#### **CHAPTER-I**

#### INTRODUCTION

# 1.1 Background of the Study

Overall national development of any country depends upon the economic development of that country and economic development largely depends upon the financial infrastructure of that country. Therefore, the primary goal of any nation including Nepal is rapid economic development to promote the welfare of the people and the nation as well. Nepal being one of the least developed countries has been trying to embark upon the path of economic development by economic growth rate and developing all sectors of economy.

The proper mobilization and utilization of domestic resources is one of the key factors in the economic development of a country. Similarly, integrated and speedy development of the country is only possible when competitive and reliable banking services are reached and operated to every corner of the country. It has been well established that the economic activities of any country can hardly be carried without the assistance and support of financial institutions. Financial institutions have catalytic role in the process of economic development. The investment policy of financial institutions, especially banks has long term impact not only on their growth and sustainability but also on the economic development of the country. Successful formulation and effective implementation of investment policy is the prime requisite for the successful performance of banks and other financial institutions. Good investment policy has a positive impact on economic development of the country and vice-versa.

The initial step an investing policy involves is determining the investment objectives and the amount of one's investable fund. Investment is always related with risks and returns. Making money alone cannot be an appropriate objective. It is appropriate to state that the objective is to make a lot of money by recognizing the possible losses. Therefore, investment objective should be

stated in terms of both risks and returns. Setting a clear investment policy also involves the identification of the potential categories of financial assets for consideration in the ultimate portfolio. The identification of assets depends upon many things, such as investment objectives, investable fund, tax consideration etc. (Bhattarai Rabindra, 2004; 3).

Investments policy determines the investor's objective and the amount wealth. It is not appropriate foe a investors to say that the objective is to make a lot of money (Clarke, 1989:97). What is appropriate for a investors in this situation is to state that objective to earn profit while recognizing that here exits some chances of incurring large losses. Investment objective should be stated in terms of both risk and return.

National development of any country depends upon the economic development of that country and economic development is supported by financial infrastructure of that country. Therefore, the primary goal of nation including Nepal is rapid economic development to promote the welfare of the people and the nation as well. Nepal being listed among the least developed countries, is trying to embark upon the path of economic development by achieving a higher economic growth rate and developing all sectors of economy. The proper mobilization and utilization of domestic resource is one the key factors in the economic development of a country. Similarly, integrated and speedy development of the country is possible only when the competitive and reliable banking services reached and carried to every corner of the country. It has been well established that the economic activities of any country can hardly be carried forward without the assistance and proper support of financial institutions. Financial institutions have catalytic role in the process of economic development. Successful formulation and effective implementation of investment policy is prime requisite for the successful performance of banks and other financial institution. Proper investment policy has a positive impact on economic development of the country.

The initial step of an investment policy involves is determining the investment objective and the amount of one's wealth. Investment is always related with risks and return .making money alone cannot be an appropriate to state that objective is to make profit by recognizing the possible losses. Therefore, investment objective should be stated in terms of both risk and returns. Setting a clear investment policy also involves the identification of the potential categories of financial asset for consideration institution the ultimate portfolio. The identification of asset depends upon many things such as investment objectives, investable wealth, tax consideration etc. (Bhattarai, 2004:3)

Investment is a very risky job for a purposeful, safe and profitable investment. Bank must follow sound investment policy. The fundamental principle of investment must be followed thoroughly for profitable investment. Investment policy should ensure maximum amount of investment to all sectors with proper utilization. There is high liquidity in the market and it seems no profitable place to invest these days. Investment policy provides the bank several inputs through which they can handle their investment operation efficiently ensuring the maximum return with minimum risk, which ultimately leads the bank to the path of success to achieve its organizational objectives of shareholders' wealth maximization.

#### 1.1.1 Evolution of Bank

Similar to other countries goldsmith and landlords were the ancient bankers in Nepal. Tejarath Adda established during the tenure of then Prime Minister Rannodip Singh was the first step towards the institutional development of banking in Nepal thought all the banking activities were carried out by it. Tejarath Adda did not collect deposits from the public but provided loans government employees and public against bullions.

The evolution of Bank is not a non-Phenomenon. The crude form of banking is found even in the ancient Vedic era. The banking terms such as deposits, pledge, policy of loan, interest rates etc can be found in the "Manusmiriti".

The Roman Empire collapse in the last of the 15<sup>th</sup> century and beginning of 16<sup>th</sup> century. Consequently, Commercial banking transaction was received because of revival of commercial and other trading activities in European countries. According to opinion of Geoffrey Crothers, following community groups are the ancestors of modern banking.

- 1. The Merchant trader
- 2. The goldsmith
- 3. The money lenders

History tells us that it was the merchant banker who first involved the system of banking by trading in commodities than money. Their trading activities required the remittance of money from one place to another. For this they issued different documents as the near substitutes of money, called draft of hands in modern days.

The next stage in the growth of banking was the goldsmith; the business of goldsmith was such that he had to take deposits such as bullion, money and amendments for the security from the theft. This makes possible to the goldsmith to charge something for taking care of money and bullion. On the other hand, as the evidence of receiving valuables, he used to issue a receipt to the depositors. As such receipts are good for payment equipment to the amount mentioned, it become like the modern cheaque, as a medium of exchange and a means of payment.

Finally, money lender in the early age contributed to the growth of banking to a large extent. He advanced coins on load by charging interest. As a safe guard he used to keep some money in the reserve. Therefore goldsmith and moneylender became a banker who started performing the two functions of collecting and advancing loans. "The Bank of Venice" of Italy was established in 1157 A.D. as first banking institution of the World. The second banking institution namely, "The bank of Barcelona" of Spain was established in 1401 A.D. Its function is to exchange money, receive deposits and discount bill of

exchange, both for the citizens and for the foreigner. The Bank of Geneon was established in 1694 A.D. "The Bank of England" was incorporated in 1694 A.D. as a joint stock bank and later on in 1844 A.D, became the first central bank of the world.

### 1.1.2 Commercial Banks in Nepal

Commercial banks are those banks, which pool together the saving of the community and arrange them for the productive use. They accept deposits form the public and provide same deposits to the public as loan and advances. In fact, they circulate the money and create credit. The concept of the commercial banks made the economy strong. And now it's playing important role to make country economically strong. According to the Black's law Dictionary "Commercial Bank" means a bank authorized to receive both demand and time deposits, to engage in trust services, to issue letter of credit, to rent time-deposit boxes, and to provide similar services. Like wise section 2(a) of the Commercial Bank Act 2031 has defined that "Commercial Bank" means a bank which operates currency exchanges transactions, accepts deposits, provides loan perform, dealings, relating to commerce except the banks which have been specified for the co-operative, agricultural, industry of similar other specific object.

Commercial banks are the most numerous banks. They offer a full range of services, including current and savings accounts, loans, and trust services. They primarily serve the needs of businesses but also offer their services to individuals. A commercial bank is owned by shareholders, who buy shares in it (The world Book Encyclopedia, 1996:93,'B').

Thus, commercial bank plays a vital role in the economic growth of the nation. They hold the deposits of persons, government and business houses. They make funds available through their lending and investing activities to borrowers, individuals, business firms and governments. Moreover they

provide technical and administrative assistance to industries, trade and business enterprises.

Nepal's first ever commercial bank, NBL, began operating in 1994B.Swith the government owing 51 percent of its share .It was followed decade later, by RBB established in 2022 B.s which also was owned by the government. In order to police these commercial banks and guide the country's monetary policy the government established NRB in 2013 B.S prior to the establishment of RBB, Kathmandu valley had a little power over its foreign currency holdings. The use of Nepalese currency was Nepal signed the trade and transit treaty with India in 1960 A.D; Nepal had the full access to foreign currencies other than the Indian rupees.

It was only in the early 40s that three foreign commercial banks made their way to Nepal. Nepal Arab Bank Limited, a joint venture bank established in 2041B.S. was Co-owned by the Emirates Bank International Limited (Dubai), Nepalese financial institution and the local public. Nepal Indosuez Bank Limited, now known as Nepal Investment Bank Limited (NIBL) established in 2042 B.S. was jointly owned by French Basque Indosuez, Rastriya Banijya Bank, Rastriya Bema sans than and the local public. Thirdly, Nepal Grind lays Bank Limited (NGBL) now known as standard chartered Bank Limited (SCBNL) established in 2043 B.S. was co-owned by a British firm called Grind lays Bank, Nepal Bank Limited and the local public. Ever since, the country's financial world has come a long way with 31 commercial Banks in the country.

### 1.1.3 Investment Policy

Commercial which occupy quite important place in the framework of every economy. Commercial banks lend numerous services to their customer with a view of facilitating their economic and social life. All the economic activities of each and every country are greatly influenced by the commercial banking business of that country. Commercial banks, by playing actives roles, have changed the economic structure of the world. Thus commercial banks have

become the heart of financial system. Commercial banks deal with other people's money. They have to find the ways of keeping their liquid so that they could meet the demand of their customer. In anxiety to make profit, banks can't afford to lock up their funds in institutions assets that are not easily realizable. The depositors confidence could be secured only if the bank able to meet the cash promptly and fully. The banker has to keep adequate cash for this purpose. Cash is an ideal asset and hence the banker can't afford to keep a long portion of his assets in the bank. Therefore the banker has to distribute his assets in such a way that he can have adequate profits without sacrificing liquidity (Radhaswamy and Vasudevan 1999:510).

Commercial banks must mobilize its deposits and other fund to profitable, secured, stable and marketable sector. Then only it can earn more profit and it also be secured and can be converted into cash whenever needed. But, commercial bank have to pay due consideration while formulating investment policy regarding loan and investment. Investment policy is one fact of the overall spectrum of policies that guide banks investment operations. A healthy development of any bank depends heavily upon its investment policy. A sound and viable investment policy attracts both borrowers and lender, which helps to increase the volume and quality of deposits, loan and investment. Commercial bank should be careful while performing the credit creation. The banks should never invest its fund in those securities, which are subject to too much depreciation and fluctuations because a little difference may cause a great loss. It must not invest its funds into speculative businessmen who may become bankrupt at once and who may earn millions in a minute. Emphasizing upon this, H.D Crosse stated "The investment policy should be carefully analyzed." So they must invest their funds where they gain maximum profits with minimum risk.

Commercial banks must follow the rules and regulation as well as different directives issued by central bank. The bank should invest its funds in legal securities only. Diana McNaughton in her research paper "Banking institution"

in developing markets" state that, investment policy should incorporate several elements such as regulatory environment, the availability of the funds. The selection of risk, loan portfolio balance and term structure and liabilities. (Mc Naught on, Diana, 1994:38). Thus, commercial bank should incorporate several elements while making investment policy. The loan provided by commercial bank is guided by several principles such as length of time, their purpose, profitability, safety etc. These fundamental principles of commercial bank's investment are fully considered while making investment decision.

#### 1.1.4 Profile of Concerned Bank

In this section, general introduction of the bank under study is being attempted to furnish for the easy reference of sample to the research.

#### **Everest Bank Ltd.**

Everest Bank Limited was established in 1992, under the company Act. It is also foreign joint venture bank and the partner was United Bank of India and managed from very beginning till November 1996. Later on it handed over the management to the Punjab National Bank Ltd, India that holds 20% equity on the banks share capital. Altogether 21 branches of Everest bank are in operation. Authorized capital and paid-up capital of Everest Bank Limited are Rs.10, 00,000,000 and Rs.51, 80, 00,000 respectively. Its market value per share Rs.2430 and book value is Rs.292.95. EPS is Rs.78.6.Tele Banking

Credit card facility
Locker facility
Foreign exchange
Remittance
ATM facility
This bank is awarded as Bank of the year in 2066.

### Nabil Bank Ltd.

Nabil Bank Limited formerly named as Nepal Arab Bank Limited was established on July 12<sup>th</sup> 1984 under a technical service agreement with Dubai Bank Limited, Dubai, which was later merged with Emirates Bank, UAE. The share of Emirates Bank sold its share to "National Bank Ltd., Bangladesh" which was again transferred into "NB International, Ireland. It is the pioneer joint venture Bank of Nepal. NABIL is the only joint venture Bank with 48 points of representation in various parts of the country.

# **Share Holding Pattern**

International entity	50%
Other Institution	20%
General Public	30%

NABIL is amongst the most successful Bank in Nepal registering strong growth. NABIL launched its operation with the marketing concept. NABIL has also been a pioneer in introducing modern Banking and innovative products in Nepal like working capital & Project financing, trade finance, priority & deprived sector (financing or refinancing), mortgage loan, personal lending, remittance products & card products (Credit and debit card) etc. NABIL is the Banker to a multitude of International Aid Agencies, Non-Government Organization, Embassies and Consultants in the country. NABIL has been providing wide range of Banking services to various parts of the society. NABIL Bank ranks among the top three financial institution in Nepal in terms of market share of handling Nepal's trade. NABIL Bank is being managed by a team of qualified and highly experienced professionals. Tele banking

J	Credit Card Facility
J	SWIFT
J	Deposit locker
J	Western Union Money Transfer
J	ATM

- International Trade and Bank Guarantee
- This bank is awarded the "Bank of year 2004

#### 1.2 Statement of the Problem

Mushrooming of private sector banks is the present situation of Nepalese financial sector. The fast growth of such organization has contributed the prorata increment in collecting deposits and their investment. They collect adequate amount from the mass, however they could not find or locate new investment sectors required to mobilize their funds on the changing context of Nepal. Only few commercial banks are getting regular profits. Most of them are unable to satisfy their shareholders and customers in earning profit and ensuring their safe deposit. Some banks are incurring losses in early establishment years. It is not that they do not have potential clients or adequate deposits but they cannot find profitable sectors or opportunities to invest the deposit collections. They have always feared with high degree of risk and uncertainty.

There are various problems in resources mobilization by financial institution in Nepal. The most important problem is poor investment climate prevailing in Nepal due to heavy regulatory procedure, uncertain government policy, NRB's stringent directives, unsecured social environment etc. Lack of sound investment policy is another reason for a commercial bank not to properly utilizing its deposits that is making loan and advances or lending for a profitable project. This condition may lead the commercial bank to the position of liquidation.

