, significance of the study, research methodology, limitation of the study and organization of the study.

Chapter two deals with the review of literature. It includes conceptual framework along with review of major books, journals, research works, thesis etc.

Chapter three deals with the research methodology. It includes methodology used to achieve the objective of the study sources of data, population and sample, method of analysis financial and statistical tools used.

Chapter four deals with the analysis and interpretation of data using financial and statistical tools described and major findings of the study. This chapter is to analysis different financial ratio and statistical analysis related to investment and fund mobilization of four sample banks. In this chapter, results are found using different ratios like liquidity ratio, assets management ratio, profitability ratio, risk ratio, growth ratio, trend ratio, co-efficient of correlation analysis and regression analysis.

Chapter five, the last chapter, deals with the conclusions and recommendation of the study, beside these, bibliography and appendices are also included at the end of the study.

CHAPTER - TWO

REVIEW OF LITERATURE

The first chapters has provided the introduction, statement of problems, objectives and limitations of this study. This chapter deals with review of literature react to the investment practices of the commercial banks. Literatures are the main sources of information related with the study that provides the bases and input of this study. The chapter has been divided into main sections. The first section of the chapter implies with the conceptual framework of the study whereas the second implies the review of previous studies i.e. books, articles, dissertations etc.

2.1 Conceptual Framework of the Study

2.1.1 Concept of Investment

Investment as a term is quite puzzling and comprehensive. In financial sense, it is termed as money committed or property acquired for future income. We can even say the term investment as, tradeoff between risk and reward while aiming for incremental gain and preservation of the invested amount (principal). In contrast, speculation aims at 'high gain or heavy loss,' and gambling at 'out of proportion gain or total loss.' Two main classes of investment are (1) Fixed income investment such as bonds, fixed deposits, preference shares, and (2) Variable income investment such as business ownership (equities), property ownership. In economics, investment means creation of capital or goods capable of producing other goods or services. Expenditure on education and health is recognized as an investment in human capital, and research and development in intellectual capital. Return on investment (ROI) is a key measure of a firm's performance.

From this study we can give the definition of investment as, in finance, the purchase of a financial product or other item of value with an expectation of favorable future returns. In general terms, investment means the use money in the hope of making more money.

In business, the purchase by a producer of a physical good, such as durable equipment or inventory, in the hope of improving future business. However the investment needs to be a

procedure task. It must follow a definite investment process, which definitely begins from the formulation of proper investment policy.

In the words of Gitman and Joehnk (1990; 22), "Investment is any vehicle into which funds can be placed with the expectation that will preserve or increase in value and generated positive returns."

According to Sharpe and Alexander (1999; 3), " Investment in its broadest sense, means the sacrifice of certain present value for (possible uncertain) future values."

Frank K. Reilly (1999; 5) has defined investment in such way, "An investment may be defined as the current commitment of funds for a period of time to derive a future flow of funds that will compensate the investing unit for the time funds are committed, for the expected rate of inflation and also for the uncertainty involved in the future flow of the funds."

A commercial bank must always arrange its funds and other deposits to profitable, secured and marketable sector so that it earns a attractive amount of profit as well as it should be secured and can be converted into cash as per the requirement.

Thus the investment process emphasizes research-based decision-making, lowering risk and maximizing resources to ensure long-term capital appreciation for fund holders. So, the best way to do this is by working in teams, sharing information and combining a macroeconomic perspective with a company-specific view.

2.1.2. Concept of Commercial Bank

A Commercial bank is business organization that receives and holds deposits of fund from others, makes loans or extends credits and transfers funds by written order of deposits (Grolier Incorporated,1984).

“Commercial bank is a corporation which accepts demand deposits subject to check and makes short- term loans to business enterprises, regardless of the scope of its other services”. (American institute of banking; 1972: 325)

Commercial banks are major financial institutions, which occupy quite important place in the framework of every economy because they provides capital for the development of industry, trade and business and other resource sectors by investing collected deposits. Besides this commercial banks render numerous services to their customer in view of facilitating their economic and social life. All the economic activities of each country are greatly influenced by the commercial banking business in that country. In this way commercial banks have become the heart of financial system. Commercial bank deals with others money. They have to finds ways of keeping their assets liquid so that they could meet the demand of their customers. Liquidity is the lifeline of bank. Any bank perceived to be illiquid cannot attract deposit from the public. Inadequate liquidity does damage credit standing of those organizations, but if banks fail to repay the deposits on demand, the bank loses the trust of the public. This leads to "runs" in the bank and probably bankruptcy thereof. Trade off between liquidity and profitability is thus a crucial task for any bank. Satisfactory trade off is possible through correct prediction of liquidity needs and judicious distribution of resources in various forms of liquid and high earning assets.

The main function of commercial bank is concerned with the accumulation of the temporarily idle money of the general public to advance it to deficit sections i.e. trade and commerce for expenditure. Its main functions are:-

- Accepting various types of deposits
- Lending money in various productive sectors
- Letter of credit
- Guarantee
- Remittance
- Bills
- Others

Hence, a commercial bank can be defined as a "financial department stores" 'which renders a host of financial services besides taking deposits and giving loans.

2.1.3 Historical Development of Bank

The term “Bank” is derived from Italian word “Banko” which means a counter table or bench used by medieval money exchanges. The concept of the banking has been developed from the ancient history with the effort of ancient goldsmiths who developed the practice of storing peoples gold and valuables under such arrangement that the depositors would leave their gold for safekeeping and given a receipt by the goldsmith. Whenever the receipt was presented, the depositors would get back their gold and valuables after paying a small amount as fee for safekeeping and serving. According to Oxford Dictionary bank means “an establishment for keeping money and valuables safety of the money being paid out on the customer order by means of cheque.”

The first bank of the word called the "Bank of Venice" was established in Venice, Italy in 1157 A.D. to finance the monarch in his wars following its establishment. The bank of Barcelona and the bank of Genoa were established in 1401 and 1407, respectively. In England, the banking begins with English goldsmith only after 1640. The Bank of Amsterdam was the great bank in 17th century and it enjoyed a prestigious position. No less important than is help currently by the Bank of England, for a long time in the sphere of international commerce.

2.1.4 Joint Venture

"A joint venture is the joining of forces between two or more enterprises for the purpose of carrying out a specific operation (industrial or commercial) investment, production or trade”. (grupt; 1984:15)

In order to operate a business organization under joint venture basis, there should at least be two partners from two different countries. Joint venture are the commercial banks formed by joining two or more enterprises for the purpose of carrying out specific operation such as investment in trade , business, and industry as well as in the form of negotiation between various groups of industries or traders to achieve mutual exchange of goods and services. JVB’ s are the mode of trading to achieve mutual exchange of goods and services for sharing competitive advantage by performing joint investment scheme between Nepalese investors and their parents banks each supplying 50 percent of total investment. The parent banks,

which have experience in highly merchandised and efficient modern banking services in many parts of the world, have come to Nepal with latest technology and advanced management skills. JVB's are established by joining forces and with ability to achieve a common goal with each of the partners. They are more efficient and efficient monetary institution in modern banking fields than other old type of banks in Nepalese context.

The primary objective of these JVB's always to earn profit by investing or granting loan and advances to people associated with trade, business, industry etc.

2.1.5 Banking in Nepal

There are limited records of traditional banking practiced in the history of Nepal. From the available information, it is very difficult to trace the correct chronological history of the traditional banking system due to the lack of historical reports of banking system. The historical records state that Guna Kama Dev, the king of Kathmandu, borrowed money to rebuild his kingdom in 728 AD.

Some efforts of banking were carried out during the Rana regime. The 'Tejarath Adda' was established during this period, which might be regarded as the father of modern banking institution in Nepal. During the Prime Minister ship of Juddha Shamsher in 1937 AD the "Tejarath Adda" was replaced by a commercial bank, 'Nepal Bank Ltd.', which could be considered as a milestone that marked the beginning of a new era in the history of modern banking in Nepal. Until the mid 1980's, Nepal's financial sector was closed to foreign banks and was effectively controlled by state owned banks RBB and NBL. In 1984, policies were liberalized and banking industry was opened to private sector. After 1984 there was rapid entry of joint venture commercial banks in the Nepalese financial market. In the first phase Nabil Bank (1984), Nepal Indo-Suez Bank (1985) and Nepal standard chartered bank (1987) entered the market. In the second phase Himalayan bank, Nepal SBI Bank, Nepal Bangladesh Bank, Everest Bank, Bank of Kathmandu, Bank of Ceylon entered the market. After these banks, there was a progressive increase in the number of joint venture commercial banks in Nepal. There are 31 commercial banks, 76 development banks, 5 Gramin Bikas Banks, 72 Finance Companies, 11 forth Class (Gha Barga) Finance Limited, 19 Co-operative Limited, 47 Non-Government Organization and 117 Hulak Bachat Banks operating in Nepal till 2010 A.D. The open and liberal policy in the financial sector has helped in establishing many

commercial banks and financial institutions in the country. In Nepalese banking industry there is a lack of product/ service differentiation. All banks are offering the same traditional banking products like deposit schemes, loans, remittances, L/C, guarantee facility to their customers. Only the big and established banks are providing new services like ATM, credit card, tele banking, networked banking and e-banking. Banks like Himalayan, Nabil and Standard Chartered are the pioneers in introducing innovative and modern banking products in the market. Banking industry is accumulating high level of NPA. Every player in the industry is focusing on making profit and increasing market share, resulting in unhealthy competition. Banks are competing through interest rate reduction, issuing loans irrespective of borrowers' credibility and authenticity. In course of making their credit bigger and short term profits banks are becoming least visionary. Nepalese banking industry requires innovation in quality and quantity of services being provided to the customers. But limited attempts are being made.

2.2 Features of a Sound Lending and Investment Practice

As commercial bank is a profit oriented business organization, bank has to advance loan to public and generate interest from them as income. Bank provides short term, and long term loan to their borrowers. Bank provides loan to its borrowers by keeping security as land, buildings, treasury bills etc. The income and profit of a financial institution depends upon to its lending procedure, lending policy and investment of its fund in different securities. A sound lending and investment practice is not only pre-requisite for banks profitability but also of utmost significance for the promotion of commercial savings of an under developed and backward country like Nepal.

The factors that banks must consider for sound lending and investment policies are explained as under:

a. Safety and Security

Banks should buy investment rated securities only. It should not invest its fund in those securities, which are subject to greater depreciation and fluctuation for example common stock, since a little difference may result in a great loss. It must not advance its funds to speculative business, which may earn millions in a minute or may become bankrupt the next minute. Since risk is overpriced during recession and under priced

during boom banks should invest in medium grade and high-grade securities, which are commercially durable, marketable and have high market price.

b. Liquidity

Liquidity is a unique characteristic that describes how easy and at what cost an asset is able to be sold. It is important when investing to understand that there is inherent risk with holding assets that are more liquid, but there are also potential greater rates of return with less liquid investments. Investors sometimes choose to hold their assets in the form of money because it is the most liquid asset and does not need to be converted to another form before people are willing to accept it.

c. Profitability

Profitability is the efficiency with which management has utilized both the total assets and the net assets as recorded on the balance sheet to generate earnings. This efficiency is measured by relating net profit to the assets and resources utilized in generating that profit. Commercial banks can maximize its volume of wealth through maximization of return on their investments and lending.

d. Purpose of Loan

It is very important to be reminded that most of the bank failures in the world are due to contraction in the value of loan and advances. The first substantive question a banker must examine is how loan proceeds will be used. If the loan purpose conflicts with commercial policy, such as loan for some speculative purpose not acceptable to the banker such loans should not be processed. If customers misuse their borrowings, there is risk involved in repayment and the bank will incur heavy bad debts. Detailed information about the plan and scheme of project should be collected and examined before borrowing.

e. **Diversification**

Diversification in finance is a risk management technique, related to hedging , that mixes a wide variety of investments within a portfolio. It is the spreading out of investments to reduce risks(Wikipedia, the free encyclopedia, Diversification-

finance). Because the fluctuations of a single security have less impact on a diverse portfolio, diversification minimizes the risk from any one investment.

f. Legality

Illegal issued securities may cause problems to the investors. Therefore, all commercial banks should follow the directives of NRB, Ministry of Finance and other relevant organization at the time of mobilizing funds.

g. Tangibility

A commercial bank should prefer tangible security to an intangible one. It may be considered that tangible property doesn't yield an income apart from intangible securities, which have lost their value due to price level inflation.

h. Legality

Illegal issued securities may cause problems to the investors. Therefore, all commercial banks should follow the directives of NRB, Ministry of Finance and other relevant organization at the time of mobilizing funds.

2.3 Sources of Funds for the Investment

There are different sources of funds for the investment of the bank.

a. Capital

Capital is the life blood of the trade and commerce. Therefore, capital is needed for the operation of the bank as in other business. The capital terms consists of two elements like

i) Issuing Shares

ii) General Reserve

i) Issuing Shares: Bank issues its share for the collection of capital. So this is one of the sources of fund to invest. By increasing in the issue of shares the bank can increase its capital.

ii) General Reserve: Reserve is kept by the bank separated from the profit. This reserve is also invested at the time of unforeseen event and to cover the loss in future.

b. Deposits

Deposits are the main sources of funds. By providing certain rate of interest, Commercial bank calls for the deposits from the customer. Mainly, the bank like current deposit, fixed deposit and saving deposits, accepts three types of the deposits. These different types of deposits are used for lending the money to different sector like agriculture, production, trade services sector and other industry. The deposits will lead to increase the working capital of the bank.

c. External and Internal Borrowings

Borrowings money through different banks or different institution can collect the funds. In a developing country like Nepal, those types of borrowing are very important. The commercial banks may not have sufficient funds to invest in different sector. In that case it has to borrow from other bank or other financial institutions. Generally the commercial banks borrow from two sources i.e. external and internal. Generally external borrowing means the borrowing from foreign banks, and foreign government. Internals the commercial banks borrow mainly from inter banks and Nepal Rastra Banks. So the commercial bank cannot provide loan or investment without the funds from the funds collected from above different sources the commercial bank grants loan.

d. Accumulated Profit

If the capital is not sufficient and there is need of more money to invest in that case the bank use the accumulated profit to invest. In the time of contingency also, the bank invests its accumulated profit for recovering its future loss.

e. Other use of Funds

A commercial bank must maintain the minimum bank balance with NRB i.e. 8% for fixed deposit and 6% for current and saving deposit account in local currency.

Similarly, 3% cash balance of all local currency accounts must be maintained by it according to the rules of NRB to have a good liquidity position. Again, a part of funds should be used for bank balance in foreign bank and to purchase fixed assets like land, building, furniture, computers, stationery etc.

f. Off Balance Sheet Activities

Off balance sheet activities involve contracts for future purchase of sale of assets and all these activities are contingent obligation. These are not recognized as assets or liabilities on balance sheet. Some good examples of these items are letter of credit, letter of guarantee, bills for collection etc. Nowadays, some economists and finance specialists highlight such activities to expand the modern transactions.

2.4 Principle of Good Investment

a. Principle of Safety

The safety sought in investment is not absolute or completes the word means, rather protection against loss under reasonable likely. It calls for careful review of economic and industrial trend before choosing any type of investment or the time to invest. Thus, this principle recognizes that errors are unavoidable and requires extensive diversification (American Institute of Banking, 1972: 149).

b. Adequate Liquidity and Collateral Value

An investment is a liquid asset if it can be converted into cash without delay at full market value in any quantity. For an investment to be liquid, it must be I) reversible or II) marketable. The difference between reversible and marketability is the process whereby the transaction is reversed or terminated while marketability involves the sale of the investment in the market for cash. To meet emergencies, every investor must have a sound portfolio to be sure for the additional funds, which may be needed for the business opportunities. Whether money is rising is to be done by sale or by borrowing it will be easier if the portfolio pursues a planned proportion of higher grade and readily saleable investment.

c. Stability of Income

Stability of income must be looked at different ways just as was security of principle. An investor must consider stability of monetary income and stability of the purchasing power of income. However, emphasis on income stability may not always be consistent with other investment principles. If the income stability is stressed capital growth and diversification will be limited.

d. Capital Growth

Capital appreciation has today become an important principle. Recognizing the connection between corporation and industry growth and very large capital appreciation, investors and their advisors constantly are seeking "growth stock". It is exceedingly difficult to make successful choice. The ideal "growth stock" is the right issue in the right industry, bought at the right time.

e. Tax Status

To plan an investment program without regarding to one's tax status may be costly to the investor. There are really two problems involved here that, one concerned with the burden of income taxes upon that income. When investor's incomes are small, they are anxious to have maximum cash returns on their hand, investors who are not posses for cash income often find that income taxes deplete certain types of investment incomes less than others.

f. Purchasing Power Stability

Since an investment nearly always involves the commitment of current funds with the objective of the investor should consider receiving greater amounts of future funds, the purchasing power of the future funds. For maintaining purchasing power stability, investors should carefully study I) the degree of price level inflation they accept, II) the possibility of gain and loss in the investment available to them and III) the limitations imposed by personal and family considerations.

g. Conceivability

To be safe from social disorders, government confiscation or unacceptable levels of taxation, property must be conceivable and level no record of income received from its use of sale. Gold and precious stones have long been estimated for purposes because they combine high value with bulk and readily transferable (American Institute of Banking, 1972: 149)

2.5 Review of Legislative Provisions

This section includes some reviews of legislative framework under which the commercial banks operate. Legislative provisions influence on a bank's establishment, mobilization and resources utilization. A commercial bank should specify the legislative provisions indicated by other financial institutions and rules and regulations formulated by NRB.

Investment Management Regulation

A commercial bank decides to invest in shares and securities but such investment is restricted to 10% of paid up capital. However, such investments in all companies in which the bank has financial interest shall be limited to 20% of paid up capital of the bank. But, the total amount of investment in shares and securities of organized institution is restricted to 30% of the paid up capital of the bank (NRB Directives). Commercial banks are not allowed to invest in any shares, securities and hybrid capital instruments issued by any financial institutions licensed by NRB. A commercial bank is related to the fund collected as paid up capital, fund needed to expand the branches, and flexibility of NRB rules and regulations. The main provisions of NRB are discussed here under:

i. Provisions for Investment in the Deprived Sector

Investment in shares of the rural development bank by CBs, which used to be counted for the priority sector lending, is only now the deprived sector lending. According recent provisions effective from 1997/98, NBL, RBB, NABIL,NGBL, NIBL are required to 3% invest, HBL, NSBL,NBBL,EBL, are required to invest 2%, BOK is required to invest 1.75%, NBCL is required to invest 0.75% and new commercial

banks are required to invest 0.25% of their total loans and advances to the deprived sector.

ii. Provisions for Credit to the Priority Sector

Commercial banks are required to extend loans and advances at 12% of their total outstanding credit to the priority sector (agriculture, cottage and small industries) and service are counted commercial banks loan to the cooperatives licensed by the NRB is also to be counted as the priority sector credit from 1995/96 onwards.

iii. Provision for the Investment in Productive Sector

NRB directs the commercial banks they should extend at least 40% of their total credit to the productive sectors. Productive sector investment includes loans to priority sector, agriculture sector, industrial sector etc.

iv. Provision for the Single Borrower Limit

NRB directs commercial banks to set an upper limit of loan financed to an individual, firm, company or group of companies. The single borrower limit should not exceed 25% in the case of fund-based credit and 50% in the case of non-fund based credit such as the letter of credit, guarantee, acceptance letter, and commitment in a fixed proportion of capital funds of the bank. Similarly, NRB has graded NABIL, NGBL, NIBL, HBL, SBI, and NBBL as class 'A' banks, which have been kept outside the provision of the single borrower credit limit. Likewise, commercial banks are permitted to extend an additional 10% credit above the limit fixed by NRB as before in the case of consortium financing.

v. Provision for Minimizing Liquidity Risk

A gap found between maturing assets and maturing liabilities is the liquidity risk. They are monitoring their assets and liabilities on the basis of maturity period. Maturity periods such as 0-90 days, 91-180 days, 181-270 days, 271-365 days, and above 1 year are classified for the purpose of matching the assets liability maturity.

vi. Cash Reserve Requirements (CRR)

Commercial banks are required to have maximum CRR to ensure adequate liquidity, to meet the depositors demand for cash at any time and to inject the confidence in depositors regarding the safety of their deposited funds. NRB directs them to deposit

at Nostro accounts maintained with NRB minimum 5% of total deposit of two weeks. Cash kept at banks vault is not considered as a part of CRR.

vii. Loan Classification and Loan Provision

NRB directs commercial banks to classify their outstanding loan and advances, investment and other assets into four categories via Pass loan, performing loan, substandard loan, doubtful and bad loan when making loan loss provision (LLP) of 1%, 25%, 50% and 100%, respectively.

viii. Directives Regarding Interest Rate Spread

The difference between interest charged in loan and advances and the interest paid to the depositors is Interest Rate Spread. Previously, NRB directed the commercial banks to have Interest Rate Spread at maximum of 5% but now there is no regulation thought NRB official including governor used to give pressure on banks for reducing the Interest Spread Rate on different forums and meetings.

2.6 Review of Books

Bank are such types of Institutions, which deals in money and substitute for money. They deal with credit instruments. The most important think for the bank is good spread of credit. Fluctuate flow of credit and week decision harms the whole economy and the bank as well. Thus to collect fund effectively and its utilization is the very challenging task for the bank. The decision of an investment of fund may be the question of life and death for the bank.

Cross (1963; 87) says in this regard "Lending is the essential of commercial banking, consequently the formulation and implementation of sound policies are among the important responsibilities of bank directors and management. Well conceived lending policies and careful lending practices are essential if a bank is to perform its credit creating function effectively and minimize the risk inherent in any extension of credit."

Bexley (1987; 6) expresses his views as "Investment policy fixed responsibilities for the investment disposition of the bank's assets in term of allocating funds for investment and loan establishing responsibility for day to day management of those assets."

Gitman & Jochek (1990; 69), "Investment is any vehicle in which funds can be placed with the expectation that will preserve or increase in value and generate positive returns."

"The term investing can cover a wide range of activities. It often refers to investing money in certificates of deposits, bonds, common stocks or mutual funds. More knowledgeable investors would include other financial assets such as warrants, puts and calls future contracts and convertible securities. Investing encompasses very conservative positions and aggressive speculation."

Balla (1993; 125), "Financial investment is a form of this general or extended sense of the term. It means an exchange of financial claims, stock and bonds (collectively termed securities), real estate montages etc. The term "Financial Investment" is often used by investors to differentiate between the pseudo-investment concept of the consumer and the real investment of the businessman. Semantic aside, there is still a difference between the pawing of watch and the planting of a field of corn. Some investment are simple transaction among people other involve nature. The former is "Financial" investment. We now turn a closer examination of finance and investment decision themselves."

It may be said that a bank must strike a balance between liquidity, profitability and safety. The secret of successful banking is to distribute resource between the various forms of assets in such a way as to get a sound balance between liquidity and profitability so that there is cash on hand quickly realization to meet every claim and at the same time, enough income for the bank to pay its way and earn profits for its shareholders.

Dr. Shrestha (1995; 51), in her book "Portfolio behavior of commercial banks in Nepal" said, "The commercial banks fulfill the credit needs of various sector of the economy including agriculture, industry, commercial and social service sectors. The lending policy of commercial banks is based on the profit maximizing of the institution as well as the economic enhancement of the country."

