

CHAPTER I

INTRODUCTION

1.1 Background

Every country's economic development is not possible without development of industrialization, agriculture, infrastructure, information technology, education, banking sector etc. Nepal is one of the poorest and undeveloped countries in the world. It is facing various problems due to its complex economy, social environmental, geographical structure and political situation. Nepalese economy has been adopting liberal economic policy after the restoration of democracy in 2046. As a result many companies are established in different sector such as industrial, construction, transportation, information technology, finance sector etc. Whose contribution in economy has greater significance, among them financial sector is one of the most significance sector. Bank and financial institution play vital role in the economic development of the country, as they are considered main source of capital for most of investment from one sector to another sector.

Financial institution collects funds from various sectors and invests it in various productive sectors. An investment policy has played very important role in the growth of economic conditions of a country. Investment is the implementation of financial management decision which is basically to operate in the financial sector. Investment always involves a certain amount of risk that is the chance of loss. One good investment policy can make success to an organization whereas one worse investment policy turns successful organization into bankruptcy. The economic development of any country may be dynamic only through balance industrial growth, trade and commercial promotion and agricultural expansion. It has equally been self-evident that the development of these fields may not be possible without the establishment of a sound banking system in the country. Many countries are aspiring for the rapid economic development. So, several banking and non-banking specialized financial institutions have been established with the objectives of meeting the financial goal of their country.

Commercial banks are among the most important financial institutions in the country's economy and are highly essential business in the several local towns and cities.

Definitely, the banks must be recognized with their function, service roles they perform in the economy of the society. At the moment the functions of banks and their principal competitors are changing. The competitors like financial institutions including security dealers, brokerage firms and insurance companies are trying to be similar as soon as possible in the service they offer.

Commercial banks play an important role for economic development of a country as they provide capital for the development of industries, trade, business, etc. by investing the saving collected from public. They render various services to their customers facilitating their economic and their social life. They are the most important ingredient for integrated and speed development of the country.

The underdeveloped countries including Nepal are suffering from problem of improper mobilization of the financial, physical and human resources. One of the efforts applied to mobilize both internal and external financial resources is to set up banking organization and institutionalize them. The commercial banks should therefore come forward for developing the economic conditions of country. Therefore commercial banks play the important role in the economic and financial development of the country. Economic developments done by the banking organization should focus on the development of the leading sectors of the economy such as agriculture, industry, trade, transportation, commerce information etc. The sustainable development of these sectors requires a regular delivery of sound banking system.

Financial sector consists of two major components i.e. banking and non-banking sector component. The commercial banks are basically known as the banking sector component whereas co-operatives, Gramin Bikash Banks, Development Banks, Financial companies and Non-government organization is known as Non-banking sector components. Bank's role has been considered to be the predominant in underdevelopment economy in various ways as they enhance capital formations by developing banking habit of people and collecting of saving. Thus, their role in the economic development is to eliminate the deficiency of capital by stimulating saving and investment activities.

A good investment policy attracts both the borrowers and lenders which help to increase the volume and quality of the deposits, loans and investment. The bankers

have the responsibilities of safeguarding of the depositors, shareholders and the society they are serving.

1.2 Introduction of Himalayan Bank Ltd.

Himalayan Bank Ltd. (HBL) was established in 1993 in joint venture with Habib Bank Limited of Pakistan. Despite the cut-throat competition in the Nepalese Banking sector, Himalayan Bank has been able to maintain a lead in the primary banking activities- Loans and Deposits. Its authorized capital is 2,00,00,00,000 (in Rs), Issued Capital is 1,01,35,12,500 (in Rs) and Paid up Capital is 1,01,35,12,500 (in Rs). Share Ownership of Himalayan Bank Limited is Foreign Institutions 20%, Other Licensed Institutions 65% and General Public 15% with Total Rs. 1, 01, 35, 12,500. It has 33 branches all over the Nepal. The product & services of this bank are Credit Card, Tele Banking, Any Branch Banking System (ABBS), ATM card, 24 hrs. Banking, Evening Counter, Safe Deposit Locker, SMS Banking, Remittance, Card Service, Internet Banking.

1.3 Introduction of Everest Bank Ltd.

Everest Bank Limited (EBL) started its operations in 1994 with a view and objective of extending professionalized and efficient banking services to various segments of the society. The bank is providing customer-friendly services through its Branch Network. All the branches of the bank are connected through Anywhere Branch Banking System (ABBS), which enables customers for operational transactions from any branches. Punjab National Bank (PNB) is its joint venture partner (holding 20% equity in the bank) is the largest nationalized bank in India. EBL is one of the first bank to introduce Any Branch Banking System (ABBS) in Nepal. It has 48 branches all over the Nepal. The product & services provided by this bank are Deposit Collection, Lending loans, Fixed Deposit Lending, Remittance Facilities, Foreign Exchange, E-Banking, Utility Bill Payment, Easy E-Ticketing, Cash Certificate scheme, Debit/Credit Card, 365 days Banking, Evening Counter Facility.

1.4 Introduction of Nabil Bank Ltd.

Nabil Bank Limited (NABIL) the first foreign joint venture bank of Nepal, started operations in July 1984. Nabil was incorporated with the objective of extending international standard modern banking services to various sectors of the society.

Pursuing its objective, Nabil provides a full range of commercial banking services through its 47 points of representation across the kingdom and over 170 reputed correspondent banks across the globe. The total number of branches is 50 throughout the country. Its authorized capital is 2,100,000,000 (in Rs), Issued Capital is 2,029,769,400 (in Rs) and Paid up Capital is 2,029,769,400 (in Rs).The product & services provided by this bank are Collecting deposits, Lending Loans, Clean Bills, E-Banking, US Visa Free, Safe Deposit Locker, Balance Certificate, Advance Payment Certificate, Remittance, ATM Facility, Internet Banking, 365 days Banking Facility, Debit/Credit Card Facility.

1.5 Statement of Problem

Financial institution are collecting adequate amount from the mass, however they could not find the new investment sectors to mobilize funds on the changing context of Nepal. Increasing rate of liquidity has caused a downward trend in investment sectors. It can impact the condition of whole country negatively. It has ensure bad impact on interest rate to the depositors, lower dividend to the shareholders, lower market values of shares, lower contribution to national revenue etc. Lack of sound investment policy is another reason for a commercial bank not to properly utilizing its deposit that is making loan and advance or lending for a profitable project. If the funds are wrongly invested without thinking any financial risk, business risk and other related fact, the bank cannot obtain profitable return as well as it should sometimes lose its principal. In this way to answer different questions of credit policy on commercial banks some research question are as follows.

1.6 Research Question

-) What is the liquidity position, assets management efficiency, profitability and risk position of Everest Bank Limited, Himalayan Bank Limited and Nabil Bank Limited?
-) Is the trends of deposits utilization towards total investment, loans and advances are satisfactory?
-) What are effects of the investment decision to the total earning of Everest bank Limited, Himalayan Bank Limited and Nabil Bank Limited?
-) Whether these banks grab satisfactory growth rate or not?

1.7 Objectives of the Study

The main objective of this study is to analyze the investment policy adopted by Everest Bank Limited, Himalayan Bank Limited and Nabil Bank Limited. In comparison with each other, the specific objectives of the study are as follows:

-) To find the liquidity position, assets management, efficiency, profitability and risk positions of the banks.
-) To analyze the trends of deposits utilization towards total investment and loans and advances.
-) To assess the profitability and investment policy of the banks.
-) To evaluate the growth ratio of loan and advance, total investment with other financial variables of the banks.

1.8 Significance of the Study

This research study is related with the comparison and highlighting of investment policy of Everest Bank Limited, Himalayan Bank limited and Nabil Bank Ltd. This will help to bridge the gap between deposits and investment policies. Furthermore the study would help to provide information pertaining to the level of utilization of fund and would help the management of banks to take the necessary actions in investment policies.

This study tried to analyze deposit collection, investment, loan and advance and other related financial variables. It has focused on deposit mobilization and investment policy of Everest Bank Limited, Himalayan Bank Limited and Nabil Bank Ltd. This study also has evaluated the strength and weakness of the Everest Bank Limited, Himalayan Bank Limited and Nabil bank Ltd along with finding out opportunity and threat of these banks. It is more important for the organization because it provides suitable and useful information to related banks. This study helps to improve the profitability as well as overall financial performance. It would provide the guidelines for taking further step and making strategy to concerned banks. Thus, this research study is significant to the Everest Bank Limited, Himalayan Bank Limited and Nabil Bank Ltd.

1.9 Limitation of the Study

The study has been conducted with certain limitation as follows:

-) Time and cost factors are constrained.
-) Some of the statistical and financial tools are used in the study. Hence the result of the study may not be generalized.
-) The study is simply a partial study for the fulfillment of MBS degree. So the study cannot cover all the dimension of the subject matter.
-) The study concentrates only those factors that are related with investment policy.

1.10 Organization of the Study

The study is divided into five parts:

-) Introduction
-) Review of literature
-) Research methodology
-) Data presentation and analysis
-) Summery, conclusion and recommendation

The first chapter is concerned with the introduction of the study. It includes the background, introduction of banks, statement of problem, research question, objectives of study, significance of study, limitation of study and organization of study.

The second chapter is review of literature. This part deals conceptual framework review of different article Journal, books, relevant thesis and research gap related to investment policy are study.

The third chapter Research methodology employed in the study which includes research design, data collection, and method of analysis and research variables.

The fourth chapter includes financial analysis and interpretation of data where different part of ratio analysis are analyze like liquidity ratio, profitability ratio, assets management ratio, risk ratio and growth ratio. Statistical analysis and interpretation of data where study analyze the trend analysis, correlation analyses between variable terms like total deposit, investment, net profit and loan and advances.

The fifth chapter deals with summary, conclusion and recommendation. The Bibliography and appendices are also included as supplements to the above chapters.

CHAPTER II

REVIEW OF LITERATURE

This chapter basically concerned with review of literature relevant to the investment policy of commercial bank of Nepal. Every study is based on past knowledge or the previous studies should not be ignored as it provides foundation to the present study. Therefore this chapter has its own important in this study.

2.1 Evolution of the Banking System

In the ancient times there were traces of banking activities in the Temple of Jerusalem as stated in the New Testament. In Greece, the famous temples of Delphi and Olympia served as the depositories for people having surplus funds and also served the money lending transactions. The modern proper banking system started with the establishment of Casa de San Giorgio bank in Genoa in the year 1148 A.D. The Bank of Venice was set up in 1157 A.D. In 1401 A. D. the Bank of Barcelona was established in Barcelona. In fact, modern bank started to take rapid speed in forming and functioning from 17th century. During this period, Bank of Milan, Bank of Florence, and Bank of St. George were established in Genoa. In 1609 A. D. the Bank of Amsterdam was established in Holland. Afterwards in 1610 A. D. Bank of Hamburg was established in Germany and Bank of England in England. The Bank of Venice and the Bank of Genoa continued to operate until the end of eighteenth century and the expansion of commercial banking activities took place in Northern Europe. There sprang a number of private banking houses in Europe and slowly it spread throughout the world. (Morris, 1990)

2.2 Evolution of Bank in Nepal

The logical historical order of development of financial structure has gone through different stages the first stage starts from a rudimentary economy in which only one of financial assets exist. It is the commodity money such as gold and silver coins generally accepted as the means of payment is assumed to have begun in Nepal from about the beginning of the 5 century. Regarding the origin of bank of Nepal as in other countries; goldsmiths and merchants were the ancient bankers in Nepal. Till mid of 18 century, banking system was not formed officially. In the year 1877 A.D. (1933 B.S.), tenure of Prime Minister Ranadip Singh, a number of economic and financial reforms were introduced. He took the first step towards the development of banking in Nepal

by establishing "Tejarath Adda" fully subscribed by the government in the Katmandu valley. The main propose of setting up of the "Tejarath Adda" was to provide credit facilities to the government employee at a very concessional rate of, i.e. 5%, but did not collect deposit from public. The establishment of this institution marked the beginning of extending credit through any organized financial institution in Nepal. However the installation of "Kausi Tosha Khana" as a banking agency during the regime of King Prithivi Narayan Shah could also lie claim to be regarded as the first step towards initiating banking development in Nepal. As it was focused within the valley only, the Prime Minister Chandra Shamsher in 1957 B.S. undertook an initiative in expansion of setting up branches outside the valley.

The second major stage in the course of logical development is the innovation of the bearing private debt, such as bonds, mortgages and loans. This stage of development permitted deficit units to issue bearing financial claim direct to surplus units. The evidence of many countries shows that the issue of primary securities started the development of the financial markets. But in Nepal, the development of the market is seen only in the last state. Treasury bills were issued the first time in 1962 A.D. and the government bonds were introduced in February 1964 A.D. The beginning of true sense modern banking was commenced with the establishment of Nepal Bank Limited (NBL) in 30 Kartik 1994 B.S. (i.e. 1937 A.D.). This was the first commercial bank. In the year 2013 Baisakh 14 B.S. (26th April 1956 AD), Nepal Rastra Bank was established as the central bank of Nepal under the Nepal Rastra Bank Act 2012 B.S. (1955 A.D.) with the full ownership of His Majesty's Government of Nepal. After its establishment Nepal notes were used first time on 7th Falgun, 2016 B.S. Unlike commercial bank, a central bank neither accepts deposit from the public nor gives loan to the public. But it accepts the credit of His Majesty's Government, commercial banks, financial institutions, and Government offices and provides loan to the His Majesty Government and financial

Institutions when needed. It controls the banking sector by regulations, and market operation. It issues directives to the commercial banks, instructing them to fulfill its regulatory requirement of the country. The bank also gives advice to the H.M.G. time to time on economic and financial matters. New amendment was made in 2058, effective from 2059 Shrawan (22 July 2002). NRB plays significant role to make commercial bank mobilize their fund in good and productive and profitable sector so that commercial bank can have sufficient liquidity and security.

After establishment of Nepal Rastra Bank, many other financial institutions were established In 1957 A.D. Industrial Development Bank was established to promote the industrialization in Nepal, which was later converted into Nepal Industrial Development Corporation (NIDC) in 1959 A.D. Then, Rastriya Baniya Bank was established in 1965 A.D. as the second commercial bank of Nepal. In 1968 A.D., separate Agricultural Development Bank was established. For more than two decades, no more banks have been established in the country. After the declaring free economy and privatization policy, HMG encouraged the foreign banks for joint venture in Nepal. As a result, many modern banks with latest banking technology are established. In the canted of Nepal we can say that banking sector is the leading institution of Nepalese economy. (Pradhan, 2003)

2.3 Commercial Bank

“Commercial bank deals with other people’s money. They have to find ways of keeping their assets liquid so that they could meet the demand of their customer. In their anxiety to make profit, the bank can’t afford to lock up their funds in assets, which are not easily realizable. The depositors’ confidence could be secured only if the bank is able to meet demand for cash promptly and fully” (Commercial Bank Act, 2013 B.S.)

“Nepal Rastra Bank is bank of bank and bank of government where as commercial bank is bank of public.

“According to the American institution (principle of bank operation) define commercial bank as commercial bank is a corporation which accept demand deposits subjects to check and make short term loans to business enterprises regarding of the scope of its other service” (Morris, 1990)

Commercial bank refers to such type of bank deals in the money exchange, accepting deposits, advancing loan, commercial transaction except specific banking related to co-operative, agriculture, industry and other objective.

The main function of commercial bank is accumulation of the temporarily idle money of general people for trade and commerce. Its main function are accepting deposits and grants loan, purchase and discount bill for promissory notes, exchange foreign currency, agency function, overseas trading service, gold transaction, information and other service as customer need. Commercial banks earn profit by proper mobilization of their resource. Many commercial banks have been established to provide a suitable

service, according to their customer.

Since financial sector in Nepal is small it is fast growing at present among 26 commercial banks. Two banks (Nepal Bank Limited and Rastriya Banijya Bank.) are controlled by government rest joint venture. Nepal Arab Bank Limited (NABIL) is the first joint venture bank operates in Nepal.

2.4 Investment and Investment Policy

2.4.1 Investment

The banks are such types of financial institution, which deal with money and substitute for money. They deal with credit and credit instrument. Good circulation of credit is very much important for the bank. Collect funds and utilize it is a good investment is not a joke for such organization. An investment of fund may be the question of life and death for the bank. View of few author on investment as under.

A distinction is often made between investments and saving. Saving is defined as foregone consumption; investment is restricted to “real” investment of the sort that increases national output in the future. While this definition may prove useful in other contexts, it is not especially helpful here. However, it is useful to make a distinction between real and financial investments.

Real investment generally involves some kind of tangible assets, such as land, machinery, factories. Financial investment involves contracts written on piece of paper, such as common stock and bonds. In primitive economics most investment is of real variety, whereas in a modern economy, much investment is of financial variety. Highly developed institution for financial investment greatly facilitates real investment. By and large, the two forms of investment are complementary, not competitive. (Sharpe, 1985)

Gitman and Joehnk (1991:1) “Investment is any vehicle into which funds can be placed with the expectation that will preserve or increase in value and generate positive returns”

Sharpe and Gorden (1999:1) defined investment in this way “Investment, in its broadest sense, means the sacrifice of current dollars for future dollars. Two different attributed are generally involved: time and risk. The sacrifice taken place in the present and is certain. The reward comes later, if at all and magnitude is generally uncertain. In some cases the element of time predominates (for example: Government

Bond). In other cases risk is the dominant attribute (for example: call option on common stock). In yet both time and risk are important”.

J.K Francies (1990) saying, “An investment is a commitment of money that I expected to generate additional money. Every investment entail some degree of risk, it requires a present certain sacrifice for a future uncertain benefit.”

The World Book Encyclopedia, “Investment individual, business and government involve a present sacrifice of income to get an expected future, benefit, as a result investment raises a nation’s standard of living.”

James B Bosley (1996) express his views as, “ Investment policy fixes responsibilities for the investment disposition of the bank assets in term of allocation funds for investment and loan and establishing responsibility for day to day management of those assets.”

From the above definitions we can conclude that investment means use of rupee of amount today by expecting more income in future. It is clear that investment is the utilization of funds today with expected additional return in future.

Above mentioned definitions of different authors about investment clarify that investment means to trade money for expected future stream of payment of benefits that will exceed the current cash outflow which is the benefit to the investors for sacrificing the time and commitment or due to uncertainty and risk factors. Financial institutions must be able to mobilize their deposit collection funds in profitable, secured and marketable sector so that they can earn good return on their investment.

2.4.2 Investment Policy

Generally, policy will be a plan or course of future action that are proposed to be adopted, regarding a particular filed of activities. Similarly, investment policy will be plan of course of future action that is proposed to be adopted regarding the investment. The investment policy varies according to the field of operation relating particular firm or individual. Thus the investment policy will be to formulate the investment strategy based upon own objective and nature the investible fund their future use. Such investment policy must be balanced as of the risk-return character, where the risk includes the stability in value, liquidity, marketability of investment or similar inconveniencies caused by the readily unavailability of the fund and return includes the appreciation in value of investment and regular income of similar benefits. Investment policy must also concentrates on the component of investment and usually such

component will be capital markets instrument like common stock or bonds and financial/money market instruments like commercial paper government securities or some less than one year maturity bonds. Further, the investment policy must also indicate the use of the variable income components where, variable income components are where neither the principal nor the income is contractually set in advance where as fixed income components are those which promises a stated amount of income periodically. Various authors have expressed their views regarding investment policies of bank, then formulation and implementation differently. (Shakya, 2007)

In the word of **Singh and Singh**, (Singh, 1992:10) the investment policies of banks are conditioned to great extent, by the national policy framework, every banker has to apply his own judgment for arriving at credit decision, keeping on course, his banker's credit (investment) policy also in mind. They further state the field of investment is more challenging as it offers relatively greater scope to banker for judgment and discretion in selecting their loan portfolio. But this higher degree of freedom in the field of credit management is also accompanied by greater risk. Particularly, during recent years, credit function has become more complex.

Bexley (1987:9) expresses his views as investment policy fixes responsibilities for the investment disposition of the bank assets in terms of allocating funds for investment and loan and establishing for day to day management of those assets.

Bhalla (1992:13) has given the concept of investment in three points they are as follows:

1. Economic investment that is an economist definition of investment
2. Investment in a more general or extended sense, which is used by "the man of street".
3. The sense in which we are going to be very much end normal financial investment.

2.5 Characteristics of Sound Lending and Investment Policy

Income and profit of the bank depend upon its lending procedure and investment of funds on different securities. The greater the credit created by a bank, greater will be the profitability. A sound lending policy is not only prerequisite for banks

profitability, but also crucially significant for the promotion of commercial saving of a backward country like Nepal.

Some of the main characteristics of sound lending and investment policies are given below. (Shrestha, 1997)

-) Safety and Security
-) Liquidity
-) Propose of loan
-) Profitability
-) Tangibility
-) Diversification
-) Legality

2.5.1 Safety and Security

The bank should invest its funds in those securities, which are subject to too much depreciation and fluctuation because little difference may cause a great loss. It must not invest its funds into speculative businessman who may be bankrupt at once and who earn million in a minute also. The bank should accept the type of securities, which are commercial, durable and marketability and have high market value. In this case “MAST” should be applied for the investment (Raja Ram, 1998)

Where,

- M - Marketability
- A - Ascertain ability
- S - Stability
- T - Transferability

2.5.2 Liquidity

It is the position of the firm to meet current or short-term obligations. General public or customers deposit their saving at the banks in different accounts having full confidence of repayment by the banks whenever they require. To show a good current position and maintain the confidence of the customers, every firm must keep proper cash balance with them while investing in difference securities and granting loan from excess fund. (Radhaswomi and vasudevon, 1979)

2.5.3 Purpose of Loan

The loan should be utilized on purposed plan. Everything related with the customer should be examined before lending. If borrower misuses the loan granted by the bank they can never repay and bank will possess heavy bad debts. Detailed information about the scheme of the project activities should be examined before lending.

2.5.4 Profitability

Commercial banks can maximize its volume of wealth through maximization of return on their investment and lending. The profit of commercial bank mainly depends on the rate, volume of loan, and its time period and nature of investment in different securities. It is a fact that a commercial bank can maximize its volume of wealth through maximization of return on their investment and lending. So, they must invest their funds where they gain maximum profit. Ambition of profit to commercial bank seem reasonable as the bank has to cover all the expenses and make payment in the forms dividend to the shareholder who contribute to build up the bank's capital and to the depositors. For this the bank calculates the cost of fund and likely return, if the spread is enough irrespective of risk involved and absorbs its liquidity obligation, it will go ahead for investment good bank is one who invest more of its fund in different earning assets standing safety from the problem of liquidity, i.e. keeping cash reserve to meet day to day requirements of the depositors.

2.5.5 Tangibility

A commercial bank should proper tangible security to an intangible one. Though it may be considered that tangible property does not yield an income apart from intangible securities, which have lost their value due to price level inflation (Bhattarai Rabindra, 2006).

2.5.6 Diversification

“A bank should not lay all its eggs on the same basket.” this is very important to bank and it should be always careful not to grant loan in only one sector to minimize risk, a bank must diversify its investment on different sectors. Diversification of loan helps to sustain loss according to law of average, if a security of a company is deprived of there may be an appreciation in the securities of other companies. In this way, the loss can recover by commercial banks. (Bhattarai Rabindra, 2006).

2.5.7 Legality

Illegal securities will bring out money problems for the investor, a commercial bank must follow the rules and regulation as well as different directions issued by Nepal Rastra Bank, Ministry of finance, Ministry of law and other whole mobility its funds (Bhattarai Rabindra, 2006).

2.6 Some other terms related to Banks

Several terms related with banking are to be explained by commercial banks. The study in this section comprises of some important banking terms for which efforts have been made to clarify the meaning, which frequently used in this study, are given below.

2.6.1 Deposits

Deposit means the amounts deposited in different accounts such as fixed account saving account, current accounts etc. of a bank or financial institution. Deposit is the main source of fund of the financial institution. For a commercial bank deposit is the most important source of liquidity. For bank's financial strength, it is treated as a barometer. In the word of Eugene, "A Bank's deposits are the amount that it owes to its customers". Deposits are the lifeblood of the commercial bank. Though they constitute the great bulk of bank liabilities, the success of a bank greatly depends upon the extent to which it may attract more and more deposits. For accounting and analyzing purpose deposits are categorized in three headings. (Shrestha, 1991)

1. Current Deposits
2. Saving Deposits and
3. Fixed Deposits

2.6.2 Loan and Advances

Loan, advances and overdraft are the main source of income for a bank. Bank deposit can cross beyond a desired level but the level of loans, advances and overdraft will never cross it. Commercial banks and other financial institution may take more preferential collateral while granting loan and advances. Some portion of loan, advances and overdrafts includes that amount which is given to staffs of the bank as home loan, vehicle loan, personal loan and others. (Katwal, 2007)

2.6.3 Investment on Government Securities, Shares and Debentures

Though a commercial bank can earn some and dividend from the investment on government securities, shares and debentures, it is not the major portion of income, but it is treated as a second source of income of banking business. A commercial bank may extend credit by purchasing government securities bond and shares for several reasons, which are

- It may want to space its maturity so that the inflow of cash coincide with expected withdrawals by depositors or large loan demands of its customers.
- It may also be forced to invest because the demand for loans of its decreased or is not sufficient to absorb its excess reserves.
- It may wish to have marketable securities to liquidate if its primary reserve becomes inadequate.

However, investment portfolio of commercial bank is established and maintained primarily with a view of nature of bank liabilities that is since depositors, may demands fund in great volume without previous notice to banks. The investment must be of a type that can be marketed quickly with little or no shrinkage in value.

2.6.4 Investment on Other Company's Share and Debenture

Due to excess funds and least opportunity to invest these funds in much more profitable sector and to meet the requirement of Nepal Rastra Bank's directives many commercial banks have to utilize their funds to purchase shares and debentures of other financial and non-financial companies. Now a-days most of the commercial banks purchase shares and debentures of regional development bank, NIDC and other development bank's shares.

2.6.5 Other Use of Fund

Commercial banks must maintain bank balance with NRB. 6% of fixed deposits and 8 percent of each current and saving deposit account in local currency similarly 3% percent of cash balance of local cash balance, in local currency accounts must be maintained in the vault of the bank. Again the part of fund should be used for bank balance in foreign bank and to purchase fixed assets like land building furniture computer stationary etc. (Commercial Bank Act, 2013 B.S.)

2.6.6 Off Balance Sheet Activities

Off balance sheet activities involve contracts for future purchase or sale of assets and all these activities are contingent obligation. These are not recognized as assets or liabilities on balance sheet. Some examples of this item are letter of credit, Letter of guarantee and bills of collection etc. These activities are very important as they are good source of profit of bank through they have risk now days some economic and finance specialist to expand the modern transaction of a bank stressfully highlight such activities.

2.7 Review of Previous Studies

Following books, article and journal, dissertation are read to complete the study.