Nepalese commercial bank have invested in the similar sectors. These major sectors include tourism, garments, and trading as well. But given the current situation of the country, it is not up to them to decide in which sector they want invested. The main factor for success of any organization is secured situation. Once the economic and political situation is stabilized, then only commercial

banks can consider rationally as to where they invest and grow. Till then it is a question of moving into sectors as and when thing develop. So, security problem is the big problem for every commercial bank to invest their funds in any sectors. Nepalese commercial banks do not seem to have formulated their investment policy in an organized manner. They mainly rely upon the instruction and guidelines of Nepal Rastrya Bank. They do not have clear view toward investment policy. Furthermore, implementation of policy is not done in effective way. Lack of farsightedness in policy formulation and absence of strong commitment towards its proper implementation has caused many problems to commercial banks.

The issued specially related to investment function of the commercial banks under study have been presented briefly.

- a) Is the investment policy of Nabil Bank Ltd. and Everest Bank Ltd effective and efficient?
- b) Is the investment strategy of Nabil Bank Ltd. and Everest Bank Ltd. are successful to utilize the available fund?
- c) Does the investment decision affect the total earning of bank?
- d) Are they maintaining sufficient, liquidity, profitability, and risk position?
- e) What is the relationship of investment on loan and advances with total deposits and total net profit?

### 1.3 Objective of the Study

The main objective of this study is to examine the investment policy of two joint venture banks (JVBS), namely NABIL and EVEREST Banks Ltd. the specific objectives are given below:

a) To evaluate the liquidity, profitability, and risk position of the banks.

- b) To find the empirical relationship between deposits, loans and advances, investment and net profit.
- c) To provide suggestion on the basis of major finding.

# 1.4 Significance of the study

The main focus of the study is to highlight the investment policies of commercial banks expecting that the study can be bridge the gap between deposits and investment policies. On the other hand, the study would provide information to management of the bank that would help them to take collective action. Further from the study, the shareholders would get information to make decision while making investment on shares of various banks.

Every investor in the worlds invests their money in the hope of getting good return from their investment. Some of them succeed while other become failure in their goal. Due to many reasons they lose their hard earning just not by analyzing risk and return involved in the investment. Thus recoverable investment is must because investment policy is the proper management of wealth to generate income. Moreover, without sound investment policy no banks and institutions can run or exits in the long run. Thus the main focus of the study is to analyze the sound investment policy of EBL and NBL. With the help of financial and statistical analysis. Moreover the study is focused on evaluating the deposits utilization in terms of loans and advances and investment and its impact in the profitability of the banks and the study is the portfolio behavior of the banks.

Furthermore, this study will provide a useful feedback to the policy maker of the banks and will be helpful for anyone who wants know about the investment policy of EBL and NABIL.

### 1.5 Limitation of the study

This study is simply a partial study for the fulfillment of MBS degree, which has to be finished within limited period. Hence, this study is not far from

several limitations of its own kind, which weaken the scope of the study to some extent.

- a) The study is mainly based on secondary data.
- b) The study has recovered only five fiscal years i.e. from 2005/2006 to 2009/2010
- c) Out of the affecting factors, this study concentrates only on those factors, which are related with the investment policy, and available in the required from analyzing the different issues.
- d) The study deals with only two commercial banks, which may not be representative of all CBs of Nepal.

# 1.6 Testing of Hypothesis

The objective of this test is to test the significance regarding the parameters of the population on the basis of sample drawn from the population. This test has been conducted on the various ratios related with the banking business.

- Test of hypothesis on loan and advances to total deposit ratios between NABIL and EVEREST Bank.
- Test of hypothesis on total investment to total deposit ratio between NABIL and EVEREST Bank.
- Test of hypothesis on investment on government securities to current assets ratio between NABIL and EVEREST Bank.
- Test of hypothesis on loan and advances to current assets ratio between NABIL and EVEREST Bank.
- Test of hypothesis on return on loan and advances ratios between NABIL and EVEREST Bank.

# 1.6 Organization of the Study

The whole study has been divided into five chapters:

**Chapter I:** First chapter is the introductory chapter which deals with background of study, focus of the study, statement of problem, objective of the study, limitation of the study and organization of the study.

**Chapter II:** Second chapters deals with the review of literature conceptual review, review of articles, review of pervious thesis and research gap.

**Chapter III:** Chapter three is the most important part of the study and includes the interpretation parts like research design, sources of data, sampling and population, data collection techniques and data analysis tools which are financial tools and statistical tools.

**Chapter IV:** Fourth chapter is analyzing chapter which deals with the presentation and analysis of data and major findings of the study are also included.

**Chapter V:** This chapter is the last chapter which provides summary, conclusions and recommendations for improvement.

At the end of the chapters bibliography and appendices have been incorporated.

#### CHAPTER-II

### **REVIEW OF LITERATURE**

This chapter deals with the theoretical aspect of the topic on investment policy in more detail and descriptive manner. It provides the foundation for developing a comprehensive theoretical framework and knowledge of the status relevant to the field of research in order to explore the relevant and true facts for the reporting purpose. Hence, in this chapter, the focus has been made on the review of literature relevant to the investment policy of commercial banks. For this study, different books, journals, articles, annual reports and some research paper related with this topic has been reviewed. Therefore, this chapter is arranged in the following order:

## 2.1 Conceptual Framework

Review of supportive text provides the fundamental theoretical framework and foundation to the present study. For this, various books, research paper, article etc dealing with theoretical aspect of investment policy analysis are taken into consideration.

#### 2.1.1 Investment

Investment Policy involves determining the investor's objective and the amount of his/her investible wealth. Setting Investment Policy is the initial step in entire investment process. This step in the investment process concludes with the identification of the potential categories of financial assets for inclusion into the portfolio. For active management of Investment Policy, a written 'Investment Policy Statement' should be prepared. This statement should include 'Mission Statement' which is nothing but long-run financial goals. 'Investment Objectives' should also be well cited in the statement. The amount of risk that an investor is willing to bear should be well incorporated in such document (Sharpe, Alexander and Bailey, 2003).

Investment is concerned with the management of an investor's wealth which are the sum of current income and the present value of all future income. Funds to be invested come from assets already owned, borrowed money and savings. Investors expect to enhance their future consumption possibilities by investing their savings in order to increase their wealth.

The term investment covers a wide range of activities. It is commonly known fact that an investment is only possible when there is adequate saving. If all the income and saving are consumed to solve the problem of hand to mouth and to the other basic needs, then there is no existence of investment. Therefore both investment and saving are interrelated. Different author have tried to explain the meaning of investment in their own way. Some of them are explained below.

Investment is the allocation of capital to investment proposal whose benefit are to be received in the future. Because the future benefits are not known with certainty, investment proposal necessarily involve risk. Consequently, they should be evaluated in relation to their expected return and risk, for these are the factor that affect the firm's valuation in the marketplace. Moreover investment in capital projects should provide expected return in the excess of what financial market require (Van Horne, 2002:6).

Investment as the commitment of future one or more assets that will be held over some future time period. Investment is concerned with the management of an investor's wealth. Which is the sum of current income and present value of all income (Charles 1991:2).

The investment objective are to increases systematically the individual wealth, defined as asset minus liabilities. Higher the level of desired wealth the higher must be received. An investor seeking higher return must be willing to face the higher level of risk (John M.Cheney and Edward A.Moses 1998).

Investment are made in assets in all are two types, real assets(land, building, factories etc) and financial assets(stocks, bond, T-bill etc.). These two investment are not competitive but complementary. High developed institution for financial investment greatly facilitates real investment (Bhattarai, 2004:3).

# 2.1.2 Principles of Sound Lending Investment Policy

Some of the principles of sound lending and investment policies which the banks have to keep in mind are mentioned below.

# 1) Principle of Liquidity

It is not enough that the loan will come back; it is also important that the advances granted to the customer must come on demand or in accordance with the agreed terms of repayment. The source of repayment must be definite.

Liquidity is the ability of a firm to satisfy its short-term obligations when they become due for payment. It implies the ability to produce cash on demand. People deposit money at the bank in different account with confidence that the bank will repay their money when they need. Such deposits are repayable on demand or on the expiry of a specified period. In either case, the banker must be ready to meet these liabilities. Otherwise, he will suffer in his credit, which is the very foundation of his business.

Nevertheless, a bank utilizes its deposit liabilities for the purpose of granting loans and advances. To maintain depositors' confidence towards bank, the bank must grant such loans and advances which are as liquid as possible. That is why commercial bank should grant loans and advances of short-term nature. Discounting first class bill of exchange, financing customer's current assets through Overdrafts and Cash Credit facilities generally fulfils this liquidity principle. Investment on industrial fixed assets under term loans is illiquid in nature. Matching the maturity of loans and deposits will assist in managing the

loan portfolio's liquidity position. So, a bank's Credit Policy should pay due attention towards the liquidity of loans and advances.

# 2) Principle of safety

"Safety First" is most important principle of good lending. The Credit Policy formulated by banks should be capable enough to secure its investment. The banker should ensure that the borrower has the ability and will try to repay the advances as per the agreement. When a bank lends, then the bank should confirm on their lending whether they are safe or not. The bank shall ensure that the advances when granted to the right customers and is utilized in such a way that the advances are safe for all time.

In this connection, before granting a secured advances, bank should ensure carefully consider the margin of safety offered by security concerned and possibilities of fluctuation in its value. Credit policy should be devised in such a way to keep the higher margin of safety for secured loans. The bank should never invest its funds in the collateral of those securities which are too volatile i.e., which are subject to too much depreciation and fluctuations because a little difference may cause a great loss. Security means adequate collateral having good value, which can be easily sold off if required at any point of time. The bank should accept such type of securities, which are commercial, durable and marketable having fair market value.

# 3) Principle of profitability:

The main goal of bank is to earn profit. For this, the bank is required to increase its investment without letting the fund remain idle. The bank should try to invest only on those projects from which it can ensure good and timely interest income. But bank never should forget its own liquidity condition while lending huge number of loans. Secured and long term loan can give good income.

To fulfill the stakeholders' expectations, it must meet sufficient profit. Main contributor towards a bank's profit is 'interest income' derived by granting loans and advances. Hence, the credit policy of a bank should be aimed at yielding higher interest income. However, such income should be reasonable. Interest rate levied on different loan headings is an indicator of the profitability level of loan portfolio.

Banks credit operation should be profitable to cover the full prudential provisioning, for allocation to capital and reserves, which is essential for any bank to maintain its competitive viability and expand its lending operations, to give reasonable dividends to shareholders and to give the depositors with reasonable return on their money, banks should earn profits.

All the above facts indicate that it is necessary for the banks to make sure that their lending operations are sufficiently profitable.

# 4. Principle of Diversification

The bank should not concentrate on only one sector while extending the loan. It should try to diversify its investment. It should mobilize its resources on various collateral, various assets, different business and different individuals and organization. This will help to reduce the banks risk in greater extent.

Therefore, the principle of diversification is guided by the fact: "Do not put all eggs in a single basket". The credit policy should avoid excessive concentration of loans and advances in single sector of economy, single geographical area and single borrower or group of borrowers. It should aim at spreading the advances as widely as possible over the different industries and different localities. This would enable banks to compensate any losses which might arise as a result of unanticipated factors adversely affecting particular industries and/or particular localities. In this respect, banks having wide branches network can well exercise the credit diversification. It is also advisable for a banker to

advance moderate sums to large number of borrowers than advance large sums to a small number of borrowers.

Nepal Rastra Bank has also directed banks not to avail fund based credit facilities to a single borrower exceeding 25 percent of core capital and non-fund based credit facilities to a single borrower exceeding 50 percent of core capital. This limit is called single obligor limit (SOL) of a bank. The central bank has also circulated instruction to regulate concentration of credit to such borrowers who are operating in a single economic sector.

# 5. Principle of Purposive

Loans and advances policy of a bank should clearly cite the purposes for which it will advance credit facilities. From the viewpoint of security, a banker should always be known that why a customer needs loans. If a borrower misuses the loan granted by the bank, it can never repay and bank will possess heavy bad debts. Therefore, in order to avoid this situation each and every bank should demand and examine all the essential detailed information about the scheme of the project or activities, before lending. NRB directive no. 2 has required 100% provision for such loans which are diverted from the purposes other than that indicated by the borrower at the time of application. Hence, banks should develop post credit supervision practices to monitor the use of loans and advances.

# 6. Principle of National Interest

Even when an advance satisfies, all the above principles it might not be suitable if it does not take into account the national interest. Banks are required to grant advances on those sectors, which are priorities by the government on time to time in meeting the national requirements. The bank should invest on such sectors as per the government or Nepal Rastra Bank.

Bank's credit policy should not contradict the national interest. In addition to its own profitability objective, the bank should also consider the national interest. Even though the bank cannot get maximum return from such investment, it should carry out its obligation towards the society and the country. The Bank is required to invest on such sectors as per the Government and Nepal Rastra Bank's instruction. Investment on government bonds, priority and deprived sector lending are the examples of such investments.

# 7. Policy for Risk Management

Bank Credit Policy should also incorporate all the aspects of risk management. Risk is a condition in which there is a possibility of an adverse deviation from a desired outcome that is expected or hoped for. Risk can be broadly divided into:

Credit Risk	Financial	Non-financial Risk	Intrinsic Risk	Systemic Risk
	Risk			
Default risk	Liquidity risk	Reputation risk	Deficiencies in	Trade
			Appraisals	restrictions
Exposure risk	Counter Party	Regulatory risk	Excess dependency	Economic
	risk		in collateral	Sanctions
Recovery risk.	Transactional	Deficiencies in loan	Absence of post	Govt. policies
	risk	policies and	sanction	
		procedures	Surveillance	
	Country risk	Absence of credit	State of the	
		concentration limits	economy	

Credit Risk is one of the primitive forms of risk. A bank assumes Credit Risk when it advances a loan – it accepts that there is a risk of the borrower not servicing interest or repaying back the loan as per the agreed terms and conditions. In order to assure itself against such risk, a bank performs a detailed credit analysis, to assess the probability of default (or repayment). This is why credit risk is also called default risk. Risk can not be avoided, rather it should be managed. Predictable loss is a cost not a risk. Risk Management is the

process by which risks associated with a financial institution's activities are identified, assessed, monitored and controlled.

- Risk Control Method includes:
  - Risk Avoidance- when an organization refuses to accept the risk (rejection of a loan proposal).
  - Risk Reduction- Consists of all techniques that are designed to reduce the likelihood of risk (preventive-frequent monitoring) or the potential security of those risks that do occur (collateral)

Credit Risk Management has to be considered while formulating the Credit Policy to fulfill the following objectives.