Vaidya (1996; 46) on sound investment policy, "A sound investment policy of a bank is such that its funds are distributed in different types of assets with good profitability on one hand and provide maximum safety and security to the depositors and banks on other hand; moreover, risk in banking sectors tends to be connected in the loan portfolio. When a bank

gets into serious financial trouble, its problem usually springs from significant amounts of loan that has become uncollectible due to mismanagement and illegal manipulation of loan, misguided leading policy or unexpected economic down trun. Therefore, the bank investment policy must be such that it ensures that it is sound and prudent in order to protect public funds."

Sharpe and Gordon (1999; 1) has defined the term "Investment" as the sacrifice of money today for the prospective money tomorrow. He writes "Investment in its broadest since means the sacrifice of current dollars for future dollars. Two different attributes are generally involved time and risk. The sacrifice takes place in the present and is certain. The reward comes later, if at all and the magnitude is uncertain. In some case the element of time predominates (e. g. government bond). In other cases, risk is the dominant attribute (e.g. call option on common stock). Hence both time and risk are important."

Various authors of above definition and view, it is clear that an investment means to trade a known rupee amount today for some expected future stream payment or benefits. That will exceed the current outlay by an amount that will compensate the investor for the time the fund committed for the expected change in prices during the period and uncertainty involve in expected future cash flows. Thus investment is the most important factor of commercial banks. So a bank has to be very cautious while investing their funds in various sectors. The success of a bank heavily depends upon the proper management of it's invest able funds.

Investment management of bank is guided by the investment policy adopted by the bank. The investment policy of the bank helps the investment operation of the bank to be efficient and profitable by minimizing the inherent risk. So, that an investment word attach in economic risk and return theory of future results.

2.7 Review of Articles

Sharma (1988) "A study of joint venture banks in Nepal, co-existing and growing out" pointed out that it is very much beneficial for Nepalese to let joint venture banks to enhance the development of local commercial banks. But the government should charge more cost to joint venture banks than the local commercial banks.

He suggested Nepal government to treat equally to joint venture banks and local banks, both types of banks will co-exist complementing each other and contributing the national accelerated development.

Kishi (1996), in his article, "The changing face of the banking sector and the HMG/N recent budgetary policy" concludes that following an introduction of the reform in the banking sectors as an integrate part of the liberal economy policy, more banks and finance companies have come as a welcome measure competition. Slowly and steadily the two government controlled banks, Nepal Bank Limited and Rastriya Banijaya Bank have also shown an improvement of nonperforming loans and are taking steps to adopt improved technology. However, higher economic growth will social justice bringing a significant benefit to the poor are yet to be achieved as envisaged by the HMG/N.

Pradhan (1999) has pointed out of some major issues on local commercial banks in comparison of recently established joint venture banks through his article, "Nepalma Banijaya Bank", Upalabdhi tatha Chunauti". The study deals with the whole CBs system of Nepal in respect of their performance and profitability. Some of his finding relevant to his study is summarized below:

- The deposit collection rate of local banks is very poor in comparison to joint venture banks.
- The patterns of deposit are also different between these banks. The rent of current deposit in local banks is 9.34% only where as in the same joint venture banks is 52.6%, but fixed deposit ratio is very high in local banks.

Shrestha (2055) in her article, "Lending operation of commercial banks of Nepal and its impact of GDP" has presented with the objectives to make an analysis of contribution of commercial banks' lending to the Gross Domestic Product (GDP) of contribution of commercial banks to the GDP. In search methodology, she has considered GDP as the dependent variable and various sectors of lending via agriculture, industrial, commercial, service and social sectors as independent variables. A multiple regression technique has been applied to analyze the contribution.

The multiple analyses have shown that all the variables except service sector lending have positive impact on GDP. In conclusion she has accepted the hypothesis i.e. there has been positive impact by the lending of commercial banks in various sectors if economy, except service sector investment. Likewise Sunity Shrestha has analyzed in her "Financial Performance of Commercial Banks using both descriptive and diagnostic approach." In her studies, she has concluded the following points.

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

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

Shrestha (2055) in his article, "A study on deposits and credits of commercial banks in Nepal" concluded that the credit deposits ration would be 51.30 percent, other things remaining the same, in 2001 AD, which was lowest under the period of review. So he had strongly recommended that the commercial bank should try to invest in new field (expansion of credit of investment in shares) as far as possible. Otherwise, they might not be able to make operating profit.

Hadlock and James (2002), "Do banks provide financial slack?" In this paper their main hypothesis is that the banks have the ability to accurately price financial claims thus including a performance for undervalued firms to choose bank debts as their marginal

financial source. They refer to this expect that this information benefit will be weighed against the variety of contracting costs in a firm's ultimate financing choice. In particular they find that firms who exhibit small pronouncement stock price run-ups and those with high stock return volatility are relatively more likely to announce new banks loans. Since they expect that these firms are the most likely to be undervalued, these findings are consist dent with the presence of an information benefit to bank debt finance.

2.8 Review of Dissertations

Many researchers have published their research article about the investment policy in Nepal. There are many such articles that have been conducted by students regarding the various aspects of commercial banks and financial institutions in order to achieve their goal effectively. Some of these, as supposed to be relevant for the study are presented below:

Silwal (1980) has conducted a study on "Lending policy of commercial banks in Nepal" with the objective of:

- To analyze the role of commercial banks in its historical prospective.
- To show the relationship between deposits and loan and advances.
- To identify major weakness of lending policy of the commercial banks.

The research was conducted mainly on the basis of secondary data. The research finding of the study summarized as follows:

- Effectiveness of lending policy is directly based upon a sounding banking system. But due to geographical variation, transportation, and other regional disparities, it can be said that commercial banks in Nepal are not paying an active role to utilize their sources collected from different sectors.
- By paying higher interest rate, the banks are increasing deposits, which in true increase saving habits of the general people. Then the banks will be able to utilize these idle funds in productive channels. This type of business of commercial banks is really a necessary one in an agricultural country like Nepal, where public investment has limited capacity.

Joshi (1982) in his study entitled, "Lending policy of commercial Banks in Nepal" concluded that commercial banks have collected many resources from people but they are far behind in their utilization. Commercial Banks in Nepal are still lazy to play an active role to utilize their resources collected from different sector in accordance with the need of the economy.

Bohara (1992) in his study entitled, "A comparative study on the financial performance of Nepal Arab Bank Ltd, and Nepal Indosuze Bank Ltd," had made endeavor to examine the comparative financial performance of NABIL and NIBL in terms of their liquidity activity profitability along with other parameters. He has concluded that bank performance cannot be judged solely in terms of profit as it may have earned profit by maintaining adequate liquidity and safety position. But it also be evaluated on the ground of the contribution, it has made to the community, government and national economy or on the social and national priority discharged by banks. This means the banks should come forward with national priority tasks i.e. more deposit collection resources mobilization. The tasks are possible when they expand branches more employment opportunities, services to more customers developing skills and expertise in local staffs, satisfaction on profit earning and exchange of autonomy provide by them. The accountability can be discharged by following their rules regulations institutions directives and priorities.

Pradhan (1994), in his research, "Financial Management practices in Nepal" has studied about the major feature of financial management practices in Nepal. To address his issue a survey of 78 enterprises was carried out by distributing a multiple questionnaires. This contained questions on various aspects of financial management practices in Nepal.

He found that among the several financial functions, the most important finance function appeared to be working capital management. While the least important one appeared to be maintaining good relation with stockholders. The finding reveals that banks and retained earnings are two most widely used financing sources. Most enterprises do not borrow one bank loans; bank loans less than one year are more popular in public sector where as bank loans of 1-5 years are more popular in private sector. In periods of tight money, the majority of private sector enterprises fell that bank will treat all firms equally while public sector does not fell so. Similarly he concluded that the majority of enterprises in traded sector find that the same is one higher side.

Khadka (2000), "A study on investment policy of NABIL in comparison to other joint venture banks of Nepal", had found that liquidity position of NABIL was worse than that of NGBL and NIBL had more portion current assets as loan and advances but loss portion as investment on government securities. NABIL was comparatively less successful in on balance sheet operations as well as off balance sheet operation than that of other JVBs. Profitability position of NABIL was comparatively not better than that of other banks. NABIL was more successful in deposit mobilization but failure to maintain high growth rate of profit in compare to NGBL and NIBL.

He had suggested the JVBs to be careful in increasing profit in real sense to maintain the confidence of shareholders depositors. He had strongly recommended NABIL to utilize its risks assets and shareholders fund to gain highest profit margin and reduce its expenses and collect cheaper fund for more profitability. He had recommended investing its fund in different sectors of investment and administering various deposits schemes to collect fund such as cumulative deposit scheme, price bond scheme, gift cheque scheme, house building deposit scheme etc. He had recommended following liberal lending policy and investment more percentage of total deposit as loan and advances.

Deuja (2004), has conducted his study entitled, "A comparative study of the financial performance between Nepal State Bank of India Bank Ltd. And Nepal Bangladesh Bank Ltd." The researcher's main objective of study was to evaluate the trend of deposits and loan advances of NSBI and NBBL and to evaluate the liquidity, profitability, capital structure, turnover and capital adequacy position of NSBI and NBBL.

Through his research Mr. Deuja has found that the cash and bank balance to current deposit of NSBI are higher, while fixed deposit to total deposit, loans and advances to current assets of NBBL are higher and NBBL has better turnover than NSBI in terms of loan and advances to total deposits ratio and loan and advances to fixed deposit ratio where as the loan and advances ratio is better than NBBL. Further NBBL has better utilization of resources in income generating activity than NSBI. Through return on total assets and return on total deposit is better of NSBI than NBBL they are on decreasing trend while interest earned to total assets and return on net worth of NBBL is better than NSBI. As per MR. Deuja both banks are highly leveraged.

2.9 Research Gap

The review of above relevant literature has contributed to enhance the fundamental understanding and knowledge, which is required to make study meaningful and purposive. Investment in different sectors is made on the basis of the directive and circulars of Nepal Rastra Bank as well as the investment guidelines and policy of the concerned commercial bank. Commercial banks should follow these directives and circulars. Furthermore, their own investment guidelines and policies should be in line with NRB directives and circulars. So the up to data study over the change of time frame is major concern for the researcher and concerned organization as well as industry as a whole. This study covers the more recent financial data, NRB circulars and guidelines than that of studies previously conducted.

The optimum diversification of loan and advances reduced the default risk of credit. It is the major concern of stakeholders to know the portfolio behavior of the bank. This study puts its effort to find out the proportion to total loan and advances of the bank disbursed to different sectors of economy and analyses the diversification of its investment.

No case study has yet been shown about regression analysis on this topic i.e. investment policy. Here Simple regression analysis has been used. It is used to describe the nature of a relationship and to make predictions. Simple regression has one prediction variable predicting one criterion variable, where as multiple regressions have two or more independent variable predicting one dependent variable.

So, this study will be fruitful to those interested persons, parties, scholars, teachers, businessman, civil society and government for academically as well as policy perspectives.

CHAPTER - THREE

RESEARCH METHODOLOGY

The chapter is related to the Research methodology. It depends on the various aspects of the research project. Research methodology describes the methods and process applied in the entire aspect of the study. It is preferable to call this study an in depth analysis of the investment policy. This study basically helps to conclude the real position of Nabil Bank, Himalayan Bank, Everest Bank and Nepal SBI Bank. This chapter includes research design, Population and sample, nature and sources of data, analysis of data etc.

3.1 Research Design

Research design is planned structure and strategy of investigations conceived so as to obtain answers to the research question and to control variances. It is an organized approach and not a collection of loose unrelated parts. It is an integrated system that guided the researcher in formulating, implementing and controlling the study. The study is based on secondary sources of data so descriptive and analytical research design has been used.

3.2 Nature and Sources of Data

The study conducted on the basis of primary data and secondary data. For primary data, a set of questionnaire were asked with some bank professionals & their answers were used as a primary source of data. For secondary data, relating to “Investment” e.g. deposit, loan and advances and profit/loss that have been directly obtained from the balance sheet and the P/L a/c concerned banks annual reports, collected from number of institution and authorities like NRB budget speech, NRB published books, bank bulletin newspaper previous studies, security exchange board, Nepal Stock exchange Ltd. all the secondary data are observed, processed and tabulating in the time as per need and objectives. Various data and information are collected from the economic journal, periodicals, bulletins magazines and other published and other published and unpublished reports and documents from various sources.

3.3 Population and Sample

Population refers to the entire group people, events or things of interest that a researcher wishes to investigate. Since this study is about investment practices of commercial banks, the population for this study comprised all the licensed commercial banks of the country. There are altogether 31 commercial banks (domestic commercial banks and joint venture banks) functioning till to date and most of their stocks are traded actively in the stock market. Here for the study or for sample Nabil Bank Limited, Himalayan Bank Limited, Everest Bank Limited and Nepal SBI Bank Limited are taken into account as a population of the study.

Table 3.1

List of Sample Companies (Commercial Banks)

S.N.	Name of commercial Banks	Years	Observation
1.	NABIL	2004,05,06,07,08	5
2.	HBL	2004,05,06,07,08	5
3.	EBL	2004,05,06,07,08	5
4.	NSBI	2004,05,06,07,08	5
Total Observations = 20			

(Source: Annual Report & Websites of Concerned Banks)

3.4 Nature, Source and Collection of Data

The study is mainly based upon secondary data. The data required for analysis are directly obtained from profit and loss a/c and balance sheet of concerned banks annual reports. Supplementary data and information are collected from sample banks and regulating authorities like NRB , security exchange board, Nepal stock exchange ltd, ministry and finance, budget speech of different fiscal years, economy survey and national planning commission etc. The websites of the selected banks have been used as secondary source of data. Likewise, various data and information are collected from the economic journals, periodicals, bulletins, magazines and other published and unpublished reports and document

from various sources. Some have been collected from central library of TU, library of Balkumari College. Formal and informal talks with the concerned authorities of the banks were also helpful to obtain the additional information of the related problems. And a set of questionnaire were asked with some bank professionals which is used as a primary source of data

3.5 Processing and Analysis of Data

The data collected from different sources are recorded systematically and identified. All the data collected from secondary sources may not be appropriate to analyze without processed. So data collected are separated as relevant and irrelevant then all required data are compiled processed and tabulated in time series as per need and objectives. To achieve the objective of this study some statistical and financial tools have been used. The data extracted from various sources are processed and tabulated in various tables and charts under different heading according to their nature. These data are then used for required calculation like ratio analysis, growth ratio and analytical tools are used to examine the financial strength and weakness of the bank. Similarly, some statistical tools like graph, percentage, coefficient of correlation, regression analysis and method of least liner trend are also used in this study. Statistical results help to achieve the objective the study. The various tools applied in this study are presented as follows:

3.5.1 Financial Tools

Financial analysis is the process of identifying the financial strength and weakness of the firm by properly establishing relationship between the items of the balance sheet. Financial tools are used to examine the financial strength and weakness of the bank. In these study financial tools like ratio analysis has been used.

Ratio Analysis

Ratio Analysis is the widely used tools of financial analysis. It is completed by dividing one item of relationship with the other. Ratio simply means one number expressed on terms of another. Financial ratio is the mathematical relationship between two accounting figure. Ratio analysis is a part of whole process of analysis of financial statement of any industrial concern especially to take output and credit decisions. Thus ratio analysis is done to compare

a firm's financial performance and statues to that of other firms or to itself overtime. The qualitative judgment regarding financial performance of a firm can be done with the help of ratio analysis. Even though there are many ratios only those ratios have been covered in this study which are related to investment operation of the bank. Following ratios have been computed and analyzed in this study.

a. Liquidity Ratio

Liquidity Ratio measures the firm's ability to meet its current obligation. Commercial banks collect fund from the community with a commitment to return depositor's fund, facilitate withdrawal on demanded. A firm should ensure that it does not suffer from lack of liquidity and also that it does not have excess liquidity. It is necessary to strike a proper balance between high liquidity and lack of liquidity. The following ratios are evaluated under liquidity ratio:

i) Current Ratio

The current ratio is calculated by diving current assets by current liabilities:

Current Ratio = $\frac{Current\ Assets}{Current\ Liabilities}$

The current ratio is a measure of the firm's short-term solvency. It also shows the relationship between CA and CL of a firm. Current assets include cash and those assets which can be convened into cash within a year such as money at call or short notice, loans and advances, overdrafts, bills purchased and discounted, Investment in government securities, prepaid expenses, and other interest receivables and miscellaneous current assets. In this research study, leasehold improvement (deferred expenditure) as they are amortized over the period of lease has been included in fixed assets. Prior to F/Y 2001/2002 they were booked under current assets.

All obligation maturing within a year are included in current liabilities such as deposit and other accounts, short term loans, outstanding or accrued expenses, bills payable, tax liability, staff bonus, dividend payable, long term debt

maturing in current year and miscellaneous current liabilities. As a conventional rule a current ratio of 2:1 is considered satisfactory. A current ratio is a crude and quick measure of the firm's liquidity.

ii) Cash and Bank Balance to total Deposit Ratio

They are the most liquid of current assets to pay off depositors immediately. This ratio is calculated by dividing cash and bank balance by total deposits. In order to bring about consistency in this research, checks for clearing have been excluded from cash and bank balance and included in other assets. Mathematically,

Cash & Bank Balance to total Deposit Ratio = $\frac{Cash\ \&\ Bank\ Balance}{Total\ Deposit}$

Cash and bank balance includes cash in local currency & foreign currency on hand or with banks. The total deposits consists of deposits in current account, saving account, fixed deposit account, money at call deposits, margin deposits etc. A higher ratio indicates greater ability of banks to meet their deposits and vice-versa.

iii) Cash and Bank Balance to Current Assets Ratio

This ratio measures the percentage of liquid assets i.e. cash and bank balance in the current assets of the firm. Higher ratio shows greater capacity of firms to meet cash demand. The ratio is calculated by dividing cash and bank balance by current assets. Mathematically,

Cash & Bank Balance to Current Assets Ratio = $\frac{Cash\ \&\ Bank\ Balance}{Current\ Assets}$

iv) Investment in Government Securities to Current Assets Ratio

This ratio is used to find the percentage of current assets invested in government securities, i.e. treasury bills, development bonds etc. Commercial banks are interested to invest some portion of their collected fund in government securities as they are risk free and can easily sold in the market. Mathematically,

Investment in Government Securities to current Assets ratio = $\frac{Total\ Investment\ in\ Governmetn\ Securities}{Current\ Assets}$

v) Loan and Advances to Current Assets Ratio

The major portion of a bank's assets side of the balance sheet includes loan and advances. Loan and advances comprise of loan and advances, credit overdraft, bills purchased and discounted. In this research study, staff loan and advances have been treated as other assets to maintain status quo with the practice followed by banks.

It shows the percentage of total loan and advances to current assets. Mathematically,

Loan and Advances to Current Assets Ratio = $\frac{Total\ Loan\ and\ Advances}{Current\ Assets}$

b. Assets Management Ratios (Activity ratio)

In order to satisfy its customers, earn profit and for its own survival a commercial banks must be well versed in managing its assets. Activity ratios are employed to evaluate the efficiency with which the firm manages and utilizes its assets. In this study, it is used to measure the bank's ability to utilize their available resources. The following ratios related to investment policy are calculated under assets management ratio.

i) Loan and advances to Total Deposit Ratio

This ratio is calculated to find out how successfully the selected banks are utilizing their total deposits on loan and advances to generate profits. A higher ratio is indicative of better utilization of total deposits, but the same might not hold true from liquidity point of view. It is computed by dividing total loan and advances by total deposits. Mathematically,

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

ii) Loan and Advances to Total Working Fund Ratio

The major portion of a bank's assets side of the sheet includes loan and advances. It is also the major component of the total working fund. This ratio shows the ability of a bank to channelize its assets in the form of loan and advances to earn higher profits. A higher ratio indicates better mobilization of fund as loan and advances and vice-versa. Mathematically,

Loan and Advances to Total Working Fund Ratio = $\frac{Total\ Loan\ and\ Advances}{Total\ Working\ Fund}$

Where total working fund includes all assets of balance sheet items i.e. current assets, net fixed assets and other miscellaneous assets.

iii) Total Investment to Total Deposit Ratio

This ratio shows the utilization of firm's deposits on investment in government securities and purchasing shares and debentures of other companies. A high ratio is indicative of high success in mobilization of deposits in investments and vice-versa. This ratio can be calculated by dividing total investment by total deposits. Mathematically,

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

iv) Investment on Government Securities to Total Working Fund Ratio

This ratio shows the percentage of total working fund invested in government securities. In other words, this ratio measures the extent to which the banks have been successful in mobilizing their total working fund on different type of government securities. The logic behind Investment on government securities by banks is to diversify the risk by not putting all the eggs in the same basket. This is also beneficial in the sense that banks are assured of adequate liquidity. A high ratio indicates better mobilization of funds as Investment on government securities and vice-versa.

This ratio can be calculated by dividing total amount of investment in government securities by the total working fund. Mathematically,

Investment in Government Securities = $\frac{Investment\ in\ Govt.Securities}{Total\ Working\ Fund}$

v) Investment on Share and Debentures to Total Working Fund Ratio

This ratio shows the percentage of total working fund invested in purchasing shares and bonds & debentures of other companies. Investment on shares and debentures to total working fund measures the extent to which the banks have been successful in mobilizing their total assets on shares and debenture of other companies to generate income. A high ratio indicates portion of investment on shares and debentures out of total working fund and vice-versa. This ratio is calculated by dividing the total amount of investment is shares & debenture of other companies by total working fund. Mathematically,

Investment on Shares & Debentures to Total Working Fund Ratio = $\frac{Investment\ in\ Shares\ \&\ debentures}{Total\ Working\ Fund}$

vi) Total off Balance Sheet Operation to Loan and Advances Ratio

This ratio shows the proportion of free based off balance sheet activities are very much dependent on made operation management strategy banking net work with foreign banks etc. A high ratio indicates the highest OBS transaction or vice versa. Mathematically,

Total off Balance Sheet Operation to Loan and Advances Ratio = $\frac{Off\ Balance\ Sheet\ assets}{Loan\ \&\ Advance}$

vii) Loan Loss Relation

It is occurred when the debtors fail to pay their loan. Greater loan loss provision is made in income statement if high loss is expected. But this will lead to low profit and possible losses and produces low increase or decrease in capital. The loan loss ratio shows how efficiently the bank manages its loan and advances and makes effort for timely recovery of loan.