2.7.1 Review of Books

Commercial banks are financial institutions, which deal in money, its substitutes, credit and credit instruments. The good mobilization of the credit is the most important factor for the survival of banks. The weak decision in mobilizing funds and fluctuation of flow of credit is harmful to the bank and economy as a whole. Hence, the effective collection of funds and its use is very challenging task for the banks. The decisions pertaining to the investment of funds is the factor of survival and extinction of banks.

Reilly, (1961) defines investment as, “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 the funds are committed, for the expected rate of inflation and also for the uncertainty involved in the future flow of the funds.”

Crosse, (1963) Emphasizing the importance of investment policy, puts his view in this way, “Lending is the essence of commercial banking, and consequently the formulation and implementation of sound policies are among the most 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 creation function effectively and minimize the risk inherent in any extension of credit”

Radhaswami and Vasudevan, (1979) have opined as, “The secret of successful banking is to distribute resources 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 realizable) to meet every claim and at the same time, enough income for the bank to pay its way and earn profits for its shareholders”.

Bexley, (1987) defined “Investment policy means the responsibilities for the investment disposition of the bank’s assets in term of allocating funds for investment and loan and establishing responsibility for day to day management of those assets”.

Gitman and Jochnk, (1990) have opined as, “Investment is any vehicle into which funds can be placed with the expectation that will preserve or increase in value and generate positive returns”.

Charles, (1998) express his views as “The term investment can cover a wide range of activities. It often refers to investing money in certificate 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 position and aggressive speculation”.

Sharpe, Alexander and Bail, (1998) have opined as “Investment in its broaden sense, means the sacrifice of current dollars for future dollars. Two difference attributes are generally involved: time and risk. The sacrifice takes places in the present and its magnitude as generally uncertain”.

Pandey, (1999) expressed his views as; in investment decision expenditure and benefits should be measured in cash. In investment analysis, cash flow is more important than accounting profit. It may also be pointed out of that investment decision affects the firm’s value. The firm’s value will increase if investments are profitable and add to the shareholders wealth. Thus, investment should be evaluated on the basis of a criterion, which is compatible with the objectives of the shareholder’s wealth if it yields benefits it excess to the minimum benefits as per the opportunity cost of capital. From the above definition, it is clear that an investment means to trade a known rupee amount today for some expected future stream of payments or benefits, that will exceed the current outlay by an amount that will compensate the investor for the time the funds are committed for the expected

changes in prices during the period and for the uncertainty involved in expected banks. It is the long-term commitment of bank in the uncertain and risky environment. It is a very challenging task for 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 its investible 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. The field of investment is more challenging as it offers relatively greater scope to banker for judgment and discretion in selecting their loan portfolio. But this higher degree of freedom in the field of credit management is also accompanied by greater risk. Particularly during recent years, the credit function has become more complex. A commercial bank must mobilize its deposits and other funds to profitable, secured and marketable sector so that it can earn a handsome profit as well as it should be secured and can be converted into cash whenever needed. Obviously, a firm that is being considered for loans must be analyzed, to find out why the firm needs money, how much money the firm needs and when and how it will be able to repay the loan. Investment policy provides the bank several inputs through which they can handle their investment operation efficiently ensuring the maximum return with minimum exposure to risk, which ultimately leads the bank to the path of success.

Bhattacharai, (2006) in his views, a sound investment policy of a bank is such that its funds are distributed in different types of assets with good profitability on the one hand and provide maximum safety and security to the depositors and banks on the other hand, moreover, risk in banking sectors tends to be concentrated in the loan portfolio.

2.7.2 Review of Articles and Journals

In this section effort has been made to examine and review of some related articles in different economic journal, magazines, newspaper and other related books.

Morris, (1990), In his discussion on "Latin American Banking System in the 1980's" has concluded that most of the bank concentrated on compliance with central bank rules on reserve requirement credit allocation (Investment Decision) and rates. While

analyzing loan portfolio quality, operating efficiency and soundness of bank investment management has largely been overlooked. He further adds that mismanagement in financial institutions has involved inadequate and over-optimistic loan appraisal, high-risk diversification, high-risk concentration, related-party lending, etc. are major causes of investment and loan that has gone bad.

Bajracharya, (1991) has mentioned in his article "Monetary Policy and Deposit mobilization in Nepal" has concluded that the mobilization of domestic saving is one of the monetary policies in Nepal. For this purpose, commercial banks stood as the vital and active financial intermediary for generating resources in the form of deposits of the private sector so far providing credit to the investors in different aspects of the economy.

Shrestha, (1991) in his article, "A Study on Deposits and Credits of Commercial Bank in Nepal," concluded that the credit deposit ratio would be 51.30 percent, other things remaining the same in 2004 A.D. which was the lowest under the period of review. So it is strongly recommended that commercial banks should try to give more credit-earning fields as far as possible. Otherwise, they might not be able to absorb even their total expenses.

Shrestha, (1997) in her article has presented the objectives to make an analysis of the contribution of commercial banks' lending to the gross domestic product of Nepal. She has set a hypothesis that there has been a positive impact of lending of commercial banks on the GDP. In research methodology, "she has considered GDP as the dependent variable and various sectors as independent variables (agriculture, industrial, commercial, service and general, and social sector, etc.). Multiple regression techniques have been applied to analyze the contribution.

The multiple analyses show that the entire variables, except service sector lending, have a positive impact on GDP. Thus, in conclusion, she has accepted the hypothesis, i.e. there has been a positive impact on GDP by the lending of commercial banks in various sectors of the economy, except service sector investment".

Ghimire, (1999) has mentioned in his article “Banijya Bank Haru Prathamikta chhetrama Lagani Garna Bhandha Harja Tirna Tayar as.” Most of the banks of Nepal are ready to pay the penalty in spite of investing on rural sector, poverty stricken and deprived areas. In the directives of NRB it is clearly mentioned and directed that all the banks should invest 12% of its total investments to the priority sectors. Out of this 12%, they should have invested 3% to the lower level class of countrymen. However, these banks are unable to meet the requirement of NRB. In the light of above foreign joint venture banks use to justify that they don't have any network among these areas. So if investment will be made in these areas, operational cost will be very high, which exceeds the penalty if investment won't be made. That is why they are ready in paying penalty than investing in priority sector.

Bhaskar, (2002) has found the same results that the all commercial banks are establishing and operating in urban areas, in his study, “Banking the future on competition” the achievements are as follows:

Commercial banks are establishing and providing their services in urban areas only. They do not have to establish in rural areas. Only the branch of Nepal Bank Ltd and Rastriya Banijya Bank Ltd are running in those areas.

-) Commercial banks are charging higher rate on lending.
-) They have maximum tax concession.
-) They do not properly analyze the credit system.

According to him, “Due to the lack of investment avenues, banks are tempted to invest without proper credit appraisal and on personal guarantee, whose negative side effect would show colors only after four or five years.” He has further included that private commercial banks have mushroomed only in urban areas where large volume of banking transaction and banking activities are possible.

Pradhan, (2003) has highlighted following problems of deposit mobilization in Nepalese context.

1. Unavailability of the institutional services in rural areas.
2. Most of the Nepalese people do not go for saving in institutional manner due to the lack of good knowledge. However, they are very much used to saving be it in the form of cash or ornaments. Their reluctance to deal with institutional system is

governed by the lower level of understanding about financial organization process, withdrawal system, and unavailability of depositing facilities and so on.

3. Due to less working hours of banking system people prefer holding the cash in the personal possessions.
4. Less mobilization and improvement of the employment of deposits in the loan sectors.

Mr. Pradhan (2003) has recommended the following remedies for effective mobilization of deposits:

1. By providing sufficient institutional services in the rural areas.
2. By cultivating the habit of using rural banking unit
3. By providing more service hours by the banks in rural areas
4. The Central Bank could also organize training program to develop skilled manpower.
5. By spreading cooperative to rural areas to develop mini branch services.

Panthi, (2005) highlights on his article entitled “The importance of human resource management” published in souvenir of RBB where the banking services are only made by human skills. If the size of the employees is suitable and skillful, the optimum objectives of the bank will be nearer to achievement. The objectives of the profitability and the liquidity of the bank may be fulfilled if only if its human resources are perfect in and suitable in quality. So, the selecting process of human resources should go through the straightway of identifying workforce requirement recruiting-selecting-placing-promoting-appraising-training and retirement

2.7.3 Review of Dissertation

Raja Ram Khadka, (1998) conducted a study on “A study on the investment policy of Nabil Bank Ltd. in comparison to other Joint Venture Banks of Nepal.” The research findings of the study are as follows:

The liquidity position of Nabil Bank Ltd. is comparatively worse than that of other JVBs. Nabil Bank has more portions of current assets as loan and advances but less portion as investment on government securities. Nabil Bank Ltd. is comparatively less successful in on-balance sheet operation as well as off-balance sheet operations than of other JVBs.

Profitability position of Nabil Bank Ltd. is comparatively not better than that of other JVBs. The mean ratio on loan and advances of Nabil Bank Ltd. has been found slightly lower than that of other JVBs and the return has been found less homogeneous than that of others JVBs. Similarly the mean ratio of total earned to total outside assets of Nabil Bank Ltd. has been found slightly lower than that of others JVBs.

Nabil Bank Ltd. seems to be more successful to increase its source of funds as well as mobilization by increasing loan and advances and total investment. It seems to be failure to maintain its high growth rate of profit in comparison to that of other JVBs (i.e. Nepal grindlays Bank Ltd. and Nepal Indosuez Bank Ltd.)

There is significant relationship between deposit and loan and advances as well as outside assets and net profit but not between deposit and total investment in case of both Nabil Bank Ltd. and other JVBs.

Tuladhar, (2000) in his study of “investment policy of Nepal Grindlays Bank Ltd. in comparison to other joint venture banks” has conducted that joint venture banks are discouraging lower level depositors and ad in the higher level as paramount customers. He found the probability position of NGBL is higher than the NABIL and HBL, NGBL maintain successful liquidity position than other banks he also found that because of uncertain return depositors may withdraw high portion of deposits and invest it in newly opened organization. He has recommended following liberal lending policy so that more percentage of deposits can be invest into different profitable sectors as well as loans and advances. As analysis showed that investment and loan and advances as significance sectors which affect the profit of the banks he further suggested to invest the fund of the bank in the purchase of shares and debentures of other reputed organization. he compare NGBL with other joint venture and focused to invest more percentage of deposits but it is sometimes harmful because they give much important to the liquidity position in banks operation, when depositors demand money bank must return them to maintain creditability. Bank invests on highly return sector so it need to search which sector is more potential and how can it identify those sectors. (Tuladhar, 2000:104-106)

Thapa, (2000) on her studies “A Comparative Study on Investment Policy of Nepal Bangladesh Bank Ltd. and other Joint Venture Bank.” On her study, the major

objectives were to evaluate the liquidity, assets management efficiency, profitability and risk position of Nepal Bangladesh Bank Ltd. in comparison to NABIL and Nepal Grindlays Bank Ltd. to analyze the relationship between loan, advance and total investment with other financial variables of sample banks. To examine the fund mobilization and investment policy of Nepal Bangladesh Bank Ltd. through off-balance sheet and on-balance sheet activities and comparison on other two banks. To study the various risk in investment and to analyze the deposit utilization trend and its projection for next five years of the sample banks. And to provide the suggestion for improving the investment policy of Nepal Bangladesh bank on the basis of the findings of the analysis.

Thapa, (2000) has found that the liquidity position of Nepal Bangladesh Bank is comparatively better than that of NABIL and Nepal Grindlays Bank Ltd. It has the highest cash and bank balance to total deposit, cash and bank balance to current assets ratio. It has good deposit collection, it has made enough loan and advance but it has made the negligible amount of investment in government securities. The Nepal Bangladesh Bank Ltd. is not in better position regarding its on balance as well as off-balance activities in compare to NABIL and Nepal Grindlays Bank Ltd. It does not deem to follow any definite policy regarding the management of its assets. She further found that the profitability position of Nepal Bangladesh Bank Ltd. is comparatively worse than that of NABIL and Nepal Grindlays Bank Ltd. The bank most maintains its high profit margin for the well-being in future. Nepal Bangladesh Bank Ltd. has maintained high a growth rate in comparison ion to other bank though it is not successful to make enough investment. And can say that the bank is successful in increasing its sources of funds and its mobilization.

Chaudhary, (2006) conducted a study on "Investment Policy, a comparative study of Nepal Bangladesh Bank Ltd. and Himalayan Bank Ltd." The research findings of the study are as follows:

The liquidity position of NBBL is comparatively better than that of HBL. The assets management ratio of NBBL is comparatively better than that of HBL and HBL has the highest proportion of non-performing loan and advance than NBBL. The profitability ratio of HBL is comparatively better than NBBL due to higher return on loan and advances ratio, return on equity ratio but HBL failed in total earned total outside ratio and total earned to total working fund ratio in comparison to NBBL. The

degree of risk is high in NBBL due to highest credit risk and rate risk, which shows that NBBL has greater risk in credit recovery and in recovery in comparison to HBL. The trend of total deposit, total loan and advances, total investment and net profit of HBL is comparatively better than NBBL. But the main important fact is that the trend of Net Profit of NBBL shows a negative trend. Both banks are not effectively informative to their clients since the large percentage of the people doesn't know the services provided by the banks. The respondents of HBL selected "they are profit oriented only" as the first option whereas respondents of NBBL selected "they don't want to take the risk" as the first choice.

Maharjan, (2007) conducted a study on “Investment Policy Analysis of Joint Venture Banks (A comparative study of Nepal SBI Bank with Everest Bank Ltd)” In her study, the financial tools such as ratio analysis viz. liquidity ratio, asset management ratio, profitability ratios, risk ratios, growth ratios and statistical tools like percentage, he found that mean, standard deviation, coefficient of variation, correlation and trend analysis have been used for the analysis and interpretation of the data. The data, which were employed in this research, are secondary in nature. They are obtained from annual reports of the concerned banks, likewise, the financial statement of five years from 2001/2002 to 2005/2006 were selected for the purpose of evaluation. NSBI has maintained good liquid position than in comparison to EBL. NSBI has higher cash and bank balance to total deposit and cash and bank balance to current assets ratio. NSBI has good deposit collection in comparison to EBL and has made moderate investment on government securities and also has maintained moderate investment policy on loan and advances. From the point of view of asset management ratio or activity ratio, EBL has comparatively higher ratio. The total investment of NSBI is higher compared to EBL.

The analysis of loan and advances to total deposit ratio and total investment to total deposit shows the slightly higher value of EBL than NSBI. Moreover, investment on shares and debentures to total working fund ratio is higher than that of EBL.

As regards to the profitability ratios, total earned to total outside assets of EBL is higher than that of NSBI. EBL also has higher credit risk and average capital risk with compared to NSBI.

Katuwal, (2007) conducted a study on “A Credit (Investment) Policy Analysis of Commercial Banks (with respect to Kumari Bank Ltd and Himalayan Bank Ltd.)”, in his research study he found,

After analyzing the liquidity ratios, it is found that the liquidity position of KBL is comparatively better than HBL. KBL's liquidity position is satisfactory but liquidity position of HBL is not satisfactory.

The assets management ratio (activity ratio) shows that the portion of investment of its fund made by KBL is lower than that of HBL. But the portion of loan and advances of its total deposit is higher than that of HBL. The portion of investment on government security of its total working fund made by KBL is lower than HBL. So, it can be concluded that the performance of overall assets management of KBL is not so good than that of HBL. The profitability ratio shows that the profitability position of HBL is better than that of KBL. From the study it can be concluded that KBL's profit earning capacity by utilizing available resources is weak than HBL. The risk ratio implies that during the study period the credit risk ratio of KBL is higher than that of HBL. So, it can be concluded KBL has more risk in comparison to HBL. The analysis of growth ratios shows that the KBL has maintained the higher level of growth ratios in all ratios. HBL has not successfully collected and utilized its fund collected from the customer due to see growth rate of total deposit, loan and advances, total investment, and net profit. From the correlation analysis it shows that the correlation coefficient (r) between total deposit and net profit of KBL is 0.989 and is greater than 6 times of probable error, which reveals that there is very strong positive and significant relationship between total deposit and net profit of KBL. Similarly, correlation coefficient (r) between total deposit and net profit of HBL is 0.86 and is greater than 6 times of probable error, which indicates that there is highly positive but lower than that of KBL and significant relationship between two variables. The correlation coefficient (r) between total deposit and total investment of KBL and HBL is 0.986 and 0.70 respectively and 6 times of probable error of both banks are low than correlation so it can be concluded that there is highly positive and significant relationship between two variables of both bank. Similarly, correlation between total deposit and loan and advance of both banks are higher than 6 times of probable error. Hence, there is highly positive and significance relationship between two variables. The correlation between CA and CL of both banks is same and greater than 6 times probable error. So, it can be concluded that there is positive and significant

relationship between two variables of both banks. Since, it can be said that the increase and decrease of one variable affects the volume of one another variables.

Bhhata, (2008) conducted a study on, “A Comparative Study of Investment Policy of Nepal Investment Bank Ltd. and Himalayan Bank Ltd.” on her research study, recommendations are made in order to overcome the weakness and inefficiency and make better policy on utilization and investment. HBL has maintained the ratio of cash and bank balance to total deposit lower than that of NIBL. It is recommended to increase cash and bank balance to meet current obligations and loan demand. The study reveals that NIBL has not invested more funds in government securities and so is recommended to invest more funds in this sector and not making them idle because govt. securities are the less risky assets. The loan and advances to total deposit of HBL’s is lower than NIBL which indicates it has not properly used its fund as loan and advances. Hence, HBL is recommended to follow liberal policy. The profitability position of NIBL is greater than HBL. So, it is recommend that HBL should properly utilize its loan and advances, investment should be done on less risky asset decrease the expenses by controlling the operating expenses. So, it can earn more profit. Since, the risk increases effectiveness and profitability of bank, the credit risk and liquidity risk taken by HBL is lower than that of NIBL and its consistency is unstable which may result in loss. The bank should not take high risk, HBL should carefully analyze in above risk to achieve higher returns. HBL growth ratio is lower than that of NIBL. It has very much fluctuating growth rate and HBL is recommended to increase its growth ratio into deposits, loans and advances, investment and net profit by designing new products and services to the depositors in order to attract them.

2.8 Research Gap:

EBL, HBL and Nabil are the leading commercial bank of the country having huge market share and their investment activities have significant impact on the national economy. No study has been yet conducted on the topic of investment policy of HBL, EBL and Nabil. Therefore this study has been done to analyze the comparative investment policy of three banks by taking the data of 5 years. The study is completely based on secondary data. The current data has been used in this research will try to show the present investment of the banks. Hence, this study will fulfill the prevailing research gap about in depth analysis of the investment policy of HBL, EBL and Nabil, which is the major concern of the public shareholders and other stakeholders.

CHAPTER III

RESEARCH METHODOLOGY

3.1 Research Design

A research design is the arrangement of conditions for collection and analysis of data. Moreover the research design is the conceptual structure within which research is conducted: it constitutes the blueprint for the collection and analysis of data. This study follows descriptive and analytical research design. To achieve the objectives of the study some financial and statistical tools have been applied to evaluate investment policy of HBL, EBL and Nabil.

3.2 Sources of Data

The study is conducted on the basis of the secondary data. The data required for the analysis are directly obtained from the balance sheet and P/L a/c of the concerned bank's annual reports. Supplementary data and information are collected from member of institutions and regulating authorities like NRB, Security Board of Nepal (SEBON), Nepal Stock Exchange Ltd. (NEPSE), Central Library T.U., Economic Survey and National Planning Commission etc. All the secondary data are compiled, Processed and tabulated in the time series as per the need and objectives.

3.3 Population and Sample

It is not possible to study investment policy of all banks of Nepal. There are altogether thirty one listed Commercial Banks in the country and their stocks are traded actively in stock market. So the investment policy of listed three banks is being compared with that average of the same which are selected from population. From the above listed commercial banks are considered as population. So, the investment analyses are done on Everest Bank, Himalayan bank and Nabil Bank which are randomly selected from population.

The selected samples are as follows:-

1. Everest Bank Ltd.
2. Himalayan Bank Ltd.
3. Nabil Bank Ltd.

3.4 Analysis of Data

In this study, various financial, accounting and statistical tools have been used to achieve the objective of the study. The analysis of data will be done according to the pattern of data available. Due to limited time and resources, simple analytical statistical tools are used in this study. Likewise, some financial tools such as ratio analysis and trend analysis have also been used for financial analysis. The various tools in this study have been briefly presented as under.

3.4.1. Financial Tools

Financial tools are used to examine the financial strength and weakness of bank. Ratio analysis is one of the important financial tools that have been used in the study. Although there are many ratios, only those ratios have been covered in the study, which are related to the investment operation of the bank. This study measures the following ratios.

Ratio Analysis

Ratio analysis is as the systematic use of ratio to interpret the financial statements so that the strengths and weaknesses of a firm as well as its historical performance and current financial condition can be determined. "Ratio analysis is a part of the whole process of analysis of financial statement of any business or industrial concern especially to take output and credit decision." (Kothari, 1984:265). The term ratio refers to the numerical or quantitative relationship between two terms/variables. The reason for ratio analysis lies in the fact that it makes related information comparable. With the help of this analysis, the qualitative judgment can be done regarding firm's performance and status. Although there are many types of ratios used to analyze and interpret the financial statements, only following listed ratios related to investment policy of the bank have been covered in this study

- A) Liquidity Ratios
- B) Asset Management Ratios
- C) Profitability Ratios
- D) Risk Ratios
- E) Growth Ratios

A) Liquidity Ratio

Liquidity ratio is the ability of a firm to meet its current/short term obligations. It reflects the short-term financial strength of the bank. In fact, liquidity is a pre-requisite for the very survival of a firm. These ratios are used to know the capacity of the concern to pay its Short-term liability. The analysis of liquidity needs the preparation of cash budgets, cash fund but liquidity ratios by establishing provide a guidance measure of liquidity. These ratios provide the insights into present cash solvency of the bank and its ability to remain solvent in the event of adversities. It is the measurement of speed with which a bank's assets can be converted into cash to meet deposit withdrawal and other current obligations.

The following ratios are evaluated under liquidity ratios:

- I) Current Ratio
- II) Cash and Bank Balance to Total Deposit Ratio
- III) Cash and Bank Balance to Current Assets Ratio
- IV) Investment on Government Securities to Current Assets Ratio
- V) Loan and Advances to Current Asset Ratio

I) Current Ratio

This ratio shows the banks short-term solvency. It shows the relationship between current assets and current liabilities. Current assets include cash and bank balance, money at call or short notice, loans and advances, investment in government securities and other receivables, overdraft, bills purchased and discounted and miscellaneous current assets. Similarly, current liabilities include deposits and other short-term loan, bill payable, tax provision, staff bonus, dividend and miscellaneous current liabilities.

Current Ratio (CR) can be computed as,

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

There is no such hard and fast rule, conventionally, a current ratio of 2:1 (current assets twice of current liabilities) is considered satisfactory.

II) Cash and Bank Balance to Total Deposit Ratio

Cash and Bank balances are the most liquid current assets. This ratio measures the percentage of most liquid fund with the bank to make immediate payment to the depositors. This ratio (Cash and Bank Balance to Total Deposit) can be computed as,

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

Cash and bank balance includes cash on hand, foreign cash on hand, cheques and other cash items, balance with domestic banks, balance held in foreign banks and other financial institutions. The total deposits encompass current deposits, fixed deposits, investment in other financial institution, money at call and short deposit and other deposits. A high ratio indicates the greater ability to meet their deposits liability and vice versa. Moreover, too high ratio is unfit, as capital will be tied-up and opportunity cost will be higher.

III) Cash and Bank Balance to Current Assets Ratio

The ratio measures the proportion of cash and bank balance among the total current assets of the bank. This ratio (Cash and Bank Balance to Current Assets) can be computed as,

$$\text{Cash and Bank Balance to Current Assets Ratio} = \frac{\text{Cash and Bank Balance}}{\text{Total Current assets}}$$

Higher the ratio, higher will be the capacity of the bank to meet the cash demand

IV) Investment on Government Securities to Current Assets Ratio

This ratio is computed to find out the proportion of current assets invested in government securities. The treasury bills, development bonds, saving bonds etc. are treated as investment on government securities. This ratio (Investment on Government Securities to Current Assets) can be computed as,

Investment on government securities to current assets

$$= \frac{\text{Investment on government securities}}{\text{Current assets}}$$

v) Loan and Advances to Current Asset Ratio

Loan and advances are also included in the current assets of commercial banks because generally it provides short-term loan, advances, overdrafts, cash-credit and foreign bill purchased and discounted. All commercial banks mobilize their collected funds as loan and advances to the customers. If sufficient loan and advances cannot be graded, it should be pay on those utilized deposit funds and may be lose some earnings, but high loan and advances may also be harmful to keep the bank in most liquid position because they can only be collected at the time of maturity only. Thus, a bank must maintain its loan and advances in appropriate level to find out portion of current assets, which is granted as loan and advances. This ratio (Loans and Advances to Current Asset) computed as,

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

B) Asset Management Ratio/Activity Ratio/Turnover Ratio

The second group of financial tool used to analyze the data in this research is asset management ratio. It is concerned with measuring the efficiency in asset management. At times these ratios are called efficiency or asset utilization ratios. The efficiency with which the assets are used would be reflected in the speed and rapidity with which assets are converted into revenue generating greater the rate of turnover or conversion, the more efficient the utilization or management other things being equal. For this reason, such ratios are also called turnover ratios. Turnover ratio is the primary mode for measuring the extent of efficient employment of assets by relating the assets to revenue. Thus, asset management ratio is a test of the relationship between revenue and the various assets of a firm. These are used to measure the bank's ability to utilize their available resources. The following listed ratios are used in this study:

- I) Loan and Advances to Total Deposit Ratio
- II) Total Investment to Total Deposit Ratio
- III) Loan and Advances to Total Working Fund Ratio
- IV) Investment on Government Securities to Total Working Fund Ratio
- V) Investment on Shares and Debentures to Total Working Fund Ratio

I) Loan and Advances to Total Deposit Ratio

This ratio is computed to find out how successfully the bank is utilizing its total deposits on loan and advance for income generating purpose. This ratio (Loan and Advances to Total Deposit) can be computed as,

$$\text{Loan and advance to total deposit ratio} = \frac{\text{Loan and advance}}{\text{Total deposit}}$$

Here loan and advances refers to total of loan, advances and overdraft and total deposits refer to total of all kinds of deposits

II) Total Investment to Total Deposit Ratio

This ratio is computed to find out how successfully the bank is utilized its total deposits on investment for income generating propose. The above ratio is computed dividing total investment by total deposit. Investment is one of the major credits created to earn income.

This implies the utilization of bank's deposit on investment in government securities and share debentures of other companies and banks. The ratio (Total Investment to Total Deposit) can be computed as,

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

A high ratio indicates that the Bank's efficiency is more investing on its deposit and vice-versa

III) Loan and Advances to Total Working Fund Ratio

Loan and advances is an important part of total working fund (It includes current assets, fixed assets, other assets, Investment and Loan and advances). Commercial bank must be very careful in mobilizing in total assets. This ratio is success in mobilizing their assets loan and advances for the purpose If income generation. This ratio (Total Investment to Total Deposit) can be computed as,

$$\text{Loan and advance to total working fund ratio} = \frac{\text{Loan and advance}}{\text{Total working fund}}$$

A high ratio indicates better in mobilization of funds as loan and advances and vice-versa.