- To minimize the losses
- To be competitive in the market despite various risks and stringent regulatory limits
- To apply risk based pricing for maximizing the return and for optimum utilization of capital
- To develop quality & diversified loan products
- To develop sound lending policies and a rigorous appraisal system
- To develop effective post sanction surveillance mechanism.

Credit Policy also includes the techniques of credit risk analysis. There are various techniques for Credit Risk Analysis. However, bank can use:

J	Classical Analysis (Judgmental Credit Analysis)	
J	Modern Analysis Process (Quantification Credit	Analysis) or
J	A Combination of both	

Classic Credit Analysis Process is an expert system "art" that relies on the subjective judgment of trained and experienced professionals. In reaching their subjective judgment, credit Officers are assisted by various analytical

techniques for evaluating the likelihood that the potential borrower will meet an agreed debt obligation.

The classic 6cs of credit are the foundation of Classic credit Risk analysis process.

- i. **Character** Characteristic of the borrower, honesty and attitude.
- ii. Capacity-Legal existence, management, business-cash flow
- iii. Capital Financial condition of the borrowes' net worth
- iv. **Collateral** Security, Pledged assets, insurance coverage.
- v. **Conditions** Economic environment
- vi. **Compliance** Compliance with laws and regulations

**Modern Analysis Process** is a system that helps in quantification of the Credit Risk. The following are some of the models used in quantification of the credit risk.

- Credit scoring Model
- Internal Risk Rating System
- Market Value based Credit Risk Models and
- Portfolio Diversification Models

Some of the common (combined) analysis models used widely for analyzing credit risk associated in lending by a bank are:

- The CAMPARI MODEL
- The FINANCIAL ANALYSIS MODEL
- The FIVE PILLAR ANALYSIS MODEL

Under the **CAMPARI MODEL**, the broad criteria set for lending in all types of projects are as follows:

- Character: The person involved
- Ability: Can they achieve what is promised?
- Margin: Is the return reasonable for the risk?
- **P**urpose: What is the need for money?
- Amount: How much is needed?

- **R**epayment: How and when will the bank get its money back?
- Insurance: How is the lender adequately secured if theplans do not work out?

Under the **FINANCIAL MODEL**, the anlaysis of the financial statements is carried on.

- i) <u>Balance Sheet Analysis:</u> Under this, the post financial figures are studied so as to derive a present trend with regard to the Balance Sheet and other financial statements.
- *ii) Financial Projections*: This analysis is pursued to ascertain where the business will stand in future.

Some of the common financial analyses to be studied before granting a loan are:

- <u>Cross Sectional Analysis</u>: The comparison of different unit's financial ratios at the same point in time
- <u>Time Series Analysis</u> : The evaluation of the unit's financial performance over time period
- <u>Combined Analysis</u>: Combination of cross Sectional and Time-Series Analysis.

Under Financial Analysis technique Ratio Analysis Tool is used to analyze the risk. Ratio can be broadly divided into five Categories

### A. Profitability Ratio:

1. Return on Capital Employed (ROCE)

# **B.** Turnover and Efficiency Ratio:

- 1. Capital Turnover Ratio
- 2. Profit Margin Ratio
- 3. Fixed Assets Turnover Ratio
- 4. Current Asset Turnover
- 5. Inventory Turnover
- 6. Debtors Turnover
- 7. Gross Profit Margin

# C. Liquidity or Working Capital Ratios

- 1. Current Ratio
- 2. Quick Ratio / Acid Test Ratio

# D. Coverage Ratio

- 1. Interest Coverage Ratio
- 2. Loan Repayment Coverage Ratio

# E. Capital Structure or Stability Ratio

- 1. Debt Equity Ratio
- 2. Net Worth to Total Asset

#### 2.1.3 Sources of Funds for the Investment

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

### a) Capital

Capital is the lifeblood of the trade and commerce. Capital is needed for the operation of the bank as in other business. But, it is only a nominal source. Still it can be used for the investment purpose. The capital fund consist of two element like

- I) Shares
- II) General Reserve

### i) Shares

Sources of fund to invest. By increasing the issue of shares, the bank can increase its capital.

#### ii) General Reserves

The bank is required to assign certain percentage of its profit to the reserves. This reserve is also invested.

### b) Accumulated profit

When there is a need of more funds for investment, the bank can retain the accumulated profit. The bank invests its accumulated profit.

## c) Deposits

Deposits are the main sources of funds. By providing certain rate of interest, commercial banks call for the deposit from the customer. Mainly, banks accept

three type of deposits i.e. current deposit, fixed deposit, saving deposit. These different of deposits are used for lending the money to different sector like agriculture, productive work, trade, irrigation and industry. The deposits will lead to increase in the working capital of the bank.

# d) External and Internal Borrowing

The funds can be collected by borrowing money through different banks or different institution. In a developing country like Nepal, borrowing is very important. The commercial bank may not have sufficient fund to invest in different sector. In that case it has to borrow from other bank or institution. Generally the commercial bank borrows from two sources i.e. external and internal. Generally external borrowing means the borrowing from foreign banks, and foreign government. Internally, the commercial banks borrow mainly from Nepal Rastra Bank. So the commercial bank cannot provide loan or investment without the funds. From the above different sources of funds commercial bank grants loan.

### 2.2 Review of Legislative Provisions

In this section review of legislative framework under which the commercial banks are operating has been discussed. This legislative environment has significant impact on the commercial bank's establishment, their mobilization and utilization of resources. All the commercial banks have to conform to the legislative provisions specified in the commercial Bank Act. 2031 and the rules and regulations formulated to facilitate the smooth running of commercial banks.

### **Investment Management Regulation**

"A commercial bank formulating a written policy may decide to invest in shares and securities of an organized institution. However, such investment is restricted to 10% of paid up capital of the organization. However, the cumulative amount of such investment in all the companies in which the bank

has financial interest shall by limited to 20% of the paid up capital of the bank. But the total amount of investment in share and securities of organized institution is restricted to 30% of the paid up capital of the bank."(Directives to commercial Banks, directive No.8, NRB Banking operation department 81-82)

Likewise, commercial banks are not allowed to invest in any shares, securities, and hybrid capital instruments issued by any banks and financial institutions, licensed by NRB. Where such investment exists prior to issuance of this directive, such investment should be brought within the restrictive limitations by the fiscal year 2060/61. But investment on rural micro finance development banks' shares are not comes under such restriction. A commercial bank is directly related to the fact that how much fund must be collected as paid up capital while being established at a certain place of the nation, how much fund is needed to expand the branch and counters, how much flexible and helpful the NRB rules are also important. But we discuss only those, which are related to investment function of commercial banks. The main provisions, established by NRB in the form of prudential norms in above relevant area are briefly discussed here under.

# i) Provisions for investment in the deprived sector

Some rules, which are formulated by NRB, affect the areas of credit and investment extension to the deprived sector by the commercial bank.

According to the new provision, with effect from the 3<sup>rd</sup> quarter of FY 1995/96, investment in shares of the rural development bank by CBs, which used to be counted for the priority sector lending, only is now to be included under the deprived sector lending.

According to the new provisions effective from FY 1997/98, NBL, RBB, NABIL, NGBL, NIBL are required to invest 3 percent, HBL, NSBL, NBBL, EBL, are required to invest 2 percent, Bank of Kathmandu is required to invest 1.75 percent, NBCL is required to invest 0.75 percent while new commercial

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

## ii) Provision for credit to the priority sector

NRB requires commercial banks to extend loan and advances, amounting at least to 12 p.c. of their total outstanding credit to the priority sector. Commercial banks credit to the deprived sector is also a part of priority sector. Under priority sector, credit to agriculture, credit to the cottage and small industries and credit to service are counted commercial bank's loan to the cooperatives licensed by the NRB is also to be computed as the priority sector credit from the fiscal year 19955/96 onwards.

# iii) Provision for the investment in productive sector

Nepal, being a developing country needs to develop infrastructure and other primary productive sectors like agriculture, industry etc. For this, NRB has directed commercial banks to extend at least 40 p.c. of their total credit to the productive sectors. Loans to priority sector, agriculture sector, industrial sector have to be included in productive sector investment.

# iv) Provision for the single borrower credit limit

With the objectives of lowering the risk of over concentration of bank loans to a few big borrowers and also to increase the access of small and middle size borrower to the bank loans, NRB directed CBs to set an upper limit on the amount of loan financed to an individual, firm, company or group of companies. According to this, CBs are required not to exceed the single borrower limit of 35 percent in the case of fund- based credit and 50 percent, in the case of non- fund based credit such as the letter of credit, guarantee, acceptance letter, commitment has been fixed is a proportion of capital funds of bank.

Similarly, NRB has graded six foreign joint venture banks now as the prestigious class "A" bank, which is NABIL, NGBL, NIBL, HBL, SBI, and

NBBL. These banks have been kept outside the purview of the single borrower credit limit.

Likewise, in the case of consortium financing, commercial banks are permitted to extend an additional 10 percent credit above the limit fixed by the NRB as before.

In addition, Nepal Oil- Corporation, Agriculture-inputs Corporation and Nepal Food Corporation for their imports of petrol, diesel, kerosene, fertilizer and foodstuff respectively have been removed from the restrictions of single borrower credit limit.

# v) Provision for Minimize liquidity Risk

Commercial banks are required monitor their liquidity risk. This is to minimize risk inherent in the activities and portfolio of the banks. According to the regulation a gap found between maturing assets and maturing liabilities is the liquidity risk. They are monitoring their assets and liabilities on the basis of maturity period. Maturity periods such as 0-90, 91-180,181-270, 271-365 days and above 1 year are classified for the purpose of checking.

# vi) Cash Reserve Requirements (CRR)

To ensure adequate liquidity in the commercial banks, to meet the depositors' demand for cash at anytime and to inject the confidence in depositors regarding the safety of their deposited funds, commercial banks are required to have maximum CRR. In this regard, NRB has directed commercial banks to deposit minimum 8 percent of current and saving and 6 percent of fixed deposits in the NRB as primary cash reserve the commercial banks are further required to have 3 percent cash of total deposits in their own bank as secondary reserve.

#### vii) Loan Classification and Loss Provision

With a view to improving the quality of assets of commercial banks NRB has directed commercial banks to classify their out-standing loan and advances, investment and other assets into six categories. The classification is done in

two ways. The loans of more than one lakh are to be classified as debt service charge ratio, repayment situation, financial condition of borrower, management efficiency, quality of collateral. The loans of less than one lakh have to be classified as per maturity period.

### viii) Directives regarding interest rate spread

The interest rate spread, the difference between interest charged on loan and advances and the interest paid to the depositors, has widened significantly in the aftermath of deregulation in interest rates. This has caused lower financial intermediation. Therefore, NRB has required commercial banks to limit interest rate spread between deposit and lending rates to a maximum extent of 5 percent .NRB has also provided commercial banks with new calculation method of interest rate spread for a certain period recently.

# 2.3 Review of Previous Study

In this section review of articles, review of research papers & review of thesis of previous study are taken into consideration.

# 2.3.1 Review of Articles

Under this heading, effort has been made examine and review some of the related articles published in different economic journals, bulletin of World Bank, dissertation papers, magazines, newspapers and other related book

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

Timilsina (2000) has published an article on "Managing Investment Portfolio." He is however, confronted with problems of managing investment portfolio particularly in times of economic slowdown like ours. A rational investor would like to diversify his investments in different classes of assets so as to minimize risks and earn a reasonable rate of return.

Commercial banks have continuously been reducing interest rates on deposits. Many depositors are exposed to the increasing risk of non-refund of their deposits because of the mismanagement in some of the banks and finance institutions and accumulation of huge non-performing assets with them.

Few depositors of cooperative societies lost their deposits because some of these cooperatives were closed down because of their inability to refund public deposits. An investor in days of crisis has to make an effort to minimize the risk and at least earn a reasonable rate of return on his aggregate investment.

An investment in equity share can earn dividend income as well as capital gain, in the form of bonus share and right share until an investor holds it and capital profit when he sells it in the stock market. As returns from equity investments have fluctuated within a very wide range, investors feel it much difficulty to balance risk and reward in their equity portfolio. As a matter of fact, investors in equity shares should invest for a reasonable long time frame in order to manage the risk.

Making investment in fixed deposits with commercial banks is a normal practice among the common people. Normally fixed deposits with banks are considered risk-less, but they also are not 100% free of risk. You should select a bank to put your deposit therein, which has sound financial health and high credibility in banking business. In times of crisis if you select a sick bank deposit your money there is high probability that your money could be returned back.

An investor may have option of making investment in government bonds or debentures. In history we have examples that a government can nationalize the private property of its citizens, cancel out old currency notes, and can convert the new investment into some conditional instrument. But in democracy there is no probability that the government would default to repay money back. This is comparatively risk free investment, but yields low return.

An investor has to evaluate the risk and return of each of the investment alternatives and select an alternative, which has lower degree of risk and offer at least reasonable rate of return. One can draw a safe side conclusion to invest all the money he has only in government securities, but this is not a rational decision. An investor who doesn't try to maximize return by minimizing the possible risk is not a rational investor. On the other hand, one can place overconfidence on equity investment and assume high risk by investing the whole money in equity shares. Stock market these days is much dwindling and notoriously unpredictable; therefore this too is not a wise decision. Therefore, a portfolio, which consists of only one class of financial assets, is not a good portfolio.

Thapa (2003) has published an article entitled "Managing Banking Risk" in Business Age entitled in his article ha has accomplished the subsequent issues.

Banking and financial service are among the fastest growing industries in developed world and are also emerging as cornerstones in other developing and undeveloped nations as well. Bank primary function is to trade risk. Risk cannot be avoided by the bank but can only be managed. There exist two types of risk. The first is the diversifiable risk or the firm specific risk which can be mitigated by maintaining an optimum and diversified portfolio. This is due to the fact that when one sector does not do well the growth in another might offset the risk. Thus, depositor must have the knowledge of the sectors in which there banks have make the lending. The second is undiversifiable risk and it is correlated across borrower, countries, and industries. Such risk is not under control of the firm and bank.

On the basis of his article risk management of the banks is not only crucial for optimum trade off between risk and profitability but is also one of the deciding factors for overall business investment lending to growth of economy. Managing risk not only needs sheer professionalism at the organizational level but appropriate environments also need to develop. Some of the major

environmental problems of Nepalese banking sector are under government intervention, relatively weak regulatory fame, if we consider the international standard, meager corporate governance and the biggest of all is lack of professionalism. The only solution to mitigate the banking risk is to develop the badly needed commitment eradication of corrupt environment especially in the disbursement of lending, and formulate prudent and conducive regulatory frame work.