Loan Loss Relation = $\frac{Loan\ Loss}{Loan\ \&\ Advance}$

c. Profitability Ratio

The profitability ratios are calculated to measure the overall efficiency of a firm in terms of profit earning and performance. Profit is one of the major indicators of efficient performance of banks. One of the major objectives of banks is to earn profit, so profit is very crucial for the survival of banks. To meet various objectives like, maintaining good liquidity position, meet internal obligations, expansion of banking services, finance short-term government needs, commercial banks need to earn sufficient profit. A higher profit ratio shows higher efficiency of a bank. The following ratios related to investment policy are calculated under profitability ratios:

i) Return on Loan and Advance Ratio

Return on loan and advances ratio indicates how efficiently the bank has utilized its resources in the form of loan and advances to generate good return. It measures the earning capacity of a commercial bank. This ratio is calculated by dividing net profit by loan and advances. Mathematically,

Return on loan & Advances ratio = $\frac{Net\ Profit\ Loss}{Total\ Loan\ and\ Advances}$

ii) Return on Total Working Fund

Return on total assets shows the overall profitability of working fund or total assets. Return on working fund ratio is a measuring rod of the profitability with respect to each financial resource investment of banks assets. If the banks total working fund is well managed and utilized efficiently, return on such assets will be higher and vice-versa. This rati is calculated by dividing net profit by total working fund. It is calculated by dividing net profit by total assets. Mathematically,

Return on Total Assets = $\frac{Net\ Profit/loss}{Total\ Working\ Fund}$

iii) Total Interest Earned to Total Working Fund Ratio

This ratio is calculated to fund the percentage of interest earned to total assets. This ratio reflects the extent to which banks are successful in mobilizing their assets to generate high income. This ratio presents the earning capacity of a

bank on its total working fund. Higher ratio indicates better performance or proper utilization of total assets in the form of interest earned on its working fund. This ratio is calculated by dividing total interest earned by total working fund. Mathematically,

Total Interest Earned to Total Working Fund Ratio = $\frac{Total\ Interest\ Earned}{Total\ Working\ Fund}$

iv) Total Interest Earned to Operating Income Ratio

This ratio is measured to find out the ratio of interest income with operating income of the bank. It shows how efficiently the banks have mobilized their resources in interest bearing assets i.e., loan and advances, investment in government securities. Total operating income includes interest income, commission fees & discount, dividend income, foreign exchange income etc. This ratio shows the magnitude of interest income in total income. It is calculated by dividing total interest earned by net operating income. Mathematically,

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

v) Total Interest Earned to Total Outside Assets Ratio

This ratio is calculated to find the percentage of interest earned to total outside assets of the bank, which includes loan and advances, investment on Government securities, Investment on share and debentures and all other types of investment. It is calculated by dividing total interest earned by total outside assets. A high ratio indicates high return on total assets and vice-versa. Mathematically,

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

vi) Total Interest Paid to Total Working Fund Ratio

This ratio measures the percentage of total interest expenses against total working fund. A high ratio is indicative of higher interest expenses on total

working fund. This ratio is calculated by dividing by total interest paid by total working fund. Mathematically,

Total Interest Paid to Total Working Fund Ratio = $\frac{Total\ Interest\ Paid}{Total\ Working\ Fund}$

d. Risk Ratio

Risk means uncertainty, variability of return, which is inherent in any investment portfolio of a business enterprise. Risk is an important element since investment with greater risk requires higher return than investments with lower risk, Risk ratios measures the degree of risk involved in various financial operations. The possibility of risk involved in bank's financial operations makes the bank investment a challenging task. As the notion goes, "no risk no gain", therefore, if a bank expects high return on its investment it must be prepared to accept the risk and manage it efficiently.

The following risk ratios are used to analyze and interpret the financial data and investment policy.

i) Liquidity Risk Ratio

Liquidity risk of the bank defines its liquidity needs for deposit. Cash and bank balance are the most liquid of all the assets and are considered bank's liquidity sources. Deposits on the other hand refer to the liquidity needs of banks.

This ratio measures the risk associated with the liquid assets i.e., cash and bank balance that are kept to satisfy the cash demand of customers, A higher ratio shows that the banks has sufficient cash to meet its current obligations i.e. lower liquidity risk, but that may have an adverse impact on the profitability position of the bank. A trade off between liquidity and profitability must be maintained. This ratio is calculated by dividing cash and bank balance by total deposit. Mathematically,

Liquidity Risk Ratio = $\frac{Total\ Cash\ \&\ Bank\ Balance}{Total\ Deposits}$

ii) Credit Risk Ratio

Normally, every credit is good at the time it is sanctioned. Most of the bank failures are due to shrinkage in the value of loan and advances. Loan is a risky

assets and risk of non-repayment of loan in known as credit risk or default risk. Credit risk ratio measures the possibility of loan going into default. While sanctioning loans banks measure credit risk involved in the project. Credit risk is calculated by dividing total loan and advances by total assets. Mathematically,

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

iii) Capital Risk Ratio

The capital risk ratio indicates how much assets value may decline by bank before the position deposition and other creditors is jeopardized. So a bank needs to maintain adequate capital in relation to the nature and condition of its assets, its deposits liabilities and other corporate responsibilities. This also determines the level of profit. A bank earn if a bank choose to take high capital risk.

Capital Risk Ratio = $\frac{Capital}{Risk\ Wt.\ Assets}$

e. Growth Ratio

The growth ratios represent how the commercial banks are maintaining their economic and financial condition. As a conventional rule, a higher ratio is preferable. A high ratio indicates better performance of the banks and vice-versa. The following growth ratios directly related to the fund-mobilization and investment of the banks are calculated:

a. Growth ratio of total deposit
b. Growth ratio of total investment
c. Growth ratio of loan and advances
d. Growth ratio of net profit

3.5.2 Statistical Tools

Statistical tools are the mathematical techniques used to facilitate the analysis and interpretation of numerical data. In this study statistical tools such as standard deviation, coefficient of variance, least square and linear trend have been used. The basic analysis is written in point below:

a. Co-efficient of correlation analysis

This statistical tool interprets and identifies the relationship between two or more variables. It identifies whether two or more variables are positively correlated or negatively correlated Statistical tool helps to analyze the relationship between these variables and aids the selected banks to prepare appropriate investment policy relating to deposit collection, fund utilization (loan and advances and investment) and profit maximization. This study attempts to find out relationship between the following variables:

i) Co-efficient of co-relation between deposit and loan and advances.
ii) Co-efficient of co-relation between total deposit and total investment.
iii) Co-efficient of co-relation between total outside assets and net profit.
iv) Co-efficient of co-relation between deposits and net profit.
v) Co-efficient of co-relation between deposits and interest earned.
vi) Co-efficient of co-relation between loan and advances and interested paid.
vii) Co-efficient of co-relation between total working fund and net profit.

There are different techniques of calculating correlation coefficient. Among various techniques we have used Karl Pearson coefficient of correlation. It is calculated as follows:

$$\text{Correlation Coefficient (r)} = \frac{\sum XY}{n\,\sigma_x\ \sigma_y}$$

Where $x = (X - \bar{x})$, $y = (Y - \bar{y})$

Here,

σ_x = Standard Deviation of series X

σ_y= Standard Deviation of series Y

n = No. o pairs of observation

On simplication of the equation of r, we obtain the following formula for computing r.

$$r = \frac{\sum xy}{\sqrt{\sum x^2 . \sum y^2}}$$

The Karl Pearson Coefficient of correlation always falls between -1 to +1. The value of correlation in minus signifies, the negative correlation and in plus signifies the positive correlation. If,

r = 0, There is no relationship between the variables.

r < 0, There is negative relationship between the variables.

r > 0, There is positive relationship between the variables.

r = +1, The relationship is perfectly positive.

r = -1, The relationship is perfectly negative.

The reliability of he correlation coefficient is judged with the help of probable error (P.E). It is calculated as follows:

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

Where, r = correlation coefficient

n = No. of pairs of observation.

If r > 6 P.E, then the correlation coefficient is significant and reliable.

If r < 6 P.E, then the correlation coefficient is insignificant and there is no evidence of correlation.

b. Trend Analysis

Trend Analysis is one of the statistical tools which is used to determine the improvement or deterioration of its financial situation. Trend analysis informs about

the expected future values of various variables. This topic analysis the trend to deposits, loan and advances, investment and net profit of selected banks and makes the forecast for the next five years. The following trend value analysis has been used in this study.

i) Trend Analysis of total deposits.
ii) Trend Analysis of loan and advances.
iii) Trend Analysis of total investment.
iv) Trend Analysis of net profit.

The formula of least square method for straight line is represented by the following formula.

$$Y_c = a + bX$$

Where,

Y_c = Trend Values

a = Y intercept or the computed trend figure of the Y variable, when X=0

b = Slope of the trend line of the amount of change in Y variable that is associated with change in 1 unit in X variable.

X = Variable that represent time i.e. time variable

By simple method the value of the constant "a" and "b" can be determined by using the following formula.

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

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

where, n= number of years

c. Arithmetic mean

Arithmetic mean is the sum of all the observations divided by the number of observations. Arithmetic mean is calculated to find the mean of financial ratio. The arithmetic mean can be computed as:-

A.M. = $\frac{\sum fx}{n}$

d. Standard deviation

The measurement of the scatterings of an average is known as dispersion. The S.D. means a high degree of uniformity of the observations as well as homogeneity of the serried a large S.D means just the opposite. In this study S.D. of different rations are calculated. It is computed as :-

Standard Deviation (S.D) = $\sqrt{\frac{\sum x^2}{n} - \left(\frac{\sum x}{n}\right) 2}$

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

The co-efficient of variation is the relative measure of dispersion, comparable across distribution, which is defines to the mean expresses in percent. It is calculated as:

C.V = $\frac{S.D}{Mean} \times 100$

f. Regression Analysis

Regression analysis is used to estimate the likely value of one variable from the know value of the other variable i.e. in regression analysis we established a kind of average irreversible functional relationship between the two variables. The cause and effect relationship clearly indicated through regression analysis than by correlation. In other words, regression analysis is a mathematical measure of the average relationship between two or more variables in terms of original units of data. There are two types of variables i.e. dependent variable and independent variable. The variable whose value is influenced or is to be predicated is called dependent variable whereas the variable which influences the value or is used for prediction is called independent variable. Thus regression analysis studies the statistical relationship between the

variables. The main objective of regression analysis is to predict or estimate the value of dependent variable corresponding to a given value of independent variables. While regression analysis has been developed to study and measure the statistical relationship between two variables only then the processes known as the simple regression analysis. Regression lines expresses in terms of mathematical relations are known as regression equations. It is the line which gives the best estimates for the value of Y for any specified values of X. Regression equation of Y on X is given by

$$Y = a + bx$$

Where,

Y = Dependent variable (Net profit)

X = Independent variable (Total deposit)

Net profit = a + b (total deposit)

a = Intercept of the line

b = Slope of the line

The values of the constants 'a' and 'b' can be determined by solving two normal equations (applying principle of method of least squares).

$$\sum y = na + b\sum X \text{ …….ii}$$

$$\sum xy = a\sum X + b\sum X^2 \text{…….iii}$$

CHAPTER – FOUR

PRESENTATION AND ANALYSIS OF DATA

This chapter implies the presentation and analysis of data collected from various secondary sources. The chapter has been divided into two main sections. The first section of the chapter includes the presentation and analysis of data while the second section includes major findings of the study.

4.1 Financial Analysis of Commercial Bank

4.1.1 Liquidity Ratio

(a) Current Ratio

It is the relationship of current assets and current liabilities. The status of the current ratio of the sample companies are given below:

Table 4.1

Current ratio (Times)

Bank	Fiscal Year					Mean	S.D	C.V %
	2003/04	2004/05	2005/06	2006/07	2007/08			
NABIL	1.29	1.13	1.05	1.15	1.20	1.16	0.08	6.89
HBL	1.01	1.07	1.13	1.21	1.25	1.13	0.088	7.76
EBL	1.57	1.61	1.43	1.45	1.44	1.50	0.869	57.93
NSBI	1.95	1.98	2.32	2.00	2.02	2.05	1.18	57.45

(Source: Annual Report & Websites of Concerned Banks)

In the table 4.1, current ratio of commercial banks has been analyzed. The table reflects that the current assets of all commercial banks have exceeded the current liabilities during the five years period. In general it can be said that all the banks have sound ability to meet their short term obligations. In other words, bank is capable of discharging the current obligations.

In case of NABIL, the current ratios are in decreasing trend from fiscal year 2003/04 to 2005/06 but it is in increasing after the year 2006/07. HBL has also increasing trend from fiscal year 2003/04 to 2007/08. Same as, EBL has also increasing trend from fiscal year 2003/04 to 2006/07 but slightly decreased in 2007/08 by 0.01. Similarly, NSBI is also in increasing ratio till 2005/06, but then it has a fluctuating trend ratio. In an average, NABIL & HBL has maintained lower current ratio. The value of coefficient of variation of EBL is 57.93% which is comparatively higher than NSBI and far greater than NABIL & HBL. It can be said that current ratio of EBL & NSBI is less consistence than NABIL & HBL . Here NABIL has maintained more consistency.

b. Investment on Government Securities to Current Assets Ratio

The ratio examine portion of a commercial banks current assets which invested in different government securities i.e. treasury bills and government bonds. Commercial banks are interested to invest their collected fund on different securities issued by government to utilize their excess funds. Even governments securities are not so liquid as cash and bank balance of commercial bank, they can easily be sold in the market or it can also be converted into cash in other ways. The ratio is computed as:-

Table No. 4.2

Investment on Government Securities to Current Assets Ratio

Bank	Fiscal Year					Mean	S.D	C.V %
	2003/04	2004/05	2005/06	2006/07	2007/08			
NABIL	21.90	15.91	12.52	21.04	14.82	17.23	3.67	21.31
HBL	18.07	26.24	19.16	22.02	24.00	21.89	3.07	14.02
EBL	25.98	18.08	23.57	22.58	18.09	21.66	3.12	14.40
NSBI	21.68	25.68	26.97	16.64	17.18	21.63	4.23	19.55

(Source: Annual Report & Websites of Concerned Banks)

The above table 4.2 reflects that investment in government securities to current asset ratio of NABIL is in decreasing trend till 2005/06 but then it is fluctuating trend, same as HBL &

EBL are also in fluctuating trend, where as, NSBI is in increasing till 2005/06 but decreases on 2006/07 & slightly increases on 2007/2008.

The mean ratio of HBL EBL & NSBI is almost similar and higher than NABIL. It means that HBL, EBL & NSBI has invest it's as much as portion of its current assets as government securities as that of NABIL. The coefficient of variation of HBL is lower in comparison to the other banks.

Lastly, it can be conclude that it has invested it's more of portion assets as government securities than other banks and investment made is consistence of coefficient of variation reveals. But its liquidity portion is slightly poor than other banks in view point of investment on government securities.

c. Loans and Advances to Current Assets Ratio

Loan and advances include short and long term loan overdrafts and cash credit. Commercial banks should not keep its all collected funds as cash and banks balance in order to invest as loan and advances to the customers. If sufficient loan and advances cannot be granted, it should pay interest on those un-utilized deposits funds. Even high loan and advances may also effects to keep the bank in most liquid position because they can only be collected at the time of maturity. Thus, a bank must maintain its loan and advances on proper way.

Table No. 4.3

Loan and Advances to Current Assets Ratio

Bank	Fiscal Year					Mean	S.D	C.V %
	2003/04	2004/05	2005/06	2006/07	2007/08			
NABIL	48.85	69.77	70.30	68.03	68.18	65.02	8.135	12.51
HBL	62.95	59.61	61.48	61.58	65.30	62.18	2.01	3.23
EBL	61.98	65.60	65.12	65.58	68.81	65.41	2.16	3.31
NSBI	59.01	61.67	57.27	67.12	68.56	62.72	4.51	7.19

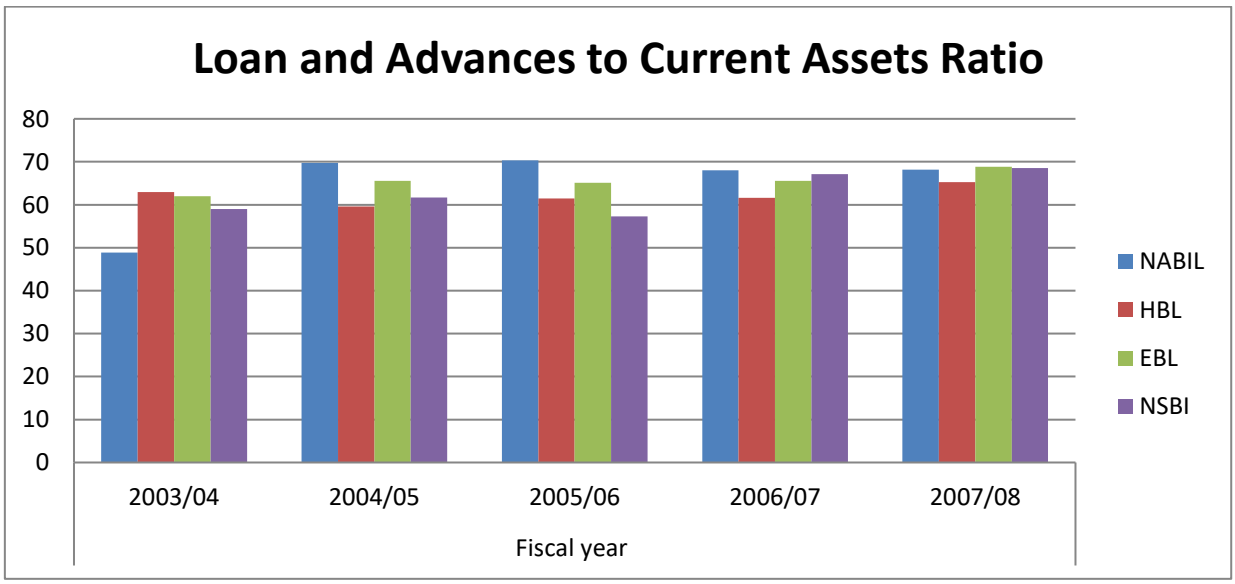
(Source: Annual Report & Websites of Concerned Banks)

The table shows the percentage of loan and advances ratio to current assets ratio position of NABIL, HBL, EBL and NSBI. The loan and advance to current assets ratio of all banks are in increasing trend. The mean ratio of NABIL is slightly less than EBL but higher than HBL & NSBI.

It reflects that loan and advances to current asset ratios of the NABIL has maintained a highest ratio of 70.30% in the FY 2005/06. Similarly, HBL, EBL and NSBI have 65.30% in 2007/08, 68.81 in 2007/08 and 68.56% in the FY 2007/08.

The coefficient of variation among ratio is lower in case of HBL, which indicates uniformity of HBL in comparison to other banks. So it can conclude that it has better to mobilize its funds as loan and advances. On the other hand, satisfactory than that of other banks from the view point of mean ratios.

Figure 4.1



(Source: Table 4.3)

4.1.2 Asset Management Ratio

Commercial bank must be managed its assets very well to satisfy its customers to earn high profit and for its own existence. It measures the efficiency of the bank.

a. Loans and Advances to Total Deposits Ratio

This ratio measures how successfully the banks are able to mobilize the total deposit on loan and advices for profit generating purpose. Higher the ratio indicates the better mobilization of total deposits, but too high is not be better from its liquidity point of view. This table 4.4 reflects the percentage of loan and advances to total deposit ratios position of NABIL, HBL, EBL and NSBI.

Table No. 4.4

Loan and Advances to Total Deposit Ratio

Bank	Fiscal Year					Mean	S.D	C.V %
	2003/04	2004/05	2005/06	2006/07	2007/08			
NABIL	58.00	72.57	66.79	69.58	66.94	66.78	30.32	45.40
HBL	54.30	50.06	55.27	56.56	61.23	55.48	3.66	6.60
EBL	72.97	75.45	71.01	75.13	76.48	74.20	2.22	3.00
NSBI	71.45	71.79	69.32	82.65	88.32	76.70	7.49	9.76

(Source: Annual Report & Websites of Concerned Banks)

The ratios of NABIL is fluctuating trend. Whereas, HBL and EBL are in increasing trend. Likewise, NSBI ratio is also in increasing trend upto FY 2004/05 and decreases in a year 2005/06 but then it increases to 88.32% in 2007/08, which is the highest ratio among five years. NABIL has maintained its higher loan and advances to total deposit i.e. 72.57% in a year 2004/05, likewise HBL has maintained higher ratio in a year 2007/08 and EBL is in 76.48% in a year 2007/08 respectively. The mean value of EBL i.e. 74.20, which is less than NSBI but higher than NABIL & HBL i.e. 66.78 & 55.48. The CV of EBL is lower than that of the other banks which indicate that loan and advances of it is stable and consistent.

Lastly, it can be concluded that EBL is in strong position or in better position regarding the mobilization of total deposits on loan and advances and acquiring higher profit in comparison with HBL and lower than NSBI & NABIL. Higher ratio is not good from the view point of liquidity as the loan and advances are not all liquid as cash and bank balance.

b. Total Investment to Total Deposit Ratio

The commercial banks must mobilize its deposit fund by investing in different securities issued by government and other financial, non financial sectors. This ratio measures the extent to which the banks are capable to mobilize their deposits on investment in various securities. This ratio is computed by dividing total investment by total deposit ratio. The table 4.5 shows the total investment to total deposit ratio of the banks NABIL, HBL, EBL and NSBI.

Table No. 4.5

Total Investment to Total Deposit Ratio

Bank	Fiscal Year					Mean	S.D	C.V %
	2003/04	2004/05	2005/06	2006/07	2007/08			
NABIL	41.33	29.31	31.93	40.03	31.14	34.75	4.92	14.16
HBL	42.21	47.11	48.07	39.34	41.89	43.72	3.38	7.73
EBL	31.44	21.08	30.43	27.40	21.10	26.29	4.45	16.92
NSBI	26.50	30.13	32.82	23.23	22.52	27.04	3.93	14.53

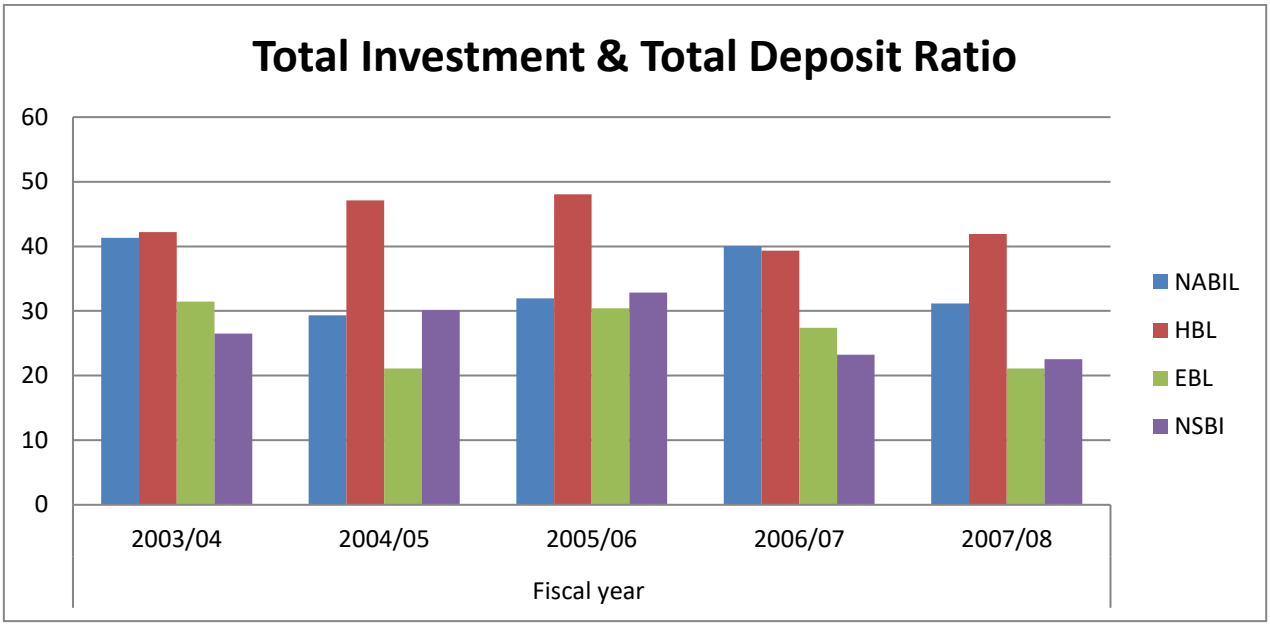
(Source: Annual Report & Websites of Concerned Banks)

From the table 4.5, it is found that, total investment to total deposit ratio all four banks are in increasing and decreasing trend or in fluctuating trend during study period 2003/04 to 2007/08. The total investment to total deposit ratio of NABIL has highest ratio of 41.33% in FY 2003/04 and lowest ratio 29.31% in FY 2004/05. Similarly, HBL has highest and lowest ratio of 48.07% and 39.34% in FY 2005/06 and 2006/07. EBL has highest and lowest ratio of 31.44% and 21.08% in FY 2003/04 and 2004/05. Likewise, NSBI has highest and lowest ratio of 32.82% and 22.52% in FY 2005/06 and 2007/08.