IV) Investment on Government Securities to Total Working Fund Ratio

A bank mobilize its fund in various ways to some extent commercial bank seems to utilize its fund by purchasing government securities. A government security is a risk free investment. This ratio is very important to know the extent to which the banks are successful in mobilizing their total fund on different types of government securities to generate profit. This ratio (Investment on Government Securities to Total Working Fund) can be calculated as,

$$\begin{aligned} &\text{Investment on government securities to total working fund} \\ &= \frac{\text{Investment on government securities}}{\text{Total working fund}} \end{aligned}$$

A high ratio includes better mobilization of funds as invest on government security and vice-versa.

V) Investment on Shares and Debentures to Total Working Fund Ratio

This ratio shows the relation between the bank's investment on shares and debentures and total working fund. The investment on shares and debentures portion of the ratio includes investment on debentures, shares and bonds of other companies. This ratio (Investment on Shares and Debentures to Total Working Fund) can be calculated as,

$$\begin{aligned} &\text{Investment on share and debenture to total working fund ratio} \\ &= \frac{\text{Investment on share and debenture}}{\text{Total working fund}} \end{aligned}$$

C) Profitability Ratios

Profitability ratios are computed to measure the efficiency of the bank in term of profit. It is the indicator of the financial performance of bank. Moreover higher the profitability ratio is better for the financial performance of the bank and vice-versa.

The following ratios are calculated under profitability ratios:

- I) Return on Total Working Fund Ratio
- II) Total Earned to Total outside Assets Ratio
- III) Return on Loan and Advances Ratio
- IV) Total Earned to Total Working Fund Ratio
- V) Total Paid to Total Working Fund Ratio

I) Return on Total Working Fund Ratio

Return is the result of investment and it measures the profit earning capacity by utilizing available resources i.e. total assets. Return will be higher if the bank working fund is well managed and are efficiently utilized, maximizing taxes within legal options available will also improve the net profit (the profit that is left to internal equities after all costs, charges have deducted). This ratio (Return on Total Working Fund) can be calculated as,

$$\text{Return on total working fund Ratio} = \frac{\text{Net Income}}{\text{Total working fund}}$$

II) Total Earned to Total outside Assets Ratio

This ratio measures the proportion of income in total income of the bank and contribution made by the lending and investing activity. Total Earned includes total income from loans, advances, cash credit and overdrafts, government securities, inter-bank and other investment. Total outside Assets includes loan and advances and all types of investment. This ratio (Total Earned to Total outside Assets) can be computed as,

$$\text{Total earned to total outside assets ratio} = \frac{\text{Total interest earned}}{\text{Total outside assets}}$$

III) Return on Loan and Advances Ratio

This ratio measures the earning capacity of loan and advances. Moreover it indicates how efficiently the bank has mobilized its recourse in the form of loan and advances. This ratio (Return on Loan and Advances) can be calculated as,

$$\text{Return on loan and advance ratio} = \frac{\text{Net Income}}{\text{Loan and advance}}$$

IV) Total Earned to Total Working Fund Ratio

This ratio gives the percentage of s earned to total assets (working funds). Higher ratio implies better performance of the bank in terms of earning on its total working funds. The ratio (Total s earned to total working fund ratio) can be calculated as,

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

V) Total Paid to Total Working Fund Ratio

Paid to total working fund ratio is defined as the ratio of total paid to total working fund. This ratio measures the percentage of total expenses against total working fund.

The ratio is calculated as paid to total working fund:

Total Paid. This ratio (Total Paid to Total Working Fund) computed as,

$$\text{Total s paid to total working fund ratio} = \frac{\text{Total intrest paid}}{\text{Total working fund}}$$

A high ratio indicates higher expenses on total working fund and vice-versa.

D) Risk Ratio

Risk is involved in any business and risk taking occurs while undertaking business of a bank. Higher the risk results higher the return. Risk is the chance of receiving actual returns other than expected, which simply means there is variability in the returns or outcomes from the investment. The investment made by banks is more susceptible to risk. Risk taking is the main job of bank's investment management. Risk ratios indicate the amount of risk associated with the various banking operation, which ultimately influence the banks investment policy. The following ratios are calculated under risk ratios.

I) Credit Risk Ratio

II) Liquidity Risk Ratio

I) Credit risk ratio

Credit risk ratio measures the possibility that loan will not be repaid or that investment will deteriorate in quality or go into default with consequent loss to the bank by definition. It is expressed as the percentage of non-performing loan to total loan and advances. The ratio of total loan and advances to total assets measures the credit risk ratio and the ratio calculated as,

$$\text{Credit risk (loan and advance to total assets) ratio} = \frac{\text{Loan and advance}}{\text{Total asssets}}$$

II) Liquidity Risk Ratio

The liquidity risk ratio of a bank decides its liquidity need for deposits. The cash and bank balance are the most liquid assets and they are considered as bank's liquidity sources and deposits as the liquidity needs. The ratio of cash and bank balance to total

deposits is an indicator of bank liquidity needs. The risk is low if funds are kept idle or as cash and bank balance but this affects profitability. When bank makes loan, its profitability increases and also the risk. Thus, higher liquidity ratio indicates less risk and less profitability or vice-versa. The ratio can be computed as:

$$\text{Liquid risk (cash and bank balance to total deposit) ratio} = \frac{\text{Cash and bank balance}}{\text{Total deposit}}$$

E) Growth Ratio

Growth ratio is directly related to find mobilization and investment decision of the bank. The growth ratios are calculated to examine and analysis the expansion and growth of the banking business during the study period. The higher ratios represent the better performance of the bank. This ratio represents how well the commercial banks are maintaining their economic and financial position. Growth ratio can be calculated by dividing the last period figure by the first period figure then by referring to the compound table the following ratios are calculated under growth ratios:

- I) Growth ratio of total deposit
- II) Growth ratio of total loan and advances
- III) Growth ratio of total investment and
- IV) Growth ratio of net profit

3.4.2 Statistical Tools

Any kind of research or study especially which are concerned with analysis of data is incomplete with out statistics tools. So, in order to make the data analysis more comprehensive and informative the researcher has to make use of certain statistical tools some important statistics tools are used here to achieve the objectives of the study. The statistics tools, which are used, are as follows.

I) Arithmetic Mean/ Weighted Average

This is the most popularly and widely used measure of statistical analysis. The main objective of this measure is to get one single value that describes the characteristics of the entire mass of huge and unwieldy data. This is also known as average. Arithmetic mean is the sum of all the observations divided by the number of observations. In this

case all the items are equally important. The arithmetic mean (AM) is denoted by \bar{x} .
Arithmetic mean computed as,

Where,

Σx = sum of observation

n = No. of observation

Standard Deviation (S.D.)

It is the best measure of dispersion as it satisfies most of the requisites of a good measure of dispersion and it is the absolute measure of dispersion. Standard deviation is defined as the positive square root of the mean of the square of the deviations taken from the arithmetic mean. It is also known as 'Root Mean- Square Deviation'. It is denoted by Greek letter small sigma. (σ). Standard deviation computed as,

$$\sigma = \sqrt{\frac{\Sigma x^2}{N}}$$

Where,

σ = Standard Deviation

N = No. of observation

x = $X - \bar{X}$

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

The coefficient of variation is the most commonly used measure of relative variation. C.V. measures the relative dispersion. Greater C.V. results as the more variable or less consistent, less uniform, less stable and less homogenous the ratio and vice-versa. C.V. calculated as,

$$C.V. = \frac{\sigma}{\bar{X}}$$

Where,
 σ = Standard Deviation
 \bar{X} = mean

III) Trend Analysis

Trend Analysis is an analysis of a firm's financial ratios over time. This measures the change of data over a period of time. This reveals whether the firm's ratio are improving or deteriorating over time. Under segment, current and projected trend,

total investment, total deposit, total loan and total net profit are calculated. The projections are based on the following Assumption.

1. The main assumption is that other things will remain unchanged.
2. The bank will run in this present position.
3. The economy will remain in the present stage.
4. The forecast will be true only when the limitation of least square method is carried out.
5. Central governing bank will not change its guidelines to commercial banks.

The following four variables are considered for the analysis of trend.

1. Trend Analysis of Total Deposit
2. Trend Analysis of Loan and Advances
3. Trend Analysis of Total Investment
4. Trend Analysis of Net Profit

For the estimation of linear trend line following formula has been used.

$$Y = a + bx$$

Where,

Y=Dependent Variable

X= Independent Variable

a= intercept of the line.

b= Slope of the line (shows the average changes in the value of Y as a result of one unit change in the value of X)

The value of the constant 'a' and 'b' can be determined by solving the following two normal equations:

$$Y = na + b x$$

$$xy = ax + b X$$

Where,

n= no. of observation

IV) Coefficient of Correlation (r)

Correlation analysis enables in determining the degree and direction of relationship between two variables. In this study, the Karl Pearson's co-efficient of correlation is

used, which is a numerical measure of linear relationship between them. It is usually denoted by 'r'. The result of coefficient of correlation is always between +1 and -1, The statistical tool-correlation analysis is used in the study to measure the relationship between variables in determining within the relationship is significant or not. For the purpose decision making interpretation are based on the following terms.

1. When, $r = 1$, then is perfect positive correlation.
2. When, $r = -1$, then is perfect negative correlation.
3. When, $r = 0$, then is no correlation.
4. When, 'r' lies between "0.7 to 0.999" (-0.7 to -0.999), then is high degree of positive (or negative) correlation.
5. When, 'r' lies between "0.5 to 0.6999" there is moderate degree of correlation.

When, 'r' is less than 0.5, there is low degree of correlation

Coefficient of Correlation calculated as,

$$\text{Coefficient of Correlation (r)} = \frac{xy}{\sqrt{x^2} \sqrt{y^2}}$$

Where,

$$X = x - \bar{x}$$

$$Y = y - \bar{y}$$

V) Probable Error of the Coefficient of Correlations (P.Er.)

After the calculation of coefficient of correlation the next thing is to find out the extent to which it is dependable. For this purpose the probable error of the coefficient of correlation is calculated. If the probable error is added to and subtracted from the coefficient of correlation would give two such limits within which we can reasonably accept the value of coefficient of correlation to vary. The formula for finding out the probable of error of the Karl Pearson's co-efficient of correlation is:

$$\text{P.Er.} \quad X \frac{1 - r^2}{\sqrt{n}}$$

CHAPTER IV

DATA PRESENTATION AND ANALYSIS

In this chapter, all the efforts have been made to analyze and present all collected data from the various sources. This chapter determines the quality of the study because how far the collected data are presented and analyzed with the help of various financial and statistical tools, tables, graphs etc as of meaningfully and clearly. This chapter has performed to know the clear picture of investment policy of Himalayan Bank Ltd, Nabil Bank Ltd and Everest Bank Ltd. The outcomes of the study solely depend upon this chapter financial and statistical tools which are presented at research methodology which used here to interpretation collected data. This chapter has been divided into two parts. The first part of the chapter includes the presentation and analysis of data while the second part includes the major finding of the study.

4.1 Ratio Analysis

Ratio analysis is a main tool of financial analysis. Financial ratios are the mathematical relationship between two accounting figures. It is used to evaluate a firm's financial performances and status of other firms. The quantitative judgments have gone down regarding financial performances of the firm with the help of ratio analysis. In this study all types of ratios are not done only those ratios which are important from the point of view of the investment policy are calculated. These are as follows:

4.1.1 Liquidity Ratio

Liquidity ratio measures the firm's ability to meet short term obligations. Current assets and liabilities involve and to maintain more effectible for the short term obligation that is commonly based on within one accounting period. Liquidity ratio measures the ability of the firm to meet its current obligation. A commercial bank must maintain its satisfactory liquidity position to meet the credit need of the community. Demand for the deposits, withdrawals and pay maturity in time and convert non-cash assets into cash to satisfy immediate need without loss to banks and consequent impact on long run profit. Analysis of liquidity needs the preparation of cash budget liquidity ratios by establishing a relationship between cash and other

current assets to current obligations, which provide a guide measure of liquidity. The following ratios are evaluated and interpreted under liquidity ratio:

A. Current Ratio

This is a measurement of liquidity ratio. It measures the ratio between total current assets and total current liabilities. Current assets are those assets which can be converted into cash within one accounting period. And the current liabilities are those liabilities, which should be paid within the one accounting period. Current ratio indicates the ability of the bank to meet its current obligation. This is the broad measure of liquidity position of the financial position. There is no such hard and fast rule, conventionally, a current ratio of 2:1 is considered satisfactory.

We have,

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

Table 4.1
Current Ratio (Times)

Banks	Fiscal year					Mean	S.D	C.V
	2005/06	2006/07	2007/8	2008/09	2009/10			
EBL	1.69	1.69	1.73	1.57	2.13	1.76	0.2126	12.07%
HBL	1.14	1.25	1.25	1.39	1.78	1.36	0.2488	18.27%
Nabil	1.42	1.48	1.56	1.53	1.96	1.59	0.2136	13.43%

Source: Appendix-1

Figure 4.1
Current Ratio

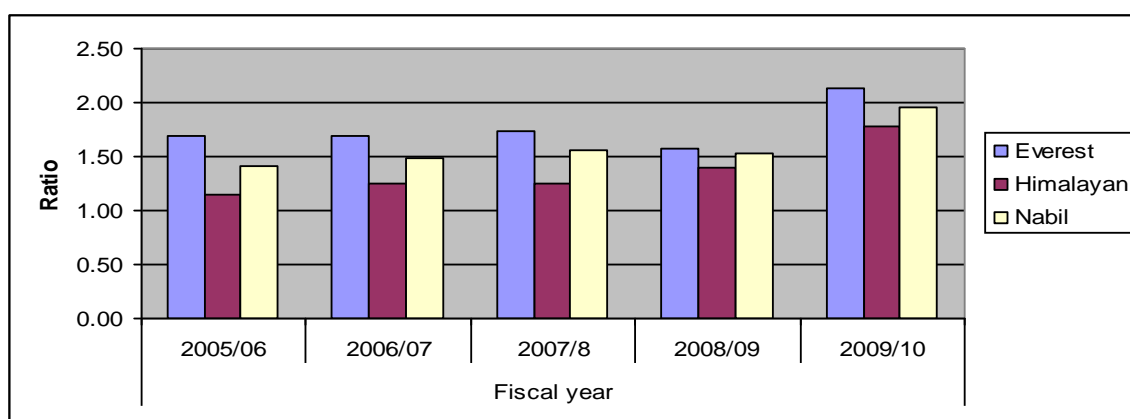


Table measures the current ratio of three banks of five consecutive years (2005/06 to

2009/10). The ratio has been ranged from 1.69 to 2.13 of EBL, 1.14 to 1.78 of HBL and 1.42 to 1.96 of Nabil. The current ratio of EBL is lowest in FY 2008/09, where current ratio of HBL and Nabil is increasing throughout the five year. Both HBL and Nabil maintain lower current ratio where EBL maintains satisfactory in F/Y 2009/10. The mean of HBL is 1.76, 1.36 of HBL and 1.59 of Nabil. If we measure the performance of these banks based in this mean, the performance of HBL and Nabil is weak and EBL has maintained better than HBL and Nabil. Standard deviation measures the variability of the ratio according to above table HBL's S.D (0.24) is greater than EBL's (0.21) of Nabil's (0.21). C.V. of EBL is 12.07, 18.27 of HBL and 13.43 of Nabil, which shows that EBL is more consistent than HBL and Nabil. In Conclusion of the liquidity position in terms of current ratio is on average but these banks must increase its current assets to maintain good ratio.

B. Cash and Bank Balance to Current Assets Ratio

The ratio measures the proportion of cash and bank balance among the total current assets of the bank this ratio shows the bank liquidity capacity on the basic of cash and bank balance that is most liquid assets. Higher ratio indicates the bank ability to meet the daily cash requirement of their customer deposit and vice versa. But higher is not preferred as the bank has to pay more in deposit and will increase the cost of fund. A lower ratio is also dangerous as the bank may not be able to make payment against the cheques presented by customers. Therefore, the bank has to maintain the cash and bank balance to current assets ratio in such a manner that it should have the adequate cash for the customers demand against deposit when required and less is required to be paid against the cash.

$$\text{Cash and Bank Balance to Current Assets Ratio} = \frac{\text{Cash and Bank Balance}}{\text{Total Current Assets}}$$

Table 4.2

Cash and Bank Balance to Current Assets Ratio (in %)

Banks	Fiscal year					Mean	S.D	C.V
	2005/06	2006/07	2007/8	2008/09	2009/10			
Everest	10.25%	11.40%	10.05%	18.88%	19.42%	14.00%	0.0473	34%
Himalayan	7.42%	6.38%	4.90%	9.00%	10.26%	7.59%	0.0212	28%
Nabil	34.75%	6.13%	8.55%	9.35%	3.07%	12.37%	0.1280	103%

Source: Appendix-1

Figure 4.2
Cash and Bank Balance to Current Assets

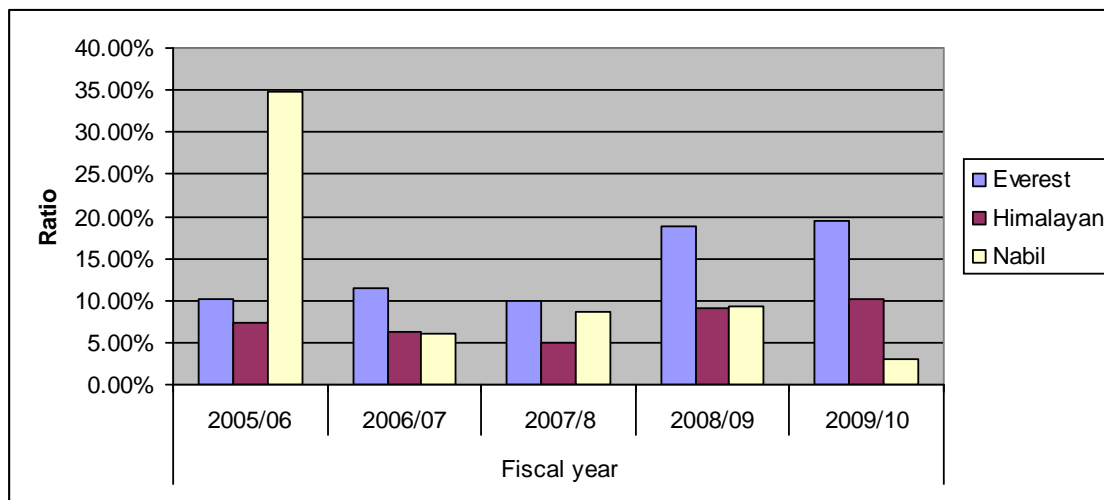


Table measures the cash and Bank Balance to current assets ratio of three banks of five consecutive years (2005/06 to 2009/10). The ratio has been ranged from 10.25% to 19.42% of EBL, 7.42% to 10.26% of HBL and 34.75% to 3.07% of Nabil. It shows that ratio of Nabil is in decreasing trend whereas ratio of EBL is in increasing trend. These banks' ratio is more fluctuating. The mean of EBL is 14%, HBL is 7.59% and Nabil is 12.37%, the performance of HBL is weak than EBL and Nabil according to mean. S.D. of EBL is 0.0473, HBL's 0.0212 and Nabil's 0.128 which shows that cash and bank balance to current assets ratio of Nabil is more fluctuate than HBL's and EBL's ratio. C.V. of Nabil is more than EBL and HBL. It shows that performance of Nabil is so much less consistency and HBL is more consistency than Nabil and EBL. In conclusion liquidity position of EBL is higher than HBL and Nabil as it is capable of maintaining higher level of cash and bank balance ratio.

C. Cash and Bank Balance to Total Deposit Ratio

Cash and bank balance to total deposit ratio is an important tool to determine the bank's financial efficiency and liquid assets. The ratio between the cash and bank balance to total deposits measure the ability of the bank to meet unanticipated demand or cash withdrawals from all types of deposits. Higher ratio shows the bank's ability to meet demand for cash, but it also shows the amount of idle fund in the form of liquid assets which would otherwise have been used for income generating investment by the bank.

We have,

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

Table 4.3

Cash and Bank Balance to Total Deposit Ratio (in %)

Banks	Fiscal year					Mean	S.D	C.V
	2005/06	2006/07	2007/8	2008/09	2009/10			
Everest	11.25%	13.15%	11.13%	18.50%	21.17%	15.04%	0.045	30%
Himalayan	6.48%	5.85%	4.55%	8.79%	10.28%	7.19%	0.023	32%
Nabil	32.57%	6.00%	8.37%	9.03%	3.02%	11.80%	0.119	100%

Source: Appendix-1

Figure 4.3

Cash and Bank Balance to Total Deposit Ratio

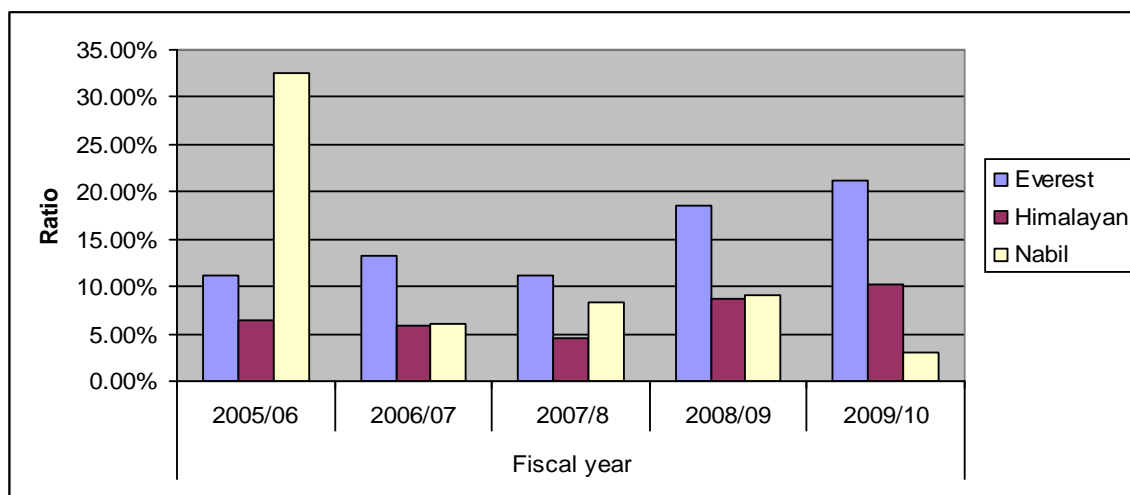


Table measures the cash and bank balance to total deposit ratio of three banks of five consecutive years (2005/06 to 2009/10). The ratio has been ranged from 11.25% to 21.17% of EBL, 6.48% to 10.28% of HBL and 32.57% to 3.02% of Nabil. Ratio of EBL and HBL are increasing throughout the five years where ratio of Nabil is decreasing throughout the five years. Nabil maintains the highest ratio 32.57% in 2005/06. The ratio of Nabil is lowest in the year 2009/10. The mean of EBL is 15.04%, 7.19% of HBL and 11.80% of Nabil. If we measure the performance of these banks based on this mean, the performance of EBL is stronger than HBL and Nabil. S.D. of HBL (0.023) is less than EBL's (0.045) and Nabil's (0.119) which shows that cash and bank

balance to total deposit ratio of Nabil is more fluctuate than HBL's and EBL's ratio. According to C.V. Nabil maintains lower liquidity position than EBL and HBL.

D. Investment on Government Securities to Current Assets Ratio

This ratio is computed to find out the proportion of current assets invested in government securities. The treasury bills, development bonds, saving bonds etc. are treated as investment on government securities. This ratio is very important to recognize a bank's liquidity position. The government securities are not so much liquid as cash and bank balance. But they can easily be sold in the financial market or they can be converted into cash in other ways.

We have,

Investment on Government Securities to Current Assets

$$= \frac{\text{Investment on Government Securities}}{\text{Current Assets}}$$

Table 4.4

Investment on Government Securities to Current Assets Ratio (in %)

Banks	Fiscal year					Mean	S.D	C.V
	2005/06	2006/07	2007/8	2008/09	2009/10			
Everest	23.43%	22.42%	18.16%	6.47%	10.81%	16.26%	0.074	45%
Himalayan	22.22%	23.42%	25.27%	12.44%	11.85%	19.04%	0.064	34%
Nabil	12.69%	21.06%	14.87%	10.27%	17.40%	15.26%	0.042	27%

Source: Appendix-1

Figure 4.4

Investment on Government Securities to Current Assets Ratio

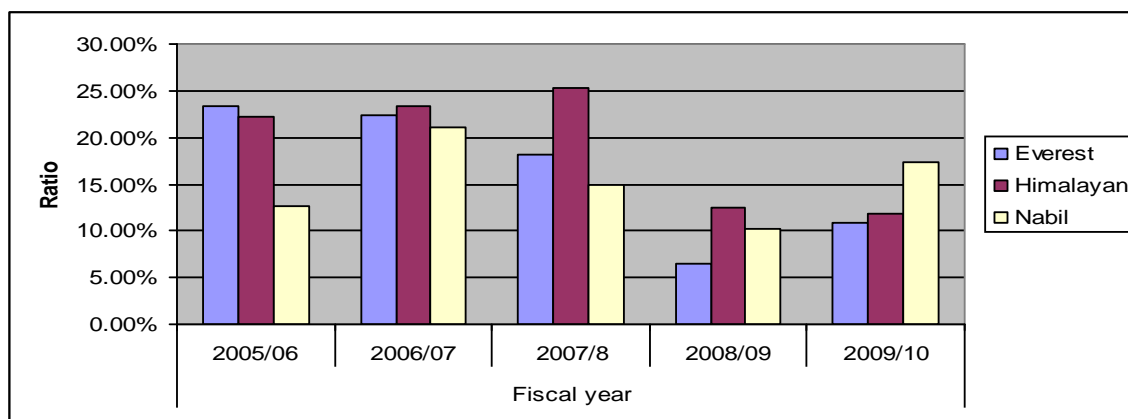


Table measures the Investment on government securities to current asset's ratio of three banks of five consecutive years (2005/06 to 2009/10). The ratio has been ranged from 23.43% to 10.81% of EBL, 22.22% to 11.85% of HBL, 12.69% to 17.40% of Nabil, Ratio of these bank are fluctuating during the period.HBL maintains highest ratio in 2005/06 but maintains lowest ratio in 2009/10. But Nabil maintains highest ratio in 2009/10, whereas EBL maintains highest ratio in 2005/06 but lowest ratio in 2009/10. The mean of EBL is 16.26%, 19.04% of HBL and 15.26% of Nabil. If we measure the performance of these banks based in this mean, the performance of Nabil is weak than EBL & HBL. Standard deviation of EBL is 0.074, HBL is 0.064 and Nabil is 0.042. Nabil's S.D. is less than EBL and HBL which shows that Investment on government securities to current assets ratio of the EBL is more fluctuate then HBL and Nabil. C.V. of EBL is 45%, 34% of HBL and 27% of Nabil. The C.V. shows that EBL is more consistency than HBL and Nabil. It indicates that EBL maintain lower liquidity than HBL and Nabil. It can be conclude that HBL has invested its more proportion of current assets in government securities than EBL and Nabil. These banks maintain better short liquidity position.