Mahat (2009) has published an article entitled "Efficient Banking" in Business Age. He has accomplished, the efficiency of banks can be measured using different parameters. The concept of productivity and profitability can be applied while evaluating efficiency of banks. The term productivity refers to the relationship between the quantity of inputs employed and the quantity of outputs produced. An increase in productivity means that more output can be produced from the same inputs or the same outputs can be produced from fewer inputs. Interest expense to interest income ratio shows the efficiency of banks in mobilizing resource at lower cost and investing in high yielding asset. In other words, it reflects the efficiency in use of funds.

The analysis of operational efficiency of banks will help one in understanding the extant of vulnerability of banks under the changed scenario and deciding whom to bank upon. This may also help the inefficient banks to upgrade their efficiency and be winner in the situations developing due to slowdown in the economy. The regulators should also be concerned on the fact that the banks with unfavorable ratio may bring catastrophe in the banking industry.

Shrestha (2065) has given a short glimpse on article entitled "*Portfolio Management in Commercial Banks; Theory and Practices*" in Nepal Bank Patrika. He has highlighted the followings issues:

➤ The portfolio management becomes very important both for individuals and institutional investor.

- ➤ Investor would like to select better mix of investment assets subject on these aspects like, higher return that is comparable with alternatives according to the risk class of investor.
- ➤ Good liquidity with adequate safety on investment, maximum tax concession, economic efficient and effective mixes.

For fulfilling those aspects, the following strategies will be adopted.

- ➤ Do not hold any signal security i.e. try to have a portfolio of different securities.
- ➤ Choose such portfolio of securities, which ensure maximum return with minimum risk or less return for wealth maximizing objectives.

He has mention short transitory view on portfolio management in Nepalese commercial banks. Nowadays number of banks & financial institution are operating in this sector are having greater networks and access to national and international markets. They have to go with their portfolio management very seriously and superiority, to get success to increase their regular income as well as to enrich the quality service to their clients. In this competitive and market oriented open economy, each commercial banks and financial institution has to play a determining role by widening various opportunities for the sake of expanding provision of best service to their customers.

### 2.3.2 Review of Previous Unpublished Thesis

Several thesis works have been conducted by various students regarding the various aspects of commercial bank such as lending policy, investment policy, investment planning, liquidity and investment position, trends of saving investment and capital formation, investment on priority sectors etc. Some of them as supposed to be relevant for the study is presented below;

Loudari (2001) conducted a study on "A study on investment policy of Nepal Indosuez Bank Ltd. In comparison to Nepal SBI Bank Ltd." With the objective of:

- To examine the liquidity, asset management and profitability position and investment policy of NIBL in comparison to Nepal SBI Bank Ltd.
- To study the growth ratios of loans and advances and investment to total deposit and net profit of NIBL in comparison to Nepal SBI bank ltd.
- To analyses relationship between deposit and investment, deposits and loan & advances, net profit and outside assets of Nepal Indosuez Bank Ltd. In comparison to Nepal SBI Bank Ltd.

The research findings of the study are as follows:

- Current ratios for both the banks are satisfactory.
- Although Cash reserve ratio is managed by both banks as per Nepal Rastra Bank directives, both banks have not paid sufficient insight towards cash management. Their cash reserves have fluctuated in a high degree.
- Nepal SBI Bank ltd. has increased investment in government securities where as Nepal Indosuez Bank has decreased.
- Nepal Indosuez Bank Ltd. has maintained both current ratio and cash reserve ratio better than Nepal SBI Bank Ltd. But its cash and bank balance, investment in government securities and loan and advances in comparison to current assets are lower than that of Nepal SBI Bank Ltd.
- Deposit utilization of Nepal Indosuez Bank Ltd. is less effective than that of Nepal SBI Bank Ltd. Further Nepal Indosuez Bank Ltd. has invested lesser amount on government securities and shares and debenture than that of Nepal SBI Bank.
- Nepal Indosuez Bank Ltd. did a better performance in return on total assets and loan and advances and interest earning, but it paid lower interest amount to working fund.

The analysis of growth ratios shows that growth ratios of total deposit, loan and advances, total investment and net profit of Nepal Indosuez Bank are less than that of Nepal SBI Bank.

The trend value of loan and advances to total deposits ratio is decreasing in case of both banks. The trend value of total investment to total deposits ratio is also decreasing in case of both banks.

Pandit (2003) in his thesis, "A study on the investment policy analysis of S.C.Bank Nepal Limited in comparison to Nabil and Nepal Bangladesh Bank" has mainly found that S.C's loan & advances to total deposits ratios are significantly lower than that of Nabil and Nepal Bangladesh Bank, S.C. is recommended to follow a liberal lending policy, invest more portion of deposition loan & advances. He has further stated that besides giving priority of investing on government securities, S.C. is recommended to invest its fund in the purchase of shares and debentures of other financial, non-financials companies, hotels and government companies. This also helps in the maintenance of a sound portfolio of the banks.

Pandit (2004) has conducted on "Investment Policy Analysis of Joint Venture Banks with Special Reference to Nepal SBI Bank, Bank of Kathmandu and Everest Bank Limited" with the following objectives:

- To evaluate whether the liquidity management assets management, efficiency, profitability position, risk position and investment practices of Nepal SBI Bank, BOK and EBL
- To find out the relationship between deposit and total investment, deposit and loan and advances and net profit and outside assets

The study used secondary data. The research findings of the study were as follows:

Liquidity position of SBI Bank was slightly good as compared to BOK and EBL. However, the liquidity positions of the banks under study were not so satisfactory. Therefore, banks should improve their liquidity position to meet their current obligations. The study of assets management ratio showed that SBI Bank was not in a better position regarding its on balance sheet activities. The profitability position of SBI was not as good as of other banks. Risk ratio of BOK was the highest and the capital risk ratio of EBL was the highest of all. It indicated that BOK and EBL must be careful about risk. Growth ratio of SBI and BOK had not successful to increase their source of funds. EBL had succeeded to maintain its higher growth rate of total deposit. Trend analysis of total deposits, loan and advances, total investment and net profit and projection of the next 5 years of SBI, BOK and EBL revealed that SBI had increasing trend values in total deposit, total investment and loan and advances of BOK and EBL had an increasing trend value of all types of trend analysis.

Regmi *f*2006) conducted "A Comparative Study on Investment Policy of Everest Bank and Himalayan Bank Limited" with the objectives as given below:

- To find out the relationship between total investments, deposits, loans and advances, net profit and assets and compare them.
- To evaluate the liquidity, asset management, efficiency, profitability and risk portion of EBL and HBL.
- To analyze the deposit utilization trend and its projection for five years of HBL and EBL
- To provide package of a workable suggestions and possible guidelines to improve investment policies.

The study was carried out the basis of secondary data. The research findings of the study were:

The liquidity position of EBL was comparatively better than HBL. EBL had the highest cash and bank balance to total deposit ratio, cash and bank balance

to current assets ratio than that of HBL. Both EBL and HBL had almost same pattern of investment on government securities, but fluctuating ratios showed the unstable policy of investment. EBL has higher loan and advances to current assets ratio and successful in deposit collection as well. The assets management ratios of both banks are satisfactory. Both bank EBL and HBL had provided its most portion of deposit as loan and advances. Moreover, EBL had invested its more portions as loan and advances, in case of investment in other sectors, HBL had adopted diversified investment policy. EBL invest its working fund in government securities and other companies share and debentures than that of HBL, So HBL is less effective in comparison to EBL. In profitability analysis, HBL had maintained high profit margin regarding profitability position. HBL was more successful to generate income through loan and advances and operating income and it has earned more from total outside assets and total working fund. From the study, it was concluded that profitability of HBL was better than that of EBL. From the risk point of view, HBL had borne lower liquidity risk and credit risk in comparison to EBL regarding various aspects of banking activities. It could be said that HBL had followed a stable liquidity policy justified by lower coefficient of variation.

Shrestha (2006) in his thesis entitled "A Study on Investment Portfolio of Commercial Banks in Nepal" has been done in 2006. The general objective of this research is to identify the current situation of investment portfolio of CBs in Nepal. The main objectives are as follows:

- To analyze the investment portfolio of Commercial Banks
- ➤ To analyze the risk and return of selected commercial banks on investment using Portfolio concept.
- ➤ To forecasting and examine the trend of investment and to provide complementary measures based on analysis.

Methodology used to analyze the data includes common financial tools like return on share and debenture, return on government securities, return on loan and advances and return on portfolio. For risk measurement, it was measured on risk on individual assets and risk on portfolio. The major ratios like return on total asset ratio, total investment to total deposit ratio, loan and advances to total deposit ratio, government securities to total deposit ratio are used. To verify the assumption, there used common statistical tools like standard deviation, arithmetic mean, co- variance, correlation and regression analysis.

# **Major Findings:**

- Proper investment on various securities i.e. balance allocation of funds on various government securities such as Treasury bills, National saving bonds, Development bonds etc and fixed income percentage rate that help to reduce the variability of return. In the analysis of risk and return comparatively SCBNL have more return from investment on government securities like same NABIL has better position on investment on loan and advances.
- The return on share and debenture of commercial banks shows wide fluctuation. These fluctuations in returns are caused mainly by the volatility of the shares prices in market and by the changes in dividends in some extent. Comparatively to other assets, share and debenture has higher return and higher risk. Hence, it is cleared from analysis that investment on share and debenture is high risky assets.

Shrestha, f2007) conducted a study on "A Comparative Analysis on investment performance of commercial banks in Nepal" with the following objectives:

- To analyze the investment activities and fund mobilization with respect to fund based on-balance sheet transactions and fee based off-balance sheet transactions
- To study the asset utilization system, profitability and risk position of commercial banks under study
- To assess the deposit utilization trends and its projection for the future
- To evaluate the growth ratios of loan and advance and total investment and respective growth rate of total deposit and net profit

To appraise the suggestion on the basis of findings for further growth of the banks under study

The study was conducted on the basis of secondary data. The research findings of the study were as follows:

The liquidity position of NIBL was stronger than NABIL and HBL. At the same time, liquidity position of NIBL was highly fluctuating, which showed that NIBL bore higher risk than other two banks. NIBL had the least investment in Government Securities, which considered the least risky asset. From the analysis of assets, management ratio of NIBL in comparison to NABIL and HBL was more successful regarding asset management and deposit NIBL's investment on shares and debentures was high in comparison to the other two banks but its performance regarding total investment has been very poor. In the profitability analysis, none of the three banks' profitability position was clearly better. However, NABIL was slightly better profitability. Therefore, their profitability ratios were in moderate position. From the risk point of view, NABIL and NIBL were facing higher risk than HBL, but the risk level of all three banks seemed almost the same. From the analysis of growth ratios, NIBL's collection of deposit, granting of loans and advances and net profit were better but in terms of investment, HBL is better. The coefficient of correlation analysis between different variables of NABIL, NIBL and HBL revealed that NABIL was weaker regarding mobilization of deposits as loans and advances and NIBL was performing extremely well regarding earning profits from outside assets. From the trend analysis study, it was found that all banks were mobilizing their total deposits into loans and advances in increasing trend, which was the indication of efficient mobilization.

#### Research Gap

The researcher has focused this study in effectiveness on investment policy analysis of NABIL Bank and Everest Bank in comprehensive manner considering the major items. The method of analysis is fully different. Financial tools and statistical tools are used in this study as ratio analysis,

overall ratio, trend analysis, correlation matrix and hypothesis. So this study will be fruitful to those interested person, scholars, students, teachers, civil society, businessmen and government for academically as well as policy perspectives. This study covers the more recent financial data, literature and NRB directives/circulars and literature so that the recent issues and scenarios can be highlighted.

#### **CHAPTER-III**

#### RESEARCH METHODOLOGY

Research methodology is a way to systematically solve the research problem. It refers to the various sequential steps that are to be adopted by a researcher during the course of studying the problem with certain objectives. This chapter deals with overall research method used for the purpose of the study. It includes research design, sources of data, population and sample and method of analysis.

### 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 collection and analysis of data. This study follows descriptive and analytical research designs. Some financial and statistical tools have been applied to evaluate investment policy of EBL & NABIL.

#### 3.2 Sources of Data

The research is mainly based on secondary data with negligible information and data collected from primary sources. The data required for the analysis are directly obtained from the balance sheet and P/L account of concerned bank's annual reports. Supplementary data and information are collected from number of institutions and regulating authorities like NRB, SEBON, NEPSE, Ministry of finance, budget speech of different fiscal years and economic survey. All the secondary data are compiled, processed and tabulated in the time series as per the need and objectives. Likewise various data and information are collected from the economic journals, periodicals, bulletins, magazines and other published and unpublished reports and documents from various sources.

Formal and informal talks with the concerned authorities of the bank were also helpful to obtain the additional information of the related problem.

#### 3.3 Population and Sample

The population refers to the industries of the same nature and its services and product in general. Thus, the total commercial banks constitute the population of data and the bank under study constitutes the sample for the study. So, from the population of 31 commercial banks operating in Nepal, Everest Bank Limited and Nabil Bank Limited has been selected as sample for study.

## 3.4 Method of Analysis

To fulfill the objectives financial as well as the statistical tools were used to make the analysis more convenient, reliable and authentic. For data analysis, different items from the balance sheet and other statements were tabulated. The analysis of data will be done according to the pattern of data available because of limited time and resources. Simple analytical statistical tools such as percentage, coefficient of correlation, the method of least square and test of hypothesis are used in this study. Similarly some accounting tools such as ratio analysis and trend analysis have also been used for financial analysis. The various tools applied 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 in this study financial tool like ratio analysis has been used.

### **Ratio Analysis**

Ratio analysis is the relationship between two accounting figure expressed mathematically. It is computed by dividing one item of relationship with other. Management itself can use these parameters to improve the organization's performance. The knowledge regarding strength and weakness is necessary for exploiting maximum benefits and to repair the weaknesses to meet the

challenges. The financial ratios, which are calculated and analyzed in this study, are as follows:

#### A) Liquidity Ratios

Liquidity ratios measure the firm's ability to current obligations. It reflects the short – term financial strength of the business. 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. A bank should ensure that it does not suffer from lack of liquidity and also it does not have excess liquidity. Both condition of liquidity are not in favor the viewpoint of banks.