In comparison with mean value, HBL has top mean ratio, which maintained 43.72%, NABIL has maintained mean value of 34.75%. EBL and NSBI has moderate ratio. Likewise the value of coefficient of variation on HBL is lower than that of other banks. After analysis it is clear that the investment policy of HBL is in better position in comparisons to other banks.

The total investment to total deposits ratio of HBL is more homogeneous because it has low coefficient of variation.

Figure 4.2



(Source: Table 4.5)

c. Loan and Advances to Total Working Fund Ratio

Loan and advances is the major components of the total working fund, which indicate the ability of banks to utilize its deposits in the form of loan and advances to earn high return. It is an appropriate level to generate profit. Total working fund is the total assets. It is composed up of current assets, fixed assets, miscellaneous assets and investment, loan and advance and interest receivable.

The table 4.6 shows the loan and advance to total working fund ratio of NABIL, HBL, EBL and NSBI.

Table No. 4.6

Loan & Advances to Working Fund Ratio

Bank	Fiscal Year					Mean	S.D	C.V %
	2003/04	2004/05	2005/06	2006/07	2007/08			
NABIL	49.00	62.03	57.87	57.04	57.37	56.66	4.26	7.51
HBL	48.27	45.31	49.70	50.71	53.90	49.57	2.96	5.97
EBL	61.23	64.93	61.41	63.75	67.54	63.77	2.40	3.76
NSBI	60.94	60.06	58.50	68.05	70.48	63.60	4.82	7.57

(Source: Annual Report & Websites of Concerned Banks)

This reflects that loan and advances to working fund ratio of NABIL, HBL, EBL and NSBI. From the table, it is found that, NABIL is in decreasing trend while, HBL and EBL is in an increasing trend during the study period. Similarly, the ratio of NSBI is also in increasing trend. NABIL and HBL has the highest ratio 62.03% in the FY 2004/05 and 53.90% in the FY 2007/08. Likewise, EBL and NSBI has the highest ratios in FY 2007/08 i.e. 67.54% and 70.48% .

The mean value of EBL has maintained average loan and advances to total working fund ratio than that of NABIL, HBL and NSBI. This regard, EBL is in better position among other banks. Here, the coefficient of variation of EBL is lower than that of other three banks i.e. 3.76% < 7.51%, 3.76% <5.97% and 3.76% < 7.57% respectively, which clear that loan and advances to total working fund ratio is less variable than other banks.

d. Investment on Government Securities to Total Working Fund Ratio

The commercial banks should never use all the total deposits resources as loan and advances and other credit from security and liquidity point of view. So, to some extent commercial bank seem to be interested to utilize their resources by purchasing government securities. This ratio reflects the relationship between the banks investment securities in comparison to the total working funds.

The table 4.7 shows the investment on government securities to total working fund ratio of NABIL, HBL, EBL and NSBI.

Table No. 4.7

Investment on Government Securities to Total Working Fund Ratio

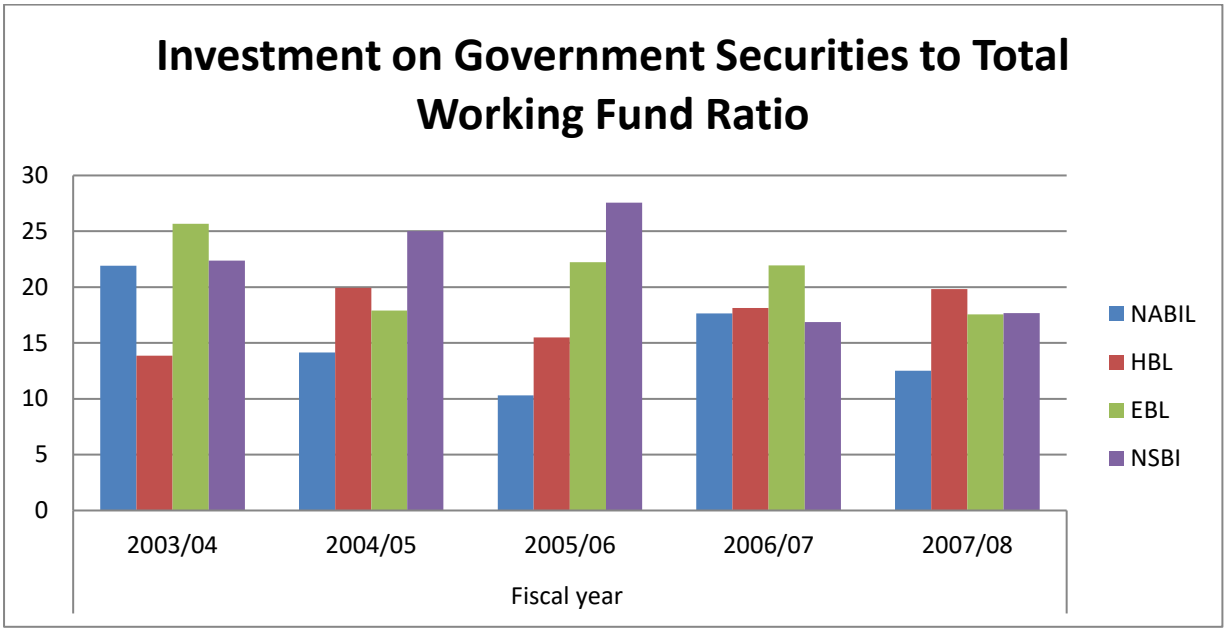
Bank	Fiscal Year					Mean	S.D	C.V %
	2003/04	2004/05	2005/06	2006/07	2007/08			
NABIL	21.93	14.14	10.30	17.64	12.51	15.30	4.10	26.80
HBL	13.86	19.95	15.50	18.13	19.81	17.45	2.40	13.75
EBL	25.67	17.90	22.23	21.95	17.56	21.06	3.03	14.38
NSBI	22.38	25.01	27.55	16.87	17.66	21.89	4.14	18.91

(Source: Annual Report & Websites of Concerned Banks)

The comparison of mean ratio of NSBI with other three banks reveal that NSBI is successful to mobilize their working fund as investment in government securities. Similarly, NSBI is also variability between ratios during the study period is greater mean value than that of NABIL, HBL and EBL.

The table 4.7 reflects that investment of government securities to total working fund ratio of all four banks are in fluctuating trend. Likewise the coefficient of variation of HBL is less than that of other three banks i.e.13.75% < 26.80%, 13.75% < 14.38% and 13.75% < 18.91. This means HBL has invest its more portion of working funds on government securities as than other banks

Figure 4.3



(Source: Table 4.7)

e. Investment on Shares and Debentures to Total Working Fund Ratio

This ratio reflects the extent on which the banks are able to mobilize their total assets on purchase of share and debenture of other companies to generate income and utilize their excess fund. A higher ratio indicated more portion of investment on shares and debenture of total working fund. The table 4.8 shows the investment on shares and debenture to total working fund ratio of NABIL, HBL, EBL and NSBI from the FY 2003/04 to 2007/08.

Table 4.8

Investment on Shares and Debenture to Total Working Fund Ratio

Bank	Fiscal Year					Mean	S.D	C.V %
	2003/04	2004/05	2005/06	2006/07	2007/08			
NABIL	0.13	0.16	0.12	0.21	0.21	0.16	0.038	22.89
HBL	0.13	0.14	0.13	0.21	0.24	0.17	0.045	26.94
EBL	0.18	0.16	0.12	0.09	0.05	0.12	0.046	38.33
NSBI	0.21	0.18	0.15	0.22	0.19	0.19	0.024	12.89

(Source: Annual Report & Websites of Concerned Banks)

The table depicts that NABIL has fluctuating trend upto FY 2006/07 but then maintain same position i.e. 0.21%. HBL has also fluctuating trend upto FY 2006/07 but then its ratios increases. Likewise, EBL has decreasing trend from 0.18% to 0.05% during the study period. Similarly, NSBI has also in decreasing trend to investment on shares and debenture to working fund ratio.

In an average, NSBI has maintained highest investment on shares and debentures to total working fund ratio than other. The coefficient of variation of NSBI is lower than that of all three banks, which indicate that NSBI is less consistent. Here HBL is more variable and less consistent due to its medium investment and its coefficient of variation is less than EBL but higher than NABIL & NSBI.

f. Total Off Balances Sheet Operation to Loan and Advances Ratio

This ratio shows the proportion of free based off balance sheet activities are very much dependent on made operation management strategy banking net work with foreign banks etc. A high ratio indicates the highest OBS transaction or vice versa.

Table 4.9

Total OBS Operation to Loan and Advances Ratio

Bank	Fiscal Year					Mean	S.D	C.V %
	2003/04	2004/05	2005/06	2006/07	2007/08			
NABIL	64.69	44.32	42.55	36.63	36.46	44.93	10.36	23.05
HBL	25.03	62.12	44.93	33.50	40.00	41.11	12.42	30.21
EBL	38.00	27.65	23.00	18.16	20.77	25.51	6.78	26.58
NSBI	19.27	27.60	25.62	29.78	26.09	25.67	3.53	13.75

(Source: Annual Report & Websites of Concerned Banks)

The total OBS operation to loan and advances ratios of HBL and NSBI are in fluctuating trend while NABIL and EBL are in decreasing trend. NABIL has highest ratio of 64.69% in FY 2003/04, HBL has 62.12% in FY 2004/05. Likewise, EBL has highest of 38.00% at FY 2003/04 whereas, NSBI has maintained maximum ratio of 29.78% at FY 2006/07.

The mean of NABIL is highest but C.V. of HBL is highest here EBL has lowest mean value and NSBI has lowest C.V. So, EBL has lowest OBS transaction which indicated it is giving attention to increase free based off balance activities.

g. Loan loss Relation

It is occurred when the debtors fail to pay their loan. Greater loan loss provision is made in income statement if high loss is expected. But this will lead to low profit and possible losses and produces low increase or decrease in capital. The loan loss ratio shows how efficiently the bank manages its loan and advances and makes effort for timely recovery of loan.

Table 4.10

Loan Loss Ratio

Bank	Fiscal Year					Mean	S.D	C.V %
	2003/04	2004/05	2005/06	2006/07	2007/08			
NABIL	0.01	0.04	0.03	0.09	0.30	0.094	0.106	112.76
HBL	1.56	0.47	1.00	0.53	0.30	0.596	0.181	30.37
EBL	1.40	1.16	0.71	0.65	0.54	0.892	0.330	37.00
NSBI	2.02	3.11	1.92	0.62	0.47	1.628	0.979	60.13

(Source: Annual Report & Websites of Concerned Banks)

The table 4.10 reflects that NABIL has fluctuating trend, it has the maximum ratio of 0.09% in the FY 2006/07. In case of EBL the trend is in decresing. Likewise in the case of HBL, it has followed the fluctuating trend. Similarly, NSBI has maximum ratio of 3.11% in FY 2004/05, which is highest ratio among four banks.

The mean value of HBL is average, which indicated that its position is better in average in this regard. It has managed its loan and advances and makes effort for timely recovery of loan. Similarly, the coefficient of variance of HBL is lower than that of NABIL, EBL & NSBI. In average, HBL has no highest loan loss ratio in comparing with three other banks. So it shows that its performance in terms of recovery of loan is satisfactory in comparison to NABIL, EBL and NSBI.

4.1.3 Profitability Ratio

Profitability ratios are useful to measure the efficiency of operation of a firm in term of profit. Profit is the indicator of the financial performance of any firm. The following profitability ratios are related to study under this heading.

a. Return on Loan and Advances Ratio

Return on loan and advances ratio measures the earning capacity of banks on its total deposits mobilized on loan and advances. In other words return on loan and advances ratio indicates how efficiently the banks have employed its resources in the firm of loan and advances.

Table 4.11

Return on Loan and Advances Ratio

Bank	Fiscal Year					Mean	S.D	C.V %
	2003/04	2004/05	2005/06	2006/07	2007/08			
NABIL	5.56	4.90	4.92	4.33	3.50	4.642	0.687	14.80
HBL	2.20	2.48	3.12	2.90	3.26	2.792	0.40	14.32
EBL	2.44	2.24	2.42	2.17	2.46	2.34	0.20	8.54
NSBI	1.18	0.92	1.53	2.70	2.04	1.674	0.63	37.63

(Source: Annual Report & Websites of Concerned Banks)

The table 4.11 reveals that NABIL return on loan and advances ratio has fluctuating trend till FY 2005/06 and after then it decreases. HBL trend increases up to 3.12% in 2004/05 but then it fluctuates. Similarly EBL trend has totally fluctuates from FY 2003/04 to 2007/08 whereas, NSBI has also decreasing trend on the first two years and after FY 2005/06 it is able to upgrade its net profit.

The mean of EBL is lesser than NABIL and HBL but higher than NSBI i.e. 2.34% < 4.64%, 2.34% < 2.79% and 2.34% > 1.67% respectively. The standard deviation of EBL is lesser than all three banks. Similarly, the coefficient of variation of EBL is less than other three banks i.e. 8.54% < 14.32% <14.80% < 37.63%. NABIL and HBL has maintained average C.V and NSBI are in highest C.V value. Thus it can be concluded that EBL is in average position in earning from loan and advances in comparison to NABIL, HBL and NSBI.

b. Return on Total Working Fund Ratio

This ratio measures the profit earning capacity by mobilizing available resources (total assets). The table below shows the return on assets of NABIL, HBL, EBL and NSBI.

Table 4.12

Return on Total Working Fund Ratio

Bank	Fiscal Year					Mean	S.D	C.V %
	2003/04	2004/05	2005/06	2006/07	2007/08			
NABIL	2.72	3.04	2.84	2.47	2.01	2.616	0.36	13.76
HBL	1.06	1.12	1.55	1.46	1.75	1.388	0.26	18.73
EBL	1.49	1.45	1.48	1.38	1.66	1.492	0.08	5.56
NSBI	0.72	0.55	0.89	1.83	1.44	1.086	0.476	43.87

(Source: Annual Report & Websites of Concerned Banks)

The table 4.12 reflects the mean, S.D and C.V of NABIL, HBL, EBL, NSBI banks from FY 2003/04 to 2007/08. Here, EBL has the fluctuating trend which indicates that its profitability ratio is not consistent. It has highest profit ratio in the FY 2007/08 is 1.66% and minimum increasing trend of profit ratio. In average, NABIL, HBL, EBL and NSBI banks have able to maintain a net profit during the stuffy period.

If the mean values are observed EBL is higher than HBL and NSBI and lower than NABIL i.e. 1.388< 1.492 > 1.086 and 2.616>1.492 respectively. The coefficient of variation of EBL is lesser than that of NABIL, HBL and NSBI i.e. 5.56% < 13.76%, 5.56% < 18.73% and 5.56% < 43.87%. It indicates, the return on total working fund ratio of EBL is stable and consistent in comparison to NABIL, HBL and NSBI. The analysis clear the profitability ratio with respect to financial resources investment of EBL is better as well as stable. But though NABIL has less stability but has higher return on average.

c. Total Interest Earned to Total outside Assets Ratio

It measures the interest earning capacity of the banks through efficient utilization of all the outside assets. Higher the ratio indicates better use of outside assets of a commercial bank. Total outside assets includes loan and advances, investment on government securities, share and debentures and other all types of investment.

The table below exhibits total interest earned to total outside assets ratio of NABIL, HBL, EBL and NSBI.

Table 4.13

Total Interest Earned to Total outside Assets Ratio

Bank	Fiscal Year					Mean	S.D	C.V %
	2003/04	2004/05	2005/06	2006/07	2007/08			
NABIL	7.02	7.23	6.73	6.38	6.23	6.718	0.374	5.56
HBL	5.61	5.75	6.10	6.00	6.23	5.938	0.223	3.75
EBL	7.61	7.17	6.30	6.00	6.48	6.712	0.58	8.64
NSBI	6.65	6.20	6.00	6.70	6.15	6.34	0.289	4.56

(Source: Annual Report & Websites of Concerned Banks)

The comparison of mean ratios of HBL with other three banks reveal that total interest earned to total outside assets ratio of HBL is lowest, which indicate that it has not able to use its fund (outside assets) to earn high interest income in comparison to other banks.

The total interest earned to total outside assets ratio of NABIL, EBL and NSBI has fluctuating trend. In case of NABIL it increase at FY 2004/05 i.e. 7.23% and after that it decreases to 6.23% in the year 2007/08. HBL trend increases up to 6.10% at FY 2005/06 and after that it fluctuates. Incase of EBL, it decreases from 7.61% at FY 2003/04 to 6.00% at FY 2006/07. Similarly, the trend of NSBI decreases up to 6.00% at FY 2005/06 then it also fluctuates. If the coefficient of variation is observed HBL has the lowest of all banks i.e. 3.75% < 4.56%, 3.75% < 5.56%, 3.75% < 8.64% respectively. This reflects that interest earned to total outside assets of HBL is consistent. In other words, HBL has less satisfactory in compared to other banks according to mean value. So it can be concluded that EBL has better position with respect to the income earned from the total outside assets but less stable.

d. Total Interest Earned to Total Working Fund Ratio

This ratio is calculated to find out the percentages of interest earned to total assets. It reflects the extent on which the banks are success in mobilizing their total assets to gain higher

income as interest. Higher ratio indicated higher earning power of the banks of its total working fund. The table below shows the interest earned to total working fund ratio of NABIL, HBL, EBL and NSBI.

Table 4.14

Total Interest Earned to Total Working Fund Ratio

Bank	Fiscal Year					Mean	S.D	C.V %
	2003/04	2004/05	2005/06	2006/07	2007/08			
NABIL	5.98	6.26	5.86	5.82	5.32	5.85	0.412	7.04
HBL	5.03	5.27	5.52	5.29	5.47	5.31	0.141	2.65
EBL	6.84	6.13	5.66	5.34	5.70	5.93	0.50	8.43
NSBI	5.84	5.60	5.43	5.98	5.64	5.70	0.20	3.51

(Source: Annual Report & Websites of Concerned Banks)

The table 4.14 reveals that the ratio of NABIL is in fluctuating trend, where the ratio of HBL increases till first three years i.e.5.52% in FY 2005/06 then it fluctuates. The EBL has maximum ratio is 6.84% in the FY 2003/04 and minimum ratio is 5.34% in the FY 2006/07. Similarly, trend of NSBI is decreasing trend till 2005/06 and after that it fluctuates. On the other hand, the mean value of NABIL has average of other three banks. It has the mean of 6.53 which is higher than HBL and NSBI i.e. 5.31% < 5.85% > 5.70%and less than EBL i.e 5.85% < 5.93%. Similarly, the coefficient of variation of NABIL is 7.04% which is also more than HBL and NSBI and less than EBL. HBL has more consistent & stable but EBL seem gaining more return by mean values.

e. Total Interest Paid to Total Working Fund Ratio

This ratio is calculated to find out the proportion of interest paid against the total working fund. Higher ratio indicated the higher interest expenses on loan working fund and vice-versa. The table below reflects the mean, S.D. and C.V. of total interest paid to total working fund ratio.

Table 4.15

Total Interest Paid to Total Working Fund Ratio

Bank	Fiscal Year					Mean	S.D	C.V %
	2003/04	2004/05	2005/06	2006/07	2007/08			
NABIL	1.70	1.42	1.60	2.04	2.04	1.76	0.256	14.54
HBL	2.00	2.05	2.20	2.29	2.27	2.16	0.173	8.00
EBL	3.30	2.55	2.51	2.41	2.33	2.62	0.343	13.10
NSBI	3.03	2.50	2.57	2.97	2.64	2.74	0.214	7.81

(Source: Annual Report & Websites of Concerned Banks)

In the listed table 4.15, NABIL trend is fluctuating in first three years then it remains constant to 2.04%. The ratio of HBL increases to 2.00% to 2.29% in the FY 2003/04 to 2006/07. Similarly, the trend of EBL decreases from 3.30% to 2.33% in FY 2003/04 to 2007/08. Likewise, NSBI ratio in first two year is decreasing after then it also fluctuates.

In comparison of mean value of HBL with other reveals that HBL is in average between NABIL, EBL and NSBI i.e. 1.76% < 2.16%, 2.62% > 2.16% and 2.74% >2.16%. The mean value of EBL and NSBI is almost equal. It means HBL has paid average interest. Similarly, the coefficient of variance of HBL is lower than NABIL and EBL but slightly high than NSBI, which indicates that total interest and to total working fund ratio is consistent than that of NABIL EBL and NSBI.

4.1.4 Risk Ratio

Risk taking is the prime business of banks investment management which increases effectiveness and profitability of the bank. These ratios, focus has been made to measure the level of risk inherent among four banks..

a. Credit Risk Ratio

Bank utilized its collected funds in providing credit to different sectors while making investment. It is essential for a bank to examine the credit risk involved in the project. This

ratio shows the proportion of nonperforming assets in total loan and advances of the bank. Due to the unavailability of the relevant data the ratio is measure with the help of loan and advances to total assets.

Table 4.16

Credit Risk Ratio

Bank	Fiscal Year					Mean	S.D	C.V %
	2003/04	2004/05	2005/06	2006/07	2007/08			
NABIL	48.90	61.60	57.87	57.04	57.53	56.58	4.17	7.37
HBL	48.16	44.62	49.70	50.71	53.90	49.42	3.04	6.15
EBL	61.23	64.93	61.47	63.75	67.55	63.78	2.34	3.67
NSBI	60.94	60.06	58.50	68.05	70.48	63.60	4.75	7.47

(Source: Annual Report & Websites of Concerned Banks)

The table 4.16 shows the percentage of credit risk ratio of NABIL, HBL, EBL and NSBI. The credit risk ratio of NABIL is in fluctuating trend during the study period i.e. it has maintained maximum ratio of 61.60% in the FY 2004/05 and it has minimum ratio of 48.90% in the year 2003/04. Similarly, HBL credit risk ratio is increasing trend it has maintained maximum ratio of 53.90%. Likewise, EBL credit risk ratio is fluctuating trend upto FY 2005/06 then after it increases and the trend of NSBI decreases upto FY 2005/06, after than it increases to 70.48% which is the maximum ratio.

The mean of NABIL is less than EBL and NSBI but higher than HBL, which mean NABIL has average credit in comparison to three banks. The coefficient of variance of NABIL is 7.37%, HBL has 6.15%, EBL has 3.67% and NSBI has 7.47%. Among these banks EBL has less C.V, it indicates that its credit policy is consistent than other banks.

b. Liquidity Risk Ratio

The liquidity risk of the bank defines it liquidity need for deposit. A higher liquidity indicates less risk and less profitable bank and vice-versa. The ratio of cash and bank balance to total deposits is the indicator of the bank liquidity needed. The cash and bank balance are the most

liquid assets and they are considered as bank liquidity sources and deposits as the liquidity needs.