E. Loan and advance to Current Assets Ratio

Loan and advances are also included in the current assets of commercial banks because generally it provides short-term loan, advances, overdrafts, cash-credit and foreign bill purchased and discounted. All commercial banks mobilize their collected funds as loan and advances to the customers. If sufficient loan and advances cannot be graded, it should be pay on those utilized deposit funds and may be lose some earnings, but high loan and advances may also be harmful to keep the bank in most liquid position because they can only be collected at the time of maturity only. Thus, a bank must maintain its loan and advances in appropriate level .To find out portion of current assets, which is granted as loan and advances.

We have,

$$\text{Loan and Advance to Current Assets Ratio} = \frac{\text{Loan and Advance}}{\text{Current Assets}}$$

Table 4.5
Loan and Advance to Current Assets Ratio (in %)

Banks	Fiscal year					Mean	S.D	C.V
	2005/06	2006/07	2007/8	2008/09	2009/10			
Everest	64.70%	65.12%	69.07%	73.15%	68.44%	68.10%	0.0343	5.03%
Himalayan	63.24%	61.67%	65.94%	73.23%	74.27%	67.67%	0.0577	8.52%
Nabil	71.26%	68.10%	68.39%	76.46%	70.70%	70.98%	0.0336	4.74%

Source: Appendix-1

Figure 4.5
Loan and Advance to current Assets Ratio

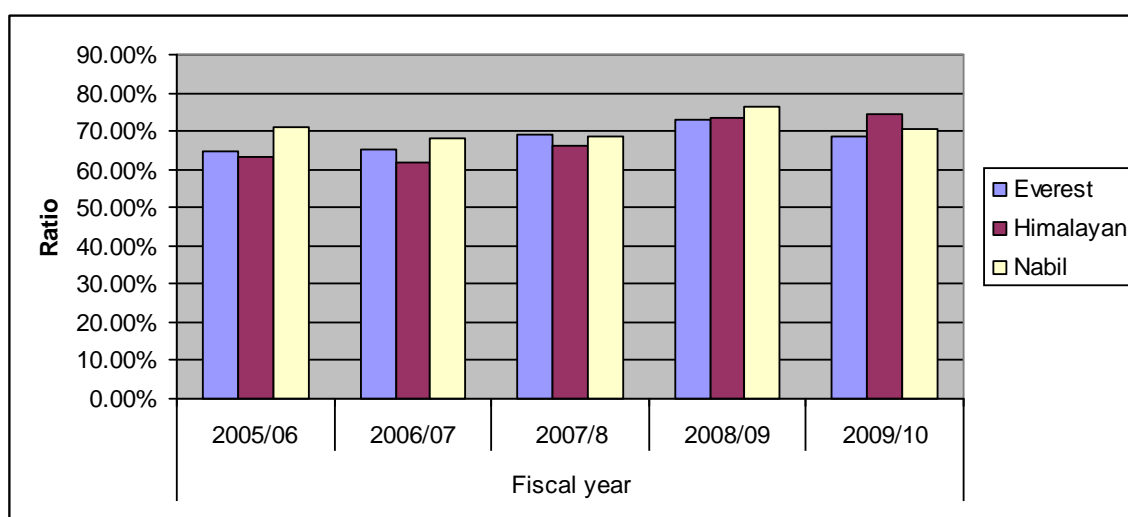


Table measures the load and advance to current assets ratio of three banks of five consecutive years (2005/06 to 2009/10). The ratio has been ranged from 64.70% to 68.44 of EBL, 63.42% to 74.27% of Nabil. Ratio of EBL and HBL and Nabil are fluctuating during the period. EBL and Nabil maintain highest ratio in 2008/09. In 2009 /10 HBL maintains highest ratio. The mean of EBL is 68.10%, 67.67% of HBL and 70.98% of Nabil. If we measure the performance of these banks based in this mean the performance of Nabil is stronger than EBL and HBL. HBL's S.D. (0.057) is more than EBL's (0.034) and Nabil;s (0.033) C.V. of EBL is 5.03%, 8.52% of HBL and 4.74% of Nabil, which shows that Nabil is more consistency than EBL and HBL.

4.1.2 Asset Management Ratio/Activity Ratio/Turnover Ratio

The second group of financial tool used to analyze the data in this research is asset management ratio. It is concerned with measuring the efficiency in asset management.

At times these ratios are called efficiency or asset utilization ratios. The efficiency with which the assets are used would be reflected in the speed and rapidity with which assets are converted into revenue generating. Increase the rate of turnover or conversion, the more efficient the utilization or management other things being equal. For this reason, such ratios are also called turnover ratios. Assets management ratio is a test of the relationship between revenue and the various assets of a firm. These are used to measure the bank's ability to utilize their available resources.

The relationships between resources are indicated by asset management ratio. A commercial bank must be able to manage its assets very well to earn high profit to satisfy its customers and for its own existence.

A. Loan and Advance to Total Deposit Ratio

This ratio measures the extent to which the banks are successful to mobilize their total deposit on loan and advances for the profit generation. A high ratio indicates better utilization of deposits in loan and advances and vice-versa. But too high ratios may not be good from liquidity point of view.

We have,

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

Table 4.6
Loan and Advance to Total Deposit Ratio (In %)

Banks	Fiscal year					Mean	S.D	C.V
	2005/06	2006/07	2007/8	2008/09	2009/10			
Everest	71.01%	75.13%	76.49%	71.68%	74.61%	73.78%	0.0234	3.18%
Himalayan	55.27%	56.57%	61.23%	71.49%	74.39%	63.79%	0.087	13.64%
Nabil	66.79%	66.60%	66.94%	73.87%	69.53%	68.75%	0.0311	4.52%

Source: Appendix-1

Figure 4.6
Loan and Advance to Total Deposit Ratio

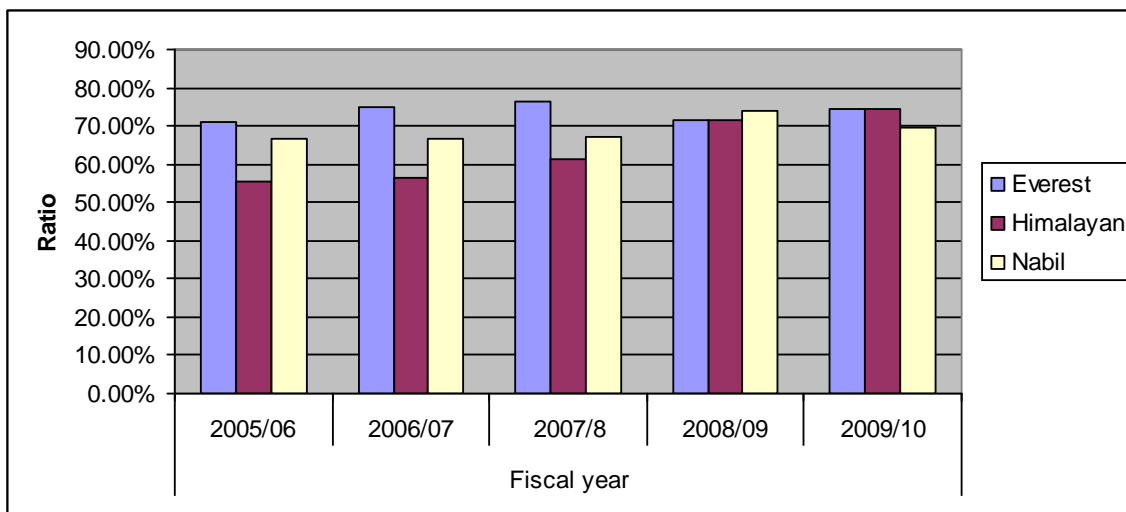


Table measures the loan and advance to total deposit ratio of three banks of five consecutive years (2005/06 to 2009/10). The ratio has been ranged from 71.01% to 74.61% of EBL, 55.27% to 74.39% of HBL and 66.70% to 69.53% of Nabil. The ratio of these banks is fluctuating during the period. EBL maintain highest ratio in 2007/08 but HBL maintains highest ratio in 2009/10. HBL's ratio is increasing during the year whereas Nabil's ratio is going up and down during the period.

The mean of EBL is 73.78%, HBL is 63.79% and Nabil is 68.75%. If we measure the performance of these banks based in mean, the performance of HBL is weak than EBL and Nabil. EBL's S.D. is 0.023, HBL's S.D. is 0.087 and Nabil's S.D. is 0.031. The C.V. of EBL (3.81%) is less than HBL (13.64%) and Nabil (4.52%) The lower CV of EBL shows the consistent deposit utilization over the period of study. It can be concluded that HBL is lower position to mobilize its total deposit as loan and advance in comparison to EBL and Nabil.

B. Total Investment to Total Deposit Ratio

Investment is one of the major credits created to earn profit. This implies the utilization of a bank's deposit on investment in government securities, shares and debenture of other companies and banks. A high ratio is the indicator of high success to mobilize the banking fund as investment and vice versa.

We have,

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

Table 4.7**Total Investment to Total Deposit Ratio**

Banks	Fiscal year					Mean	S.D	C.V
	2005/06	2006/07	2007/8	2008/09	2009/10			
Everest	30.43%	27.41%	21.10%	17.84%	13.56%	22.07%	0.0689	31.20%
Himalayan	41.10%	39.35%	41.89%	25.12%	22.45%	33.98%	0.094	27.67%
Nabil	31.93%	38.32%	31.14%	28.99%	29.46%	31.97%	0.0375	11.73%

Source: Appendix-1

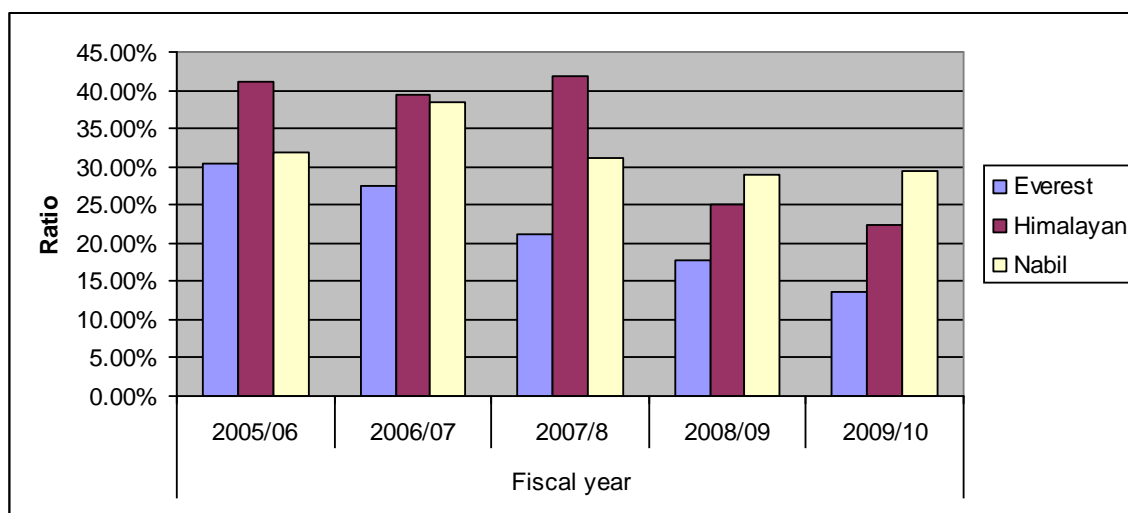
Figure 4.7**Total investment to Total Deposit Ratio (in %)**

Table measures the loan and advance to total deposit ratio of three banks of five consecutive years (2005/06 to 2009/10). The ratio has been ranged from 30.43% to 13.56% of EBL, 41.10% to 22.45% of HBL and 31.93% to 29.46% of Nabil. Ratios of these banks are fluctuating during the period. The ratios of these banks are in decreasing trend. The mean of EBL is 22.07% HBL is 33.98% and 31.97% of Nabil. The performance of these banks based in the mean, the performance of HBL is stronger than EBL and Nabil. S.D. of HBL (0.094) is more than EBL's (0.0689) and Nabil's (0.0375) S.D. C.V. of Nabil (11.73%) is less than EBL's (31.20%) and HBL's (27.67%) which shows that Nabil is more consistency than EBL and HBL. HBL is the best performer in utilization of its deposit in the form of investment. There are only

slight differences in utilization of deposit in the form of loan and advances of HBL and Nabil.

C. Loan and Advance to Total Working Fund Ratio

The working fund (Combination of current assets, fixed assets, other assets, Investment and Loan and advances) of commercial banks plays a very significant role in profit generation through fund development. This ratio reflects the extent to which the commercial banks are success in mobilizing their assets loan and advances for the purpose of income generation. Loan and advances is a vital part of total assets i.e. total working fund. Loan and advances is an important part of total working fund. A high ratio indicates better in mobilization of funds as loan and advances.

We have,

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

Table 4.8

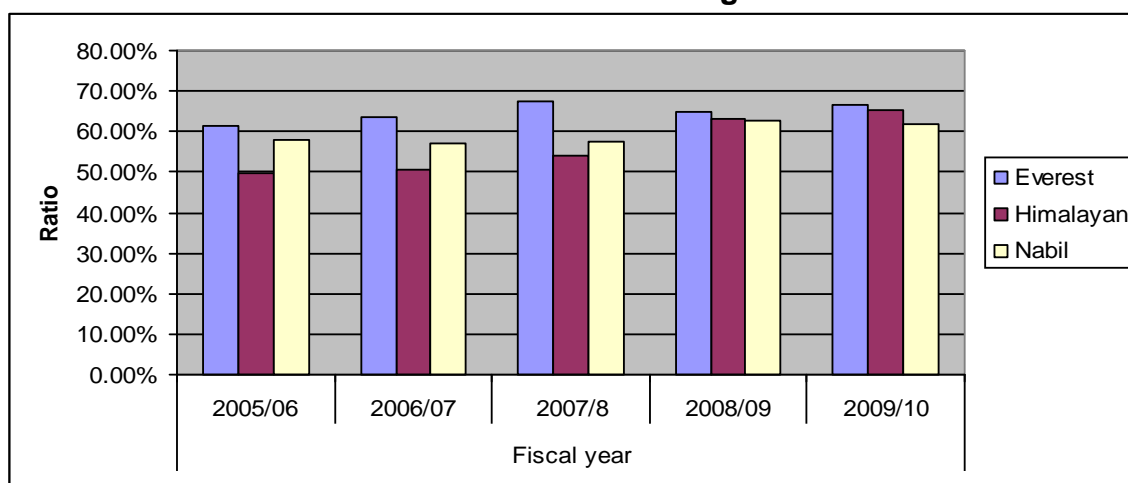
Loan and Advance to Total Working Fund Ratio

Banks	Fiscal year					Mean	S.D	C.V
	2005/06	2006/07	2007/8	2008/09	2009/10			
Everest	61.41%	63.75%	67.55%	64.70%	66.59%	64.80%	0.024	3.73%
Himalayan	49.70%	50.71%	53.90%	63.04%	65.50%	56.57%	0.073	12.82%
Nabil	57.87%	57.04%	57.54%	62.89%	61.88%	59.44%	0.027	4.58%

Source: Appendix-1

Figure 4.8

Loan and Advance to Total Working Fund Ratio



The table measures the loan and advances to total working fund ratio of three banks of five consecutive years (2005/06 to 2009/10). The ratio has been ranged from 61.41% to 66.59% of EBL, 49.70% to 65.50% of HBL and 57.87% to 61.88% of Nabil. EBL maintains highest ratio in 2009/10 during the period in comparison of HBL and Nabil. The mean of EBL is greater than HBL and Nabil, which shows that EBL highly utilizes its fund as investment in loan and advances. S.D. of HBL (0.073) is more than EBL's (0.024) and Nabil's (0.027). C.V. of HBL is more than EBL and Nabil EBL is more success in the case of working fund on loan and advance and EBL is more consistency than HBL and Nabil.

D. Investment on Government Securities to Total Working Fund Ratio

Commercial banks must not utilize all their resources in loan and advances and other credit from security and liquidity point of view. Commercial bank mobilizes its some fund by purchasing government securities. A government security is a risk free investment. Government securities are a safe medium of investment though it is not as liquid as cash and bank balance, this ratio is very important to know the extent to which the banks are successful in mobilizing their total fund on different types of government securities to generate profit.

We have,

Investment on Government Securities to Total Working Fund

$$= \frac{\text{Investment on Government Securities}}{\text{Total Working Fund}}$$

Table 4.9

Investment on Government Securities to Total Working Fund Ratio

Banks	Fiscal year					Mean	S.D	C.V
	2005/06	2006/07	2007/8	2008/09	2009/10			
Everest	22.24%	21.95%	17.76%	5.72%	10.52%	15.64%	0.0729	46.60%
Himalayan	17.46%	19.26%	20.65%	10.71%	10.45%	15.71%	0.0481	30.65%
Nabil	10.31%	17.64%	12.51%	8.45%	15.23%	12.83%	0.0369	28.80%

Source: Appendix-1

Figure 4.9
Investment on Government Securities to Total Working Fund Ratio

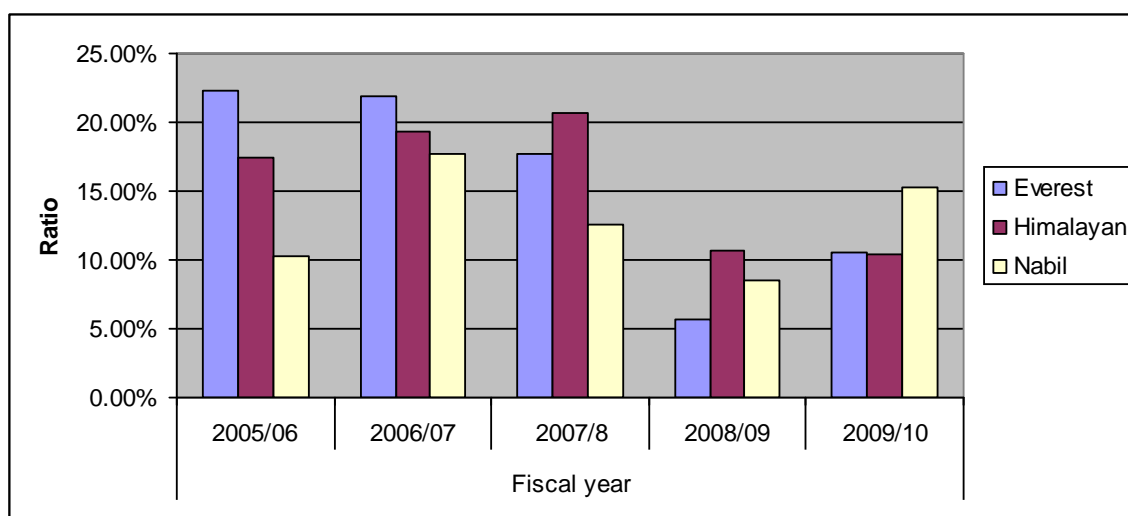


Table measures the Investment of government securities to total working fund ratio of three banks of five consecutive years (2005/06 to 2009/10). The ratio has been ranged from 22.24% to 10.52% of EBL, 17.46% to 10.45% of HBL and 10.31% to 15.23% of Nabil. EBL maintains highest ratio in 2005/06, where HBL maintains highest ratio in 2007/08. Nabil maintains highest ratio in 2006/07. Ratios of these banks are fluctuating during the period.

The mean ratio of EBL is 15.64% and 15.71% HBL, which are more than Nabil's 12.83%. According to mean performance, Nabil is weak than EBL and HBL. S.D. of Nabil (0.036) is less than S.D. of EBL (0.0729) and HBL (0.0481). Which shows that ratio of EBL is more fluctuate than Nabil's and HBL's ratio. The C.V. of EBL is 46.60%, which is greater than HBL's and Nabil's C.V. which shows than EBL is less consistency than HBL and Nabil.

E. Investment on Share and Debenture to Total Working Fund Ratio

This ratio shows the relation between the bank's investment on shares and debentures and total working fund. The investment on shares and debentures portion of the ratio includes investment on debentures, shares and bonds of other companies. Commercial banks may invest in share and debenture of any one organization institution not exceeding than 10% of the paid of capital of such organization.

We have,

Investment on Share and Debenture to Total Working Fund Ratio

$$= \frac{\text{Investment on Share and Debenture}}{\text{Total Working Fund}}$$

Table 4.10

Investment on Share and Debenture to Total Working Fund Ratio

Banks	Fiscal year					Mean	S.D	C.V
	2005/06	2006/07	2007/8	2008/09	2009/10			
Everest	0.12%	0.09%	0.37%	0.27%	0.24%	0.22%	0.0011	52.3%
Himalayan	0.13%	0.22%	0.25%	0.24%	0.18%	0.20%	0.0005	23.3%
Nabil	0.47%	1.05%	5.18%	0.81%	0.67%	1.63%	0.0199	121.9%

Source: Appendix-1

Figure 4.10

Investment on Share and Debenture to Total Working Fund Ratio

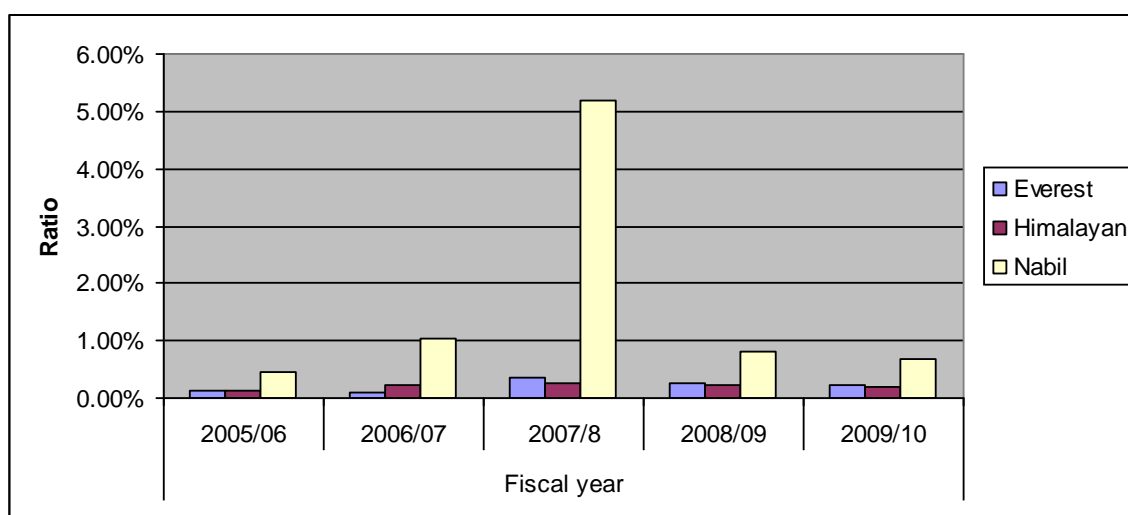


Table measures the Investment on share and debenture to total working fund ratio of three banks of five consecutive years (2005/06 to 2009/10). The ratio has been ranged from 0.12% to 0.24% of EBL, 0.13% to 20.18% of HBL and 20.47% to 0.67% of Nabil. The ratios of these banks fluctuate during the period.

The mean of EBL is 0.22%, HBL's 0.20% and Nabil's 1.63%. If we measure the performance of mean, the performance of Nabil is stronger than EBL and HBL. S.D.

of EBL is 0.0011 where as 0.0005 of HBL and 0.0199 of Nabil, which shows that. Investment on share and debenture to total working fund ratio of Nabil is more fluctuate than EBL and HBL. C.V. of HBL (23.3%) is less than EBL's (52.3%) and Nabil's (121.9%). It means HBL consistently invest its working fund in share and debenture than EBL and Nabil. Nabil's consistency is so much less.

4.1.3 Profitability Ratio

Profitability ratios are computed to measure the efficiency of the bank in term of profit. Profit maximization is the major objectives of any commercial bank. It is the indicator of the financial performance of bank. Moreover higher the profitability ratio is better the financial performance of the bank and vice-versa.

A. Return on Total Working Fund Ratio

Return is the result of investment and it measures the profit earning capacity by utilizing available resources i.e. total assets. Return will be higher if the bank working fund is well manage and are efficiently utilized, maximizing taxes within legal options available will also improve the return.

We have,

$$\text{Return on Total Working Fund Ratio} = \frac{\text{Net Income}}{\text{Total Working Fund}}$$

Table 4.11
Return on Total Working Fund Ratio

Banks	Fiscal year					Mean	S.D	C.V
	2005/06	2006/07	2007/8	2008/09	2009/10			
Everest	1.49%	1.38%	1.66%	1.73%	2.01%	1.65%	0.0024184	14.62%
Himalayan	1.55%	1.47%	1.76%	1.91%	2.01%	1.74%	0.0023072	13.26%
Nabil	2.84%	2.47%	2.01%	2.35%	2.18%	2.37%	0.0031637	13.33%

Source: Appendix-1

Figure 4.11
Return on Total Working Fund Ratio

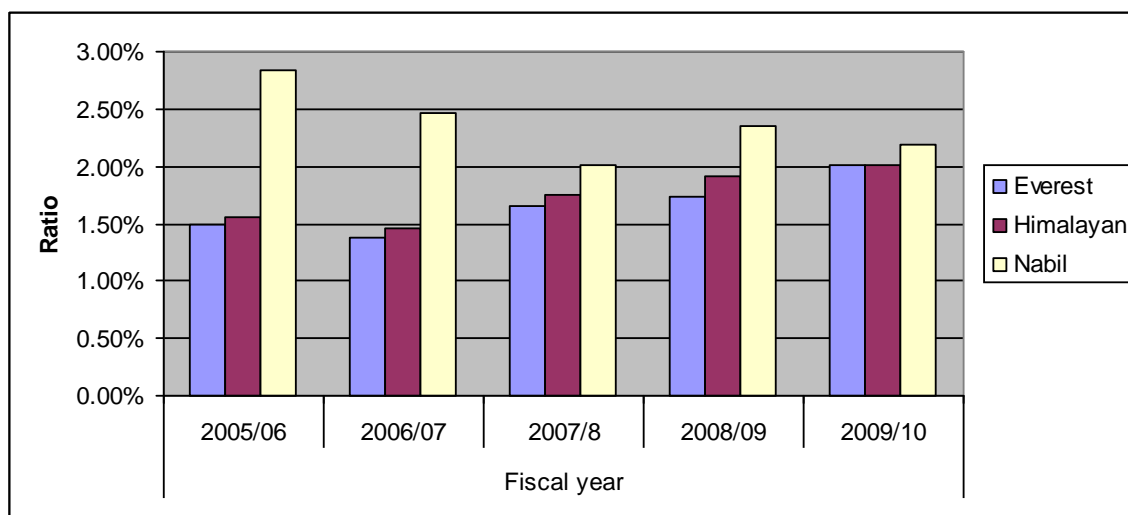


Table measures return on total working fund ratio of five consecutive years (2005/06 to 2009/10). The ratio has been ranged from 1.49% to 2.01% of EBL, 1.55% to 2.01% of HBL and 2.84% to 2.18% of Nabil. The ratio of EBL and HBL are in increasing trend. Whereas ratio of Nabil is in decreasing trend. EBL and HBL maintain highest ratio in 2009/10, whereas Nabil maintains highest ratio in 2005/06.