The following ratios are evaluated under liquidity ratios.

#### i) Current Ratio

A ratio between current assets and current liabilities is known as current ratio. It shows the relationship between current assets and current liabilities. Current assets are those assets which can be converted into cash within short period of time, normally not exceeding one year current liabilities are those obligations which are payable within a short period, normally not exceeding one year.

Mathematically it is represented as:

$$Current ratio = \frac{Total \ Current \ Assets}{Total \ Current \ Liabilities}$$

Higher the current ratio better is the liquidity position. The widely accepted standard of current ratio is 2:1 but accurate standard depends on circumstances in case of seasonal business ratio.

This ratio measures the bank short-term solvency i.e. its ability to meet short-term obligations. As a measure of creditors versus current assets, it indicates each rupee of current assets available for each rupees of current liability.

#### ii) Cash and Bank Balance to Total Deposit Ratio (Cash Reserve 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 depositor. This ratio is calculated by dividing the cash and bank balance by the amount of total deposits. Mathematically it is expressed as,

$$CRR \ ratio = \frac{Cash \ and \ Bank \ Balance}{Total \ Deposit}$$

Hence, cash and bank balance includes cash on hand, foreign cash on hand, cheques and other cash items, balance with domestic and abroad banks where as the total deposits include current deposits, saving deposits, fixed deposits, money at call and short term notice and other deposits.

#### iii) Cash and Bank Balance to Current Assets Ratio

This ratio measures the proportion of most liquid assets i.e. cash and balance among the total current assets of the bank. Higher ratio shows the banks ability to meet its demand for cash.

This ratio is calculated by dividing cash and bank balance by current assets.

Mathematically it is expressed as,

Cash and bank balance to current assets ratio  $= \frac{Cash \ and \ Bank \ Balance}{Current \ Assets}$ 

### iv) Investment on Government Securities to current Assets Ratio

Investment on government securities includes treasury bills and development bonds etc. This ratio is calculated to find out the percentage of current assets invested in government securities.

This ratio is calculated by dividing investment made on government securities by current assets,

Mathematically it is expressed as,

45

Investment on govt. securities to current assets ratio

Investment on Government Securities

Current Assets

### v) Loan and Advances to Current Assets Ratio

Loan and advances to current asset ratio shows the percentage of loan and advances in the total current assets. Where loan & advances include loans, advances, cash credit, local and foreign bill purchased and discounted etc.

This ratio can be calculated by dividing loans and advances by current assets.

Mathematically it is expressed as,

Loan and advances to current assets ratio =  $\frac{Loan \ and \ Advances}{Current \ Assets}$ 

### **B)** Assets Management Ratios (Activity Ratios)

Activity ratios are employed to evaluate the efficiency with which the firm manages and utilizes its assets. These ratios are also called turnover ratios because they indicate the speed with which assets are being converted turnover into sales. Asset management ratio measures how efficiently the bank manages the resources at its command.

The following ratios are used under this asset management ratio.

## i) Loan and Advances to Total Deposit Ratio

This ratio is calculated to find out that which banks are able to utilizing their total deposits on loan and advances for profit generating purpose. This ratio can be obtained by dividing loan and advances by total deposits, which can be states as,

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

## ii) Total Investment to Total Deposit Ratio

This ratio implies the utilization of firm's deposit on investment in government securities and share debentures of other companies and bank.

This ratio can be calculated by dividing total investment by total deposit. This can be states as,

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

Hence, total investment consist investment on government securities, investment on debenture and bonds, share in subsidiary companies, share in other companies and other investment.

## iii) Loan and Advances to Working Fund Ratio

Loan and advances indicates the ability of any bank to canalize its deposits in the form of loan and advances to earn high return. This ratio is computed by dividing loan and advances by total working fund, which can be states as,

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

Where, Total working fund consists of current assets, net fixed assets, loan for development banks and other miscellaneous assets.

### iv) Investment on Government Securities to Total Working Fund Ratio

This ratio shows that banks investment on government securities in comparison to the total working fund.

This ratio is calculated by dividing investment on government securities by total working fund, which can be states as,

Investment on Govt. Securities to Total Working Fund Ratio

Hence, Investment on government securities includes treasury bills and development bonds etc.

## v) Investment on Shares and Debentures to Total Working Fund Ratio

This ratio shows the banks investment in shares and debenture of the subsidiary and other companies.

This ratio can be computed by dividing investment on shares and debentures by total working fund, which can be states as,

Investment on Shares & Debentures to Total Working Fund Ratio

$$= \frac{Investment \ on \ Shares \ and \ Debentures}{Working \ Fund \ Ratio}$$

Where, Numerator includes investment on debentures bonds and shares of the other companies.

## C) Profitability ratios

Profit is the difference between revenues and expenses over a period of time. A company should earn profit to survive and grow over a long period of time, and it will have no future if it fails to make sufficient profits. Therefore, the financial manager should continuously evaluate the efficiency of its company in terms of profits. The profitability ratios are calculated to measure the operating efficiency of a company. It is the indicator of the financial performance of any institution. This implies that higher the profitability ratio, better the financial performance of the bank and vice versa.

The following ratios are taken into account under this heading.

## i) Return on Total Working Fund Ratio

This ratio measures the overall profitability of all working funds i.e. total assets. A firm has to earn satisfactory return on assets or working fund for its survival. This ratio is calculated by dividing net profit by total working fund.

This can be express,

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

## ii) Return on Loan & Advances Ratio

This ratio indicates how efficiently the bank has employed its resources in the form of loan and advances. This ratio is computed by dividing net profit by loan & advances.

This can be expressed as,

Return on Loan & Advances Ratio = 
$$\frac{Net \Pr{ofit}}{Loan \ and \ Advances}$$

### iii) Total Interest Earned to Total Working Fund Ratio

This ratio is calculated to find out the percentage of interest earned to total assets (working fund). Higher ratio implies better performance of the bank its terms of interest earning on its total working fund. This ratio is calculated by dividing total interest earned by total working fund.

This can be expressed as,

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

Where, total interest earned includes, interest on loan, advances and overdrafts, government securities investment debentures and other inter bank loans.

# iv) Total Interest Paid to Total Working Fund Ratio

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

Which, can be expressed as

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

Where, total interest paid includes total expenses on deposits, loan and advances, borrowings and other deposits.

#### D) Risk Ratios

Risk taking is the prime business of bank's investment management. It increases effectiveness and profitability of the bank. These, ratio indicate the amount of risk associated with the various banking operations, which ultimately influences the bank investment policy.

The following ratios are taken into account under this heading.

#### i) Liquidity Risk Ratio

The Liquidity risk ratio measures the level of risk associated with the liquid assets i.e. cash, bank balance that are kept in the bank for the purpose of satisfying the depositor's demand for cash. Higher the ratio, lower is the liquid risk. Dividing cash & bank balance calculate this ratio by total deposits. This can be mentioned as,

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

### ii) Credit Risk Ratio

Credit risk ratios 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, credit risk ratio is expressed as the percentage of non-performing loan to total loan & advances. This ratio is calculated by dividing total loan and advances by total assets.

This can be mentioned as,

Credit Risk Ratio = 
$$\frac{Total\ Loan\ and\ Adavances}{Total\ Assets}$$

## iii) Capital Risk Ratio

The capital risk ratios of a bank indicate how much asset values may decline before the position of depositors and other creditors jeopardize. The capital risk is directly related to the return on equity (ROE). Higher the ratio, low is the capital risk. This ratio is computed by dividing capital (Paid up Capital + Reserves) by risk- weighted assets as computed under BASLE committee's formula.

This can be mentioned as,

Capital Risk Ratio = 
$$\frac{Capital (Paid up \Gamma Re serves)}{Risk Weighted Assets}$$

### E) Growth Ratios

Growth ratios measure how well the firm is maintaining its economic position in its industry. It is directly related to the fund mobilization an investment management of a commercial bank.

The following growth ratios are calculated in this study.

- i. Growth ratio of total deposit
- ii. Growth ratio of loan & advances
- iii. Growth ratio of total investment
- iv. Growth ratio of net profits

### 3.4.2 Statistical Tools

Some important statistical tools are used to achieve the objective of this study. In this study, statistical tools such as trend analysis of important variables, coefficient of correlation between different variables as well as test of hypothesis have been used which are as follow:

#### a) Arithmetic Mean

An arithmetic mean is obtained by adding together all the items and dividing this total by the number of items. It is denoted as (X) and formula used to calculate it is as follows:

Mean = 
$$\frac{X}{N}$$

#### b) Standard Deviation

The standard deviation (S..D.) measures the absolute dispersion. IT is said that higher the value of S.D higher variability and vice versa. It is denoted as  $(\exists)$  and formula used to calculate S.D. in sample case is as follows:

S.D. = 
$$\sqrt{\frac{(x \overline{Zx})^2}{N}}$$

#### c) Coefficient of Variation:

Coefficient of variation (C.V.) measures the relative dispersion. Greater the C.V., the more variable or less consistent, less uniform, less stable and less homogeneous the ratio and vice versa. The formula used to calculate C.V. as follows:

C.V. = 
$$\frac{1}{X}$$
 x 100%

## d) Co- efficient of Correlation Analysis

This analysis identifies and interprets the relationship between the two or more variables. In the case of highly correlated variables, the effect on one variable may have effect on other correlated variable under this topic; correlation is calculated by using Microsoft Excel. For fine report here correlation matrix also used.

$$\mathbf{r} = \frac{N \quad xy \mathbf{Z} \quad x. \quad y}{\sqrt{N \quad X^2 \mathbf{Z}(\quad X)^2} \sqrt{N \quad Y^2 \mathbf{Z}(\quad Y)^2}}$$

## e) Trend Analysis

This topic analyzes the trend of loan and advances to total deposit ratio and trend of total investment to total deposit ratio of NABIL and Everest from 2005/2006 to 2009/2010 and makes the forecast for the next five years. Under this topic following sub-topic has been presented.

- i) Trend analysis of total deposits ratio.
- ii) Trend analysis of loan and advance
- iii) Trend analysis of total investment
- iv) Trend analysis of net profit

#### **CHAPTER-IV**

#### DATA PRESENTATION AND ANALYSIS

"The data after collection has to be processed and analyzed in accordance with the outline laid down for the purpose at the time of developing the research plan (Kothari C.R. 1990)". The purpose of this chapter is to analyze and interpret the data related to investment policy and portfolio management. Data analysis is the relationships or differences supporting or conflicting with original or new hypothesis should be subjected to statistical tests of significance to determine with what validity data can be served to indicate any conclusion.

### 4.1 Financial Analysis

From the point of view of the fund mobilization and investment policy only those ratios are calculated and analyzed which are very important. The rations are designed and calculated to highlight the relationship between financial items and figures. It is a kind of mathematical relationship and procedure dividing one item by another. All these calculations are based on financial statements of concerned banks. The important and needed financial ratios, which are to be calculated for the purpose of this study, are as fallows respectively

#### 4.1.1 Liquidity Ratio

It is well known fact that assets very with respect to time and effort required to liquidate them. Liquidity ratios measure the ability of the firm to meet its maturing short term obligations. Liquidity thus refers to "nearness to cash". Every firms need to maintain liquidity position at satisfactory level. Holding too much liquidity means holding large size of current assets which will be an expensive affair to the firm. And there will also be the possibility of misuse of current assets. While holding the large size of the current assets, besides it, holding too little liquidity, firm cannot able to meet its short term obligation caused by short term liability and it will lead to liquidation to the firm. So if the firm can't meet the short term obligations, its continuous existence becomes doubtful. So, liquidity ratio measures the short-term solvency of the firm.

The liquidity positions of banks are comparatively studied through the following liquidity ratios.

#### i. Current Ratio

Current ratio is one of the most widely used measures of liquidity of the firm. It measures the degree to which current assets cover the current liability. Generally 2:1 is considered as the optimal standard of current ratio but it is not true all the time. Higher current ratio means holding large size of current assets which lead to underutilization of firm's resources. And, low ratio indicates that the firm can't meet its short-term obligation. Bank is not a productive industry of any physical goods that's why it has its own nature. Current ratio is calculated by dividing current assets by current liability as follows:

We have.

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

Where, current assets consist of cash and bank balance, money at call or short-term notice, loan advances investment in government securities, other interest receivable and miscellaneous current assets whereas current liabilities consist of deposit, loan and advances, wills payable and miscellaneous current liabilities.

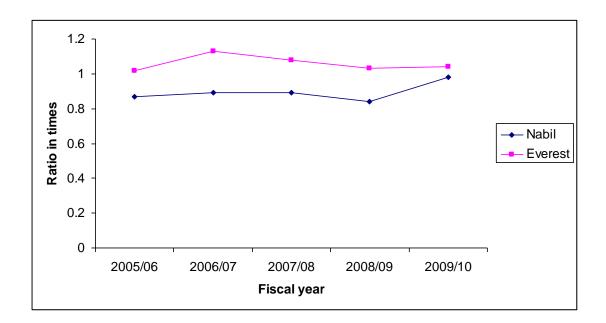
Table 4.1
Current Ratio (Times)

Fiscal year	Nabil	Everest
2005/06	0.87	1.02
2006/07	0.89	1.13
2007/08	0.89	1.08
2008/09	0.84	1.03
2009/10	0.98	1.04
Mean	0.894	1.06
S.D.	0.50	0.046
C.V.	0.055	0.043

Source: Appendix 1 'I'

The above table 4.1 shows the current ratio of Nabil and Everest Bank. Total mean, standard deviation and coefficient of variation have also been calculated.

Although the current ratio of Nabil has been fluctuating it always less one current ratio of Everest, on the other has always more than 1. In fact, the ratio of both banks seems to be appropriate. But, the lower ratio of Nabil indicates that it may often not be in proper liquidity position. Everest liquidity position is better than that of Nabil's. The coefficient of variation between the current ratio of Nabil is 5.5% that is greater than that of Everest 4.3%. It shows that current ratio of Everest is fewer consistencies than that of Nabil bank. Following figure shows current ratio of Nabil and Everest Bank Limited.



**Figure 4.1: Trend-line Showing Current Ratio** 

#### ii. Cash and Bank Balance to Total Deposit Ratio (CRR Ratio)

Cash and Bank balance are the most liquid assets. So, the main purpose of this ratio is to measure the bank's ability to immediately fund the withdrawal of their depositors. A high ratio indicates a greater ability to cover their depositor's withdrawal and vice versa. It is determined by dividing cash and bank balance by total deposits.