Table 4.17

Liquidity Risk Ratio

Bank	Fiscal Year					Mean	S.D	C.V %
	2003/04	2004/05	2005/06	2006/07	2007/08			
NABIL	6.87	3.83	3.25	6.00	8.37	5.66	1.90	33.57
HBL	9.09	8.12	6.48	5.85	4.55	6.81	1.61	23.64
EBL	7.83	10.40	11.25	13.15	8.90	10.30	1.85	17.96
NSBI	12.00	8.36	9.77	9.81	9.80	9.95	1.16	11.65

(Source: Annual Report & Websites of Concerned Banks)

In the table shows the percentage of liquidity risk ratio of NABIL, HBL, EBL and NSBI. This table reflects the liquidity risk ratio of NABIL decreases from 6.87% to 3.25% from FY 2003/04 to FY 2005/06 but than it increases upto 8.37% in FY 2007/08. The trend of HBL is totally decreasing. Similarly, EBL ratio is in increasing trend which has maximum ratio of 13.15% and minimum is 7.83%. Likewise, NSBI ratio decreases from 12.00% to 8.36% in the FY 2003/04 to 2004/05, but then it increases.

While comparing the mean of four banks, NSBI ratio is higher than NABIL and HBL but lower than EBL which indicates NSBI liquidity risk is in average in compare to other banks. The coefficients of variance of four banks are 33.57%, 23.64%, 17.96% and 11.65% respectively. In comparison them, NSBI has less C.V which indicates that liquidity risk ratio of its in consistent. The C.V ratio of NSBI is lower among all four banks i.e. 33.57% > 11.65%, 23.64% > 11.65% and 17.94% > 11.65%.

c. Capital Risk Ratio

The capital risk ratio indicates how much assets value may decline by bank before the position deposition and other creditors is jeopardized. So a bank needs to maintain adequate capital in relation to the nature and condition of its assets, its deposits liabilities and other

corporate responsibilities. This ratio measures ability to bank it attract deposits and inter-bank funds. It also determines the level of profit. A bank can earn if a bank choose to take high capital risk.

Table 4.18

Capital Risk Ratio

Bank	Fiscal Year					Mean	S.D	C.V %
	2003/04	2004/05	2005/06	2006/07	2007/08			
NABIL	12.48	11.68	11.04	10.73	9.03	8.84	6.62	74.89
HBL	7.85	8.41	8.86	9.80	11.26	9.23	1.20	13.00
EBL	9.82	9.05	8.52	8.02	9.13	8.90	0.6	6.73
NSBI	9.56	8.76	10.72	10.70	10.01	9.95	0.74	7.43

(Source: Annual Report & Websites of Concerned Banks)

From the table 4.18, it is clearly seen that percentage of capital risk ratio of NABIL is decreasing from 12.48% to 9.03% in the FY 2003/04 to 2007/08 during the study period. But looking at the trend of HBL, it is increasing trend i.e. from 7.85% to 11.26% during the study period. Likewise, EBL ratio decreases from 9.82% to 8.02% in the FY 2003/04 to 2006/07 after than it increases. Similarly, NSBI has fluctuating trend. It have maximum ratio of 10.72% in the FY 2005/06 and minimum ratio of 8.76% in the FY 2004/05 respectively.

The mean value of HBL has average capital risk ratio in comparison with other three banks. The coefficient of variance of a HBL is 13.00% that is higher than NSBI and EBL C.V and lesser than NABIL i.e. 7.43% < 13.00% > 6.73% and 74.89% > 13.00% respectively. Among four banks EBL has less C.V.

Thus it can be concluded that HBL is stable and consistent than NABIL but less stable and less consistence in comparison to EBL because it has maintained less C.V among all four banks.

4.1.5 Growth Ratio

This section analysis the growth ratio of total deposit, total investment, loan and advances and net profit are calculated.

a) Growth Ratio of Total Deposit

The comparative table 4.19 shows that the average growth ratio of EBL deposits is higher than that of NABIL, HBL and NSBI. EBL has maintained ratio of 31.37% where as NABIL, HBL and NSBI has 23.32%, 9.71% and 17.80% respectively. This means the performance of Everest Bank Limited to collect greater deposit compared to other banks. NABIL and BOK are improving year by year. Among four banks HBL has lowest growth ratio i.e. 9.71%.

Table 4.19

Growth Ratio of Total Deposit

Bank	Fiscal Year					Average Growth Rate (%)
	2003/04 (%)	2004/05 (%)	2005/06 (%)	2006/07 (%)	2007/08 (%)	
NABIL	-	3.30	32.63	20.64	36.72	23.32
HBL	-	12.73	6.75	13.42	5.97	9.71
EBL	-	25.22	36.68	31.76	31.83	31.37
NSBI	-	20.23	27.12	4.02	19.83	17.80

(Source: Annual Report & Websites of Concerned Banks)

b) Growth ratio of loan and advances

The comparative table 4.20 shows that the average growth ratio of EBL loan and advances is higher than that of other banks. EBL has able to maintain of 32.93% where as NABIL, HBL and NSBI able to have maintained 23.32%, 9.71% and 17.80% respectively. The performance of EBL to grant loan and advances is better in comparison to other banks i.e. NABIL, HBL and NSBI. The highest growth ratio is 31.37% and lowest growth ratio is 9.71%. The above table clearly has shown that EBL in comparison to other banks is better year by year.

Table 4.20

Growth Ratio of loan and advances

Bank	Fiscal Year					Average Growth Rate (%)
	2003/04 (%)	2004/05 (%)	2005/06 (%)	2006/07 (%)	2007/08 (%)	
NABIL	-	32.57	22.07	20.29	37.43	28.09
HBL	-	3.95	17.80	16.08	14.70	13.13
EBL	-	29.47	28.64	39.41	34.21	32.93
NSBI	-	20.80	22.73	24.04	28.04	23.90

(Source: Annual Report & Websites of Concerned Banks)

c) Growth ratio of total investment

The comparative table 4.21 show that the average growth ratio of total investment of EBL is higher than NABIL, NSBI and HBL i.e. 25.35% > 18.41%, 25.35% > 16.24% and 25.35% >10.09%. The average growth rate of HBL is lowest among four banks, therefore it should focus in increasing its total investment.

Table 4.21

Growth Ratio of Total Investment

Bank	Fiscal Year					Average Growth Rate (%)
	2003/04 (%)	2004/05 (%)	2005/06 (%)	2006/07 (%)	2007/08 (%)	
NABIL	-	-26.73	44.50	44.78	11.11	18.41
HBL	-	25.83	-6.87	8.57	12.83	10.09
EBL	-	-16.04	97.30	18.65	1.50	25.35
NSBI	-	36.70	38.46	-26.34	16.14	16.24

(Source: Annual Report & Websites of Concerned Banks)

d) Growth ratio of total net profit

The comparative table 4.22 shows that the average growth ratio of NSBI total net profit is higher than other three banks. Net profit of NABIL is poor in comparison with HBL and EBL. EBL has able to maintain the growth ratio in average position i.e. 33.75%. So it clear that NSBI has high growth rate in comparison to other banks.

Table 4.22

Growth Ratio of Total Net Profit

Bank	Fiscal Year					Average Growth Rate (%)
	2003/04 (%)	2004/05 (%)	2005/06 (%)	2006/07 (%)	2007/08 (%)	
NABIL	-	14.22	22.13	6.09	10.75	13.29
HBL	-	17.19	48.38	7.51	29.28	25.59
EBL	-	18.97	38.97	24.86	52.22	33.75
NSBI	-	-5.70	103.90	117.87	-2.80	53.31

(Source: Annual Report & Websites of Concerned Banks)

4.2 Statistical Tools

4.2.1 Trend Analysis

i) Trend Analysis of Total Deposit

Under this topic an efforts has been made to calculate the trend values of deposits of EBL, NABIL and BOK for five years from mid July 2000/01 to 2005/06 and forecast for next five years from the mid July 2005/06 to 2010/11.

Table 4.23

Trend Value of Total Deposit of NABIL, HBL, EBL and NSBI

(Rs. In Million)

Fiscal Year	Trend Value of NABIL	Trend Value of HBL	Trend Value of EBL	Trend Value of NSBI
2004	11792.53	22061.82	6842.61	7238.26
2005	16217.30	24551.65	10833.96	8830.71
2006	20462.07	27041.48	14825.31	10403.16
2007	24796.84	29531.31	18816.66	11985.61
2008	29131.61	32021.14	22808.01	13568.06
2009	33466.38	34510.97	26799.36	15160.51
2010	37801.15	37000.80	30790.71	16732.96
2011	42135.92	39490.63	34782.06	18315.41
2012	46470.69	41980.46	38773.45	19897.86
2013	50805.46	44470.29	42764.76	21480.31

(Source: Appendix No. 21)

The table 4.23 shows the trend value of total deposit from 2007/08 to 2012/13 of four banks.

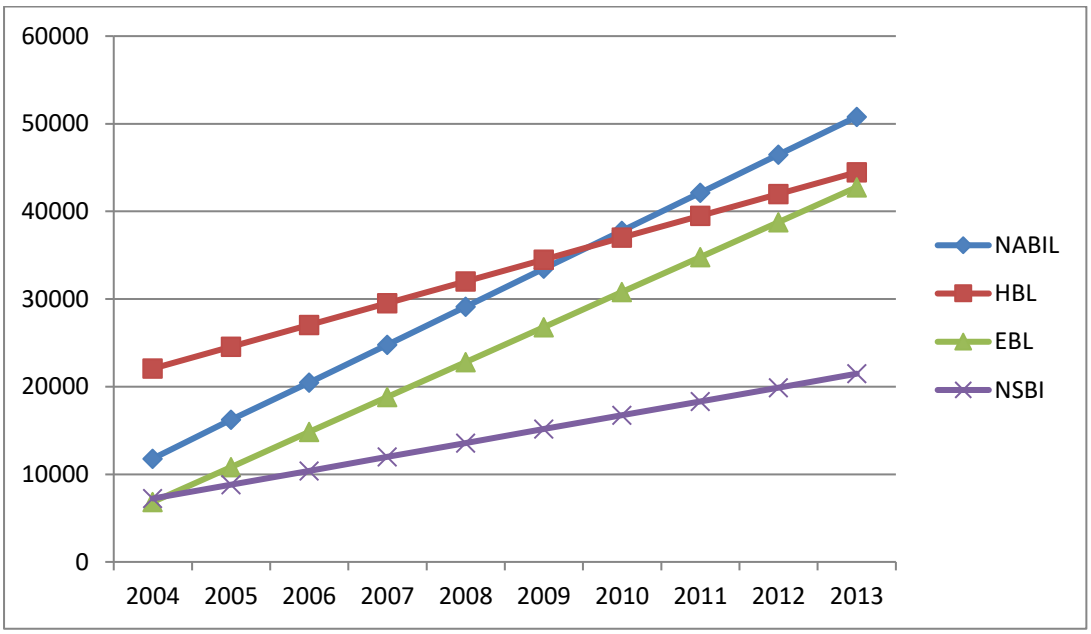
The total deposits of NABIL, HBL, EBL and NSBI have in the increasing trend. If all other things remain the same the total deposits of the NABIL will be highest deposit among the four banks, under the study period. Same as the total deposit of the NSBI will be 21480.31 million in the mid July 2013. The total deposit of NABIL will be 50805.46 million in the mid

July 2013. The total deposit of EBL will be 42764.76 and HBL will be 44470.29 in mid July 2013.

By analyzing the above trend value, it is found that the total deposit position collection of NABIL is better in comparison to HBL, EBL and NSBI . The deposit of NABIL, EBL and BOK are increasing in the same proportion.

Figure 4.4

Trend Value of Total Deposit of NABIL, HBL, EBL and NSBI



(Source: Table 4.23)

ii) Trend Analysis of Loan and Advances

Here the trend values of loan ad advances of NABIL, HBL, EBL and NSBI have been calculated for five years from mid July 2003/04 to 2007/08. The forecast for next five years up to 2013 have been done.

The table 4.24 reveals that the trend value of loan and advances of the four banks have been in increasing trend. If other things remain same, total loan and advances of EBL will be 32730.16 million by 2013. Similarly, the total loan and advances of HBL will be 28868.18 million and of NSBI will be 20142.30. Total loan and advances of NABIL will be 35638.69, which is the highest among the study period.

Table 4.24

Trend Values of Loan and Advances of NABIL, HBL, EBL and NSBI

(Rs. In Million)

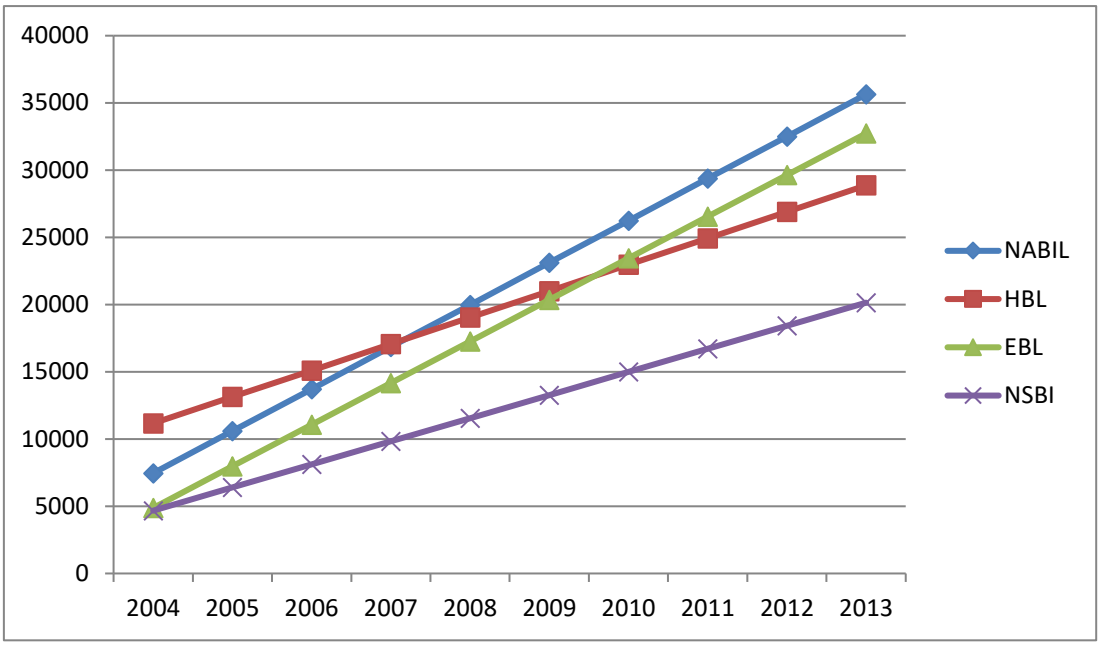
Fiscal Year	Trend Value of NABIL	Trend Value of HBL	Trend Value of EBL	Trend Value of NSBI
2004	7459.96	11169.95	4870.39	4674.36
2005	10590.93	13136.42	7965.92	6393.02
2006	13721.90	15102.89	11061.45	8111.68
2007	16852.87	17069.89	14156.98	9830.34
2008	19983.84	19035.83	17252.51	11549.00
2009	23114.81	21002.30	20348.04	13267.66
2010	26245.78	22968.77	23443.57	14986.32
2011	29376.75	24935.24	26539.10	16704.98
2012	32507.72	26901.71	29634.63	18423.64
2013	35638.69	28868.18	32730.16	20142.30

(Source: Appendix No. 21)

From the above analysis it is found the loan and advances position of EBL is comparatively lower than NABIL and is better in comparison to HBL and NSBI i.e. 35638.69 > 32730.16 and 28868.18 < 32730.16 > 20142.30 million respectively. HBL and NSBI may use the skill for the other option of secured loss that is quite appreciable. NABIL is tilted towards the secured loan because of less risk due to the sufficient collateral of its clients.

Figure 4.5

Trend Values of Loan and Advances of NABIL, HBL, EBL and NSBI



(Source: Table 4.24)

iii) Trend Analysis of Total Investment

In this topic, an effort has been made to calculate the trend values of total investment from the mid July 2003/04 to 2007/08 have been calculated and forecasted from July 2008 to 2013. The table 4.25 shows the trend values of total investment from mid July 2003/04 of the NABIL, HBL, EBL and NSBI.

Table 4.25

Trend Values of Total Investment of NABIL, HBL, EBL and NSBI

(Rs. In Million)

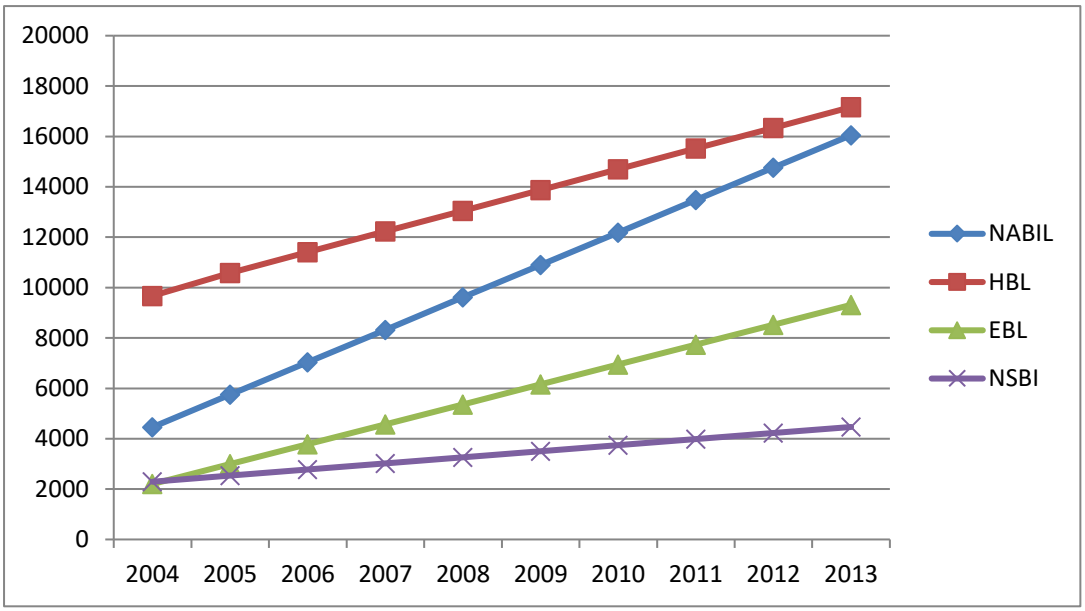
Fiscal Year	Trend Value of NABIL	Trend Value of HBL	Trend Value of EBL	Trend Value of NSBI
2004	4459.54	9671.98	2201.17	2291.96
2005	5747.27	10584.65	2991.48	2533.41
2006	7035.00	11407.32	3781.79	2774.86
2007	8322.73	12230.00	4572.10	3016.31
2008	9610.46	13052.66	5362.41	3257.76
2009	10898.19	13875.33	6152.72	3499.21
2010	12185.92	14698.00	6943.03	3740.66
2011	13473.65	15520.67	7733.34	3982.11
2012	14761.38	16343.34	8523.65	4223.56
2013	16049.11	17166.01	9313.96	4465.01

(Source: Appendix No. 21)

Total investments of NABIL, HBL, EBL and NSBI have the increasing trend value. The total investment of NSBI will be 4465.01 million in the mid July 2013, which is the lowest in comparison with NABIL, HBL and EBL. The total investment trend of HBL is satisfactory among the four banks. From the above analysis it can be concluded that NSBI has not maintained comparatively less investment whereas EBL is not so satisfactory in its investment but in case of HBL and NABIL it is predicted to be good in total investment trend up to the 2012/13 years.

Figure 4.6

Trend Value of Investment of NABIL, HBL, EBL and NSBI



(Source: Table 4.25)

iv) Trend Analysis of Net Profit

Under this topic, an effort had been made to analyze net profit of NABIL, HBL, EBL and NSBI from the mid July 2003/04 to 2007/08 and forecast from the mid July 2007/08 to 2012/13. The table 4.26 shows the trend values of net profit for ten years from mid July 2003/04 to 2012/13 of NABIL, HBL and NSBI.

Table 4.26

Trend Value of Net Profit of NABIL, HBL, EBL and NSBI

(Rs. In Million)

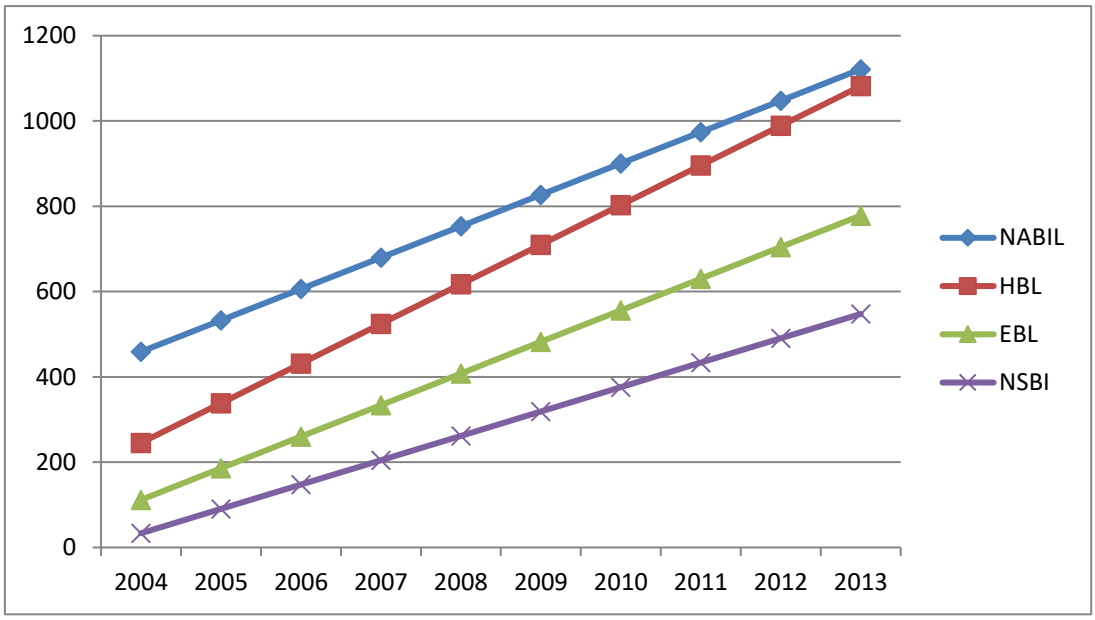
Fiscal Year	Trend Value of NABIL	Trend Value of HBL	Trend Value of EBL	Trend Value of NSBI
2004	459.00	245.45	111.71	33.32
2005	532.61	338.37	185.79	90.45
2006	606.22	431.29	259.87	147.58
2007	679.83	524.21	333.95	204.71
2008	753.44	617.13	408.03	261.84
2009	827.05	710.05	482.11	318.97
2010	900.66	802.97	556.19	376.10
2011	974.27	895.89	630.27	433.23
2012	1047.88	988.81	704.35	490.36
2013	1121.49	1081.73	778.43	547.49

(Source: Appendix No. 21)

The above table 4.26 shows the net profit all four banks have the increasing trend value. The net profit of NABIL will be 1121.49 million, which is the highest amount among the four banks. The net profit of HBL will be 1081.73 million in the mid July 2013. Similarly, net profit of EBL will be 778.43 million and the net profit of NSBI will be 547.49 million, which is lowest value among four banks during the study period.

Figure 4.7

Trend Value of Net Profit of NABIL, HBL, EBL and NSBI



(Source: Table 4.26)

From this trend analysis it can be said that the net profit of HBL is lower than NABIL but it is higher than EBL and NSBI which shows i.e.1121.49 > 1081.73 and 778.43 < 1081.73 > 547.49 million in the year 2013. The above calculated trend values of all four banks are fitted in the trend line.

4.2.2 Correlation Coefficient Analysis

i) Coefficient of Correlation between outside Asset and Net Profit

The table 4.27 shows the value of 'R', R^2, P.Er, 6P.Er between outside asset and net profit of NABIL, HBL, EBL and NSBI.