The mean ratio of EBL is 1.65%, 1.74% of HBL and 2.37% of Nabil. EBL has less efficiency to earn net profit than HBL and Nabil. In comparison of three banks Nabil has more efficiency to earn net profit. Similarly, C.V. of HBL is less than EBL's and Nabil's C.V. This implies that HBL ratios are more consistent than EBL and Nabil. From the above figure it can be said that Nabil is in strong position in the earning capacity by utilizing available resources than that of EBL and HBL. EBL and HBL must have to make effort to earn high profit by mobilizing its working assets more efficiently.

B. Total Earned to Total out Side Assets Ratio

This ratio measures the proportion of income in total income of the bank and contribution made by the lending and investing activity. Total Earned includes total income from loans, advances, cash credit and overdrafts, government securities, inter-bank and other investment. Total outside Assets includes loan and advances and all types of investment. Better the ratio better the performance.

We have,

$$\text{Total Earned to Total Out Side Assets Ratio} = \frac{\text{Total Earned}}{\text{Total outside Assets}}$$

Table 4.12
Total Earned to Total out Side Assets Ratio

Banks	Fiscal year					Mean	S.D	C.V
	2005/06	2006/07	2007/8	2008/09	2009/10			
Everest	6.44%	6.13%	6.59%	7.31%	9.50%	7.19%	0.0136	18.9%
Himalayan	6.36%	6.15%	5.96%	6.97%	8.63%	6.81%	0.0108	15.9%
Nabil	6.82%	6.41%	5.96%	7.22%	8.74%	7.03%	0.0107	15.2%

Source: Appendix-1

Figure 4.12
Total Intrest Earned to Total out Side Assets Ratio

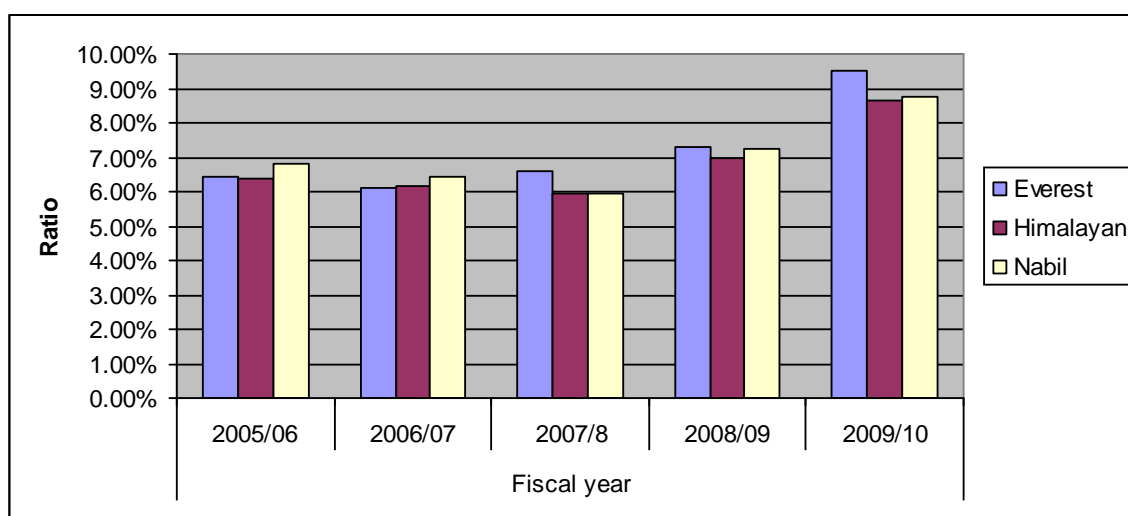


Table measures total earned to total outside assets ratio of five consecutive years (2005/06 to 2009/10). The ratio has been ranged from 6.44% to 9.50% of EBL, 6.36% to 8.63% of HBL and 6.82% to 8.74% of Nabil. The ratio of these banks is increasing during the period. EBL, HBL and Nabil maintain highest ratio in 2009/10 which shows that the performance of banks are going in better position.

The mean of HBL (6.81%) is less than mean of EBL (7.19%) and Nabil (7.03%). HBL has less efficiency to earn than EBL and Nabil. According to C.V EBL is less consistency than HBL and Nabil. Nabil is more consistency. From the above figure, it can be said that Nabil is in strong position in the earning capacity by utilizing

available resources than that of EBL and HBL. EBL and HBL must have to make effort to earn high profit by mobilizing its working assets more efficiently.

C. Return on Loan and Advance Ratio

This ratio measures the earning capacity of loan and advances. Moreover it indicates how efficiently the bank has mobilized its recourse in the form of loan and advances. A high ratio indicates greater return from mobilized fund as loan and advances and vice versa.

We have,

$$\text{Return on Loan and Advance Ratio} = \frac{\text{Net Income}}{\text{Loan and Advance}}$$

Table 4.13
Return on Loan and Advance Ratio

Banks	Fiscal year					Mean	S.D	C.V
	2005/06	2006/07	2007/8	2008/09	2009/10			
Everest	2.42%	2.17%	2.46%	2.67%	3.02%	2.55%	0.003	12.48%
Himalayan	3.12%	2.89%	3.26%	3.04%	1.82%	2.83%	0.006	20.49%
Nabil	4.92%	4.34%	3.49%	3.74%	3.53%	4.00%	0.006	15.29%

Source: Appendix-1

Figure 4.13
Return on Loan and Advance Ratio

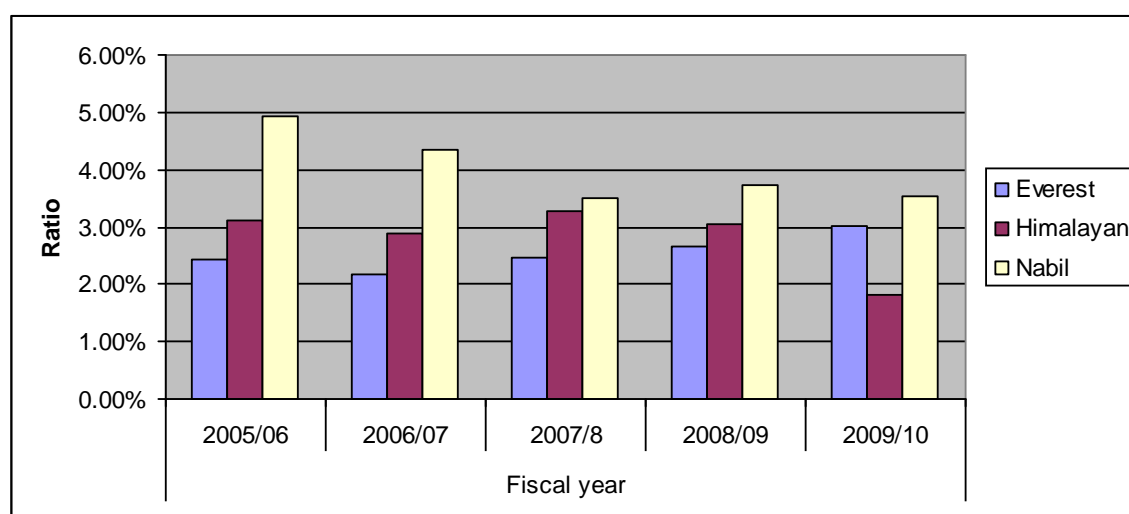


Table measures return on loan and advance ratio of five consecutive years (2005/06 to 2009/10). The ratio has been ranged from 2.42% to 3.02% of EBL, 3.12% to 1.82% of HBL and 4.92% to 3.53% of Nabil. The above table shows that the profitability ratio of three banks fluctuating. The ratio of EBL is in increasing trend. It maintains highest ratio (3.02%) in 2009/10. Where in 2009/10 HBL and Nabil maintains lowest ratio. If we measure the performance of these banks Nabil is in strong position to make greater return from mobilized fund as loan and advances.

The means of EBL is lower than HBL and Nabil. EBL has less efficiency to earn net profit than HBL and Nabil. Similarly, S.D. of HBL and Nabil is same and greater than EBL. It indicates that ratio of HBL and Nabil are more fluctuate then EBL. C.V. of EBL (12.48%) is less than C.V. of HBL (20.49%) and Nabil (15.29%). This implies that EBL is more consistent than HBL and Nabil.

D. Total Earned to Total Working Fund Ratio

Total earned to total working fund ratios reflects the extent to which the banks are successful in mobilizing their total assets to generate high income. A high ratio is indicator of high earning power of the bank on its total.

We have,

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

Table 4.14
Total Earned to Total Working Fund Ratio

Banks	Fiscal year					Mean	S.D	C.V
	2005/06	2006/07	2007/8	2008/09	2009/10			
Everest	5.66%	5.34%	5.70%	5.92%	7.50%	6.03%	0.008	14.09%
Himalayan	5.52%	5.30%	5.43%	5.96%	7.37%	5.91%	0.009	14.38%
Nabil	5.87%	5.83%	5.33%	6.38%	7.76%	6.23%	0.009	14.96%

Source: Appendix-1

Figure 4.14

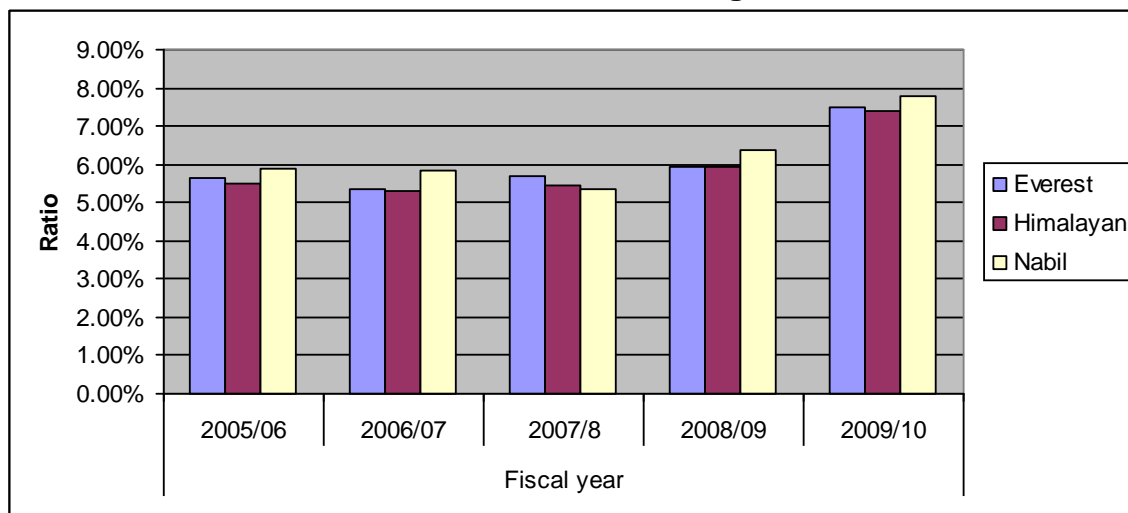
Total Intrest Earned to Total Working Fund Ratio

Table measures total earned to total working fund ratio. The ratio has been ranged from 5.66% to 7.50% of EBL, 5.52% to 7.37% of HBL and 5.87% to 7.76% of Nabil. The table shows that the profitability ratios of these banks are in increasing trends. All three banks maintain highest ratio in 2009/10.

The mean of Nabil (6.23%) is higher than EBL's (6.03%) and HBL's (5.91%). Nabil is more efficient to earn than EBL and HBL. Similarly, S.D of EBL is less than HBL and Nabil. C.V of Nabil is higher than EBL and HBL. It indicates that Nabil is less consistent than EBL and HBL. From the above figure, it can be said that Nabil is in strong position in the earning capacity by utilizing available resources than that of HBL and EBL.

E. Total Interest Paid to Total Working Fund Ratio

Total interest paid to total working fund ratio is defined as the ratio of total paid to total working fund. This ratio is calculated to find out the proportion of paid against the total working fund. Higher the ratio indicate the higher expenses on total working fund and vice-versa

We have,

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

Table 4.15
Total Paid to Total Working Fund Ratio

Banks	Fiscal year					Mean	S.D	C.V
	2005/06	2006/07	2007/8	2008/09	2009/10			
Everest	2.52%	2.41%	2.33%	2.74%	3.80%	2.76%	0.006	21.80%
Himalayan	2.20%	2.29%	2.28%	2.38%	3.64%	2.56%	0.006	23.75%
Nabil	1.60%	2.04%	2.04%	2.63%	3.76%	2.41%	0.008	34.64%

Source: Appendix-1

Figure 4.15
Total Intrest Paid to Total Working Fund Ratio

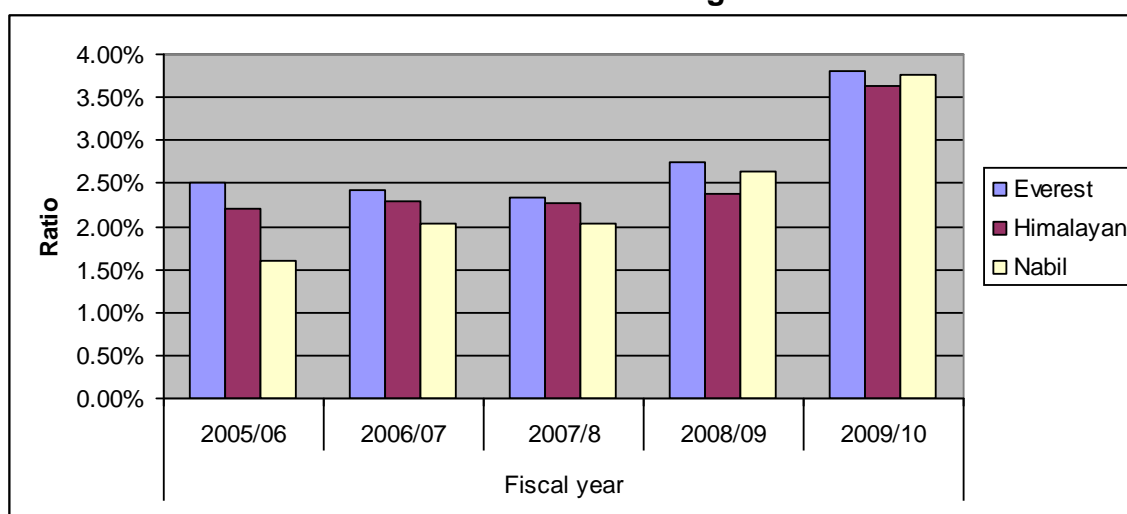


Table measures Total interest paid to Total working Fund Ratio of five consecutive years (2005/06 to 2009/10). The ratio has been ranged from 2.52% to 3.80% of EBL, 2.20% to 3.64% of HBL and 1.60% to 3.76% of Nabil. The above figure shows that the profitability ratios of these banks are in fluctuation trend. EBL (3.80%) is higher in 2009/10 than HBL (3.64%) and Nabil (3.76%).

The mean ratio of EBL (2.76%) is higher than HBL's (2.56%) and Nabil's (2.41%). Similarly S.D of Nabil is higher than EBL and HBL .It indicates that Nabil is more fluctuating than EBL and HBL. C.V of Nabil (34.60%) is higher than EBL (21.80%) and HBL (23.75%) which indicates that Nabil is less consistent than EBL and HBL.The total interest paid to total working fund ratio of EBL is more consistent than HBL and Nabil.

4.1.4 Risk Ratio

Risk is involved in any business and risk taking occurs while undertaking business of a bank. Higher the risk results higher the return. Risk is the chance of receiving actual returns other than expected, which simply means there is variability in the returns or outcomes from the investment. Risk ratio is very important in determining the extent of risk. The possibility of risk makes bank's investment a challenging task. Bank has to take risk to get return on investment. The risk taken is compensated by the increase in profit. Bank has to take high risk if it expects high return on its investment. So, the bank opting for high profit has to accept the risk and manage it effectively. Through the following ratios, effort has been made to measure the level of risk.

A. Credit Risk (Loan and Advance to Total Assets) Ratio

Credit risk ratio measures the possibility that loan will not be repaid or that investment will deteriorate in quality or go into default with consequent loss to the bank by definition. It is expressed as the percentage of non-performing loan to total loan and advances of the bank due to the lack of data in the ratio measure with the help of loan and advance to total assets. The ratio of total loan and advances to total assets measures the credit risk ratio.

We have,

$$\text{Credit Risk (Loan and Advance to Total Assets) Ratio} = \frac{\text{Loan and Advance}}{\text{Total Assets}}$$

Table 4.16

Credit Risk (Loan and Advance to Total Assets) Ratio

Banks	Fiscal year					Mean	S.D	C.V
	2005/06	2006/07	2007/8	2008/09	2009/10			
Everest	61.41%	63.75%	67.55%	64.70%	66.59%	64.80%	0.024	3.73%
Himalayan	49.70%	50.71%	53.90%	63.04%	65.50%	56.57%	0.073	12.82%
Nabil	57.87%	57.04%	57.54%	62.89%	61.88%	59.44%	0.027	4.58%

Source: Appendix-1

Figure 4.17
Credit Risk Ratio

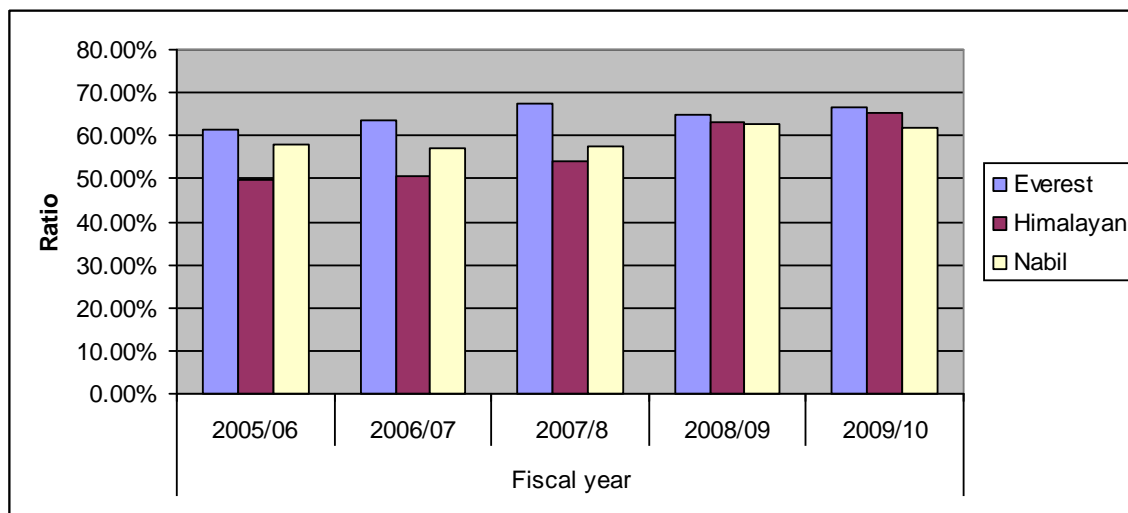


Table measures credit risk ratio of five consecutive years (2005/06 to 2009/10). The ratio has been ranged from 61.41% to 66.59% of EBL, 49.70% to 65.50% of HBL and 57.87% to 61.88% of Nabil. The ratio indicates that the performances of these banks are increasing. The ratio of EBL (66.59%) is higher in 2009/10 than HBL (65.50%) and Nabil (61.88%).

The mean of EBL (64.80%) is higher than HBL's (56.57%) and Nabil's (59.44%). EBL is in high credit risk than HBL and Nabil. Similarly, S.D of HBL (0.073) is higher than EBL's (0.024) and Nabil's (0.027). It indicates that ratio of HBL is more fluctuating than EBL and Nabil. C.V of HBL (12.82%) is higher than EBL's (3.73%) and Nabil's (4.58%) which shows that HBL is less consistent than EBL and Nabil. On the basis of mean we can say that credit risk of EBL is higher than HBL and Nabil. On the basis of C.V and S.D credit risk of HBL is less consistent and more fluctuate than EBL and Nabil.

B. Liquid Risk (Cash and Bank Balance to Total Deposit) Ratio

The liquidity risk ratio of a bank defines its liquidity need for deposits. The cash and bank balance are the most liquid assets and they are considered as bank's liquidity sources and deposits as the liquidity needs. The ratio of cash and bank balance to total deposits is an indicator of bank liquidity needs. The risk is low if funds are kept idle or as cash and bank balance but this affects profitability. When banks makes loan, it

increases its profitability and also the risk. Thus, higher liquidity ratio indicates less risk and less profitability or vice-versa.

We have,

Liquid Risk (Cash and Bank Balance to Total Deposit) Ratio=

$$\frac{\text{Cash and Bank Balance}}{\text{Total Deposit}}$$

Table 4.17

Liquid Risk (Cash and Bank Balance to Total Deposit) Ratio

Banks	Fiscal year					Mean	S.D	C.V
	2005/06	2006/07	2007/8	2008/09	2009/10			
Everest	11.25%	13.15%	11.13%	18.50%	21.17%	15.04%	4.55%	30.25%
Himalayan	6.48%	5.85%	4.55%	8.79%	10.28%	7.19%	2.31%	32.16%
Nabil	32.57%	6.00%	8.37%	9.03%	3.02%	11.80%	11.85%	100.46%

Source: Appendix-1

Figure 4.17

Liquid Risk Ratio

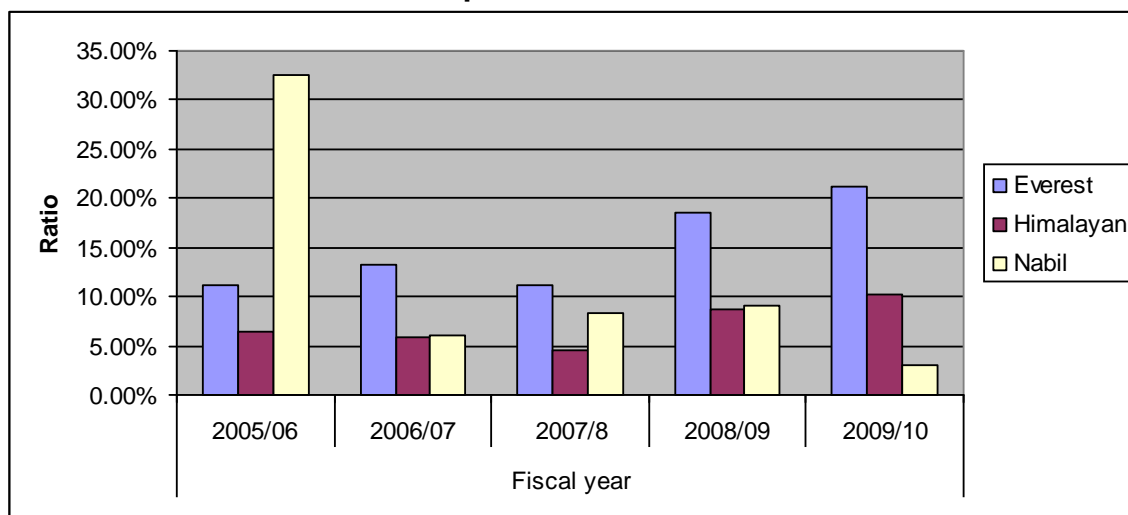


Table measures Liquid Risk ratio of three banks of five consecutive years (2005/06 to 2009/10). The ratio has been ranged from 11.25% to 21.17 of EBL, 6.48% to 10.28% of HBL and 32.57% to 3.02% of Nabil. Ratio of EBL and HBL are increasing through out the five year where ratio of Nabil is decreasing through out the five year. Nabil

maintain the highest ratio 32.57% in the 2005/06. The ratio of Nabil is lowest in the year 2009/10.

The mean of EBL is 15.04%, 7.19% of HBL and 11.80% of Nabil. If we measure the performance of these banks based in this mean, the performance of EBL is stronger than HBL and Nabil. S.D. of HBL (0.023) is less than EBL's (0.045) and Nabil's (0.119) which shows that Liquid ratio of Nabil more fluctuates than HBL's and EBL's ratio. According to C.V EBL is more consistent than HBL and Nabil. EBL's higher liquidity ratio indicates less risk and less profitability.

4.1.5 Growth Ratio

Growth ratio is directly related to find mobilization and investment decision of the bank. The growth ratios are calculated to examine and analysis the expansion and growth of the banking business during the study period. The higher ratios represent the better performance of the bank. This ratio represents how well the commercial banks are maintaining their economic and financial position. Growth ratio can be calculated by dividing the last period figure by the first period figure then by referring to the compound table the following ratios are calculated under growth ratios.

A). Growth Ratio of Total Deposit

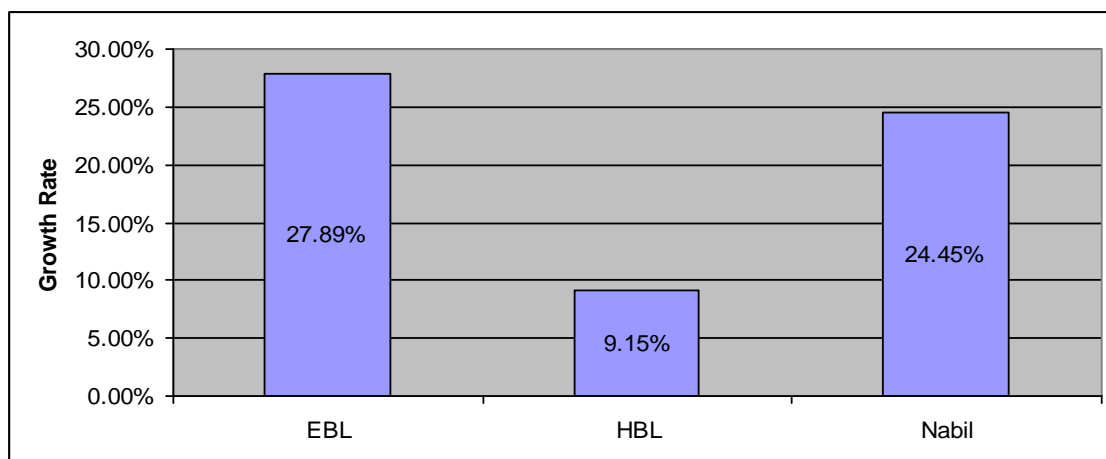
Growth ratios of total deposit of three banks are calculated to find out the trend of growth of the total deposits and to find better position of banks. The growth ratios are derived from the interpolation of the factor, which is calculated by dividing final year's deposit with initial deposit

Table 4.18
Growth Ratio of Total Deposit

Total Deposit			
Fiscal Year	EBL	HBL	Nabil
2005/06	13802.44	26490.85	19347.40
2006/07	18186.26	30048.42	23342.29
2007/08	23976.30	31842.79	31915.05
2008/09	33322.95	34682.31	37348.26
2009/10	36932.31	37611.20	46410.70
Growth	27.89%	9.15%	24.45%

Source: Appendix -2

Figure 4.18
Growth of Total Deposit



The table shows that the growth ratio of total deposits of HBL is less than EBL and Nabil. Growth rate of EBL is higher than HBL and Nabil. Above growth rate indicate that EBL uses to increase its deposits very highly than HBL and Nabil. HBL should increase its growth rate.