We have,

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

Where,

Cash and bank balance includes cash on hand, foreign cash on hand, cheques and other cash items, balance with domestic and abroad banks whereas the total deposits include current deposits, saving deposits, money of call and short-term notice and other deposits.

Table 4.2

Cash and Bank Balance to Total Deposit Ratio (%)

Fiscal year	Nabil	Everest
2005/06	3.25	11.03
2006/07	5.99	13.14
2007/08	8.37	11.13
2008/09	9.02	18.49
2009/10	3.02	21.17
Mean	5.93	14.992
S.D.	2.496	4.109
C.V.	0.420	0.274

Source: Appendix 1 'II'.

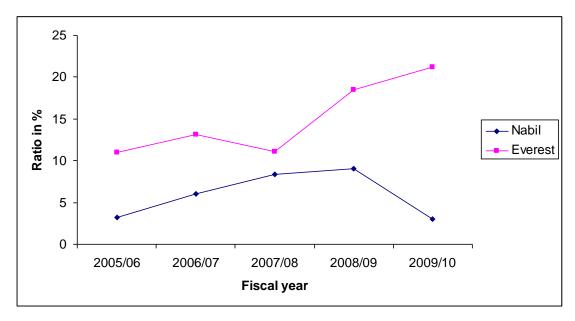
The table 4.2 shows total mean, standard deviation and coefficient of variation of cash and bank balance to total deposit ratio of these two banks.

Above table shows that CRR of the banks quite fluctuating, although Everest's CRR is quite high as compared to that of Nabil's. It indicates that Nabil bank is maintaining appropriate CRR ratio. If Everest bank can maintain consistent CRR, the remaining fund can be used for further investment.

Mean and standard deviation of Nabil bank is less than Everest bank. CV ratio of Nabil and Everest bank are 0.420 and 0.274. From this, we can conclude that

Everest has better maintained its liquidity than Nabil bank. Following figure shows the cash and bank balance to total deposit ratio.

Figure 4.2: Trend-line Showing Cash and Bank Balance to Total Deposit
Ratio



#### iii. Cash and Bank Balance to Current Assets Ratio

This ratio indicates the proportion of cash and bank balance in total current assets of the concerned banks. It shows the percentage of readily available fund within the bank. It is calculated by dividing cash and bank balance by total current assets. It is calculated as:

Cash and bank balance to current assets = 
$$\frac{Cash \, and \, bank \, balance}{Current \, asset}$$

Where, cash and bank balance represent of local currency, foreign currency, cash in hand and various bank balances in local as well as foreign banks. Whereas current assets consist of cash and bank balance, money at call, short term notice loan and advances, investment in government securities and other interest receivable and other miscellaneous current assets.

Table 4.3

Cash and Bank Balance to Current Assets Ratio (%)

Fiscal year	Nabil	Everest
2005/06	3.58	10.17
2006/07	6.27	11.51
2007/08	8.72	10.91
2008/09	8.32	17.51
2009/10	3.55	19.68
Mean	6.088	13.956
S.D.	2.221	3.872
C.V.	0.364	0.277

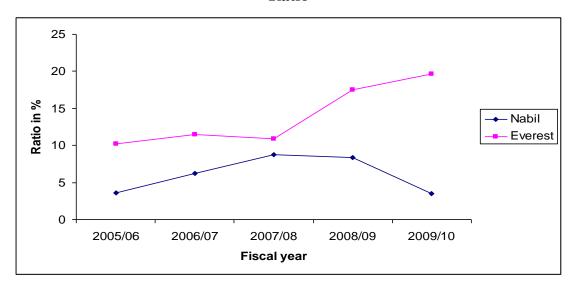
Source: Appendix 1 'III'

The above table 4.3 shows the total mean, standard deviation and C.V. of cash and bank balance to current ratio of commercial banks.

The above table shows that the cash and bank balance to current assets ratio of Nabil bank is fluctuating trend. But, Everest bank has increasing trend. From above analysis we can conclude that liquidity position of Nabil bank is lesser than that of Everest bank.

Mean and standard deviation of Nabil bank is less than that of Everest bank. C.V. of Nabil and Everest bank are 0.364 and 0.277 respectively. It shows Nabil bank has lower consistency than Everest bank.

Figure 4.3: Trend-line Showing Cash and Bank Balance to Current Assets
Ratio



#### iv. Investment on Government Securities to Current Assets Ratio

The government securities are not so much liquid as cash and bank balance. But they can easily sold in the market or they can be converted into cash. Investment on government securities includes treasury bills and development bond etc.

Investment on government securities

investment on to current assets ratio =  $\frac{Government \ sec \ urities}{Current \ assets}$ 

Table 4.4

Investment on Government Securities to Current Assets Ratio (%)

Fiscal year	Nabil	Everest
2005/06	19.61	15.37
2006/07	21.08	23.16
2007/08	15.74	17.75
2008/09	12.71	10.05
2009/10	11.04	19.98
Mean	16.036	17.262
S.D.	3.855	4.429
C.V.	0.240	0.256

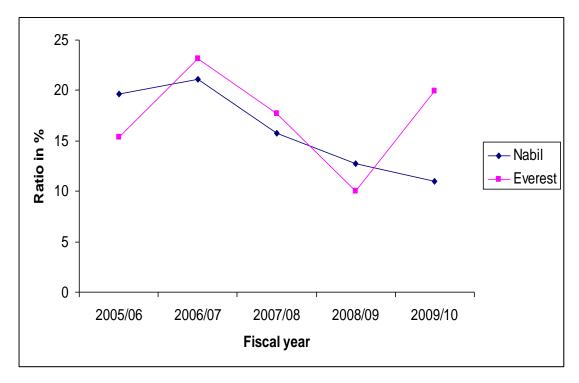
Source: Appendix 1 'IV'

The above table 4.4 shows the total mean, standard deviation and coefficient of variation of investment on government securities to current assets ratio of commercial bank.

Above table shows that investment on government securities to current asset ratio of Nabil bank has increasing trend in first 3 years but then after, it follows decreasing trend. But Everest bank has increasing trend, first 3 year and decreasing in 4<sup>th</sup> year and again increasing in 5<sup>th</sup> year.

Mean and standard deviation of Everest bank is higher than that of Nabil bank. Coefficient of variation of Everest is higher than Nabil bank. It can be concluded that Everest bank has invested its current assets in government securities more than Nabil bank.

Figure 4.4: Trend-line Showing Investment on Government Securities to Current Assets Ratio



#### v. Loan and Advances to Current Assets Ratio

To make an appropriate profit a commercial bank should not keep it all collection funds as cash and bank balance but they should be invested as loan and advances to customer. Loan and advances represent local and foreign bill discounted and purchased, loans, cash credit and overdraft in local current as well as in convertible foreign currency.

We have,

Loan and Advances to Current Assets ratio =  $\frac{Loan \ and \ advances}{Current \ assets}$ 

Table 4.5
Loan and Advances to Current Assets Ratio (%)

Fiscal year	Nabil	Everest
2005/06	73.46	65.47
2006/07	69.65	65.82
2007/08	69.74	70.06
2008/09	68.13	67.86
2009/10	81.78	69.35
Mean	72.552	67.712
S.D.	11.039	4.102
C.V.	0.152	0.061

Source: Appendix 1 'V'

Table 4.5, total mean standard deviation and coefficient of variation of loan and advances to current assets ratio of these two banks.

Above table shows Nabil bank loan and advances to current assets ratio are in fluctuating trend i.e. highest in Fy 2009/10 is 81.78% lowest in Fy 2008/09 i.e. 68.13. Similarly, the ratio of Everest bank are also in fluctuating trend i.e. highest in Fy 2007/08 (70.06%) and low in Fy 2005/06 (65.47%).

Mean, standard deviation and coefficient of variation of Nabil bank is greater than that of Everest bank. This analysis shows that Nabil bank provides more loan and advances than Everest bank.

Figure 4.5: Trend-Line Showing Loan and Advances to Current Assets
Ratio

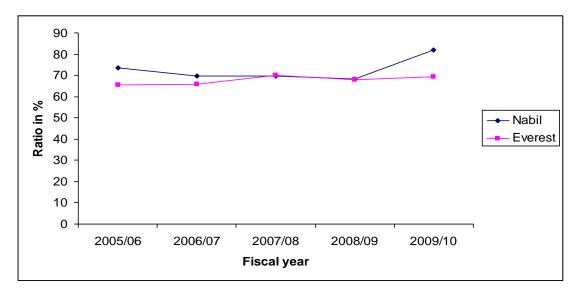


Table 4.6

Calculation of Overall Liquidity Ratio of NABIL Bank and Everest Bank

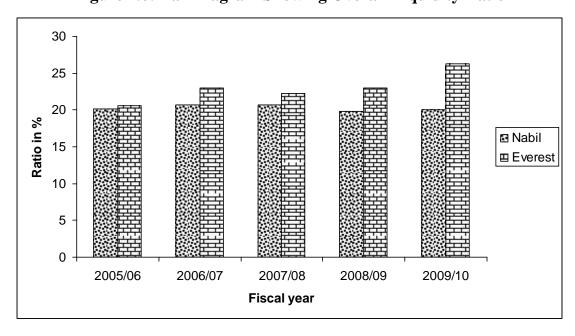
Ltd.

Fiscal year	Nabil		Eve	erest
	Ratio	Index	Ratio	Index
2005/06	20.154	100	20.612	100
2006/07	20.736	102.88	22.952	115.22
2007/08	20.692	102.66	22.186	101.35
2008/09	19.868	98.58	22.988	118.94
2009/10	20.074	99.60	26.241	135.78
Mean	20.30		22	.99
S.D.	0.347		2.	11
C.V.	0.0	017	0.0	918

The above table 4.6 shows the total means, standard deviation and C.V. of overall liquidity ratio of both banks.

The table shows that overall liquidity position of both banks has fluctuating trend. The mean and S.D. of EBL is greater than Nabil bank. This analysis shows overall liquidity position of EBL is better than Nabil. But C.V. of Nabil is less than EBL, which shows Nabil has consistent liquidity position than EBL. Overall liquidity ratio of Nabil and Everest Bank Limited can be presented in below bar-diagram.

Figure 4.6: Bar-Diagram Showing Overall Liquidity Ratio



## **4.1.2** Assets Management Ratios (Activity Ratio)

Assets management ratio measures the efficiency of the bank to manage its asset in profitable sector. This indicates the ability of the bank to utilize their available resources. Following ratios are discussed under this topic.

# i. Loan and Advances to Total Deposit Ratio

It shows the relationship between loans and advances to total deposit. This ratio measures the extent to which the banks are successful to mobilize their total deposit on loan and advances.

We have,

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

Where, loan and advances includes loans, advances, cash credit, local and foreign bill purchased and discount. Total deposit includes saving, fixed, current, short deposit and others.

Table 4.7

Loan and Advances to Total Deposit Ratio (%)

Fiscal year	Nabil	Everest
2005/06	66.79	71.10
2006/07	66.59	75.13
2007/08	66.94	76.48
2008/09	73.87	71.67
2009/10	69.63	74.61
Mean	68.764	73.798
S.D.	6.226	4.629
C.V.	0.0965	0.0627

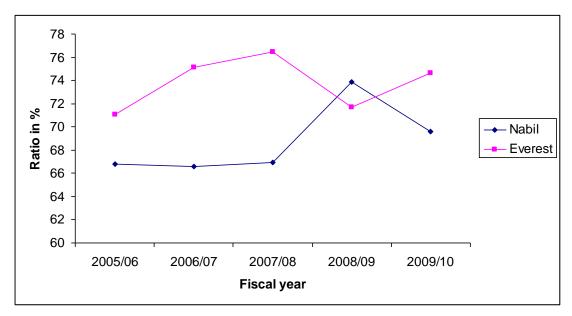
Source: Appendix 2 'I'

The above table 4.7 shows ratio of Nabil bank fluctuating trend i.e. highest in Fy 2008/09 (73.87%) and lowest in Fy 2006/07 (66.59%). Everest bank ratio is increasing trend in first three years then after it decreased and again it

increases. It has highest ratio in Fy 2007/08i.e. 76.48% and lowest in Fy 2005/06 i.e. 71.10%.

The mean value of Nabil bank is lower than that of Everest bank. Coefficient of variation of Everest is lower than that of Nabil bank. It shows Everest has strong position regarding the mobilization of total deposit on loan and advances and acquiring high profit. Following figure shows the trend of loan and advances to total deposit ratio.

Figure 4.7: Trend-Line Showing Loan and Advances to Total Deposit
Ratio



#### ii. Total Investment to Total Deposit Ratio

Commercial bank mobilizes its deposit by investing its fund in different securities issued by government and other non-financial companies. This ratio measures the extent to which the banks are able to mobilize their deposit on investment in various securities.

We have,

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

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

Table 4.8

Total Investment to Total Deposit Ratio (%)

Fiscal year	Nabil	Everest
2005/06	31.93	30.43
2006/07	38.32	27.40
2007/08	31.14	21.10
2008/09	28.97	17.85
2009/10	29.34	13.56
Mean	31.94	22.068
S.D.	7.54	13.76
C.V.	0.236	0.624

Source: Appendix 2 'II'

Table 4.8 shows total mean, S.D. and C.V. of total investment to total deposit ratio of these banks.

The above table reveals that Nabil bank has fluctuating trend i.e. highest in Fy 2006/07 i.e. 38.32% and lowest in Fy 2008/09 (28.97%). But Everest ban has decreasing trend; it has ranged from 30.43% in Fy 2005/06 to 13.56% in Fy 2009/10.

The mean value of Nabil is higher than that of Everest bank i.e. 31.94 > 22.068. But C.V. of Nabil is less than that of Everest bank i.e. 0.236 < 0.624. Form the above analysis it is clear that Nabil is more successful to utilize it's deposit than Everest bank and also it has higher consistency to investment than Everest.