Table 4.27

Coefficient of Correlation between outside Asset and Net Profit

Bank	Evaluation criterions			
	R	**R^2**	**P.Er**	**6P.Er**
NABIL	0.972634	0.9460174	0.0162836	0.0977016
HBL	0.972434	0.9456278	0.0164011	0.0984068
EBL	0.981055	0.962468	0.0167848	0.100708
NSBI	0.881068	0.7762806	0.067483	0.404903

(Source: Appendix No. 22)

The table 4.27 shows the value of R, R^2, P.Er, 6P.Er between outside assets and net profit of NABIL with comparison to HBL, EBL and NSBI for the study period 2003/04 to 2007/08. From this table, it has been found that the coefficient of correlation between total outside i.e. independent variable and net profit dependent variable is 0.972634 in case of NABIL. It shows positive relationship between these variables. By considering the value of coefficient of determination (R^2), is 0.9460174 indicated that 94.60% of the variation in the dependent variable has been explained by the independent variable. Similarly considering the value of R is greater than the value of 6P.Er, which reveals NABIL is capable to earn net profit by mobilizing in total outside assets.

Likewise, the coefficient of correlation between total outside assets and net profit in the case of HBL, EBL and NSBI are 0.972434, 0.981055 and 0.881068. Again when we consider the value of coefficient determination (R^2) i.e. 0.9456278, 0.962468 and 0.7762806, it means 94.56%, 96.24% and 77.62% respectively in the dependent variable has been explained by the independent variable.

Similarly, on the basis of comparison between the value of 'R' and 6P.Er, other three banks i.e. HBL, EBL and NSBI are significant correlation between mobilizations of funds return because the value of R is greater than the value of 6P.Er.

ii) Coefficient of Correlation between Deposit and Net Profit

The following table 4.28 shows the value of 'R', R^2, P.Er, 6P.Er between deposit and net profit of NABIL, HBL, EBL and NSBI during the study period.

Table 4.28

Coefficient of Correlation between Deposit and Net Profit

Bank	**Evaluation criterions**			
	R	**R^2**	**P.Er**	**6P.Er**
NABIL	0.9462554	0.8953992	0.0467788	0.2806728
HBL	0.9699993	0.9408986	0.0178276	0.1069660
EBL	0.9898646	0.9798319	0.0060836	0.0365016
NSBI	0.8722812	0.7608746	0.0721311	0.4327867

(Source: Appendix No. 22)

From this table 4.28, it has been found that the coefficient of correlation between total deposits and net profit in the case of NABIL is 0.9462554, which indicated the positive relationship between these variables. The coefficient of determination (R^2) is 0.8953992, which indicates 89.53% of the variation of the dependent variable has been explained by the independent variable. Similarly, the value of 6P.Er is lesser than the value of R i.e. 0.2806728 < 0.9462554, which states that there exists a significant relationship between deposits and net profit.

The coefficient of correlation between deposits and net profit in case of HBL and EBL is 0.9699993 and 0.9898646 which indicated a positive relationship between deposit and net profit. The value of (R^2) of both bank is 0.9408986 and 0.9798319 indicates that 94.08% and 97.98% of the variation of the dependent variable has been explained by the independent variable. The value of 6 P.Er is less than that of the value of 'R'. This states that there is significant relationship between these variables.

Similarly the coefficient of correlation between these variables in case of NSBI is 0.8722812, which indicated positive relation. The value of 6P.Er are lesser than the value of R i.e. 0.4327867 < 0.8722812 that means there is also significant correlation relationship between two variation.

The above analysis clear that, the value of R in case of all four banks is significant relationship between deposit and net profit. The value of (R^2) in case of NSBI shows lower percentages of dependency than other selected banks i.e. 0.9798319 > 0.9408986 > 0.8953992 > 0.7608746. The increase in net profit in case of NSBI is due to effective mobilization of deposits and other factor has a less role to play for increasing net profit. NSBI has not been more successful as EBL in mobilization of its deposits.

iii) Coefficient of Correlation between Deposit and Interest Earned

The table 4.29 shows the value of 'R', R^2, P. Er and 6P.Er of NABIL, HBL, EBL and NSBI during the study period.

Table 4.29

Coefficient of Correlation between Deposit and Interest Earned

Bank	**Evaluation criterions**			
	R	**R^2**	**P.Er**	**6P.Er**
NABIL	0.9901644	0.9804255	0.0059045	0.0354273
HBL	0.9933676	0.9867792	0.0039879	0.0239279
EBL	0.9941478	0.9883299	0.0052190	0.0313141
NSBI	0.9900473	0.9801938	0.0059744	0.0358467

(Source: Appendix No. 22)

The coefficient of correlation 'R' between deposit and interest earned in case of NABIL is 0.9901644, which indicates a positive relationship between these variables. When deposits increase the interest earned subsequently increased so it has direct proportional relation. The coefficient of determination (R^2) is 0.9804255 which indicate that 98.04% of the variation of dependent variable has been explained by independent variable. Similarly, considering the value of 'R' and comparing with 6P.Er it has been found that the value of R is greater than

the value of 6P.Er. This shows that it has significant relationship between deposit and interest earned.

The coefficient of correlation 'R' between two variables in case of HBL, EBL and NSBI are 0.9933676, 0.9941478 and 0.9900473 which indicates that 99.33%, 99.41% and 99.00% of the variation of dependent variable has been explained by independent variables. The value of 'R' in case of HBL, EBL & NSBI has higher than that of 6P.Er. This states that there is a significant relationship between deposit and interest earned.

After above analysis it can be concluded that the relationship between deposit and interest earned in case of EBL is highly significant with showing higher dependency. Here HBL shows average. It has effectively mobilization of deposits which has had a major role to play in its earning; whereas other factors are responsible in the earnings of NABIL & NSBI.

iv) Coefficient of Correlation between Loan and advances & Interest Paid

The table 4.30 shows the values of 'R',R^2, P.Er and 6P.Er of NABIL, HBL, EBL and NSBI during the study period.

Table 4.30

Coefficient of Correlation between Loan and Advances and Interest Paid

Bank	**Evaluation criterions**			
	R	**R^2**	**P.Er**	**6P.Er**
NABIL	0.9623088	0.9260383	0.0223102	0.1338613
HBL	0.8483851	0.7197572	0.1253283	0.7519703
EBL	0.9852338	0.9706856	0.0088425	0.05305535
NSBI	0.9744362	0.9495260	0.0152252	0.09135155

(Source: Appendix No. 22)

The coefficient of correlation between loan and advances and interest paid in the case of EBL is 0.9852338. It shoes the positive relationship between two variables. The coefficient of determination (R^2) in case of EBL shows a higher degree of dependency than NSBI, NABIL and HBL. The value of 'R' is much greater than value of 6P.Er in case of EBL which states that there is significant relationship between loan and advances and interest paid.

Similarly the coefficient of correlation between loan and advances and interest paid in the case of NABIL, HBL and NSBI are 0.9623088, 0.8483851 and 0.9744362. They also shows the positive relationship between these variables. The values of coefficient of determination (R^2) are 0.7197572, 0.9706856 and 0.9495260 it means 71.97%, 97.06% and 94.95% of the variation in the dependent variable is explained by the independent variable. Again considering the value of R and comparing with 6P.Er in all cases, it is also higher than 6P.Er which reveals that the value is significant relationship between two variables.

In conclusion, it can be clear that the relationship between loan and advances and interest in case of NABIL is highly significant than other sample banks. It is successful to utilize the loan and advances. In case of HBL, EBL and NSBI there relationship could be established between the loan and advances and interest paid.

v) Coefficient of Correlation between Total Working Fund and Net Profit

The table 4.31 shows the value of 'R',R^2, P.Er , 6P.Er between these two variables of NABIL, HBL, EBL and NSBI.

Table 4.31

Coefficient of Correlation between Total Working Fund and Net Profit

Bank	**Evaluation criterions**			
	R	**R^2**	**P.Er**	**6P.Er**
NABIL	0.9569549	0.9157628	0.0254097	0.1524586
HBL	0.9819146	0.9641563	0.0160297	0.0961787
EBL	0.9838785	0.9680170	0.0096475	0.0578851
NSBI	0.8993702	0.8088668	0.0576544	0.3459268

(Source: Appendix No. 22)

The coefficient of correlation 'R' between total working fund and net profit in case of NABIL is 0.9569549 which indicates positive relationship between these variables. The coefficient of determination (R^2) is 0.9157628, which states that 91.57% of the variation of the dependent variable has been explained by independent variable. Similarly considering the value of 'R' 0.9569549 and comparing it with 6P.Er 0.1524586, the value of R is greater than the value of 6P.Er, so it is significant relation between these variables.

Similarly the value of R between these variables in case of HBL is 0.9819146, which shows the positive relationship. In case of EBL and NSBI its value is 0.9838785 and 0.8993702 that means it has positive relationship. The coefficient of determination R^2 in case of HBL, EBL and NSBI are 0.9641563, 0.9680170 and 0.8088668, which shows that only by independent variables. The value of R is greater than 6P.Er in case of HBL, EBL and NSBI, so there is significant relationship between these variables.

After analysis the conclusion can be drawn that all selected banks are significant relationship between the variable, which indicated that total working fund is significantly used to generate earnings.

vi) Coefficient of Correlation between Deposit & Loan and Advances

It measures the intensity or magnitudes or degree of relationship between the two variables. In the analysis, deposit is independent variable (X) and loan and advances are dependent variable (Y). The objectives of computing coefficient of correlation (R) between the two variables are to justify whether deposit is significantly used as loan and advance or not.

Table No. 4.32

Coefficient of Correlation between Deposit and Loan and Advances

Bank	**Evaluation criterions**			
	R	**R^2**	**P.Er**	**6P.Er**
NABIL	0.987654	0.975460	0.007401	0.044406
HBL	0.909970	0.828045	0.0518693	0.311216
EBL	0.998484	0.996971	0.0009134	0.005480
NSBI	0.885438	0.7840004	0.0965979	0.579587

(Source: Appendix No. 22)

The table 4.32 shows the value of 'R', 'R^2', P. Er and 6.P.Er between deposit and loan and advance of NABIL in comparison with HBL, EBL and NSBI. In case of NABIL, it is found that coefficient of correlation between deposit and loan and advances is 0.987654. It shows the positive relationship between two variables. The value of coefficient of determination (R^2) is 0.975460, which means 97.54% of the variation in the dependent variable (loan and advances), has been explained by the independent variable (deposit). Similarly, considering the value of 'R' i.e. 0.987654 and comparing it with 6 P. Er i.e. 0.044406, we can find, it is greater than the value of 6P.Er which reveals the value of 'R' is significant or there is significant relationship between deposit and loan and advances.

In case of HBL, EBL and NSBI, have positive correlation between deposit and loan and advances when we consider the value of coefficient of determination (R^2) it indicated than HBL, EBL and NSBI are 82.80%, 99.69% and 78.40% respectively of the variation in the dependent variable has been explained by the independent variable.

After analyzing, the conclusion can be drawn that in HBL, EBL and NSBI there is also significant relationship between deposit and loan and advances because 'R' is greater than 6P.Er .This indicates that EBL has higher correlation between deposit and loan and advances as well as higher value of (R^2) than NABIL, HBL and NSBI. NABIL has also considerable high correlation than HBL and NSBI. It can conclude that EBL is moreover successful to grant loan and advances to mobilize the collected deposits in a proper way.

vii) Coefficient of Correlation between Deposit and Total Investment

Table 4.33

Coefficient of Correlation Deposit and Total Investment

Bank	**Evaluation criterions**			
	R	**R^2**	**P.Er**	**6P.Er**
NABIL	0.907884	0.8242542	0.053012	0.318072
HBL	0.944369	0.8918345	0.032627	0.195765
EBL	0.921094	0.8484143	0.045725	0.274350

NSBI	0.779512	0.6076403	0.118353	0.710121

(Source: Appendix No. 22)

The table 4.33 shows the value of 'R', R^2, P.Er, 6P.Er between deposit and total investment of NABIL with comparison of HBL, EBL and NSBI. From table, it is found that coefficient of correlation between deposit and total investment of NABIL is 0.907884. It shows the positive relationship between two variables i.e. deposit, independent (X) and total investment, dependent (Y). Moreover, when we consider the value of coefficient of determination (R^2) it is 0.8242542 and it means 82.42% of the variation in the dependent variable is explained by the independent variable. Similarly, considering the value of 'R' and comparing with 6 P.Er, it is greater than 6P.Er, which reveals that the value is significant. Likewise in the case of HBL and EBL value of 6P.Er is also less than 'R', so we can say that there is also a significant relationship between total deposit and total investment.

On the other hand, in case of NSBI has provide correlation between deposit and total investment. By considering the probable error since the value of 'R' i.e. 0.779512 is slightly more than 6P.Er i.e. 0.710121, so it indicates that there is significant relationship between total deposits and total investment. Likewise by the application of coefficient determination i.e. R^2 which indicates NSBI to be 60.76% of the variation in the dependent variable has been explained by the independent variables.

The above analysis clears that all the sample banks are able to follow the policy to invest their deposit but in case of NSBI, comparing with other three banks, they are not fully able to follow the policy of maximizing the investment of their deposits because the value of 'R' of NSBI is slightly high than 6P.Er. It has not certain investment policy to invest their deposit where there as NABIL, HBL & EBL there is significant relationship between deposit and total investment. Lastly, we can say that NABIL, HBL & EBL followed the policy of maximizing the investment of their deposits or NABIL, HBL & EBL is successful in maximizing the investment of their deposit.

4.2.3 Regression Analysis

Regression of Networking Capital and Net Profit

To find out the exact relationship between different variable simply regressions analysis has been done and results of the analysis have been table.

Table 4.34

Calculation of Regression Equation between Net Profits on Total Working Fund

Banks	Regression equation	Value (a) constant	Reg. coeff. (b)
NABIL	Y = 294.47 + 0.0129329X	a = 294.47	b = 0.0129329
HBL	Y = -521.20 + 0.031470X	a = -521.20	b = 0.031470
EBL	Y = -28.34 + 0.016780X	a = -28.34	b = 0.016780
NSBI	Y = 260.09 + (-0.0089428)X	a = 260.09	b = -0.0089425

(Source: Appendix No. 23)

The table shows the regression equation of net profit and net working fund in NABIL, HBL, EBL and NSBI. According to the table regression equation of net profit on net working fund Y = 294.47 + 0.0129329X in NABIL is positive. The regression coefficient is positive i.e. 0.0129329 which indicates the positive relationship exists between net profit and net working fund. In other word, one million increase in net working funds leads to average about 0.0129329 million increase in net profit. The value of (a) indicates that if net working fund is 0 then the value of net profit is 294.47 million. So from analysis it shows that the net profit will be decrease and net working fund also decrease.

On the other hand, regression coefficient of (b) is positive in case of EBL which indicates that one million increase in net working fund lead to an average about Rs 0.016780 increases in net profit. According to the above table regression equation of net profit on net working fund regression coefficient is positive which reveals the positive relationship between net and working fund.

The test of t statistics helps us to conclude that in all cases the results are not statistically significant at 5% level of significance since the value of t is small than tabulated value.

Table 4.35

Calculation of Regression Equation between Net Profits on Total Deposit

Banks	**Regression equation**	**Value (a) constant**	**Reg. coeff. (b)**
NABIL	Y = 298.93 + 0.015017X	a = 298.93	b = 0.0150176
HBL	Y = -548.30 + 0.036225X	a = -548.30	b = 0.0362259
EBL	Y = -20.47 + 0.018910X	a = -20.47	b = 0.0189105
NSBI	Y = -200.37 + 0.033447X	a = -200.37	b = 0.0334473

(Source: Appendix No. 23)

The above table is the collection of major output of simple regression analysis of net profit on total deposit.

The regression equation of net profit (Y) dependent variable on total deposit (X) independent variable Y = 298.93 + 0.0150176X in NABIL is positive i.e. 0.0150176 which indicates the positive relationship exists between net profit and total deposit or it can be said that one million increase in total deposit leads to average 0.0150176 million increase in net profit. The value of constant (a) is relatively high. Similarly in case of EBL, the regression coefficient is positive or in other words one million increases in total deposit leads to average about 0.0189105 million increase in net profit and the value of constant (a) is negative. The regression coefficient of (b) is positive in case of EBL i.e. 0.0189105 which indicates that one million increase in total deposit leads to an average about 0.0189105 increases in net profit. The regression coefficient is positive which reveals the positive relationship between net profit and total deposit.

4.3.1 Interpretation of Questionnaire's Responses Given by Employees of NABIL, EBL, HBL and NSBI

Table No. 4.36

Analysis of responses given by employees of EBL, HBL, NABIL and NIBL

Particulars	Yes % (No.)	No % (No.)	Total % (No.)
Is there credit related problems in your banks	100 (40)	- -	100 (40)
Does your bank granted the entire credit to same sector as specified at the time of policy formulation?	65 (26)	35 (14)	100 (40)
Does the service charges taken by banks is satisfactory?	62.5 (25)	37.5 (15)	100 (40)
The borrowers past track record must be analyzed before approval of loan.	100 (40)		100 (40)
Do the borrowers need to submit the detail proposal in the bank	100 (40)	- -	100 (40)
Does your bank provides loan to large parties without analyzing detail?	20 (8)	80 (32)	100 (40)
While granting loan, the installment payment ability and borrower's regular income mechanism is ensured properly?	100 (40)	- -	100 (40)
The relation to the top authority may sometimes influences in loan decision rather than the credit appraisal	25 (10)	75 (30)	100 (40)

A system of periodic valuation is must.	100 (40)		100 (40)
Does your bank make provision for loan loss as per NRB directive?	100 (40)		100 (40)
Taking sufficient collateral is the basis for granting loan.	80 (32)	20 (8)	100 (40)
Does any bank officer visit the project site at the time of granting loan?	75 (30)	25 (10)	100 (40)
Are you satisfied with the bank's credit policy and practices?	70 (30)	25 (10)	100 (40)

Source: Survey of Commercial Banks: 2010

Table 4.36 shows the responses given by employees of NABIL, EBL, HBL and NSBI over structured questionnaires. Following was obtained according to the primary survey :-

- 100% survey employees of all banks agreed that there are present credit related problems during working time.
- 65% sampled employees replied that entire credit is granted in same sector as specified at the time of policy formulation but 35% replied that their banks do not grant the entire credit to same sector as specified at the time of policy formulation.
- 37.5% survey employees agreed that service charge taken by the banks is not satisfactory & 62.5% replied that it is satisfactory.
- 100% sampled employees agreed on that the past record of the borrower about his credit history, is analyzed before granting loan.

  Note:-[(%)- percentage of employees]

  [(No.)- Number of sample employees]
- Similarly, 100% sampled employees agreed that the borrower need to submit detail proposal in the bank while taking loan.

- 80% sampled employees did not agreed with that the bank provides loan to large parties without much analysis but 20% agreed because of regular & high transaction.
- 100% of sampled employees agreed that while granting loan, the borrower's installment payment ability, his regular income mechanism is ensured.
- 25% sampled employees replied that the relation with top authority sometimes influences the loan decision rather than the credit appraisal but 75% said it doesn't influence.
- All the sampled respondent i.e. 100% employees of all sampled banks said that they have the system of periodic valuation of collateral as well as bank makes provision for loan loss as per NRB directives, which can survive their banks from future loss.
- Similarly, 80% of respondents agreed that taking sufficient collateral is the basis for granting loan but 20% did not agree with that.
- Only 75% respondents agreed with that the bank officier visit the project site at the time of granting loan but 25% replied not.
- Above all response are satisfactory, 70% of sample employees are satisfied with the banks credit policy & practices and rest i.e. 30% are not satisfied because of higher service charge, sufficient collateral to the base of floating loan and also availability of loan to large parties without much analysis because of relation to top authority.

4.3.2 Interpretation of Questionnaire's Responses Given by Credit Customers of NABIL, EBL, HBL and NSBI.

Table No. 4.37 Analysis of responses given by credit customers

Particulars	Yes % (No.)	No % (No.)	Not clear % (No)	Total % (No.)
Do you have full knowledge about bank's credit policy?	60 (24)	40 (16)		100 (40)
Does any bank officer visit your project site at the time of granting loan?	80 (32)	10 (4)	10 (4)	100 (40)

Are you satisfied with the rate of interest taken by bank?	20 (8)	80 (32)		100 (40)
And what about service charge taken by banks, are you satisfied with that?	90 (36)	10 (4)		100 (40)
Have you received any notice before credit expiration date?	70 (28)	10 (4)	20 (8)	100 (40)
Have you utilized the entire credit to the same sector as specified at the time of taking credit?	90 (36)		10 (4)	100 (40)
Do you want to take further credit from the bank?	70 (28)	20 (8)	10 (4)	100 (40)
Are you satisfied with the bank services?	75 (30)	25 (10)		100 (40)

Source: Survey of Commercial Banks: 2010

Note:- [(%)- percentage of credit customers]

[(No.)- Number of sample credit customers]

Table 4.37 shows the responses given by credit customers of NABIL, EBL, HBL and NSBI over structured questionnaires. Following was obtained from that survey :-

- 60% of the total sample customers said that they knows about the rules, policies of bank & remaining said “No”.
- Among sample customers, 80% of sample customers said that the bank officer visited their project site at the time of granting loan. 4 customer said “No” because there was representative of the credit taking group and 4 customer didn’t response properly.
- 32 customers out of 40 said they are not satisfied with banks interest rate only 8 customers are satisfied.

- 90% of the sample customers are satisfied with service charge of banks but 10% are dissatisfied.
- 70% of the total sample customer of bank received notice in time i.e. at the time of paying interest or before credit expiration date. 20% of the total customers didn't cooperate with researcher & remaining 10% said "No".
- 90% of the sample customer said that they utilized the credit for the same sector as specified at the time of taking credit but 10% customers i.e. 4 customers didn't respond clearly.
- Out of 40 customers, 28 sample customers wants to take credit from same bank in near future. 8 customer said "No" & remaining 5 customers didn't respond clearly.
- 75% of the sample customers of the bank said that they are satisfied with the service provided by bank & remaining 25% said "No".

4.4 Major Findings of the Study

1. The current ratio of NABIL shows the fluctuating trend during the study period. The mean ratio of NSBI is higher than other three banks. In general, the current ratio analysis of banks over the five years period indicates that it has been able to meet its short-term obligations and has satisfactory liquidity position.
2. The cash and bank balances to total deposit ratio of EBL is in increasing trend. The mean ratio of this bank is higher than NSBI, HBL and NABIL which indicates that its liquidity position is better to serve its customers deposits withdrawal demands.
3. The mean ratio of cash and bank balance to current assets of EBL is higher than NSBI, HBL and NABIL. It states that liquidity position of EBL is better in this regard. On the basis of C.V the ratios are seemed to be variable. EBL is better position in maintaining its cash and bank balance to meet its daily requirement to make the payments on customers deposit withdrawal in comparison with NSBI, HBL and NSBI.
4. The mean ratio of investment on government securities to current asset of EBL is average in compared to HBL and higher than NABIL & NSBI, which states that its investment on government securities is slightly greater than that of NSBI & NABIL. On the basis of C.V the ratio of EBL & HBL are more volatile and in consistent.