B). Growth Ratio of Loan and Advance

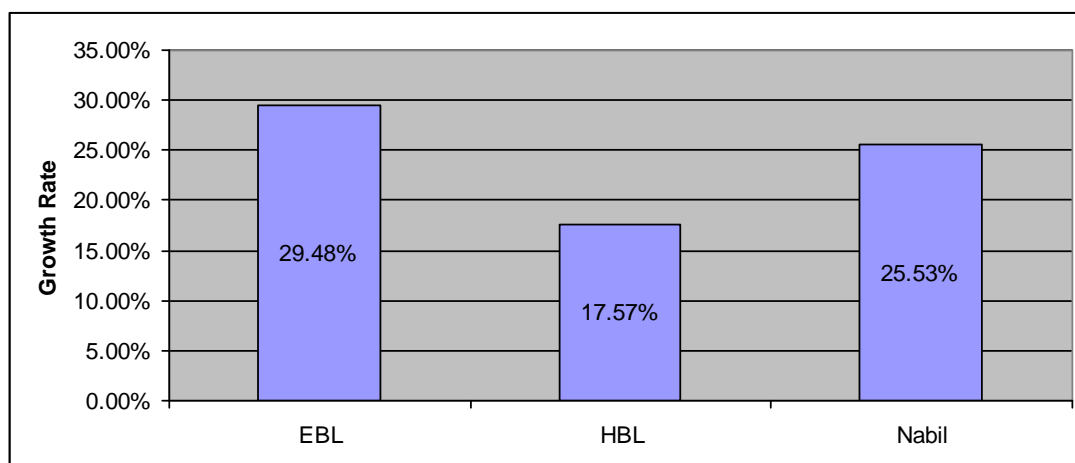
Growth ratio of total loan and advance of EBL, HBL and Nabil banks are calculated to find out the trend of growth of total loan and advances and to detect better position of banks. The growth ratio are derived from the interpolation of the factor, which is calculated by dividing final loan and advance with initial loan and advance.

Table 4.19
Growth Ratio of Loan and Advance

Loan and Advance			
Fiscal Year	EBL	HBL	Nabil
2005/06	9801.31	14642.56	12992.54
2006/07	13664.08	16998	15545.78
2007/08	18339.09	19497.52	21365.05
2008/09	23884.67	24793.16	27589.93
2009/10	27556.36	27980.63	32268.87
Growth	29.48%	17.57%	25.53%

Source: Appendix -3

Figure 4.19
Growth of Loan and Advance



The table shows that the growth of total loan and advance of HBL is less than EBL and Nabil. It shows that the growth rate of HBL (17.57%) is less than growth rate of EBL (29.48%) and Nabil (25.53%). Above growth rate indicate that EBL uses to increase its loan and advance very highly than HBL and Nabil.

C). Growth Ratio of Net Profit

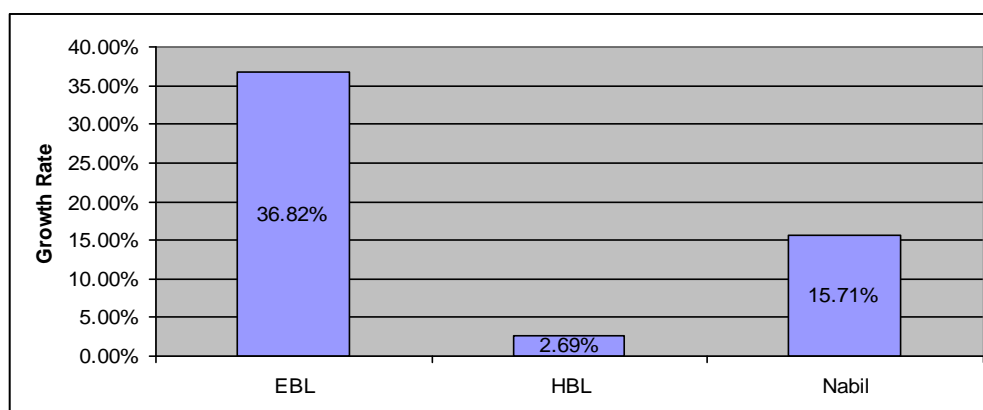
The growth on Net Profit shows the overall performance of the bank its shows that how efficiently banks use all its available resources in to income generating sector. Better the growth rate batter the performance and vice-versa.

Table 4.20
Growth Ratio of Net Profit

Net Profit			
Fiscal Year	EBL	HBL	Nabil
2005/06	237.29	457.46	635.26
2006/07	296.41	491.82	673.96
2007/08	451.22	635.87	746.47
2008/09	638.73	752.83	1031.05
2009/10	831.77	508.80	1139.10
Growth	36.82%	2.69%	15.71%

Sources: Appendix- 4

Figure 4.20
Growth Ratio of Net Profit



The table shows that the growth of net income of HBL is less than EBL and Nabil. It shows that the growth rate of HBL (2.69%) is less than growth rate of EBL (36.82%) and Nabil (15.71%). Above growth rate indicates that EBL uses to increase its net income very highly than HBL. It shows that EBL efficiently use all its available resource in profitable sector than HBL and Nabil.

D. Growth Ratio of Total Investment

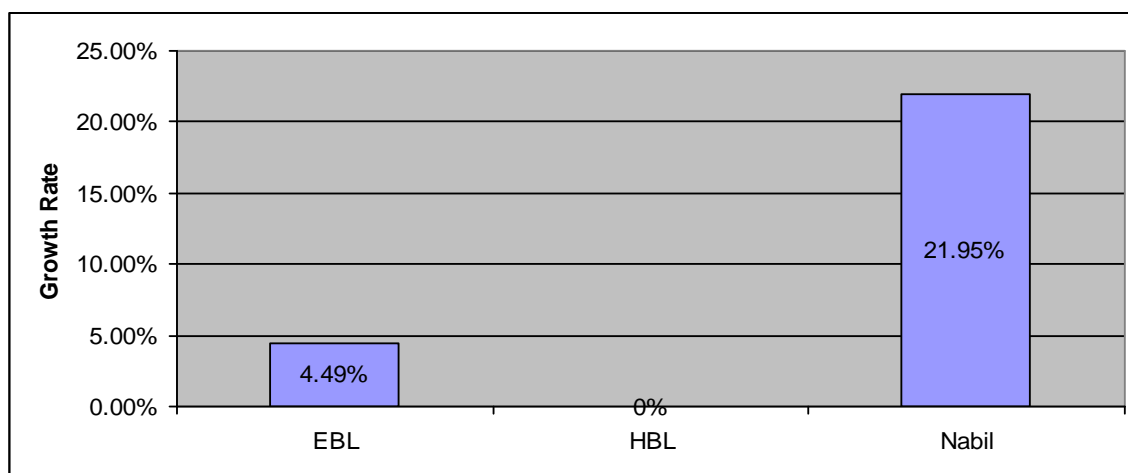
Growth ratio of total investment of EBL, HBL and Nabil bank are calculated to find out the trend of growth of total investment and to detect better position of banks. The growth ratio is derived from interpolation of the factor, which is calculated by dividing final investment with initial investment.

Table 4.21
Growth Ratio of Total Investment

Total investment			
Fiscal Year	HBL	EBL	Nabil
2005/06	4200.52	10889.03	6178.53
2006/07	4984.31	11822.98	8945.31
2007/08	5059.56	13340.18	9939.77
2008/09	5945.48	8710.69	10826.38
2009/10	5008.31	8444.91	13670.92
Growth	4.49%	0%	21.95%

Sources: Appendix- 5

Figure 4.21
Growth of Total Investment



The table shows that the growth rate of total investment of HBL is in negative form. It shows that the growth rate of HBL is in a decreasing trend. Above growth rate indicates that Nabil increases its total investment very highly than HBL and EBL. On the basis of growth rate, HBL is in a very poor condition. Nabil has a very high growth rate, whereas EBL has a very low growth rate.

4.2 Statistical Analysis

Under this chapter, some statistical tools such as trend analysis of deposit, loan and advances, investment and net profit, coefficient of correlation analysis between different variables are used to achieve the objective of the study.

4.2.1 Trend Analysis

The main objective of this analysis is to analyze the trend of deposit, loans and advances, investment and net profit of HBL, EBL and Nabil under five years of study period. Under this section we calculate the trend values of HBL, EBL and Nabil by using previous five years data (2005/06-2009/10) and forecast for next five years (2010/11-2014/15).

The following four variables are considered for the analysis of trend.

-) Trend Analysis of Total Deposit
-) Trend Analysis of Loan and Advances
-) Trend Analysis of Total Investment

J Trend Analysis of Net Profit

A. Trend Analysis of Total Deposit

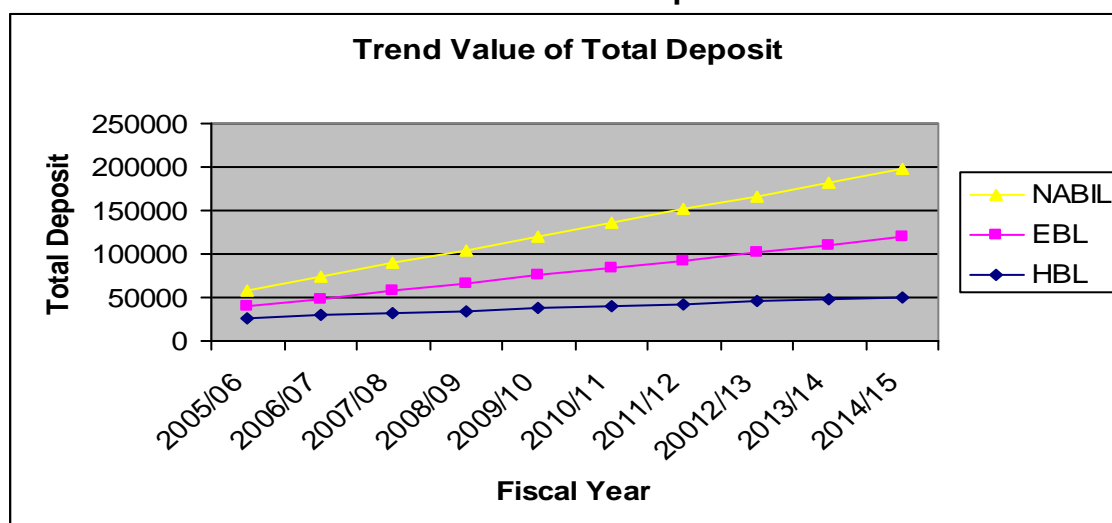
The trend analysis of total deposit of HBL, EBL and Nabil less than five years study period and projection of trend for the next five years is calculated. The following table describes the trend value of total deposit of the HBL, EBL and Nabil for five years.

Table 4.22
Trend Value of Total Deposit of HBL, EBL & Nabil

Fiscal Year	HBL	EBL	Nabil
2005/06	26759.92	12964.7	18246.16
2006/07	29447.46	19104.35	24959.45
2007/08	32135.00	25243.99	31672.72
2008/09	34822.5	31383.63	38385.99
2009/10	37510.06	37523.27	45099.26
2010/11	40197.62	43662.9	51812.53
2011/12	42885.10	49802.55	58525.80
2012/13	45572.90	55942.15	65239.07
2013/14	48260.24	62081.83	71952.34
2014/15	50947.70	68221.47	78665.61

Sources: Appendix- 6, 7, 8

Figure 4.22
Trend Value of Total Deposit



The above table shows that the trend value of total deposit of HBL, EBL and Nabil are in increasing trend if all other things remain constant. Nabil has the highest trend value of 78665.61 in the year 2014/15, EBL has the highest trend value of 68221.47 in the year 2014/15 and HBL has the highest trend value of 50947.70. The increasing trend of total deposits of these banks shows the good performance of the banks but trend value of total deposit of the Nabil is higher than EBL and HBL.

B. Trend Value of Loan and Advance

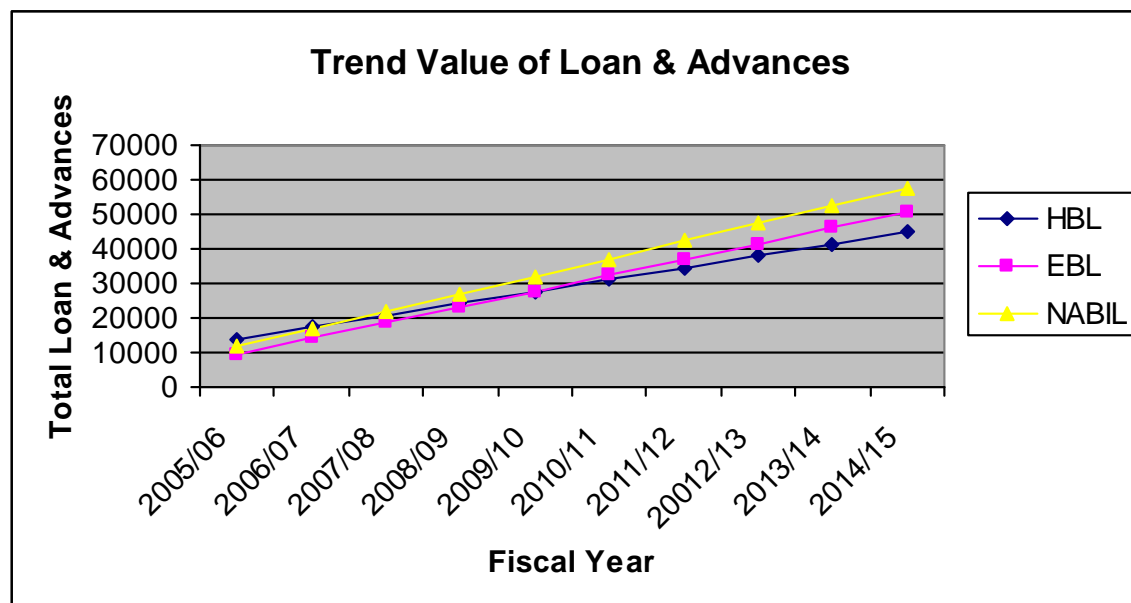
The trend analysis of Loan and advance of HBL, EBL and Nabil less than five years study period and projection of trend for the next five years is calculated. The following table describes the trend value of loan and advance of the HBL, EBL and Nabil for five years.

Table 4.23
Trend Value of Loan and Advance of HBL, EBL & Nabil

Fiscal Year	HBL	EBL	Nabil
2005/06	13888.114	9502.964	11791.072
2006/07	17335.244	14076.033	16864.753
2007/08	20782.374	18649.102	21938.434
2008/09	24229.504	23222.171	27012.115
2009/10	27676.634	27795.24	32085.796
2010/11	31123.764	32368.309	37159.477
2011/12	34570.894	36941.378	42233.158
2012/13	38018.024	41514.447	47306.839
2013/14	41465.154	46087.516	52380.52
2014/15	44912.284	50660.585	57454.201

Sources: Appendix- 9, 10, 11

Figure 4.23
Trend Value of Loan and Advance



The above table shows that the trend value of loan and advance of HBL, EBL and Nabil are in increasing trend if all other thing remains constant. HBL has the highest trend value of 44912.28 in the year 2014/15 and EBL has the highest trend value of 50660.58 in the year 2014/15 and Nabil has the highest trend value of 57454.20 in the year 2014/15. The increasing trend of loan and advance of these banks shows the good performance of the banks but trend value of loan and advance of the Nabil is higher than EBL & HBL.

C. Trend Value of Total Investment

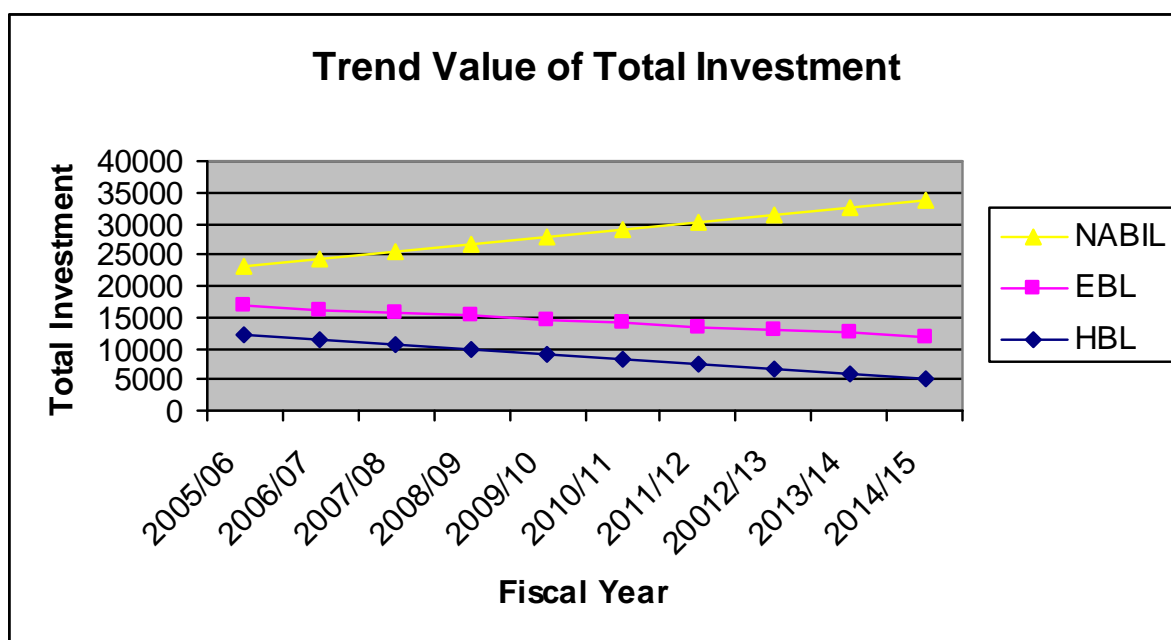
The trend analysis of Total investment of HBL, EBL and Nabil less than five years study period and projection of trend for the next five years is calculated. The following table describes the trend value of total investment of the HBL, EBL and Nabil for five years.

Table 4.24
Trend Value of Total Investment of HBL, EBL & Nabil

Fiscal Year	HBL	EBL	Nabil
2005/06	12241.664	4524.286	6539.012
2006/07	11441.611	4781.961	8225.597
2007/08	10641.558	5039.636	9912.182
2008/09	9841.505	5297.311	11598.767
2009/10	9041.452	5554.986	13285.352
2010/11	8241.399	5812.661	14971.937
2011/12	7441.346	6070.336	16658.522
2012/13	6641.293	6328.011	18345.107
2013/14	5841.24	6585.686	20031.692
2014/15	5041.187	6843.361	21718.277

Sources: Appendix- 12, 13, 14

Figure 4.24
Trend value of Total Investment



The above table shows that the trend value of total investment of EBL and Nabil are in increasing trend if all other thing remains constant. HBL has the highest trend value of 5041.187 in the year 2014/15 and EBL has the highest trend value of 6843.36 in the year 2014/15. Nabil has the highest trend value of 21718.27 in the year 2014/15. The increasing trend of total investment of banks EBL and Nabil shows the good performance of the banks but trend value of total investment of HBL is in decreasing trend .The trend value of total investment of Nabil is higher than EBL and HBL .

D. Trend Value of Net Profit

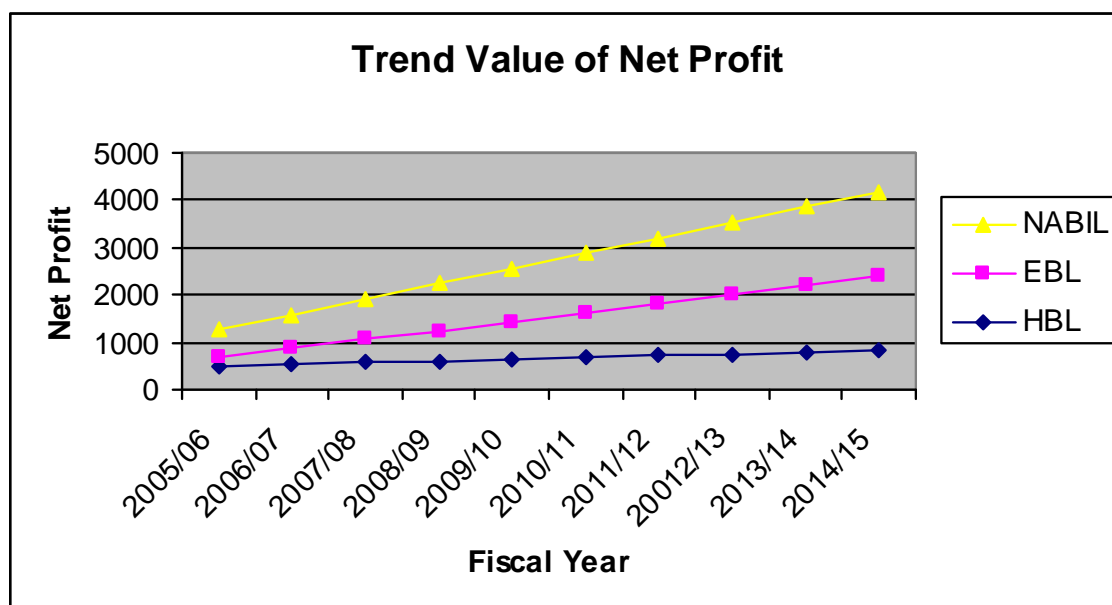
The trend analysis of net profit of HBL, EBL and Nabil less than five years study period and projection of trend for the next five years is calculated. The following table describes the trend value of net profit of the HBL, EBL and Nabil for five years.

Table 4.25
Trend Value of Net profit of HBL, EBL and Nabil

Fiscal Year	HBL	EBL	Nabil
2005/06	496.618	184.828	572.214
2006/07	532.987	337.956	708.691
2007/08	569.356	491.084	845.168
2008/09	605.725	644.212	981.645
2009/10	642.094	797.34	1118.122
2010/11	678.463	950.468	1254.599
2011/12	714.832	1103.596	1391.076
20012/13	751.201	1256.724	1527.553
2013/14	787.57	1409.852	1664.03
2014/15	823.939	1562.98	1800.507

Sources: Appendix- 15, 16, 17

Figure 4.25
Trend Value of Net Profit



The above table shows that the trend value of net Profit of HBL, EBL and Nabil are in increasing trend if all other thing remains constant. HBL has the highest trend value of 823.93 in the year 2014/15 and EBL has the highest trend value of 1,562.98 in the year 2014/15 .If we measure the performance of trend value, the performance of Nabil is higher 1,800.50 than HBL & EBL. The increasing trend of Net Profit of these banks shows the good performance of the banks but trend value of net profit of Nabil is higher.

4.2.2 Coefficient of Correlation Analysis

Coefficient of Correlation is the measure of correlation between two variables that summarizes correlation in one figure. If the change in the value of variable is accompanies by the change in the value of the other, the variables are said to be correlated. Analysis of correlation coefficient explains to what extent two variables are correlated. In this analysis Karl Pearson's Correlation Coefficient has been used to find out the relationship between variables. Correlation analysis describes the relationship between variables i.e. positive or negative. It helps to determine the following.

-) A positive or negative relationship exists.
-) The relationship is significant or insignificant.
-) Establish cause and effect relation if any.

A. Relationship between Total Deposit and Loan and Advance of HBL and EBL & Nabil

Coefficient of correlation between Total deposit and Loan & advance measures the relationship between Total deposit and Loan & advance. The main objectives of the calculation are to judge whether Deposits are significantly used on Loan & advance or not. Table shows correlation (r), coefficient of determination (r^2), probable error (P.Er) and 6 P.Er, of 2005/06 to 2009/10.

Table: 4.26

Relationship between Total Deposit and Loan & Advance of HBL, EBL & Nabil

Evaluation Criterion	R	r^2	P.Er.	6×P.Er.	Relation
HBL	0.984	0.9683	0.0100	0.0600	Significance
EBL	0.997	0.9940	0.0020	0.0120	Significance
Nabil	0.994	0.9880	0.0040	0.0240	Significance

Sources: Appendix- 18

The above table shows that the Correlation Coefficient between Total Deposit and Loans & advances of HBL, EBL and Nabil is 0.984, 0.997 and 0.994 respectively. For the study period of 2005/06 to 2009/10 which shows that the EBL and Nabil used its deposit on loan & advance more than HBL, Nabil used its deposit on loan & advance more than EBL. Total deposits are independent variable whereas Loan & advance is dependent variable. There is high degree of positive relationship between deposit and loans & advances of these three banks. Coefficient of determination ' r^2 ' of HBL, EBL and Nabil are 0.9683, 0.994 and 0.9880 respectively indicate that 96.83% of the dependent variable variation by independent variable of HBL and 99.40% of the dependent variable variation by independent variable of EBL and 98.80% of the dependent variable variation by independent variable of Nabil and rest from other thing. The value of 'r' is greater than '6 P.Er.' of these banks this shows that there is significance relationship between these variable of these three banks. This means Deposit of these three banks is significantly used on their Loan & advance.

B. Relationship between Total Deposit and Total Investment of HBL, EBL and Nabil

Coefficient of correlation between total deposit and total investment measures the relationship between total deposit and total investment. The main objectives of the calculation are to judge whether deposits are significantly used on total investment or not. Table shows correlation (r), coefficient of determination (r^2), probable error (P.Er) and 6 P.Er of 2005/06 to 2009/10.

Table 4.27

Relationship between Total Deposit and Total Investment of HBL and EBL & Nabil

Evaluation Criterion	R	r^2	P.Er.	6×P.Er.	Relation
HBL	-0.609	0.3709	0.1900	1.1400	No Significance
EBL	0.698	0.4872	0.1550	0.9300	No Significance
Nabil	0.967	0.9351	0.0190	0.1140	No Significance

Sources: Appendix- 19

The above table shows the Correlation Coefficient between Deposit and Total investment of HBL, EBL and Nabil are -0.609, 0.698 and 0.967 respectively. For the study period of 2005/06 to 2009/10 which shows that EBL and Nabil used its deposit on total investment more than HBL, Nabil used its Deposit on Total investment more than the EBL. Total deposits are independent variable whereas total investment is dependent variable. There is high degree of positive and negative relationship between Deposit and Total investment of these three banks. Coefficient of determination ' r^2 ' of HBL, EBL and Nabil are 0.3709, 0.4872 and 0.9351 respectively. This indicate that 37.09% of the dependent variable variation by independent variable of HBL and 48.72% of the dependent variable variation by independent variable of EBL and 93.51% of the dependent variable variation by independent variable of Nabil and rest from other thing. The value of ' r ' is less than '6 P.Er.' of these three banks, this shows that there is no significance relationship between these three banks variable. This means Deposit of these three banks is not significantly used on their Total Investment.