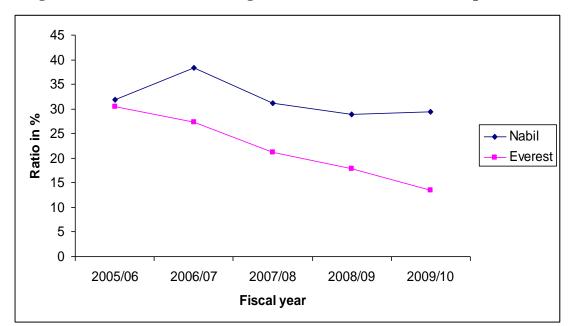


Figure 4.8: Trend-line Showing Total Investment to Total Deposit Ratio

## iii. Loan and Advances to Total Working Fund Ratio

A commercial bank must be very careful in mobilizing its total asset as loan and advance in appropriate level to generate profit. This ratio reflects the extent to which the commercial banks are success in mobilizing their assets on loan and advances for the purpose of income generating. A high ratio indicates better mobilization of funds as loan and advance and vice versa.

We have,

Loan and advances to total working fund ratio =  $\frac{Loan \ and \ advnaces}{Total \ working \ fund}$ 

Where, total working fund consists current assets, net fixed assets, loan for development banks and other miscellaneous assets.

Table 4.9

Loan and Advance to Total Working Fund (%)

Fiscal year	Nabil	Everest
2005/06	57.87	61.41
2006/07	57.04	63.75
2007/08	57.53	67.54
2008/09	62.98	64.69
2009/10	61.96	66.58
Mean	59.476	64.794
S.D.	5.545	4.825
C.V.	0.0932	0.074

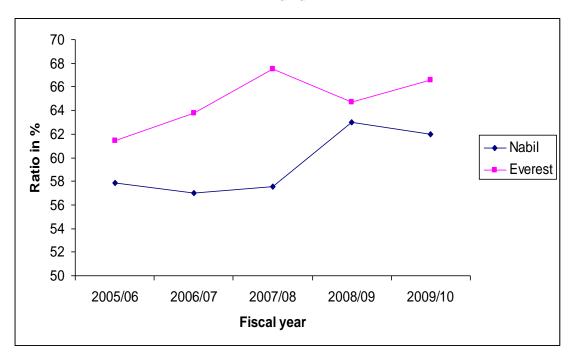
Source: Appendix 2 'III'

Table 4.9 shows the total mean, S.D. and C.V. of loan and advances to total working fund ratio of banks.

The above table shows that the loan and advances to total working fund ratio of Nabil bank is fluctuating trend i.e. highest in Fy 2008/09 (62.98%) and lowest in Fy 2006/07 (57.04%). Everest bank has increasing trend in Fy 2005/06 (61.77%) and Fy 2007/08 (67.54%). But it has decreased in Fy 2008/09 (64.69%) and again it increases in Fy 2009/10 (66.58%).

Mean value of Nabil is lower than that of Everest bank i.e. 59.476 < 64.794 but C.V. of Everest is lower than Nabil bank 0.0794 < 0.0932. Form the above analysis, we conclude that Everest bank has done better utilization fund as loan and advances for the purpose of income generation. It has higher consistency than that of Nabil bank.

Figure 4.9: Trend-Line Showing Loan and Advance to Total Working
Fund



# iv. Investment on Government Securities to Total Working Fund Ratio

To some extend commercial banks seem to utilize its fund by purchasing government securities. Government securities are a safe medium of investment though it is not liquid as cash and balance. This ratio is very important to the extent to which the banks are successful in mobilization their total fund on different type of government securities to maximizes their income.

We have,

Investment on government securities to

total working fund ratio =  $\frac{Investment\ on\ government\ sec\ urities}{Total\ working\ fund}$ 

Table 4.10

Investment on Government Securities to Total Working Fund Ratio (%)

Fiscal year	Nabil	Everest
2005/06	15.44	14.42
2006/07	17.26	22.43
2007/08	12.98	17.11
2008/09	11.73	10.03
2009/10	8.39	19.19
Mean	13.16	16.64
S.D.	6.84	9.43
C.V.	0.519	0.566

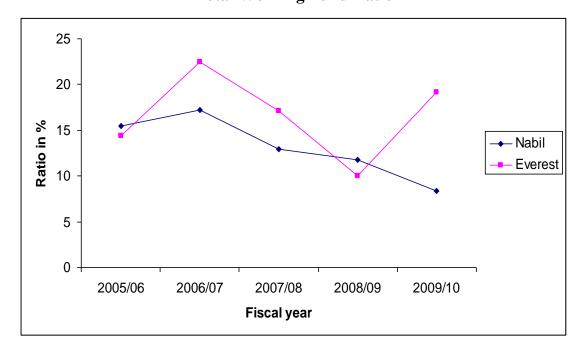
Source: Appendix 2 'IV'

Table 4.10 shows total mean, S.D. and C.V. of investment on government securities to total working fund ratio of these two banks.

In the above table, it shows that investment on government securities to working fund ratio of Nabil has increasing in Fy 2006/07 then after it has in decreasing trend. TI has decreased form 12.98 in Fy 2007/08 and 8.39 in Fy 2009/10. But, the Everest has fluctuating trend i.e. highest in Fy 2006/07 (22.43%) and lowest in Fy 2008/09 (10.03%).

Mean ratio of Everest is higher than that of Nabil bank. C.V. of Nabil is less than Everest 0.519 < 0.566. From this analysis, we can say that Everest bank is more successful in mobilizing its funds as investment on government securities. Nabil's investment policy is consistence than Everest bank.

Figure 4.10: Trend-Line Showing Investment on Government Securities to Total Working Fund Ratio



## v. Investment on Shares and Debenture to Total Working Fund Ratio

There are two types of investment i.e., investment on government securities and investment on shares and debenture. Investment on shares and debenture to total working fund ratio shows the extent to which the banks are successful to mobilize their total assets on purchase of shares and debenture of other companies to generate income and utilize their excess fund.

We have,

Investment on Shares and debentures to

total working fund ratio = 
$$\frac{Investment \ on \ shares \ and \ debenture}{Total \ working \ fund}$$

Where, investment on shares and debenture includes investment on debentures, bonds and share of other companies.

Table 4.11

Investment on Shares and Debentures to Total Working Fund Ratio (%)

Fiscal year	Nabil	Everest
2005/06	0.44	0.13
2006/07	1.05	0.093
2007/08	0.87	0.37
2008/09	0.81	0.27
2009/10	0.67	0.25
Mean	0.768	0.2226
S.D.	0.453	0.223
C.V.	0.591	0.988

Source: Appendix 2 'V'

Table 4.11 shows the total mean, S.D. and C.V. of investment on shares and debentures to total working fund ratio of Nabil and Everest bank.

The above table shows the investment on shares and debenture to total working fund ratio of Nabil bank has fluctuating trend. It has highest in Fy 2006/07 (1.05) and lowest in Fy 2005/06 (0.44%). Everest bank has also in fluctuating trend i.e. highest in Fy 2007/08 (0.37) and lowest in Fy 2006/07 (6.09).

The mean value of Nabil is higher than Everest. The C.V. of Nabil is less than Everest. The above analysis shows that Nabil has invested its funds in shares and debenture more than Everest bank, we can say that Nabil's investment in shares and debentures is more consistence than Everest.

Figure 4.11: Investment on Shares and Debentures to Total Working Fund Ratio

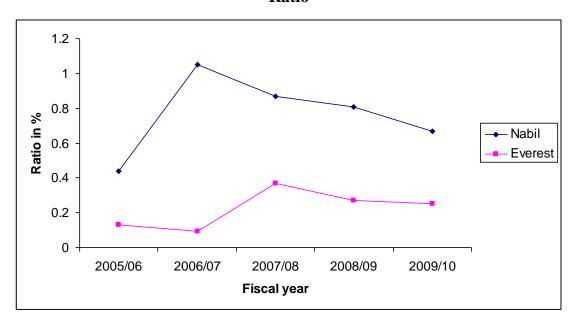


Table 4.12
Calculation of Overall Activity Ratio of Nabil Bank and Everest Bank Ltd.

Fiscal year	Nabil		Eve	erest
	Ratio	Index	Ratio	Index
2005/06	34.494	100	35.498	100
2006/07	36.052	104.52	37.760	106.37
2007/08	33.892	98.25	36.52	102.87
2008/09	35.672	103.42	32.902	92.68
2009/10	33.998	98.56	34.38	98.14
Mean	34.821		35.	503
S.D.	0.881		1.6	535
C.V.	0.0	)25	0.0	)46

The above table 4.12 shows total mean, S.D. and C.V. of overall activity ratio of both banks.

The above table shows that overall activity ratio both bank has fluctuating trend as shown by index. Nabil has highest ratio in 2006/07 i.e. 104.52 and lowest in

2007/08 i.e. 98.25 EBL has highest ratio in 2006/07 i.e. 106.377 and lowest in 2008/09 i.e. 92.68.

Total mean value of EBL is higher than Nabil, which shows that EBL has utilize its assets in profitable sector than Nabil. Overall activity ratio of Nabil and Everest Bank Limited can be presented in below bar-diagram.

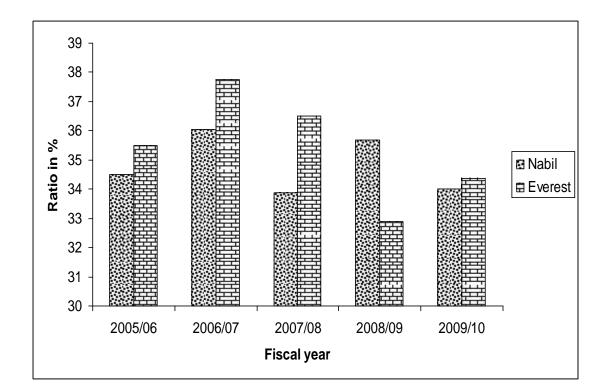


Figure 4.12: Bar-Diagram Showing Overall Activity Ratio

#### 4.1.3 Profitability Ratios

Profitability ratios are very helpful to measure the overall efficiency of operation of financial institutions. Here, profitability ratios are calculated and evaluated in terms of the relationship between net profit and assets. Higher ratio shows the higher efficiency of the bank.

The following profitability ratios are taken under this headings:

#### i. Return on Total Working Fund Ratio

This ratio measures the profit earning capacity of the bank by utilizing its available resources i.e. total asset. Return will be higher if the bank working fund is well managed and if efficiency is utilized.

We have,

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

Table 4.13
Return on Total Working Fund Ratio (%)

Fiscal year	Nabil	Everest
2005/06	2.73	1.48
2006/07	2.47	1.38
2007/08	2.01	1.59
2008/09	2.35	1.73
2009/10	2.18	2.00
Mean	2.35	1.64
S.D.	0.55	0.48
C.V.	0.234	0.295

Source: Appendix 3 'I'

Table 4.13 shows the total mean, S.D. and C.V. of return on total working fund ratio Nabil and Everest bank. IN the above table, return on total working fund ratio of Nabil has decreasing trend in Fy 2005/06 to 2007/08. Then after, it has increasing trend. The ratio of Everest bank has fluctuating trend. It has highest in Fy 2009/10 (2.00) and lowest in Fy 2006/07 (1.48).

Mean ratio of Nabil is higher than that of SBI bank i.e. 2.35 > 1.64. Whereas C.V. of Nabil is lower than that of Everest bank i.e. 0.234 < 0.299. From this analysis it found Nabil is successful to maintain the higher ratio in return on total working fund. It also shows than investment policy of Nabil is consistence.

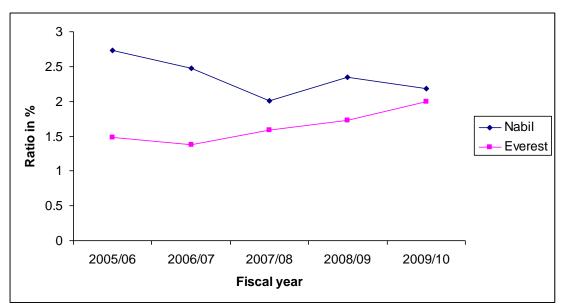


Figure 4.13: Trend-Line Showing Return on Total Working Fund Ratio

#### ii. Return on Loan and Advance Ratio

It measures the earning capacity of a commercial bank on its deposits mobilized on loan and advances. Higher the ratio greater will be return and vice-versa. We have,

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

Table 4.14
Return on Loan and Advances Ratio (%)

Fiscal year	Nabil	Everest
2005/06	2.82	2.78
2006/07	4.33	2.17
2007/08	3.49	2.35
2008/09	3.74	2.67
2009/10	3.52	3.01
Mean	3.58	2.59
S.D.	1.08	0.672
C.V.	0.303	0.259

Source: Appendix 3 'II'

Table 4.14 shows the total mean, S.D. and C.V. of return on loans and advances ratio of Nabil and Everest.

In the above table, return on loans and advances ratio of Nabil bank has fluctuating trend. It has highest in Fy 2006/07 (4.33) and 10 west in Fy 2005/06 (2.82). The ratio of Everest bank has also in fluctuating trend. It has highest in Fy 2009/10 (3.01) and lowest in Fy 2006/07 (2.17). Mean ratio of Nabil is greater than Everest bank i.e. 3.58 > 2.59 whereas, C.V. of Everest is less than Nabil bank 0.259 < 0.303. From the above analysis, it is found that Nabil has maintained higher ratio than Everest bank, which indicates that it is successful to earn high return on its loan and advance. But C.V. of Everest is less than Nabil, which shows investment policy return of Everest bank is consistence than Nabil.

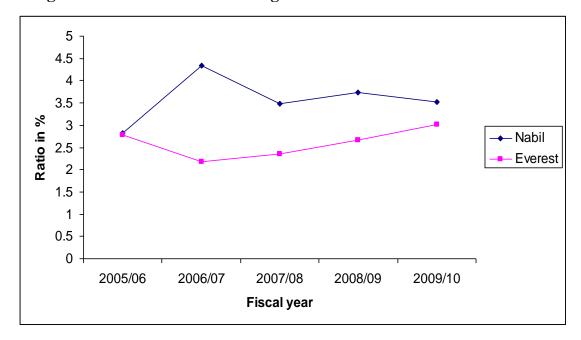


Figure 4.14: Trend-Line Showing Return on Loan and Advances Ratio

#### iii. Total Interest Earned on Total Working Fund Ratio

It reflects the extent to which the banks are successful in mobilizing their total assets to generate high income as interest. This ratio actually reveals the earning capacity of commercial bank by mobilizing its working fund. A high ratio is the indicator of high earning power of the bank on its total working fund and vice versa.