5. The loan & advance to current assets ratio of EBL is increasing trend. The mean ratio of EBL is higher among all four banks. The ratio of EBL is variable in comparisons to other banks, which indicates that its liquidity positions fewer consistencies. Since NSBI has highly mean value, it has been able to mobilize its funds in loan & advances.
6. The loans and advances to total deposits ratio of EBL has in increasing trend. The mean ratio of EBL is higher than HBL & NABIL and lower than NSBI, which shows that the ratios are satisfactory consistent over the study period.
7. Investment to total deposit of all four banks has in fluctuating trend during the study period. The mean ratio of total investment to total deposit of EBL is lowest among all four banks. The highest ratio is 31.44% and lowest is 21.08% with mean ratio is less consistent and more variable. Its overall figure suggests that the banks have not mobilized significant amount of fund on the government securities and shares and debentures of other companies.
8. The loans and advance to total working fund of ratio EBL is highest among four banks. Its C.V. is 3.76% which is lowest than that of other three banks shows the ratios is consistent over the study period. From the study shows two third of the asset taken optimum risk towards the mobilization of its risky assets.
9. In case of investment on government securities to total working fund mean ratio, NSBI is higher than that of other compared banks. The mean of the ratio is 21.89% with lowest C.V of 18.91% between them indicates that its ratio is variable and consistent over the study period.
10. The investment on shares and debenture to total working fund ratios of EBL is in decreasing trend whereas NABI, HBL & NSBIL have fluctuating trend. According to its mean ratio and C.V it shows the ratio of EBL is lowest among the sample Bank over the study period.
11. Total off balance sheet operation to loan an advances ratio of HBL, EBL & NSBI have fluctuating trend except NABIL is in decreasing. It may be due to competition in the banking sector or bank is not getting enough attention towards non-funded business. Here the mean ratio of NABIL is appeared to be highest, which indicates that the ratio is not consistent during the study period.

12. The loan loss ratio of HBL has fluctuating trend. The mean ratio of HBL is found to be 0.5964% with C.V of 30.37%, which is lowest mean than that of the other compared banks, it shows that the bank manages its loan and advances and makes effort for timely recovered of loan. The increasing trend of loan loss provision indicates the quality of loans becoming degrading year by year.
13. The mean ratio of return on loans and advances ratio of EBL is higher than NSBI and is lower than NABIL and HBL. The mean of the ratio is found to be 2.34% with C.V of 8.54%, which indicates that the ratios are less variable. The average ratio of 2.34% suggests that the earning capacity of the bank's loan and advances is satisfactory.
14. Return on total working fund ratios of EBL are in fluctuating trend during the study period. The mean ratio of EBL is in between NABIL, HBL & NSBI. This indicates that the ratios are less variable and consistent than that of other compared banks.
15. The mean ratio of total interest earned to total outside assets of HBL is lowest of all. The total interest earned to total outside assets ratio of the HBL is less variable in comparison to NABIL, EBL and NSBI. Its lowest C.V indicates that the ratios are satisfactory consistent during the study period.
16. Total interest earned to total working fund ratios of EBL have ranging from 6.84% in 2003/04 to 5.70% in 2007/08. The mean ratio of total interest earned to total working fund of EBL is 5.93% with 8.43% C.V. The ratio indicates that EBL has higher earning power of the total assets.
17. The total interest paid to working fund ratio of EBL is in decreasing trend during the study period. The mean ratio of total interest paid to total working fund of EBL is average between NSBI, HBL & NSBI i.e. higher than NABIL & HBL and lower than NSBI. The total interests paid to working fund ratios are lesser than to total interest earned to total working fund ratio. This indicates that the bank is in profitability position as it is earning higher return than it interest cost.
18. Credit risk ratios of the banks are fluctuating trend. The mean of the ratios of EBL is found to be 63.78% which is highest and NSBI has 63.60% which is second highest among other banks. Similarly its C.V is 3.67% which is lowest among all compared banks. It indicates that NSBI’s credit policy is average where as EBL has consistent credit policy.

19. Liquidity risk ratio of the banks are decreasing trend. The mean liquidity risk ratio of EBL is highest of all and C.V of its also second lowest in comparison with other banks. So the ratio of EBL is less variable than NABIL, HBL and NSBI.
20. The mean capital risk ratio of EBL is in between the compared banks. The ratio of EBL is more variable, & less consistent. As it has its C.V. the lowest among the compared bank, it has higher consistent.
21. The analysis of the growth ratio of total deposits, total loan and advances, total investments, and net profit of EBL in comparison with NABIL, HBL and NSBI during the study period shows that the total deposits of the bank is in increasing trend. It has maintained growth rate highest than other compared banks. This means the performance of EBL to collect deposit in comparison to other banks is better year by year.
22. Similarly, loan and advances of the banks are also increasing trend. The growth rate of EBL is higher than that of other compared banks. It has maintained growth rate of 32.93%, which is highest among other sample banks. So the performance of EBL to grant loan and advances in comparison to other bank is better year by year.
23. The total investment of studies banks are fluctuating trend during the study period. The growth ratio of EBL total investment is higher among all four banks which is 25.35%. NABIL has moderate successful in investing. Here NABIL ratio is lesser than EBL & higher than HBL& NSBI.
24. The total net profit of studies banks are also in fluctuating trends except of EBL. EBL trend are in increasing. The growth ratio of NSBI net profit is highest of all but unexpectedly fluctuating. It has the rate of 53.31% whereas NABIL, HBL and EBL have 13.29%, 25.59% and 33.75% respectively. It means the performance of NSBI to earn profit is better .
25. The trend analysis of total deposit of all banks has increasing trend. From the trend analysis it is forecast that the total deposit of NABIL in 2012/13 will be Rs.50805.46 million which is the highest among other banks in the third mid July of 2012 respectively. Here deposit collection of NABIL is better than HBL, EBL & NSBI.

26. From the trend analysis of total loan and advances it has been seen that the total loan and advances of all four banks have increasing trend. The total loan and advance of NABIL is the highest.
27. Total investments of NABIL, HBL, EBL and NSBI have in increasing trend. The total investment of HBL will be Rs.17166.01 million which is highest among the study period.
28. The net profits of all four banks have the increasing trend. The net profit of NABIL by the year 2012 is projected to be Rs.1121.49 million, which is the highest value under the study period.
29. The coefficient of correlation (R) between deposits and loan and advances of the EBL is highest among other banks. Since 'R' > 6P.Er and 'R' positive which is near by 1, there is very strong positive correlation between deposits and loans and advances during study period of EBL & is similar case of NABIL, HBL & NSBI.
30. The correlation coefficient r between total deposit and total investment of NABIL, HBL, EBL & NSBI is significantly relationship between these variables. It indicates that NABIL, HBL and EBL is successful in maximizing the investment of their deposit except NSBI because there is slightly difference between 'R' & 6P.Er.
31. The correlation coefficient R between total outside assets and net profit of the EBL is 0.981055 since R > 6P.Er the relation is significant. This indicates that EBL is capable to earn net profit by mobilizing it's total outside assets in comparison to NABIL, HBL and NSBI. Loan and advances is the main earning assets of the bank, but here the increase or decreases of loan and advances is significant to the net profit of NABIL, HBL and NSBI.
32. The coefficient of correlation (r) between total deposit and total net profit of all four banks have significant relationship. NSBI has not been more successful as EBL in mobilization of its deposits..
33. The coefficient of correlation between deposits and interest earned of all four banks is positively and significantly relationship between these variables since R > 6P.Er. The value of 'R' incase of HBL, EBL and NSBI also higher than the value 6P.Er so the relation is significant. So, EBL has effectively mobilization of deposits which has had major role to play in its earnings in compared with NABIL, HBL and NSBI.

34. The coefficient of correlation between loan and advances and interest paid of the NABIL shows the positive relationship between two variables. It's probable error multiplied by six is found to be lesser than value of R so it indicates that it is successful to utilize the loan and advances. In case of HBL, EBL and NSBI, the value of 'R' is also higher than the value of 6P.Er. So the relation is significant.

35. The coefficient of correlation r between total working fund and net profit of the NABIL is positive, since R > 6P.Er there is positive relationship between two variables. Here EBL has highest coefficient of correlation among four banks.

36. The regression of Net profit on net working fund is positive incase of NABIL, HBL & EBL and negative incase of NSBI. From analysis, it shows that the net profit will be decrease and net working fund also decrease.

37. Similarly, regression of net profit on total deposit is positive incase of all four sample banks. The regression coefficient is positive which reveals the positive relationship between net profit and total deposit.

38. Analysis of questionnaire's responses given by 40 employees of four banks shows that even there is some credit related problems, which complicates their credit related works, their practices are satisfactory. 65% of them said that entire credit is granted to the same sector as specified at the time of policy formulation. They use to visit the project site at the time of granting loan and borrower's past track records are analyzed. Some of them think top authority influences during taking credit related decisions. 70% of them are satisfied with banks credit policy and practices and remaining are not.

39. Analysis of responses of questionnaire given by 40 credit customers of four banks shows that even they are not satisfied with interest rate charge by the banks, they are quite satisfied with there banks services. 70% of them want to further credit from the bank and remaining is not. 75% of them are satisfied with the bank services and remaining is not.

CHAPTER – FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

Banks plays an important role in the economic development of the country as the issue of development always rests upon the mobilization of resources. Bank is the most important institution for accelerating economic growth in the country. It is quite true that a strong financial institution is of a great need in the development of the developing country like Nepal. Commercial banks are major financial institutions, which occupy quite an important place in the framework of every economy because they provide capital for the development of industry trade and business and other resources deflect sectors investing the saving collected as deposit commercial banks, by playing active role have changed the economic structure of the world. Commercial banks have its own role and contribution in the economic development; it maintains economic confidence of various segments and extends credit to people. The banking sector has to play policy and building up the financial structure for future economic development formulation of sound investment policies and planned effort pushed forward the force of economic growth.

The income and profit of the bank depends upon its lending procedure, lending policy and investment of its fund utilize in different securities. Commercial banks are able to utilize its deposits properly i.e. providing loan and advances or lending for a profitable project, the reason behind it is lack of sound investment policy. The objective of this study is to evaluate the investment policies adopted by NABIL, HBL, EBL and NSBI. The study is based on primary and secondary sources of data. Therefore for primary questionnaires are distributed to 40/40 each sampled employees and credit customers to know their views and for secondary data, the required data have been collected from various published and unpublished secondary sources.

Regarding the investment policies of commercial banks there are basically five basic principles of the bank follow while providing the loans i.e. set investment process, security analysis, decision are applied in the study. The data obtained from annual reports of the

concerned banks, likewise the financial statements of five years (from 2003/04 to 2007/08) were selected for the purpose of evaluation.

5.2 Conclusion

The liquidity position of NSBI is comparatively better than that of NABIL, HBL and EBL. In spite of current ratio is average among the other three banks EBL has maintained the cash and bank balance to meet the customers demand. All the four banks have met the normal standard current assets ratio to meet the short term obligation of its customers. HBL has invested highest sectors like government securities than EBL and lesser portion than that of NABIL and NSBI. HBL had mobilized lots of its funds in order to gain the high profit.

From the analysis of assets management ratio it can be found that EBL is in better position as compared to that of NABIL, HBL and NSBI. The loans and advances to total deposit ratio, loan and advances to total working fund ratio of EBL lien in between those of NABIL, HBL and NSBI. NSBI has invested the highest portion of total working fund on government securities as compared to NABIL, HBL and EBL. Due to more efficient loan policy, NABIL suffers less from loan loss provision. It takes low credit risk and has sufficient deposits of none bearing interest which can be used in a creation period. Somehow EBL has also trying to best in loan loss provision. Investment on shares and debentures to total working fund ratio is higher in HBL.

The interest earned to total outside assets and return on total working fund ratio of NABIL is lowest of all. But overall analysis of profitability ratios, EBL is average profitable in comparison to other compared bank i.e. NABIL, HBL and NSBI. To make the profit NSBI is taking highest risk by providing the higher portion of its deposits as a loan.

The return on loan and advances ratio and return on assets of NSBI is lowest of all. The ratio suggests that the earning capacity of the bank's loan and advances is satisfactory. The return on assets of the bank is good in average; it indicates the good earning capacity of the bank assets and good utilization of assets.

The total interest paid to working fund ratio is less than the interest earned to total working fund ratio. So it is profitable position as it is getting higher return that is interest cost.

The degree of risk is average on EBL. The credit ratio is higher than the compared banks. However, the lowest C.V. of credit risk ratio and average C.V of liquidity risk ratio and capital risk ratio over the study period provides for the assurance of consistency of the degree of risk. NABIL has showing its good performance by increasing the total deposit, loan and advances and investment in profitable sectors interested earnings by providing loan to clients. The trend of the total investment, total deposit, loan and advances and net profit of NABIL shows better position than that of HBL, EBL and NSBI.

5.3 Recommendation

On the basis of the findings of the study, following recommendations can be drawn –

- **Improve the liquidity position:** In commercial banks the liquidity position affects external and internal factors such as saving for investment situations, central banks requirements, the leading policies management capacity etc. In this study it should try to lower the current liabilities to improve its liquidity position. Current ratio of all four banks is not satisfactory. It is below its standard rate 2:1. So the banks are suggested to improve Current assets. The ratio of cash and bank balance to total deposit and current assets of EBL is higher than that of NABIL, HBL and NSBI. It means EBL has higher cash and bank balance which decrease profit of bank, so it is recommended to mobilize cash and bank balance in profitable as loan and advances.
- **Invest in government securities:** From the study it is found that NABIL has not invested funds in government securities than that of other banks. NABIL liquidity position shows that it has kept relatively funds as cash and bank balance which doesn't earn any return. This ultimately affects profitability of bank. Investment in government securities i.e. TBs development bonds. Saving certificate are free of risk and highly in nature. So NABIL is recommended to invest its fund in government securities instead of keeping them idle.
- **Expand to deprived sector:** In practice joint ventured banks are urban based; service quite a few elite, a fluent big customer are heavily dependent on free based activities. To overcome its situation they should be accessible to rural areas and possible loan

and advances to its deposit. So the customers is enjoying by getting deposit borrowing and other services.

- **Invest in share & debenture of others:** HBL has invested it's more of the funds that are total investment on total deposit ratio the percentage of investment on share and debenture is nominal. So it is suggested to invest more of its fund in share and debenture of different companies.
- **Increase in loan & advances:** HBL loan and advances to total deposit ratio is lowest in compared to other banks. To overcome from the situation it is recommended to follow liberal lending policy and invest more and more of total deposit in loan and advances and maintain stability on the investment policy.
- **Make provision for borrower limit:** NABIL's loan loss ratio is increased year by year. So this bank is recommended that before providing the loan make sure that your clients is in good character and able to pay its loan or may take the collateral which is nearly two times more than that of your guaranteed.
- **Maintain & create the profitable portfolio:** Profitability ratios of banks are not satisfactory, if resources held idle bank have to bearded more cost and results would be lower profit margin. So portfolio condition of a bank should be regularly revised from time to time. It should always try to maintain the equilibrium in the portfolio condition of the bank. The bank should use its funds in more portfolio sectors. It should utilize its risky assets and shareholders' funds and it should reduce its express and should try to collect cheaper fund being more profitable.
- **Revise the interest rate:** It is seen that EBL has invested much of its fund in total outside assets but it has not achieved the desired result. So EBL should play tactfully while investing its fund keeping in mind the interest rate.
- **Invest in riskless sector:** HBL has taken the low credit risk as HBL is one of the oldest commercial bank in Nepal. The risk taken by NABIL from the able of credit risk and capital risk are in an average but the consistencies of the same are highly volatile which may result higher loss. So it should not test such risk on an experiment basis it should carefully study it so as to achieve higher return from the above risk.
- **Create innovative strategies:** In the light of growing competition in the banking sector the business of the bank is customer oriented. It should strengthen and active its

marketing function, as it is an effective tool of attracting and retaining customers. The bank should develop on “Innovative approach to bank marketing and formulate new strategies of serving customers in a more convenient way.

- **Cover all sector:** The investment policy of NABIL is good in every aspect as studied above but the consistency in the above investment sectors is in equilibrium states it is found that at time bank focuses much of its attention to one sector leaving other sector untouched, so it is recommended to touch all the sectors and balance it effectively as to have the optimal performance of the bank.

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Appendix:- 1
Current Ratio

(Rs in million)

Banks	NABIL			HBL			EBL			NSBI		
Fiscal Year	**Current Assets**	**Current Liabilities**	**Ratio (times)**	**Current Assets**	**Current Liabilities**	**Ratio (times)**	**Current Assets**	**Current Liabilities**	**Ratio (times)**	**Current Assets**	**Current Liabilities**	**Ratio (times)**
2003/04	16765.77	12953.23	1.29	18985.90	18727.68	1.01	9492.46	6030.30	1.57	8715.67	4461.49	1.95
2004/05	15173.11	13327.90	1.13	20840.33	19408.98	1.07	11612.39	7192.62	1.61	10076.18	5073.04	1.98
2005/06	18381.26	17005.88	1.08	23817.72	20984.01	1.13	15050.90	10454.12	1.43	13316.81	5737.29	2.32
2006/07	22850.69	19761.15	1.15	27602.86	22811.50	1.21	20835.57	14304.40	1.45	14094.13	7020.44	2.00
2007/08	31335.08	25991.47	1.20	29856.05	23801.00	1.25	26648.54	18481.92	1.44	17666.92	8717.91	2.02

Appendix:- 2
Cash and Bank Balance to Total Deposit Ratio

(Rs in million)

Banks	NABIL			HBL			EBL			NSBI		
Fiscal Year	**Cash & Bank Balance**	**Total Deposit**	**Ratio (%)**	**Cash & Bank Balance**	**Total Deposit**	**Ratio (%)**	**Cash & Bank Balance**	**Total Deposit**	**Ratio (%)**	**Cash & Bank Balance**	**Total Deposit**	**Ratio (%)**
2003/04	970.48	14119.03	6.87	2001.18	22010.33	9.09	631.80	8063.90	7.83	864	7198.32	12.00
2004/05	559.38	14586.60	3.83	2014.47	24815.01	8.11	1049.99	10097.70	10.39	723.74	8654.77	8.36
2005/06	630.23	19347.40	3.26	1717.35	26490.85	6.48	1552.97	13802.44	11.25	1118.15	11002.04	10.16
2006/07	1399.82	23342.28	6.00	1757.34	30048.41	5.84	2391.42	18186.25	13.14	1122.69	11445.28	9.80
2007/08	2671.14	31915.04	8.36	1448.14	31842.79	4.54	2667.97	23976.30	11.12	1342.96	13715.39	9.79

Appendix:- 3
Cash and Bank Balance to Current Assests Ratio

(Rs in million)

Banks	NABIL			HBL			EBL			NSBI		
Fiscal Year	**Cash & Bank Balance**	**Current Assets**	**Ratio (%)**	**Cash & Bank Balance**	**Current Assets**	**Ratio (%)**	**Cash & Bank Balance**	**Current Assets**	**Ratio (%)**	**Cash & Bank Balance**	**Current Assets**	**Ratio (%)**
2003/04	970.48	16765.77	5.79	2001.18	18985.90	10.54	631.80	9492.46	6.65	864	8715.67	9.91
2004/05	559.38	15173.11	3.68	2014.47	20840.33	9.67	1049.99	11612.39	9.04	723.74	10076.18	7.18
2005/06	630.23	18381.26	3.43	1717.35	23817.72	7.21	1552.97	15050.90	10.31	1118.15	13316.81	8.39
2006/07	1399.82	22850.69	6.12	1757.34	27602.86	6.36	2391.42	20835.57	11.48	1122.69	14094.13	7.96
2007/08	2671.14	31335.08	8.52	1448.14	29856.05	4.85	2667.97	26648.54	10.01	1342.96	17666.92	7.60

Appendix:- 4
Investment on Government Securities to Current Assests Ratio

(Rs in million)

Banks	NABIL			HBL			EBL			NSBI		
Fiscal Year	**Investment on Govt. Securities**	**Current Assets**	**Ratio (%)**	**Investment on Govt. Securities**	**Current Assets**	**Ratio (%)**	**Investment on Govt. Securities**	**Current Assets**	**Ratio (%)**	**Investment on Govt. Securities**	**Current Assets**	**Ratio (%)**
2003/04	3672.63	16765.77	21.90	3431.73	18985.90	18.07	2466.43	9492.46	25.98	1889.63	8715.67	21.68
2004/05	2413.94	15173.11	15.91	5469.73	20840.33	26.24	2100.29	11612.39	18.08	2588.14	10076.18	25.68
2005/06	2301.46	18381.26	12.52	4565.32	23817.72	19.16	3548.61	15050.90	23.57	3591.77	13316.81	26.97
2006/07	4808.35	22850.69	21.04	6079.37	27602.86	22.02	4704.63	20835.57	22.58	2345.58	14094.13	16.64
2007/08	4646.88	31335.08	14.82	7166.53	29856.05	24.00	4821.60	26648.54	18.09	3035.55	17666.92	17.18

Appendix:- 5
Loan and Advance to Current Assests Ratio

(Rs in million)

Banks	NABIL			HBL			EBL			NSBI		
Fiscal Year	Loan & Advance	Current Assets	Ratio (%)	Loan & Advance	Current Assets	Ratio (%)	Loan & Advance	Current Assets	Ratio (%)	Loan & Advance	Current Assets	Ratio (%)
2003/04	8189.99	16765.77	48.85	11951.87	18985.90	62.95	5884.12	9492.46	61.98	5143.66	8715.67	59.01
2004/05	10586.17	15173.11	69.77	12424.52	20840.33	59.61	7618.67	11612.39	65.60	6213.88	10076.18	61.67
2005/06	12922.54	18381.26	70.30	14642.56	23817.72	61.48	9801.30	15050.90	65.12	7626.73	13316.81	57.27
2006/07	15545.78	22850.69	68.03	16997.99	27602.86	61.58	13664.08	20835.57	65.58	9460.45	14094.13	67.12
2007/08	21365.05	31335.08	68.18	19497.52	29856.05	65.30	18339.08	26648.54	68.81	12113.70	17666.92	68.56

Appendix:- 6
Loan and Advance to Total Deposit Ratio

(Rs in million)

Banks	NABIL			HBL			EBL			NSBI		
Fiscal Year	Loan & Advance	Total Deposit	Ratio (%)	Loan & Advance	Total Deposit	Ratio (%)	Loan & Advance	Total Deposit	Ratio (%)	Loan & Advance	Total Deposit	Ratio (%)
2003/04	8189.99	14119.03	58.00	11951.87	22010.33	54.30	5884.12	8063.90	72.97	5143.66	7198.32	71.45
2004/05	10586.17	14586.60	72.57	12424.52	24815.01	50.06	7618.67	10097.70	75.45	6213.88	8654.77	71.79
2005/06	12922.54	19347.40	66.79	14642.56	26490.85	55.27	9801.30	13802.44	71.01	7626.73	11002.04	69.32
2006/07	15545.78	23342.28	69.58	16997.99	30048.41	56.56	13664.08	18186.25	75.13	9460.45	11445.28	82.65
2007/08	21365.05	31915.04	66.94	19497.52	31842.79	61.23	18339.08	23976.30	76.48	12113.70	13715.39	88.32

Appendix:- 7
Total Investment to Total Deposit Ratio

(Rs in million)

Banks	NABIL			HBL			EBL			NSBI		
Fiscal Year	Total Investment	Total Deposit	Ratio (%)	Total Investment	Total Deposit	Ratio (%)	Total Investment	Total Deposit	Ratio (%)	Total Investment	Total Deposit	Ratio (%)
2003/04	5835.95	14119.03	41.33	9292.10	22010.33	42.21	2535.65	8063.90	31.44	1907.52	7198.32	26.50
2004/05	4275.52	14586.60	29.31	11692.34	24815.01	47.11	2128.93	10097.70	21.08	2607.68	8654.77	30.13
2005/06	6178.53	19347.40	31.93	10889.03	26490.85	48.07	4200.51	13802.44	30.43	3610.77	11002.04	32.82
2006/07	8945.31	23342.28	40.03	11822.98	30048.41	39.34	4984.31	18186.25	27.40	2659.45	11445.28	23.23
2007/08	9939.77	31915.04	31.14	13340.17	31842.79	41.89	5059.55	23976.30	21.10	3088.88	13715.39	22.52