C. Relationship between Total Deposit and Net Profit of HBL, EBL & Nabil

Coefficient of correlation between total deposit and net income measures the relationship between total deposit and net income. The main objectives of the calculation are to judge whether deposits are significantly used on income generating activity or not. Table shows correlation (r), coefficient of determination (r^2), probable error (P.Er) and 6 P.Er of 2005/06 to 2009/10.

Table 4.28

Relationship between Total Deposit and Net Profit of HBL, EBL & Nabil

Evaluation Criterion	R	r^2	P.Er.	6×P.Er.	Relation
HBL	0.434	0.1884	0.2450	1.4700	No Significance
EBL	0.986	0.9722	0.0080	0.0480	Significance
Nabil	0.957	0.9158	0.0260	0.1560	Significance

Sources: Appendix- 20

The above table shows that the Correlation Coefficient between Deposit and Net profit of HBL, EBL and Nabil are 0.434, 0.986 and 0.957 respectively. For the study period of 2005/06 to 2009/10 which shows that EBL and Nabil used its deposit on income generating activity more than HBL, and EBL used its deposit on income generating activity more than Nabil. Total deposits are independent variable where as Net profit is dependent variable. There is high degree of positive relationship between Deposit and Net profit of these three banks. Coefficient of determination ' r^2 ' of HBL, EBL and Nabil are 0.1884, 0.9722 and 0.9158 respectively. This indicates that 18.84% of the dependent variable variation by independent variable of HBL and 97.22% of the dependent variable variation by independent variable of EBL, and 91.58% of the dependent variable variation by independent variable of Nabil and rest from other thing. The value of 'r' is less than the '6 P.Er.' of HBL, these shows that there is no significance relationship between the variable. This means the HBL does not used its Deposit on income generating activity. The value of 'r' is greater than the '6 P.Er.' of EBL and Nabil, this shows that there is significance relationship between these variable. This means the EBL and Nabil used its Deposit on income generating activity.

4.3 Major Findings of the Study

From the analysis of data following findings can be drawn.

1. The mean of Current ratio of EBL is 1.76, and 1.36 of HBL and 1.59 of Nabil. If we measure the performance of these banks based in this mean, the performance of HBL and Nabil is weak. EBL has maintained better than HBL and Nabil.
2. EBL maintains more cash and bank balance to current assets ratio than HBL and Nabil. According to C.V, HBL is more Consistency than Nabil and EBL.
3. Cash and bank balance to total deposit ratio of EBL is higher than HBL and Nabil. According to C.V Nabil maintains lower liquidity position than EBL and HBL.
4. HBL has invested its more portions of current assets in government securities than that of EBL and Nabil. Investment in government securities to current assets ratio of HBL is higher than EBL and Nabil. Which indicates that the better short liquidity position of HBL.
5. C.V of Nabil (4.74%) is less than EBL's (5.03%) and HBL's (8.52%), which shows that Nabil's ratio is more consistency than the EBL's and HBL's. It indicates that HBL maintains lower liquidity position than EBL and Nabil.
6. Loan and advance to total deposit ratio of EBL is higher than HBL and Nabil. If we measure the performance of HBL is weak than EBL and Nabil. It can be said that HBL is in lower position to mobilize its total deposit as loan and advance in comparison to EBL and Nabil.
7. Total Investment to total deposit ratio of HBL is higher than EBL and Nabil, according to mean. Nabil is more consistent than EBL and HBL. All in all, HBL is the best performer in utilization of its deposit in the form of investment. There is an only slight difference in utilization of deposit in the form of loan and advances of HBL and Nabil.
8. C.V of HBL is higher than EBL and Nabil. EBL is more success in the case of better utilization of its working fund on loan and advance and EBL is more consistent than HBL and Nabil.
9. The mean of investment on government securities to total working fund of HBL (15.71%) is higher than EBL's (15.64%) and Nabil's (12.83%). C.V. of EBL is more than C.V of HBL and Nabil. It shows that EBL is less consistent.

10. The mean of investment on share and debenture to total working fund ratio of Nabil is higher than EBL and HBL. It indicates that Nabil is investing more in share and debenture of its available resources. C.V. of HBL is less than C.V of EBL and Nabil. It shows that HBL is more consistently invest its working fund in share and debenture.
11. The mean ratio (Return on total working fund) of Nabil is higher than EBL and HBL. EBL has less efficiency to earn net profit. Similarly C.V. of HBL is less than EBL's and Nabil's C.V. This implies that HBL's ratio is more consistent than EBL and Nabil. From the above study Nabil is in strong position in the earning capacity by utilizing available resources.
12. The mean ratio (Total earned to total outside assets) of EBL is higher than HBL and Nabil. HBL has less efficiency to earn than EBL and Nabil. According to C.V. Nabil is more consistent than HBL and EBL.
13. The mean ratio (Return on loan and Advance) of Nabil (4%) is higher than EBL's (2.55%) and HBL's (2.83%). It indicates that Nabil is more efficient to earn net profit in terms of loan and advances. C.V. of EBL is less than HBL and Nabil. This implies that EBL is more consistent than HBL and Nabil.
14. The ratio of credit risk of HBL is less consistent than EBL and Nabil. On the basis of mean we can say that credit risk of EBL is higher than HBL and Nabil. On the basis of S.D HBL is more fluctuate than EBL and Nabil.
15. The mean of liquid risk ratio of EBL is higher than HBL and Nabil. It indicates that EBL's higher liquidity ratio indicates less risk and less profitability. On the basis of S.D, Nabil is more fluctuate than EBL and HBL. C.V of Nabil is more than EBL and HBL. EBL is more consistent than HBL and Nabil
16. Growth ratio of total deposit of EBL is more than HBL and Nabil. Growth ratio of total deposit of HBL is lower than EBL and Nabil. Growth rate indicates that EBL is used to increase its deposit very highly than HBL and Nabil.
17. Growth ratio of loan and advance of EBL is higher than HBL and Nabil. It shows that the growth rate of HBL (17. %&%) is less than EBL's (29.48%) and Nabil's (25.53%). Above growth rate indicate that EBL is used to increase its loan and advance very highly than HBL and Nabil.

18. Growth rate of net profit of EBL (36.82%) is higher than Nabil's (15.71%) and HBL's (2.69%). It shows that EBL has efficiently used all its available resource in profitable sector. HBL has to increase its growth rate of net profit.
19. The growth rate of total investment of Nabil (21.95%) is higher than EBL's (4.49%) and HBL's (0%). Growth rate of HBL is in decreasing trend. Above growth rate indicates that Nabil increases its total investment very highly than HBL and EBL.
20. The trend value of total deposit of HBL (50947.70) is higher in 2014/15, EBL has the highest trend value of 68221.47 in the year 2014/15 and Nabil has the highest trend value of 78665.61 in 2014/15. The increasing trend of total deposits of these banks shows the good performance but trend value of total deposits of Nabil is higher than EBL and HBL
21. Trend value of loan and advances is in increasing trend of EBL, HBL and Nabil. It shows the good performance of the banks but trend value of Nabil is higher than EBL and HBL.
22. Trend value of total investment of Nabil is higher than EBL and HBL. Trend value of total investment of HBL is in decreasing trend. The performance of EBL and Nabil is good. HBL has to improve the performance.
23. The trend value of net profit of HBL has the highest trend value of 82393 in the year 2014/15. EBL has the highest trend value of 1562.98 in 2014/15. Nabil has the highest trend value of 1800.50 in 2014/15. The increasing trend of net profit of these banks shows the good performance of the banks but trend value of net profit of Nabil is higher.
24. Correlation Coefficient between Total Deposit and Loans & advances of HBL, EBL and Nabil is 0.984, 0.997 and 0.994 respectively. For the study period of 2005/06 to 2009/10 it shows that the EBL and Nabil used its deposit on loan & advance more than HBL, and Nabil used its deposit on loan & advance more than EBL. The value of 'r' is greater than '6 P.Er.' of these banks this shows that there is significance relationship between these variable of these three banks. This means Deposit of these three banks is significantly used on their Loan & advance.
25. Correlation Coefficient between Deposit and Total investment of HBL, EBL and NABIL are -0.609, 0.698 and 0.967 respectively. For the study period of 2005/06 to 2009/10 it shows that EBL and Nabil used its deposit on total

investment more than HBL, and Nabil used its Deposit on Total investment more than the EBL. The value of 'r' is less than '6 P.Er.' of these three banks, this shows that there is no significance relationship between these three banks variable. This means Deposit of these three banks is not significantly used on their Total Investment.

26. Correlation Coefficient between Deposit and Net profit of HBL, EBL and Nabil are 0.434, 0.986 and 0.957 respectively. For the study period of 2005/06 to 2009/10 which shows that EBL and Nabil used its deposit on income generating activity more than HBL, and EBL used its deposit on income generating activity more than Nabil. The value of 'r' is less than the '6 P.Er.' of HBL, these shows that there is no significance relationship between the variable. This means the HBL does not used its Deposit on income generating activity. The value of 'r' is greater than the '6 P.Er.' of EBL and Nabil, this shows that there is significance relationship between these variable. This means the EBL and Nabil used its deposit on income generating activity.

CHAPTER V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter highlights some selected actionable conclusions and recommendation on the basis of the major findings of the study derived from the comparative analysis of HBL, HBL and Nabil. The study has covered 5 years data from the year 2005/06 to 2009/10. The major findings of the study based on financial and statistical analysis listed in chapter-4, of this report in order to carry out this study mainly secondary data are used. The analysis of the data is carried out with the help of various financial and statistical tools. The findings of the study are summarized and conclusion and some recommendation drawn as below:

5.1 Summary

Overall development of the country depends upon economic development of a country. Therefore every country has given emphasis in development of its economy. Commercial banks are the main financial institution, which collect scattered resources as deposit from the general public and mobilize that fund among those who are associated with the economic, commercial and social activities of a country as loan and advances and investment. A sound investment policy of a commercial bank plays a vital role for mobilization of fund and development of country. Investment grandly depends on the saving behaviors of that country. The amount of saving of a typical household in Nepal is small because of the people have limited opportunities for investment. They prefer to spend savings on commodities rather than on financial assets. This restricts the process of financial intermediation, which might otherwise bring benefit such as reduction of investment risk and increase in liquidity. Investments depend on development of the capital market also. It provides and allocates funds to firms with profitable investment opportunities and offers and avenue of liquidity for individuals to invest current income or borrow against future income.

Investments in its broad sense, means the sacrifice of current income and present value for future income. The different attributes are generally involved. The sacrifice takes place in the present and its magnitude as generally uncertain. An investment activity of the country also depends on the development of financial institution, as

financial institution is a key for investment. Industrial development is very important for economic development of any country. And there must be investment and productive activities for industrial development. Investment analysis is done to know and evaluate the investment policy which currently adapted by HBL, EBL and Nabil. Investment analysis help to identify the bank's current strengths and weaknesses and to suggest taking action that might enable the bank to take the advantage of its strength and correct its weaknesses.

The main objective of the study is to evaluate investment policy of EBL, HBL and Nabil and to suggest measure to improve the investment policy of the bank. This study is mainly based on secondary data from the year 2005/06 to 2009/10. The data have been basically obtained from annual reports and financial statements of related banks, official records, journals and bulletins, various published reports, relevant unpublished master's thesis and different related website. In this study, the financial tools ratio analysis liquidity ratio, assets management ratio, profitability ratio, risk ratio, growth ratio and statistical tools like mean, standards deviation, coefficient of variation, trend analysis, correlation coefficient and have been used for the analysis and interpretation of the data. The various ratios show the investment position of the EBL, HBL and Nabil, over the five years period. Correlation analysis helps to establish the relationship between two variables, which can be useful to know how one variable affects another. Similarly, trend analysis is used to find out the trend of some important tool like total deposit, loan and advances, net profit and total investment on the basic of past data of the bank. This can be used to predict the value of these elements in future

5.2 Conclusion

On the basis of the major findings of the study derived from the comparative analysis of HBL, EBL and Nabil. The overall performance of Everest Bank Limited (EBL) and Nabil Bank Limited (Nabil) are satisfactory than Himalayan Bank Limited (HBL). Following conclusion can be made after analysis the performance of concern bank.

-) The liquidity position of the EBL is comparatively higher than that of the HBL and Nabil. Cash and Bank Balance to total deposit Ratio of EBL is consistence than HBL and Nabil. HBL maintains lower liquidity position than EBL and Nabil on the view of Loan and advance to current assets ratio. HBL

mobilizes its total deposit as loan and advance lower than EBL and Nabil in comparison.

-) The assets management ratio shows that, HBL has stronger investment policy towards loan and advances to total deposit, Investment on government securities to total working fund and total investment to total deposit. Loan and advance to total working fund of EBL is greater than HBL & Nabil, Nabil has stronger in investment on shares and debentures to total working fund. Out of five assets management ratio three ratios (investment on government securities to total working fund and investment on share and debenture to total working fund) of HBL is more consistence than EBL & Nabil and two ratios (loan and advance to total deposit and loan and advance to total working fund) of EBL is mores consistence than HBL & Nabil. Total investment to total deposit ratio of Nabil is more consistent than EBL &HBL.
-) The profitability ratios shows that, returns on loans and advances, return on total working fund, total increase earned to total working fund ratio and of Nabil bank ltd is greater than Everest bank ltd & Himilayan Bank Ltd.Total interest paid to total working fund ratio of Everest bank ltd is greater than Himalayan bank ltd and Nabil bank ltd.Return on Loan & advance and total interest paid to total working fund ratio of EBL is more consistence than HBL & Nabil..
-) From the view point of risk ratio, credit risk (loan and advance to total assets ratio) and liquidity risk (cash and bank balance to total deposit ratio) of Everest bank ltd is higher than that of Himalayan bank limited and Nabil Bank Ltd.From the analysis of growth ratio of total deposit, loan and advance, net profit of EBL is higher than HBL & Nabil. Growth ratio of total investment of Nabil is higher than EBL and HBL.Trend value of total deposit, loan and advance and total investment of Nabil has better increasing trend than EBL & HBL.Coefficiant of correlatio between total deposit and loan and advance of three banks are significant. Coefficiant of correlatio between total deposit and total investment of EBL, HBL and Nabil is not significant. Coefficiant of correlatio between total deposit and net profit of EBL & Nabil is significant.

This means that EBL and Nabil used its deposit on income generating activities.

5.3 Recommendations

Based on above findings and conclusion the following recommendations have been forwarded.

-) As HBL has maintained the ratio of cash and bank balance to total deposit lower than that of EBL and Nabil. It is recommended to increase cash and bank balance to meet current obligations and loan demand. Banks should increase the liquid fund for meeting the cash demand of deposit holders.
-) The study shows that HBL, EBL and Nabil are decreasing their investment in government securities and so is recommended to invest more funds in this sector and not making them idle because govt. securities are the less risky assets.
-) The loan and advances to total deposit of HBL's is lower than EBL and Nabil which indicates it has not properly used its fund as loan and advances. Hence, HBL is recommended to follow liberal policy.
-) The profitability position of HBL and Nabil is greater than EBL. So, it is recommended that EBL should properly utilize its loan and advances investment should be done on less risky assets, decrease the expenses by controlling the operating expenses. So, it can earn more profit.
-) The credit risk and liquidity risk taken by HBL is lower than that of EBL and Nabil, and Nabil's consistency is unstable which may result in loss. The bank should not take high risk, these banks should carefully analyze in above risk to achieve higher returns.
-) HBL growth ratio is lower than that of EBL and Nabil. It has very much fluctuating growth rate. Growth rate of investment of HBL is in negative position. HBL is recommended to increase its growth ratio into deposits, loans

and advances, investment and net profit by designing new products and services to the depositors in order to attract them.

-) Coefficient of correlation between total deposit and net profit of EBL and Nabil is significant but HBL is not significant. However coefficient of correlation between total deposit and net profit, total deposit and loan and advance of EBL are higher significant than that of HBL and Nabil. It shows that there is highly positive relationship between variables of both banks. So, HBL innovate new strategy changing its current policy for more utilizing its investment to earn more profit to compete with the EBL and Nabil.
-) The commercial banks i.e. Everest Bank, Himalayan Bank Limited and Nabil Bank limited should go for some new areas of investment like hydroelectricity, infrastructure development and information technology of the economy as well as bank's operation.
-) Everest Bank and Himalayan Bank and Nabil Bank should target their business segment on the middle class family. So that they can earn more customer and generate more deposit amount.
-) All these three commercial banks should support the social welfare event to promote the business. The bank should formulate new strategies of serving customers in a more convenient way.
-) These commercial banks must increases there financial market for that they have to open their branches in remote areas at present which locate only in city areas.
-) Now a days every customer use ATM cards. So these banks should open their ATM center as per customers demand. Charge of using other banks ATM is high so they have to decrease the charge of using other banks' ATM.
-) There is scope of study on the comparative study on investment policy of government sector banks and private sector banks.

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Himilayan Bank Limited (HBL)

(Rs. In Million)

S.No	Particulars	062/63(05/06)	063/64(06/07)	064/65(07/08)	065/66(08/09)	066/67(09/10)
1	Current assets	23,153.11	27,564.20	29,570.65	33,856.85	37,675.72
2	Current liabilities	20,309.74	22,102.61	23,633.23	24,307.22	21,207.02
3	Cash & bank balance	1,717.35	1,757.34	1,448.14	3,048.53	3,866.49
4	Total deposit	26,490.85	30,048.42	31,842.79	34,682.31	37,611.20
5	Investment on government securities	5,144.31	6,454.87	7,471.67	4,212.30	4,465.37
6	Loan & advances	14,642.56	16,998.00	19,497.52	24,793.16	27,980.63
7	Total investment	10,889.03	11,822.98	13,340.18	8,710.69	8,444.91
8	Investment on share & dedenture	38.57	73.42	89.56	93.88	78.88
9	Total interest earned	1,626.47	1,775.58	1,963.65	2,342.20	3,148.61

10	Total interest paid	648.84	767.41	823.74	934.78	1,553.53
11	Total Assets	29,460.39	33,519.14	36,175.53	39,330.13	42,717.12
12	Total outside assets	25,570.16	28,894.41	32,927.26	33,597.73	36,504.42
13	Net profit	457.46	491.82	635.87	752.83	508.80

(Sources : Five years Annual Financial Report of Himalayan Bank Ltd.)

Appendix – 2 Growth of Total Deposit

Fiscal Year	EBL	HBL	Nabil
2005/06	13802.44	26490.85	19347.40
2006/07	18186.26	30048.42	23342.29
2007/08	23976.30	31842.79	31915.05
2008/09	33322.95	34682.31	37348.26
2009/10	36932.31	37611.20	46410.70
Growth	27.89%	9.15%	24.45%

Growth rate can be calculated as follows:-

Here,

D_n = Total deposit in F/Y 2009/10

D_0 = Total deposit in F/Y 2005/06

g = Growth rate

n = no. of observation = 5

We have, $D_n = D_0(1+g)^{n-1}$

EBL

$$D_n = D_0(1+g)^{n-1}$$

$$D_{2009/10} = D_{2005/06}(1+g)^{5-1}$$

$$36932.31 = 13802.44(1+g)^4$$

$$1+g = 1.2789$$

$$g = 0.2789, \text{ or}$$

$$g = 27.89\%$$

HBL

$$D_n = D_0(1+g)^{n-1}$$

$$D_{2009/10} = D_{2005/06}(1+g)^{5-1}$$

$$37611.20 = 26490.85(1+g)^4$$

$$1+g = 1.0915$$

$$g = 0.0915, \text{ or}$$

$$g = 9.15\%$$

NABIL

$$D_n = D_0(1+g)^{n-1}$$

$$D_{2009/10} = D_{2005/06}(1+g)^{5-1}$$

$$46410 = 19347.40(1+g)^4$$

$$1+g = 1.2445$$

$$g = 0.2445, \text{ or}$$

$$g = 24.45\%$$

Appendix - 3 Growth of Loan & Advances

Fiscal Year	EBL	HBL	Nabil
2005/06	9801.31	14642.56	12992.54
2006/07	13664.08	16998	15545.78
2007/08	18339.09	19497.52	21365.05
2008/09	23884.67	24793.16	27589.93
2009/10	27556.36	27980.63	32268.87
Growth	29.48%	17.57%	25.53%

Growth rate can be calculated as follows:-

Here,

D_n = Loan & Advances of F/Y 2009/10

D_0 = Loan & Advances of F/Y 2005/06

g = Growth rate

n = no. of observation = 5

We have, $D_n = D_0(1+g)^{n-1}$

EBL

$$D_n = D_0(1+g)^{n-1}$$

$$D_{2009/10} = D_{2005/06}(1+g)^{5-1}$$

$$27556.36 = 9801.31(1+g)^4$$

$$1+g = 1.2948$$

$$g = 0.2948, \text{ or}$$

$$g = 29.48\%$$

HBL

$$D_n = D_0(1+g)^{n-1}$$

$$D_{2009/10} = D_{2005/06}(1+g)^{5-1}$$

$$27980.63 = 14642.56(1+g)^4$$

$$1+g = 1.1757$$

$$g = 0.1757, \text{ or}$$

$$g = 17.57\%$$

NABIL

$$D_n = D_0(1+g)^{n-1}$$

$$D_{2009/10} = D_{2005/06}(1+g)^{5-1}$$

$$32268.87 = 12992.54(1+g)^4$$

$$1+g = 1.2553$$

$$g = 0.2553, \text{ or}$$

$$g = 25.53\%$$

Appendix - 4 Growth of Net Profit

Fiscal Year	EBL	HBL	Nabil
2005/06	237.29	457.46	635.26
2006/07	296.41	491.82	673.96
2007/08	451.22	635.87	746.47
2008/09	638.73	752.83	1031.05
2009/10	831.77	508.80	1139.10
Growth	36.82%	2.69%	15.71%

Growth rate can be calculated as follows:-

Here,

D_n = Net Profit of F/Y 2009/10

D_0 = Net Profit of F/Y 2005/06

g = Growth rate

n = no. of observation = 5

We have, $D_n = D_0(1+g)^{n-1}$

EBL

$$D_n = D_0(1+g)^{n-1}$$

$$D_{2009/10} = D_{2005/06}(1+g)^{5-1}$$

$$831.77 = 237.29(1+g)^4$$

$$1+g = 1.3682$$

$$g = 0.3682, \text{ or}$$

$$g = 36.82\%$$

HBL

$$D_n = D_0(1+g)^{n-1}$$

$$D_{2009/10} = D_{2005/06}(1+g)^{5-1}$$

$$508.80 = 457.46(1+g)^4$$

$$1+g = 1.0269$$

$$g = 0.0269, \text{ or}$$

$$g = 2.69\%$$

NABIL

$$D_n = D_0(1+g)^{n-1}$$

$$D_{2009/10} = D_{2005/06}(1+g)^{5-1}$$

$$1139.10 = 635.26(1+g)^4$$

$$1+g = 1.1571$$

$$g = 0.1571, \text{ or}$$

$$g = 15.71\%$$

Appendix - 5 Growth of Total Investment

Fiscal Year	EBL	HBL	Nabil
2005/06	4200.52	10889.03	6178.53
2006/07	4984.31	11822.98	8945.31
2007/08	5059.56	13340.18	9939.77
2008/09	5945.48	8710.69	10826.38
2009/10	5008.31	8444.91	13670.92
Growth	4.49%	0%	21.95%

Growth rate can be calculated as follows:-

Here,

D_n = Total Investment of F/Y 2009/10

D_0 = Total Investment of F/Y 2005/06

g = Growth rate

n = no. of observation = 5

We have, $D_n = D_0(1+g)^{n-1}$

EBL

$$D_n = D_0(1+g)^{n-1}$$

$$D_{2009/10} = D_{2005/06}(1+g)^{5-1}$$

$$5008.31 = 4200.52(1+g)^4$$

$$1+g = 1.0449$$

$$g = 0.0449, \text{ or}$$

$$g = 4.49\%$$

HBL

$$D_n = D_0(1+g)^{n-1}$$

$$D_{2009/10} = D_{2005/06}(1+g)^{5-1}$$

$$8444.91 = 10889.03(1+g)^4$$

$$1+g = 0$$

$$g = 0, \text{ or}$$

$$g = 0\%$$

NABIL

$$D_n = D_0(1+g)^{n-1}$$

$$D_{2009/10} = D_{2005/06}(1+g)^{5-1}$$

$$13670.92 = 6178.53(1+g)^4$$

$$1+g = 1.2195$$

$$g = 0.2195, \text{ or}$$

$$g = 21.95\%$$

Appendix - 6
Trend analysis of Deposit of HBL

Fiscal year (T)	Total Deposit (Y)	X = T - 2008	X ²	XY
2005/06	26490.85	-2	4	-52981
2006/07	30048.42	-1	1	-30048.42
2007/08	31842.79	0	0	0
2008/09	34682.31	1	1	34682.31
2009/10	37611.20	2	4	75222.1
	$\sum Y = 160675.57$		$\sum X^2 = 10$	$\sum XY = 26875.4$

Let, 2005/06 = 2006 & so on

Here,

N = 5

Now,

$$a = \frac{Y}{N} = \frac{160675.5}{5} = 32135$$

$$b = \frac{XY}{X^2} = \frac{26875.4}{10} = 2687.54$$

Trend Value of Deposit of HBL (2005/06 to 2014/15)

Fiscal year (T)	X = T - 2008	Y _c = a + bX
2005/06	-2	26759.92
2006/07	-1	29447.46
2007/08	0	32135.00
2008/09	1	34822.5
2009/10	2	37510.06
2010/11	3	40197.62
2011/12	4	42885.10
2012/13	5	45572.90
2013/14	6	48260.24
2014/15	7	50947.70

Appendix - 7
Trend analysis of Deposit of EBL

Fiscal year (T)	Total Deposit (Y)	X = T - 2008	X²	XY
2005/06	13802.44	-2	4	-27604.86
2006/07	18186.26	-1	1	-18186.26
2007/08	23976.30	0	0	0
2008/09	33322.95	1	1	33322.95
2009/10	36932.31	2	4	73864.62
	∑Y = 126219.96		∑X² = 10	∑XY = 61396.44

Let, 2005/06 = 2006 & so on

Here,

N = 5

Now,

$$a = \frac{Y}{N} = \frac{126219.96}{5} = 25243.99$$

$$b = \frac{XY}{X^2} = \frac{61396.44}{10} = 6139.64$$

Trend Value of Deposit of EBL (2005/06 to 2014/15)

Fiscal year (T)	X = T - 2008	Yc = a + bX
2005/06	-2	12964.7
2006/07	-1	19104.35
2007/08	0	25243.99
2008/09	1	31383.63
2009/10	2	37523.27
2010/11	3	43662.9
2011/12	4	49802.55
2012/13	5	55942.15
2013/14	6	62081.83
2014/15	7	68221.47

Appendix - 8
Trend analysis of Deposit of NABIL

Fiscal year (T)	Total Deposit (Y)	X = T - 2008	X ²	XY
2005/06	19347.40	-2	4	-38694.6
2006/07	23342.29	-1	1	-23342.29
2007/08	31915.05	0	0	0
2008/09	37348.26	1	1	37348.26
2009/10	46410.70	2	4	92821.50
	∑Y = 158363.6		∑X² = 10	∑XY = 67132.75

Let, 2005/06 = 2006 & so on

Here,

N = 5

Now,

$$a = \frac{Y}{N} = \frac{158363.6}{5} = 31672.72$$

$$b = \frac{XY}{X^2} = \frac{67132.75}{10} = 6713.27$$

Trend Value of Deposit of NABIL (2005/06 to 2014/15)

Fiscal year (T)	X = T - 2008	Yc = a + bX
2005/06	-2	18246.16
2006/07	-1	24959.45
2007/08	0	31672.72
2008/09	1	38385.99
2009/10	2	45099.26
2010/11	3	51812.53
2011/12	4	58525.80
2012/13	5	65239.07
2013/14	6	71952.34
2014/15	7	78665.61

Appendix - 9
Trend analysis of Loan & Advances of HBL

Fiscal year (T)	Total Loan & Advances (Y)	X = T-2008	X ²	XY
2005/06	14642.56	-2	4	-29285.12
2006/07	16998	-1	1	-16998
2007/08	19497.52	0	0	0
2008/09	24793.16	1	1	24793.16
2009/10	27980.63	2	4	55961.26
	∑Y = 103911.87		∑X² = 10	∑XY = 34471.3

Let, 2005/06 = 2006 & so on

Here,

$$N = 5$$

Now,

$$a = \frac{Y}{N} = \frac{103911.87}{5} = 20782.374$$

$$b = \frac{XY}{X^2} = \frac{34471.3}{10} = 3447.13$$

Trend Value of Loan & Advances of HBL (2005/06 to 2014/15)

Fiscal year (T)	X = T - 2008	Yc = a + bX
2005/06	-2	13888.114
2006/07	-1	17335.244
2007/08	0	20782.374
2008/09	1	24229.504
2009/10	2	27676.634
2010/11	3	31123.764
2011/12	4	34570.894
2012/13	5	38018.024
2013/14	6	41465.154
2014/15	7	44912.284

Appendix - 10
Trend analysis of Loan & Advances of EBL

Fiscal year (T)	Total Loan & Advances (Y)	X = T - 2008	X ²	XY
2005/06	9801.31	-2	4	-19602.62
2006/07	13664.08	-1	1	-13664.08
2007/08	18339.09	0	0	0
2008/09	23884.67	1	1	23884.67
2009/10	27556.36	2	4	55112.72
	∑Y = 93245.51		∑X² = 10	∑XY = 45730.69

Let, 2005/06 = 2006 & so on

Here,

N = 5

Now,

$$a = \frac{Y}{N} = \frac{93245.51}{5} = 18649.102$$

$$b = \frac{XY}{X^2} = \frac{45730.69}{10} = 4573.069$$

Trend Value of Loan & Advances of EBL (2005/06 to 2014/15)

Fiscal year (T)	X = T - 2008	Yc = a + bX
2005/06	-2	9502.964
2006/07	-1	14076.033
2007/08	0	18649.102
2008/09	1	23222.171
2009/10	2	27795.24
2010/11	3	32368.309
2011/12	4	36941.378
2012/13	5	41514.447
2013/14	6	46087.516
2014/15	7	50660.585

Appendix - 11
Trend analysis of Loan & Advances of NABIL

Fiscal year (T)	Total Loan & Advances (Y)	X = T - 2008	X ²	XY
2005/06	12922.54	-2	4	-25845.08
2006/07	15545.78	-1	1	-15545.78
2007/08	21365.05	0	0	0
2008/09	27589.93	1	1	27589.93
2009/10	32268.87	2	4	64537.74
	∑Y = 109692.17		∑X² = 10	∑XY = 50736.81

Let, 2005/06 = 2006 & so on

Here,

N = 5

Now,

$$a = \frac{Y}{N} = \frac{109692.17}{5} = 21938.434$$

$$b = \frac{XY}{X^2} = \frac{50736.81}{10} = 5073.681$$

Trend Value of Loan & Advances of NABIL
(2005/06 to 2014/15)

Fiscal year (T)	X = T - 2008	Y _c = a + bX
2005/06	-2	11791.072
2006/07	-1	16864.753
2007/08	0	21938.434
2008/09	1	27012.115
2009/10	2	32085.796
2010/11	3	37159.477
2011/12	4	42233.158
2012/13	5	47306.839
2013/14	6	52380.52
2014/15	7	57454.201

Appendix - 12
Trend analysis of Total Investment of HBL

Fiscal year (T)	Total Investment (Y)	X = T - 2008	X ²	XY
2005/06	10889.03	-2	4	-21778.06
2006/07	11822.98	-1	1	-11822.98
2007/08	13340.18	0	0	0
2008/09	8710.69	1	1	8710.69
2009/10	8444.91	2	4	16889.82
	∑Y = 53207.79		∑X² = 10	∑XY = -8000.53

Let, 2005/06 = 2006 & so on

Here,

N = 5

Now,

$$a = \frac{Y}{N} = \frac{53207.79}{5} = 10641.558$$

$$b = \frac{XY}{X^2} = \frac{-8000.53}{10} = -800.053$$

Trend Value of Total Investment of HBL (2005/06 to 2014/15)

Fiscal year (T)	X = T - 2008	Y _c = a + bX
2005/06	-2	12241.664
2006/07	-1	11441.611
2007/08	0	10641.558
2008/09	1	9841.505
2009/10	2	9041.452
2010/11	3	8241.399
2011/12	4	7441.346
2012/13	5	6641.293
2013/14	6	5841.24
2014/15	7	5041.187

Appendix - 13
Trend analysis of Total Investment of EBL

Fiscal year (T)	Total Investment (Y)	X = T - 2008	X ²	XY
2005/06	4200.52	-2	4	-8401.04
2006/07	4984.31	-1	1	-4984.31
2007/08	5059.56	0	0	0
2008/09	5945.48	1	1	5945.48
2009/10	5008.31	2	4	10016.62
	∑Y = 25198.18		∑X² = 10	∑XY = 2576.75

Let, 2005/06 = 2006 & so on

Here,

N = 5

Now,

$$a = \frac{Y}{N} = \frac{25198.18}{5} = 5039.636$$

$$b = \frac{XY}{X^2} = \frac{2576.75}{10} = 257.675$$

Trend Value of Total Investment of EBL (2005/06 to 2014/15)

Fiscal year (T)	X = T - 2008	Yc = a + bX
2005/06	-2	4524.286
2006/07	-1	4781.961
2007/08	0	5039.636
2008/09	1	5297.311
2009/10	2	5554.986
2010/11	3	5812.661
2011/12	4	6070.336
2012/13	5	6328.011
2013/14	6	6585.686
2014/15	7	6843.361

Appendix - 14
Trend analysis of Total Investment of NABIL

Fiscal year (T)	Total Investment (Y)	X = T-2008	X ²	XY
2005/06	6178.53	-2	4	-12357.06
2006/07	8945.31	-1	1	-8945.31
2007/08	9939.77	0	0	0
2008/09	10826.38	1	1	10826.38
2009/10	13670.92	2	4	27341.84
	∑Y = 49560.91		∑X² = 10	∑XY = 16865.85

Let, 2005/06 = 2006 & so on

Here,

N = 5

Now,

$$a = \frac{Y}{N} = \frac{49560.91}{5} = 9912.182$$

$$b = \frac{XY}{X^2} = \frac{16865.85}{10} = 1686.585$$

Trend Value of Total Investment of NABIL
(2005/06 to 2014/15)

Fiscal year (T)	X = T - 2008	Yc = a + bX
2005/06	-2	6539.012
2006/07	-1	8225.597
2007/08	0	9912.182
2008/09	1	11598.767
2009/10	2	13285.352
2010/11	3	14971.937
2011/12	4	16658.522
2012/13	5	18345.107
2013/14	6	20031.692
2014/15	7	21718.277

Appendix - 15
Trend analysis of Net Profit of HBL

Fiscal year (T)	Total Net Profit (Y)	X = T-2008	X ²	XY
2005/06	457.46	-2	4	-914.92
2006/07	491.82	-1	1	-491.82
2007/08	635.87	0	0	0
2008/09	752.83	1	1	752.83
2009/10	508.8	2	4	1017.6
	∑Y = 2846.78		∑X² = 10	∑XY = 363.69

Let, 2005/06 = 2006 & so on

Here,

N = 5

Now,

$$a = \frac{Y}{N} = \frac{2846.78}{5} = 569.356$$

$$b = \frac{XY}{X^2} = \frac{363.69}{10} = 36.369$$

Trend Value of Net Profit of HBL (2005/06 to 2014/15)

Fiscal year (T)	X = T - 2008	Yc = a + bX
2005/06	-2	496.618
2006/07	-1	532.987
2007/08	0	569.356
2008/09	1	605.725
2009/10	2	642.094
2010/11	3	678.463
2011/12	4	714.832
2012/13	5	751.201
2013/14	6	787.57
2014/15	7	823.939

Appendix - 16
Trend analysis of Net Profit of EBL

Fiscal year (T)	Total Net Profit (Y)	X = T-2008	X ²	XY
2005/06	237.29	-2	4	-474.58
2006/07	296.41	-1	1	-296.41
2007/08	451.22	0	0	0
2008/09	638.73	1	1	638.73
2009/10	831.77	2	4	1663.54
	∑Y = 2455.42		∑X² = 10	∑XY = 1531.28

Let, 2005/06 = 2006 & so on

Here,

N = 5

Now,

$$a = \frac{\sum Y}{N} = \frac{2455.42}{5} = 491.084$$

$$b = \frac{\sum XY}{\sum X^2} = \frac{1531.28}{10} = 153.128$$

Trend Value of Net Profit of EBL (2005/06 to 2014/15)

Fiscal year (T)	X = T - 2008	Yc = a + bX
2005/06	-2	184.828
2006/07	-1	337.956
2007/08	0	491.084
2008/09	1	644.212
2009/10	2	797.34
2010/11	3	950.468
2011/12	4	1103.596
2012/13	5	1256.724
2013/14	6	1409.852
2014/15	7	1562.98

Appendix - 17
Trend analysis of Net Profit of NABIL

Fiscal year (T)	Total Net Profit (Y)	X = T-2008	X ²	XY
2005/06	635.26	-2	4	-1270.52
2006/07	673.96	-1	1	-673.96
2007/08	746.47	0	0	0
2008/09	1031.05	1	1	1031.05
2009/10	1139.1	2	4	2278.2
	∑Y = 4225.84		∑X² = 10	∑XY = 1364.77

Let, 2005/06 = 2006 & so on

Here,

N = 5

Now,

$$a = \frac{Y}{N} = \frac{4225.84}{5} = 845.168$$

$$b = \frac{XY}{X^2} = \frac{1364.77}{10} = 136.477$$

Trend Value of Net Profit of NABIL (2005/06 to 2014/15)

Fiscal year (T)	X = T - 2008	Yc = a + bX
2005/06	-2	572.214
2006/07	-1	708.691
2007/08	0	845.168
2008/09	1	981.645
2009/10	2	1118.122
2010/11	3	1254.599
2011/12	4	1391.076
2012/13	5	1527.553
2013/14	6	1664.03
2014/15	7	1800.507

Appendix - 18
Coefficient of Correlation between Total Deposit and Loan & Advance

Himalayan Bank Ltd

Fiscal Year	Total deposit(X)	loan and advance(Y)	$x = X - \bar{X}$	x^2
2003/04	26490.85	14642.56	-5644.27	31857716.10
2004/05	30048.42	16998.00	-2086.69	4354291.85
2005/06	31842.79	19497.52	-292.33	85453.32
2006/07	34682.31	24793.16	2547.20	6488207.46
2007/08	37611.20	27980.63	5476.09	29987517.88
	$\Sigma X = 160675.57$	$\Sigma Y = 103911.87$		$\Sigma x^2 = 72773186.61$

$y = Y - \bar{Y}$	y^2	xy
-6139.81	37697315.95	34654731.13
-3784.37	14321486.57	7896830.52
-1284.85	1650849.80	375593.66
4010.79	16086404.34	10216258.06
7198.26	51814889.44	39418268.91
	$\Sigma y^2 = 121570946.11$	$\Sigma xy = 92561682.27$

$$\bar{X} = \frac{X}{n}, \quad \bar{X} = \frac{160675.57}{5}, \quad \bar{X} = 32135.11$$

$$\bar{Y} = \frac{Y}{n}, \quad \bar{Y} = \frac{103911.87}{5}, \quad \bar{Y} = 20782.37$$

$$\text{Coefficient of Correlation (r)} = \frac{\Sigma xy}{\sqrt{\Sigma x^2} \sqrt{\Sigma y^2}}$$

$$(r) = \frac{92561682.27}{\sqrt{72773186.61} \sqrt{121570946.11}}$$

$$(r) = 0.984$$

$$P.Er = 0.6745 \frac{1 Z r^2}{\sqrt{N}}$$

$$P.Er = 0.6745 \times \frac{1 Z \cdot 0.984^2}{\sqrt{5}}$$

$$P.Er = 0.010$$

Everest Bank Ltd

Fiscal Year	Total deposit(X)	loan and advance(Y)	$x = X - \bar{X}$	x^2
2003/04	13802.44	9801.31	-11441.61	130910439.39
2004/05	18186.25	13664.08	-7057.80	49812540.84
2005/06	23976.3	18339.09	-1267.75	1607190.06
2006/07	33322.95	23884.67	8078.90	65268625.21
2007/08	36932.31	27556.36	11688.26	136615421.83
	$\sum X = 126220.25$	$\sum Y = 93245.51$		$\sum x^2 = 384214217.33$

$y = Y - \bar{Y}$	y^2	xy
-8847.79	78283423.28	101232985.43
-4985.02	24850444.34	35183288.27
-310.01	96107.44	393017.71
5235.57	27411172.28	42297630.32
8907.26	79339245.08	104110347.39
	$\sum y^2 = 209980392.42$	$\sum xy = 283217269.12$

$$\bar{X} = \frac{X}{n}, \quad \bar{X} = \frac{126220.25}{5}, \quad \bar{X} = 25244.05$$

$$\bar{Y} = \frac{Y}{n}, \quad \bar{Y} = \frac{93245.51}{5}, \quad \bar{Y} = 18649.10$$

$$\begin{aligned} \text{Coefficient of Correlation (r)} &= \frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}} \\ (r) &= \frac{283217269.12}{\sqrt{384214217.33} \sqrt{209980392.42}} \\ (r) &= 0.997 \end{aligned}$$

$$P.Er = 0.6745 \frac{1 Z r^2}{\sqrt{N}}$$

$$P.Er = 0.6745 \times \frac{1 Z \cdot 0.997^2}{\sqrt{5}}$$

$$P.Er = 0.002$$

Nabil Bank Ltd

Fiscal Year	Total deposit(X)	loan and advance(Y)	$x = X - \bar{X}$	x^2
2003/04	19347.4	12922.54	-12325.34	151914006.12
2004/05	23342.29	15545.78	-8330.45	69396397.20
2005/06	31915.05	21365.05	242.31	58714.14
2006/07	37348.26	27589.93	5675.52	32211527.27
2007/08	46410.7	32268.87	14737.96	217207464.96
	$\sum X = 158363.7$	$\sum Y = 109692.17$		$\sum x^2 = 470788109.69$

$y = Y - \bar{Y}$	y^2	xy
-9015.89	81286344.62	111123958.95
-6392.65	40866025.16	53253684.51
-573.38	328769.21	-138936.68
5651.50	31939407.04	32075178.58
10330.44	106717907.95	152249552.55
	$\sum y^2 = 261138453.98$	$\sum xy = 348563437.92$

$$\bar{X} = \frac{X}{n}, \quad \bar{X} = \frac{158363.7}{5}, \quad \bar{X} = 31672.74$$

$$\bar{Y} = \frac{Y}{n}, \quad \bar{Y} = \frac{109692.17}{5}, \quad \bar{Y} = 21938.43$$

$$\begin{aligned} \text{Coefficient of Correlation (r)} &= \frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}} \\ (r) &= \frac{348563437.92}{\sqrt{470788109.69} \sqrt{261138453.98}} \\ (r) &= 0.994 \end{aligned}$$

$$P.Er = 0.6745 \frac{1 Z r^2}{\sqrt{N}}$$

$$P.Er = 0.6745 \times \frac{1 Z \cdot 0.994^2}{\sqrt{5}}$$

$$P.Er = 0.004$$

Appendix - 19
Coefficient of Correlation between Total Deposit and Total Investment

Himalayan Bank Ltd

Fiscal Year	Total deposit (X)	Total Investment (Y)	$x = X - \bar{X}$	x^2
2003/04	26490.85	10889.03	-5644.27	31857716.10
2004/05	30048.42	11822.98	-2086.69	4354291.85
2005/06	31842.79	13340.18	-292.33	85453.32
2006/07	34682.31	8710.69	2547.20	6488207.46
2007/08	37611.2	8444.91	5476.09	29987517.88
	$\Sigma X = 160675.57$	$\Sigma Y = 53207.79$		$\Sigma x^2 = 72773186.61$

$y = Y - \bar{Y}$	y^2	xy
247.47	61242.39	-1396797.30
1181.42	1395757.94	-2465266.20
2698.62	7282560.70	-788871.98
-1930.87	3728251.23	-4918299.25
-2196.65	4825262.44	-12029033.36
	$\Sigma y^2 = 17293074.70$	$\Sigma xy = -21598268.08$

$$\bar{X} = \frac{X}{n}, \quad \bar{X} = \frac{160675.57}{5}, \quad \bar{X} = 32135.11$$

$$\bar{Y} = \frac{Y}{n}, \quad \bar{Y} = \frac{53207.79}{5}, \quad \bar{Y} = 10641.56$$

$$\text{Coefficient of Correlation (r)} = \frac{\Sigma xy}{\sqrt{\Sigma x^2} \sqrt{\Sigma y^2}}$$

$$(r) = \frac{-21598268.08}{\sqrt{72773186.61} \sqrt{17293074.70}}$$

$$(r) = -0.609$$

$$P.Er = 0.6745 \frac{1 Z r^2}{\sqrt{N}}$$

$$P.Er = 0.6745 \times \frac{1 Z f 0.609 \hat{A}}{\sqrt{5}}$$

$$P.Er = 0.190$$

Everest Bank Ltd

Fiscal Year	Total deposit (X)	Total Investment (Y)	$x = X - \bar{X}$	x^2
2003/04	13802.44	4200.52	-11441.61	130910439.39
2004/05	18186.25	4984.31	-7057.80	49812540.84
2005/06	23976.3	5059.56	-1267.75	1607190.06
2006/07	33322.95	5945.48	8078.90	65268625.21
2007/08	36932.31	5008.31	11688.26	136615421.83
	$\sum X = 126220.25$	$\sum Y = 25198.18$		$\sum x^2 = 384214217.33$

$y = Y - \bar{Y}$	y^2	xy
-839.12	704115.66	9600838.02
-55.33	3060.97	390479.84
19.92	396.97	-25258.65
905.84	820553.35	7318223.09
-31.33	981.32	-366146.43
	$\sum y^2 = 1529108.26$	$\sum xy = 16918135.87$

$$\bar{X} = \frac{X}{n}, \quad \bar{X} = \frac{126220.25}{5}, \quad \bar{X} = 25244.05$$

$$\bar{Y} = \frac{Y}{n}, \quad \bar{Y} = \frac{25198.18}{5}, \quad \bar{Y} = 5039.64$$

$$\begin{aligned} \text{Coefficient of Correlation (r)} &= \frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}} \\ (r) &= \frac{16918135.87}{\sqrt{384214217.33} \sqrt{1529108.26}} \\ (r) &= 0.698 \end{aligned}$$

$$P.Er = 0.6745 \frac{1 Z r^2}{\sqrt{N}}$$

$$P.Er = 0.6745 \times \frac{1 Z \cdot 0.698^2}{\sqrt{5}}$$

$$P.Er = 0.155$$

Nabil Bank Ltd

Fiscal Year	Total deposit (X)	Total Investment (Y)	$x = X - \bar{X}$	x^2
2003/04	19347.4	6178.53	-12325.34	151914006.12
2004/05	23342.29	8945.31	-8330.45	69396397.20
2005/06	31915.05	9939.77	242.31	58714.14
2006/07	37348.26	10826.38	5675.52	32211527.27
2007/08	46410.7	13670.92	14737.96	217207464.96
	$\sum X = 158363.7$	$\sum Y = 49560.91$		$\sum x^2 = 470788109.69$

$y = Y - \bar{Y}$	y^2	xy
-3733.65	13940157.26	46018530.34
-966.87	934841.46	8054478.85
27.59	761.10	6684.85
914.20	835757.98	5188549.03
3758.74	14128111.35	55396130.29
	$\sum y^2 = 29839629.16$	$\sum xy = 114664373.37$

$$\bar{X} = \frac{X}{n}, \quad \bar{X} = \frac{158363.7}{5}, \quad \bar{X} = 31672.74$$

$$\bar{Y} = \frac{Y}{n}, \quad \bar{Y} = \frac{49560.91}{5}, \quad \bar{Y} = 9912.18$$

$$\begin{aligned} \text{Coefficient of Correlation (r)} &= \frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}} \\ (r) &= \frac{114664373.37}{\sqrt{470788109.69} \sqrt{29839629.16}} \\ (r) &= 0.967 \end{aligned}$$

$$P.Er = 0.6745 \frac{1 Z r^2}{\sqrt{N}}$$

$$P.Er = 0.6745 \times \frac{1 Z (0.967)^2}{\sqrt{5}}$$

$$P.Er = 0.019$$

Appendix - 20
Coefficient of Correlation between Total Deposit and Net Profit

Himalayan Bank Ltd

Fiscal Year	Total deposit (X)	Net Profit (Y)	$x = X - \bar{X}$	x^2
2003/04	26490.85	457.46	-5644.26	31857716.10
2004/05	30048.42	491.82	-2086.69	4354291.85
2005/06	31842.79	635.87	-292.32	85453.32
2006/07	34682.31	752.83	2547.20	6488207.46
2007/08	37611.2	508.8	5476.09	29987517.88
	$\sum X = 160675.57$	$\sum Y = 2846.78$		$\sum x^2 = 72773186.61$

$y = Y - \bar{Y}$	y^2	xy
-111.90	12520.71	631570.56
-77.54	6011.83	161793.91
66.51	4424.11	-19443.64
183.47	33662.71	467344.24
-60.56	3667.03	-331609.86
	$\sum y^2 = 60286.40$	$\sum xy = 909655.21$

$$\bar{X} = \frac{X}{n}, \quad \bar{X} = \frac{160675.57}{5}, \quad \bar{X} = 32135.11$$

$$\bar{Y} = \frac{Y}{n}, \quad \bar{Y} = \frac{2846.78}{5}, \quad \bar{Y} = 569.36$$

$$\begin{aligned} \text{Coefficient of Correlation (r)} &= \frac{xy}{\sqrt{x^2} \sqrt{y^2}} \\ (r) &= \frac{909655.21}{\sqrt{72773186.61} \sqrt{60286.40}} \\ (r) &= 0.434 \end{aligned}$$

$$P.Er = 0.6745 \frac{1 Z r^2}{\sqrt{N}}$$

$$P.Er = 0.6745 \times \frac{1 Z \cdot 0.434^2}{\sqrt{5}}$$

$$P.Er = 0.245$$

Everest Bank Ltd

Fiscal Year	Total deposit (X)	Net Profit (Y)	$x = X - \bar{X}$	x^2
2003/04	13802.44	237.29	-11441.61	130910439.39
2004/05	18186.25	296.41	-7057.80	49812540.84
2005/06	23976.3	451.22	-1267.75	1607190.06
2006/07	33322.95	638.73	8078.90	65268625.21
2007/08	36932.31	831.77	11688.26	136615421.83
	$\dot{y}X = 126220.25$	$\dot{y}Y = 2455.42$		$\dot{y}x^2 = 384214217.33$

$y = Y - \bar{Y}$	y^2	xy
-253.79	64411.39	2903811.97
-194.67	37897.97	1373970.16
-39.86	1589.14	50537.59
147.65	21799.34	1192817.27
340.69	116066.95	3982026.55
	$\dot{y}y^2 = 241764.79$	$\dot{y}xy = 9503163.53$

$$\bar{X} = \frac{X}{n}, \quad \bar{X} = \frac{126220.25}{5}, \quad \bar{X} = 25244.05$$

$$\bar{Y} = \frac{Y}{n}, \quad \bar{Y} = \frac{2455.42}{5}, \quad \bar{Y} = 491.08$$

$$\text{Coefficient of Correlation}(r) = \frac{xy}{\sqrt{x^2} \sqrt{y^2}}$$

$$(r) = \frac{9503163.53}{\sqrt{384214217.33} \sqrt{241764.79}}$$

$$(r) = 0.986$$

$$P.Er = 0.6745 \frac{1Zr^2}{\sqrt{N}}$$

$$P.Er = 0.6745 \times \frac{1Z(0.986)^2}{\sqrt{5}}$$

$$P.Er = 0.008$$

Nabil Bank Ltd

Fiscal Year	Total deposit (X)	Net Profit (Y)	$x = X - \bar{X}$	x^2
2003/04	19347.4	635.26	-12325.34	151914006.12
2004/05	23342.29	673.96	-8330.45	69396397.20
2005/06	31915.05	746.47	242.31	58714.14
2006/07	37348.26	1031.05	5675.52	32211527.27
2007/08	46410.7	1139.1	14737.96	217207464.96
	$\sum X = 158363.7$	$\sum Y = 4225.84$		$\sum x^2 = 470788109.69$

$y = Y - \bar{Y}$	y^2	xy
-209.91	44061.37	2587187.47
-171.21	29312.18	1426239.68
-98.70	9741.30	-23915.51
185.88	34552.12	1054977.01
293.93	86396.02	4331958.06
	$\sum y^2 = 204062.98$	$\sum xy = 9376446.71$

$$\bar{X} = \frac{X}{n}, \quad \bar{X} = \frac{158363.7}{5}, \quad \bar{X} = 31672.74$$

$$\bar{Y} = \frac{Y}{n}, \quad \bar{Y} = \frac{4225.84}{5}, \quad \bar{Y} = 845.17$$

$$\begin{aligned} \text{Coefficient of Correlation (r)} &= \frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}} \\ (r) &= \frac{9376446.71}{\sqrt{470788109.69} \sqrt{204062.98}} \\ (r) &= 0.957 \end{aligned}$$

$$P.Er = 0.6745 \frac{1 Z r^2}{\sqrt{N}}$$

$$P.Er = 0.6745 \times \frac{1 Z f 0.957^2}{\sqrt{5}}$$

$$P.Er = 0.026$$

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