Appendix:- 8
Loan and Advance to Total Working Fund Ratio

(Rs in million)

Banks	NABIL			HBL			EBL			NSBI		
Fiscal Year	Loan & Advance	Total Working Fund	Ratio (%)	Loan & Advance	Total Working Fund	Ratio (%)	Loan & Advance	Total Working Fund	Ratio (%)	Loan & Advance	Total Working Fund	Ratio (%)
2003/04	8189.99	16745.48	48.90	11951.87	24762.02	48.27	5884.12	9608.57	61.23	5143.66	8440.40	60.94
2004/05	10586.17	17064.08	62.03	12424.52	27418.15	45.31	7618.67	11732.51	64.93	6213.88	10345.37	60.06
2005/06	12922.54	22329.97	57.87	14642.56	29460.39	49.70	9801.30	15959.28	61.41	7626.73	13035.83	58.50
2006/07	15545.78	27253.39	57.04	16997.99	33519.14	50.71	13664.08	21432.57	63.75	9460.45	13901.20	68.05
2007/08	21365.05	37132.76	57.53	19497.52	36175.53	53.90	18339.08	27149.34	67.54	12113.70	17187.44	70.48

Appendix:- 9
Investment on Government Securities to Total Working Fund Ratio

(Rs in million)

Banks	NABIL			HBL			EBL			NSBI		
Fiscal Year	Investment on Govt. Securities	Total Working Fund	Ratio (%)	Investment on Govt. Securities	Total Working Fund	Ratio (%)	Investment on Govt. Securities	Total Working Fund	Ratio (%)	Investment on Govt. Securities	Total Working Fund	Ratio (%)
2003/04	3672.63	16745.48	21.93	3431.73	24762.02	13.86	2466.43	9608.57	25.67	1889.63	8440.40	22.38
2004/05	2413.94	17064.08	14.14	5469.73	27418.15	19.95	2100.29	11732.51	17.90	2588.14	10345.37	25.01
2005/06	2301.46	22329.97	10.30	4565.32	29460.39	15.50	3548.61	15959.28	22.23	3591.77	13035.83	27.55
2006/07	4808.35	27253.39	17.64	6079.37	33519.14	18.13	4704.63	21432.57	21.95	2345.58	13901.20	16.87
2007/08	4646.88	37132.76	12.51	7166.53	36175.53	19.81	4821.60	27149.34	17.56	3035.55	17187.44	17.66

Appendix:- 10
Investment on Share and Debentures to Total Working Fund Ratio

(Rs in million)

Banks	NABIL			HBL			EBL			NSBI		
Fiscal Year	Investment on Share & Debenture	Total Working Fund	Ratio (%)	Investment on Share & Debenture	Total Working Fund	Ratio (%)	Investment on Share & Debenture	Total Working Fund	Ratio (%)	Investment on Share & Debenture	Total Working Fund	Ratio (%)
2003/04	22.22	16745.48	0.13	34.26	24762.02	0.13	17.11	9608.57	0.18	17.88	8440.40	0.21
2004/05	27.36	17064.08	0.16	39.91	27418.15	0.14	19.38	11732.51	0.16	19.53	10345.37	0.18
2005/06	27.56	22329.97	0.12	38.56	29460.39	0.13	19.88	15959.28	0.12	19.53	13035.83	0.15
2006/07	57.85	27253.39	0.21	73.42	33519.14	0.21	19.88	21432.57	0.09	31.93	13901.20	0.22
2007/08	80.55	37132.76	0.21	89.55	36175.53	0.24	16.22	27149.34	0.05	32.82	17187.44	0.19

Appendix:- 11
Total Off Balance Sheet Operation to Loan & Advance Ratio

(Rs in million)

Banks	NABIL			HBL			EBL			NSBI		
Fiscal Year	OBS	Loan & Advance	Ratio (%)	OBS	Loan & Advance	Ratio (%)	OBS	Loan & Advance	Ratio (%)	OBS	Loan & Advance	Ratio (%)
2003/04	5297.73	8189.99	64.69	2992.49	11951.87	25.03	2233.89	5884.12	38.00	991.55	5143.66	19.27
2004/05	4691.54	10586.17	44.32	7718.74	12424.52	62.12	2106.64	7618.67	27.65	1715.30	6213.88	27.60
2005/06	5498.94	12922.54	42.55	6579.10	14642.56	44.93	2250.41	9801.30	23.00	1953.92	7626.73	25.62
2006/07	5695.32	15545.78	36.63	5695.32	16997.99	33.50	2481.47	13664.08	18.16	2817.30	9460.45	29.78
2007/08	7791.38	21365.05	36.46	7791.38	19497.52	40.00	3809.15	18339.08	20.77	3160.60	12113.70	26.09

Appendix:- 12
Loan Loss Ratio

(Rs in million)

Banks	NABIL			HBL			EBL			NSBI		
Fiscal Year	Loan Loss	Loan & Advance	Ratio (%)	Loan Loss	Loan & Advance	Ratio (%)	Loan Loss	Loan & Advance	Ratio (%)	Loan Loss	Loan & Advance	Ratio (%)
2003/04	1.051	8189.99	0.01	186.22	11951.87	1.56	81.78	5884.12	1.40	109.56	5143.66	2.02
2004/05	4.207	10586.17	0.04	58.86	12424.52	0.47	88.92	7618.67	1.16	193.24	6213.88	3.11
2005/06	3.77	12922.54	0.03	145.15	14642.56	1.00	70.47	9801.30	0.71	146.65	7626.73	1.92
2006/07	14.20	15545.78	0.09	90.69	16997.99	0.53	89.69	13664.08	0.65	59.37	9460.45	0.62
2007/08	64.05	21365.05	0.30	58.43	19497.52	0.30	99.34	18339.08	0.54	57.46	12113.70	0.47

Appendix:- 13
Return on Loan and Advances Ratio

(Rs in million)

Banks	NABIL			HBL			EBL			NSBI		
Fiscal Year	Net Profit	Loan & Advance	Ratio (%)	Net Profit	Loan & Advance	Ratio (%)	Net Profit	Loan & Advance	Ratio (%)	Net Profit	Loan & Advance	Ratio (%)
2003/04	455.32	8189.99	5.56	263.05	11951.87	2.20	143.57	5884.12	2.44	60.85	5143.66	1.18
2004/05	520.11	10586.17	4.90	308.28	12424.52	2.48	170.81	7618.67	2.24	57.38	6213.88	0.92
2005/06	635.26	12922.54	4.92	457.45	14642.56	3.12	237.38	9801.30	2.42	117.00	7626.73	1.53
2006/07	673.96	15545.78	4.33	491.82	16997.99	2.90	296.41	13664.08	2.17	254.91	9460.45	2.70
2007/08	746.46	21365.05	3.50	635.87	19497.52	3.26	451.21	18339.08	2.46	247.77	12113.70	2.04

Appendix:- 14
Return on Total Working Fund Ratio

(Rs in million)

Banks	NABIL			HBL			EBL			NSBI		
Fiscal Year	Net Profit	Total Working Fund	Ratio (%)	Net Profit	Total Working Fund	Ratio (%)	Net Profit	Total Working Fund	Ratio (%)	Net Profit	Total Working Fund	Ratio (%)
2003/04	455.32	16745.48	2.72	263.05	24762.02	1.06	143.57	9608.57	1.49	60.85	8440.40	0.72
2004/05	520.11	17064.08	3.04	308.28	27418.15	1.12	170.81	11732.51	1.45	57.38	10345.37	0.55
2005/06	635.26	22329.97	2.84	457.45	29460.39	1.55	237.38	15959.28	1.48	117.00	13035.83	0.89
2006/07	673.96	27253.39	2.47	491.82	33519.14	1.46	296.41	21432.57	1.38	254.91	13901.20	1.83
2007/08	746.46	37132.76	2.01	635.87	36175.53	1.75	451.21	27149.34	1.66	247.77	17187.44	1.44

Appendix:- 15
Total Interest Earned to Total Outside Assets Ratio

(Rs in million)

Banks	NABIL			HBL			EBL			NSBI		
Fiscal Year	Interest Earned	Outside Assets	Ratio (%)	Interest Earned	Outside Assets	Ratio (%)	Interest Earned	Outside Assets	Ratio (%)	Interest Earned	Outside Assets	Ratio (%)
2003/04	1001.61	14251.28	7.02	1245.89	22211.73	5.61	657.25	8631.50	7.61	493.59	7421.47	6.65
2004/05	1068.75	14773.68	7.23	1446.46	25143.51	5.75	719.30	10029.02	7.17	578.37	9327.48	6.20
2005/06	1310.76	19459.44	6.73	1626.47	26652.34	6.10	903.41	14337.57	6.30	708.71	11833.23	6.00
2006/07	1587.76	24859.33	6.38	1775.58	29616.70	6.00	1144.40	19067.00	6.00	831.11	12410.63	6.70
2007/08	1978.69	31726.02	3.23	1978.70	31726.02	6.23	1548.65	23895.99	6.48	970.51	15781.77	6.15

Appendix:- 16
Total Interest Earned to Total Working Fund Ratio

(Rs in million)

Banks	NABIL			HBL			EBL			NSBI		
Fiscal Year	Interest Earned	Total Working Fund	Ratio (%)	Interest Earned	Total Working Fund	Ratio (%)	Interest Earned	Total Working Fund	Ratio (%)	Interest Earned	Total Working Fund	Ratio (%)
2003/04	1001.61	16745.48	5.98	1245.89	24762.02	5.03	657.25	9608.57	6.84	493.59	8440.40	5.84
2004/05	1068.75	17064.08	6.26	1446.46	27418.15	5.27	719.30	11732.51	6.13	578.37	10345.37	5.60
2005/06	1310.76	22329.97	5.86	1626.47	29460.39	5.52	903.41	15959.28	5.66	708.71	13035.83	5.43
2006/07	1587.76	27253.39	5.82	1775.58	33519.14	5.29	1144.40	21432.57	5.34	831.11	13901.20	5.98
2007/08	1978.69	37132.76	5.32	1978.70	36175.53	5.47	1548.65	27149.34	5.70	970.51	17187.44	5.64

Appendix:- 17
Total Interest Paid to Total Working Fund Ratio

(Rs in million)

Banks	NABIL			HBL			EBL			NSBI		
Fiscal Year	Interest Paid	Total Working Fund	Ratio (%)	Interest Paid	Total Working Fund	Ratio (%)	Interest Paid	Total Working Fund	Ratio (%)	Interest Paid	Total Working Fund	Ratio (%)
2003/04	282.94	16745.48	1.70	491.54	24762.02	2.00	316.36	9608.57	3.30	255.91	8440.40	3.03
2004/05	243.54	17064.08	1.42	561.96	27418.15	2.05	299.56	11732.51	2.55	258.43	10345.37	2.50
2005/06	357.16	22329.97	1.60	648.84	29460.39	2.20	401.39	15959.28	2.51	334.77	13035.83	2.57
2006/07	555.71	27253.39	2.04	767.41	33519.14	2.29	517.16	21432.57	2.41	412.26	13901.20	2.97
2007/08	758.43	37132.76	2.04	823.74	36175.53	2.27	632.62	27149.34	2.33	454.91	17187.44	2.64

Appendix:- 18
Credit Risk Ratio

(Rs in million)

Banks	NABIL			HBL			EBL			NSBI		
Fiscal Year	Loan & Advance	Total Assets	Ratio (%)	Loan & Advance	Total Assets	Ratio (%)	Loan & Advance	Total Assets	Ratio (%)	Loan & Advance	Total Assets	Ratio (%)
2003/04	8189.99	16745.48	48.90	11951.87	24817.36	48.16	5884.12	9608.57	61.23	5143.66	8440.40	60.94
2004/05	10586.17	17186.33	61.60	12424.52	27844.69	44.62	7618.67	11732.51	64.93	6213.88	10345.37	60.06
2005/06	12922.54	22329.97	57.87	14642.56	29460.39	49.70	9801.30	15959.28	61.41	7626.73	13035.84	58.50
2006/07	15545.78	27253.39	57.04	16997.99	33519.14	50.71	13664.08	21432.57	63.75	9460.45	13901.20	68.05
2007/08	21365.05	37132.76	57.53	19497.52	36175.53	53.90	18339.08	27149.34	67.54	12113.70	17187.44	70.48

Appendix:- 19
Liquidity Risk Ratio

(Rs in million)

Banks	NABIL			HBL			EBL			NSBI		
Fiscal Year	Cash & Bank Balance	Total Deposit	Ratio (%)	Cash & Bank Balance	Total Deposit	Ratio (%)	Cash & Bank Balance	Total Deposit	Ratio (%)	Cash & Bank Balance	Total Deposit	Ratio (%)
2003/04	970.48	14119.03	6.87	2001.18	22010.33	9.09	631.80	8063.90	7.83	864	7198.32	12.00
2004/05	559.38	14586.60	3.83	2014.47	24815.01	8.11	1049.99	10097.70	10.39	723.74	8654.77	8.36
2005/06	630.23	19347.40	3.25	1717.35	26490.85	6.48	1552.97	13802.44	11.25	1118.15	11002.04	10.16
2006/07	1399.82	23342.28	6.00	1757.34	30048.41	5.84	2391.42	18186.25	13.14	1122.69	11445.28	9.80
2007/08	2671.14	31915.04	8.36	1448.14	31842.79	4.54	2667.97	23976.30	11.12	1342.96	13715.39	9.79

Appendix:- 20
Capital Risk Ratio

(Rs in million)

Banks	NABIL			HBL			EBL			NSBI		
Fiscal Year	Capital	Risk Weight Assets	Ratio (%)	Capital	Risk Weight Assets	Ratio (%)	Capital	Risk Weight Assets	Ratio (%)	Capital	Risk Weight Assets	Ratio (%)
2003/04	1481.68	11872.00	12.48	1324.17	16860.63	7.85	680.32	6924.80	9.82	626.63	6551.97	9.56
2004/05	1657.64	14193.07	11.68	1541.74	18321.72	8.41	832.61	9195.58	9.05	689.01	7869.61	8.76
2005/06	1874.99	16976.36	11.04	1766.17	19918.32	8.86	962.80	11291.13	8.52	982.37	9159.27	10.72
2006/07	2057.05	19166.76	10.73	2146.50	21889.71	9.80	1201.51	14976.73	8.02	1163.29	10873.27	10.70
2007/08	2437.20	27010.56	9.03	2512.99	22310.15	11.26	1921.23	21039.88	9.13	1414.64	13975.70	10.01

Trend Analysis

Appendix: 21
Trend Analysis of Total Deposit of NABIL

(Rs.in million)

Fiscal Year (t)	Total Deposit (Y)	X = t- 2006	X^2	XY	$Y_e = a + bX$
2004	14119.03	-2	4	-28238.06	11792.53
2005	14586.60	-1	1	-14586.60	16127.30
2006	19347.40	0	0	0.00	20462.07
2007	22342.28	1	1	22342.28	24796.84
2008	31915.04	2	4	63830.08	29131.61
Total	102310.35		10	43347.70	

Here,

When $\sum X$= 0, from the two normal equations,

a = $\frac{\sum Y}{N}$ = $\frac{102310.35}{5}$ = 20462.07

b. = $\frac{\sum XY}{\sum X^2}$ = $\frac{43347.70}{10}$ = 4334.77

Thus,

Average Deposits (a)= Rs. 20462.07

Rate of change of Deposits(b)= Rs. 4334.77

Hence, the equation of straight-line trend is $Y_e = a + bX$

Project trend values of total deposit for next five year

Fiscal Year	X = t- 2006	$Y_e = a + bX$
2009	3	33466.38
2010	4	37801.15
2011	5	42135.92
2012	6	46470.69
2013	7	50805.46

Similarly the trend values for other variables of the four banks have been calculated.

Appendix: 22

Coefficient of Correlation between Deposit between and Loan and Advances of NABIL

(Rs. in million)

Years	Deposit (x)	Loan & Advances (y)	$X = x - \bar{x}$	X^2	$Y = y - \bar{y}$	Y^2	XY
2004	14119.03	8190	-6343.04	40234156.44	-5532	30603024	35089697.28
2005	14586.60	10586.17	-5875.47	34521147.72	-3136	9834496	18425473.92
2006	19347.40	12922.54	-1114.67	1242489.21	-799.46	639136.29	891134.07
2007	22342.28	15545.78	1880.27	3535415.27	1823.78	3326173.50	3429198.82
2008	31915.04	21365.05	11453	131171209	7643.05	58416213.30	87535851.65
Total	102310.35	68610		210704417.60		102819043.10	145371355.70
Mean	20462.07	13722					

Mean ($\bar{X}$) = $\frac{\sum X}{N} = \frac{102310.35}{5}$ = 20462.07

Mean ($\bar{Y}$) = $\frac{\sum Y}{N} = \frac{68610}{5}$ = 13722

We have, Karl Pearson Correlation Coefficient,

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

= $\frac{145371355.70}{\sqrt{(210704417.60)(102819043.10)}}$ = 0.987654

Coefficient of Determination (r^2) = 0.987654x 0.987654= 0.97546042

Probable (P. Er) = $0.6745 \times \frac{1-r^2}{\sqrt{n}}$ = $0.6745 \times \frac{1-0.97546042}{\sqrt{5}}$ = 0.007401

6 (P. Er) = 6×0.007401 =0.044406

Similarly the Correlation coefficients, Coefficient of Determinations, P.Er & 6(P.Er) between different variables of four banks have been calculated.

Appendix 23

Regression equation between net Profit on total Working Fund of NABIL

(Rs. In million)

Years	Working Fund (x)	Net Profit (y)	x^2	y^2	XY
2004	16745.48	455.32	250411100.40	207316.30	7624551.95
2005	17064.08	520.11	291182826.20	270514.41	8875198.65
2006	22329.97	635.26	498627560.20	403555.26	14185336.74
2007	27253.39	673.96	742747266.50	454222.08	18367694.72
2008	37132.76	746.46	1378841865.00	557202.53	27718120.03
Total	120525.68	3031.11	3191810619.00	1892810.58	76770902.09

X = independent Variable

Y= Dependent Variable

Let the regression equation of Y on X is

Y = a + bx ……equation (i)

To find the value of a and b we have two normal equation

$\sum y = na + b \sum x$ …….. equation (ii)

$\sum xy = a \sum x + b \sum x^2$ …….. equation (iii)

Substituting the value of n, $\sum x$, $\sum y$, $\sum x^2$, $\sum xy$ in equation (ii) and (iii) we get,

3031.11= 5a +120525.68b …….. equation (iv)

76770902.09 = a120525.68 + b3191810619.00 …… equation (v)

Now multiplying equation iv by 120525.68 and equation v by 5 then subtracting equation v we get,

365326593.90 = 602628.40a + 14526439540b

$$\frac{-383854510. = -602628.40a + 15959053100b}{-18527916.60 = -1432613560b}$$

b = 0.01293294

Putting the value of b in equation (iv) then we get,

3031.11 = 5a +120525.68 × 0.01293294

a = 294.47

Similarly the Regression Value between different variables of four banks have been calculated.

Appendix 24

Calculation of mean, standard deviation and coefficient of variation of NABIL

Fiscal Year	**Ratio (X)**	X^2
2003/04	1.29	1.6641
2004/05	1.13	1.2769
2005/06	1.05	1.1025
2006/07	1.15	1.3225
2007/08	1.20	1.44
Total	5.82	6.806

Mean = $\frac{\sum X}{N}$ = $\frac{5.82}{5}$ = 1.16

Standard Deviation (SD) = $\sqrt{\frac{\sum X^2}{N} - \left[\frac{\sum X}{N}\right]^2}$

= $\sqrt{\frac{6.806}{5} - \left[\frac{5.82}{5}\right]^2}$

= 0.04123

Coefficient of variation (C.V.) = $\frac{S.D}{Mean} \times 100$

= $\frac{0.04123}{1.16} \times 100$

= 3.55%

The Calculation of Mean, Standard Deviation & Co-efficient of variation of other statistics are to be computed as above method.

Appendix-25

Questionnaires Given to the Employees of……. Bank Limited

Dear Respondents (Employees),

The following questions have been put forwarded to you for your independent views and opinions about the …….. Bank Limited. The responses and views obtained from your side will be kept confidential and will be used for this study purpose only. Please be kind and provide the rational information on the basis of their performances without hesitation. Thank You.

……
(Researcher)

A. Personal Profile

Name: …….

Address: …….

B. Questionnaires for sample survey

1. Is there credit related problems in your bank?
   Yes ☐ No ☐ I don't Know ☐

2. Does your bank granted the entire credit to same sector as specified at the time of policy formulation?
   Yes ☐ No ☐ I don't Know ☐

3. Does the service charges taken by bank is satisfactory?
   Yes ☐ No ☐ I don't Know ☐

4. The borrower's past track record is analysed before approval of loan.
   Yes ☐ No ☐ I don't Know ☐

5. Do the borrower need to submit the detail proposal in the bank?
   Yes ☐ No ☐ I don't Know ☐

6. Does your bank provide loan to large parties without analyzing detail?
   Yes ☐ No ☐ I don't Know ☐

7. While granting loan, the installment payment ability and the borrower's regular income mechanism is ensured properly.
   Yes ☐ No ☐ I don't Know ☐

8. The relation to top authority may sometimes influences in loan decision rather than the credit appraisal.
   Yes ☐ No ☐ I don't Know ☐

9. A system of periodic valuation is must.
   Yes ☐ No ☐ I don't Know ☐

10. Does your bank make provision for loan loss as per NRB directives?
    Yes ☐ No ☐ I don't Know ☐

11. Taking sufficient collateral is the basis for granting loan.
    Yes ☐ No ☐ I don't Know ☐

12. Does any bank officer visit the project site at the time of granting loan?
    Yes ☐ No ☐ I don't Know ☐

13. Are you satisfied with the banks credit policy & practices?
    Yes ☐ No ☐ I don't Know ☐

Appendix-26

Questionnaires Given to the Credit Customers of……. Bank Limited

Dear Respondents (Credit Customers),

The following questions have been put forwarded to you for your independent views and opinions about the …….. Bank Limited. The responses and views obtained from your side will be kept confidential and will be used for this study purpose only. Please be kind and provide the rational information on the basis of their performances without hesitation. Thank You.

……
(Researcher)

A. Personal Profile

Name: …….

Address: …….

B. Questionnaires for sample survey

1. Do you have full knowledge about bank's credit policy?
   Yes ☐ No ☐ Not Clear ☐

2. Does any bank officer visit your project site at the time of granting loan?
   Yes ☐ No ☐ Not Clear ☐

3. Are you satisfied with the rate of interest taken by bank?
   Yes ☐ No ☐ Not Clear ☐

4. And what about the service charge taken by bank, are you satisfied with that or not?
   Yes ☐ No ☐ Not Clear ☐

5. Have you received any notice before credit expiration date?
   Yes ☐ No ☐ Not Clear ☐

6. Have you utilized the entire credit to the same sector as specified at the time of taking credit?
   Yes ☐ No ☐ Not Clear ☐

7. Do you want to take further credit from the bank?
   Yes ☐ No ☐ Not Clear ☐

8. Are you satisfied with the services of bank?
   Yes ☐ No ☐ Not Clear ☐