We have,

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

Table 4.15
Total Interest Earned to Total Working Fund Ratio (%)

Fiscal year	Nabil	Everest
2005/06	5.61	5.66
2006/07	5.83	5.33
2007/08	5.32	5.70
2008/09	6.38	5.92
2009/10	7.77	7.49
Mean	6.182	6.02
S.D.	1.93	1.69
C.V.	0.313	0.281

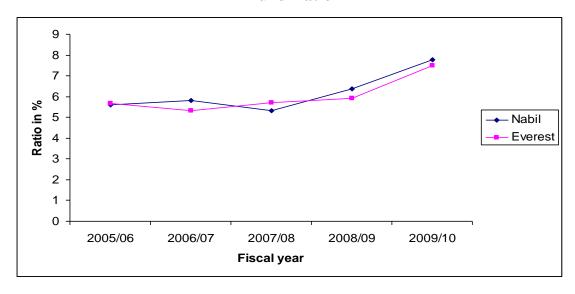
Source: Appendix 3 'III'

Table 4.15 shows the total mean, S.D. and C.V. of total interest earned to total working fund ratio of Nabil and Everest bank.

The above table shows that the ratio of interest earned to total working fund ratio of Nabil bank has increasing in Fy 2006/07 and it decreasing in Fy 2007/08 and then after it's increasing in Fy 2009/10 (7.77). Everest bank has fluctuating trend, it has highest in Fy 2009/10 (7.49) and lowest in Fy 2006/07 (5.33).

Mean ratio of Nabil bank is higher than Everest bank i.e. 6.182 > 6.02. C.V. of Everest is less than Nabil i.e. 0.281 < 0.311. From the above analysis, we can conclude that Nabil bank ratio is satisfactory than Everest. But mean ratio of Everest is consistence than Nabil bank.

Figure 4.15: Trend-Line Showing Total Interest Earned to Total Working
Fund Ratio



#### iv. Total Interest Paid to Total Working Fund

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

We have,

Total interest paid to total working fund ratio =  $\frac{Total \text{ int } erest \text{ } paid}{Total \text{ } working \text{ } fund}$ 

where, total interest paid includes total expenses on deposit liabilities, loan and advance and other deposits.

Table 4.16

Total Interest Paid to Total Working Fund Ratio (%)

Fiscal year	Nabil	Everest
2005/06	1.53	2.42
2006/07	2.03	2.41
2007/08	2.04	2.33
2008/09	2.62	2.62
2009/10	3.76	3.76
Mean	2.396	2.708
S.D.	1.71	1.19
C.V.	0.713	0.441

Source: Appendix 3 'IV'

Table 4.16 shows the total mean, S.D. and C.V. of total interest paid to total working fund ratio of Nabil and Everest bank.

The above table shows that the total interest paid to total working fund ratio of Nabil bank has increasing trend. It has increased form 1.53 in Fy 2005/06 to 3.76 in 2009/10. Everest bank decreased in Fy 2005/06 (2.52), to 2.33 in Fy 2.33. But it has increasing trend then after.

The mean ratio of Nabil is less than Everest i.e. 2.396 < 2.708. TI means the Nabil has paid lower interest than Everest bank. But C.V. of Nabil is higher than that of Everest bank i.e. 0.713 > 0.441, which indicate that total working fund ratio is less consistence than Everest bank. Following figure shows the trend of total interest paid to total working fund ratio.

Figure 4.16: Trend-Line Showing Total Interest Paid to Total Working
Fund Ratio

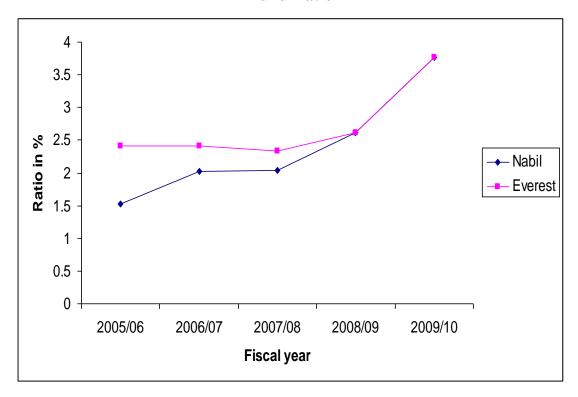


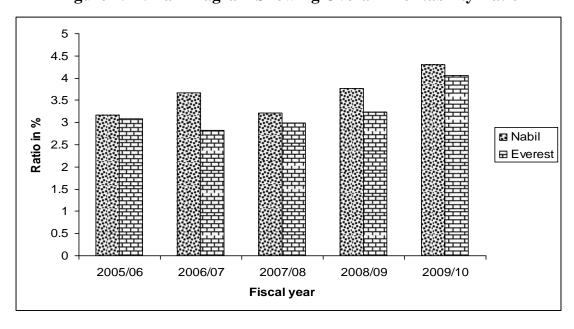
Table 4.17 Calculation of Overall Profitability Ratio of NABIL Bank and Everest Bank Ltd.

Fiscal year	Nabil		Eve	erest
	Ratio	Index	Ratio	Index
2005/06	3.172	100	3.085	100
2006/07	3.665	115.22	2.822	91.47
2007/08	3.215	101.35	2.992	96.98
2008/09	3.773	118.94	3.235	104.86
2009/10	4.307	135.78	4.065	131.76
Mean	3.626		3.2	239
S.D.	0.415		0.4	180
C.V.	0.1	14	0.1	48

Above table 4.17 shows total mean, S.D. and C.V. of overall profitability ratio of both banks.

The above table shows that overall profitability ratio of both banks has fluctuating trend. Nabil has highest in 2009/10 i.e. 135.78 and lowest in 2005/06 i.e. 100 EBL has highest in 2009/010 i.e. 131.76% and lowest in 2006/07 i.e. 91.47. The mean value of Nabil is higher than EBL, which shows that overall profitability of Nabil is better than EBL. The overall profitability ratio can be presented in below bar-diagram.

Figure 4.17: Bar-Diagram Showing Overall Profitability Ratio



#### 4.14 Risk Ratio

The possibility of risk makes bank's investment a challenging task. Bank has to take risk to get return on investment. It increases effectiveness and profitability of bank. If a bank expects high return on its investment, it has no accept the risk and manage it efficiently. Following ratio ahs been made to measure the level of risk.

#### i. Liquidity Risk Ratio

The liquidity risk ratio measure the level of risk associated with liquid assets i.e. cash, bank balance etc. that are kept in the bank for the purpose of satisfying the depositor's demand for cash. Higher the ratio, lower the liquidity risks.

We have,

$$Liquidity \ risk \ ratio = \frac{Total \ cash \ and \ bank \ balance}{Total \ deposit}$$

Table 4.18
Liquidity Risk Ratio (%)

Fiscal year	Nabil	Everest
2005/06	3.25	11.25
2006/07	5.99	13.15
2007/08	8.396	11.12
2008/09	9.02	18.49
2009/10	3.02	21.16
Mean	5.93	15.03
S.D.	5.57	9.09
C.V.	0.940	0.604

Source: Appendix 4 'I'

Table 4.18 shows the total mean, S.D. and C.V. of liquidity risk ratio of Nabil and Everest bank.

In the above table, liquidity risk ratio of Nabil bank is in increasing trend in Fy 2005/06 to 2008/09 then after it is decreasing. Everest bank has fluctuating trend it has highest in Fy 2009/10 and lowest in Fy 2007/08.

The mean ratio of Nabil is lower than that of Everest bank i.e. 5.935 < 15.03 which indicates that Everest bank's liquidity risk lower than of Nabil bank. C.V. of Nabil is also higher than Everest bank i.e. 0.940 > 0.640 which indicates Everest liquidity position is consistence than Nabil bank.

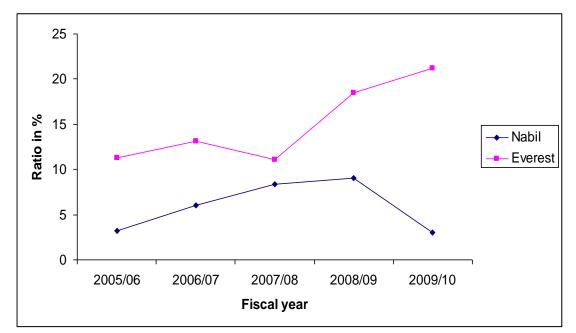


Figure 4.18: Trend-Line Showing Liquidity Risk Ratio

#### ii. Credit Risk Ratio

Credit risk ratio measures the possibility that loan will not be repaid or that investment will deteriorate inequality or go into default with consequent loss to the bank. Actually, credit risk ratio shows the proportion of non-performing assets in total loan advance of the bank.

We have,

Credit risk ratio = 
$$\frac{Total\ loan\ and\ advance}{Total\ assets}$$

Table 4.19 Credit Risk Ratio (%)

Fiscal year	Nabil	Everest
2005/06	57.87	61.41
2006/07	57.04	63.75
2007/08	57.53	67.54
2008/09	62.98	64.69
2009/10	61.96	66.58
Mean	59.476	64.794
S.D.	5.545	4.829
C.V.	0.0932	0.074

Source: Appendix 4 'II'

Table 4.19 shows total mean, S.D. and C.V. of credit risk ratio of Nabil and Everest bank. The above table shows that the credit risk of these two banks are fluctuating trend. Nabil bank mentioned highest ratio in Fy 2008/09 i.e. 62.98 and lowest in Fy 2006/07 i.e. 57.04. Similarly, Everest bank has maintained highest ratio in Fy 2007/08 i.e. 67.54 and lowest in Fy 2005/06 i.e. 61.41.

Mean ratio of Nabil bank is lower than that of Everest bank i.e. 59.476 < 64.794. It indicates that Everest bank has more credit risk than Nabil bank. C.V. of Nabil is more than Everest bank i.e. 0.0932 > 0.074, which shows Everest risk ratio is consistence than that of Nabil bank.

70 68 66 64 Ratio in % 62 Nabil 60 **Everest** 58 56 54 52 50 2005/06 2007/08 2008/09 2006/07 2009/10 Fiscal year

Figure 4.19: Trend-Line Showing Credit Risk Ratio

#### iii. Capital Risk Ratio

Capital risk ratio measures banks' ability to attract deposits an inter bank funds. It also determine the level of profit, a bank can earn if chooses to take high capital risk. The capital risk is directly related to return on equity. We have,

Capital risk ratio = 
$$\frac{Capital (Paid up \Gamma Re serve)}{Risk weighted assets}$$

Table 4.20 Capital Risk Ratio (%)

Fiscal year	Nabil	Everest
2005/06	11.04	8.26
2006/07	10.73	8.02
2007/08	9.03	9.13
2008/09	8.99	10.01
2009/10	7.78	9.12
Mean	9.51	8.91
S.D.	2.71	1.58
C.V.	0.284	0.178

Source: Appendix 4 'III'

Table 4.20 shows the total mean, S.D. and C.V. of capital risk ratio of these banks.

In the above table, capital risk ratio of Nabil has decreasing trend i.e. it has 11.04 in Fy 2005/06 and 7.78 in Fy 2009/10. The ratio of Everest bank are in fluctuating trend i.e. highest in Fy 2008/09 (10.01) and lowest in Fy 2006/07 (8.02).

The mean ratio of Nabil is higher than that of Everest bank i.e. 9.51 > 8.91. But C.V. of Nabil is greater than Everest bank 0.284 > 0.178. It shows that Nabil bank high capital risk ratio.

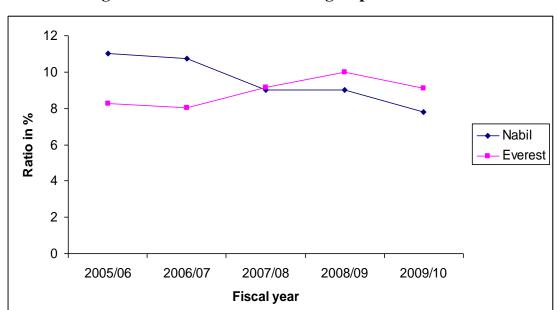


Figure 4.20: Trend-Line Showing Capital Risk Ratio

Table 4.21
Calculation of Overall Risk Ratio of Nabil Bank and Everest Bank Ltd.

Fiscal year	Nabil		Eve	erest
	Ratio	Index	Ratio	Index
2005/06	24.05	100	26.97	100
2006/07	24.58	102.20	28.31	104.96
2007/08	24.98	103.87	29.26	108.49
2008/09	24.99	103.91	31.01	114.97
2009/10	24.25	100.83	32.28	119.68
Mean	24.97		29	.56
S.D.	1.058		1.	89
C.V.	0.0	0.042		064

The above table 4.21 shows overall risk position of both banks. Above table shows that overall risk ratio of Nabil is increasing trend upto 4<sup>th</sup> year and later it is decreasing. But EBL has increasing trend. Totla mean and S.D. of EBL is higher than Nabil bank. It shows that EBL has taken high risk than Nabil bank. Overall risk ratio of Nabil and Everest Bank Limited can be presented in below bar-diagram.

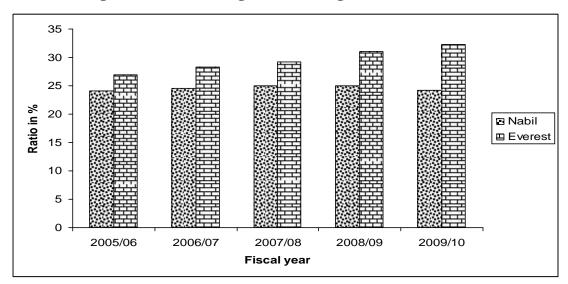


Figure 4.21: Bar-Diagram Showing Overall Risk Ratio

#### 4.1.5 Growth Ratio

Growth ratios are directly related to the fund mobilization and investment management of the bank. It represent how well commercial banks are maintaining the economic and financial position. Higher ratio indicates, better performance of bank and vice-versa.

Under this, growth ratio of total deposit, loan and advances, total investment and net profit are calculated.

#### A. Growth Ratio of Total Deposit

Table 4.22
Growth Ratio of Total Deposit (%)

Fiscal year	Nabil	Everest
2005/06	19347.39	13802.44
2006/07	23342.28	18186.25
2007/08	31915.05	23976.29
2008/09	37348.26	33322.9
2009/10	46340.70	36932.31
Growth ratio	24.40	24.92

Source: Appendix -5.

The above table 4.22 shows the growth ratio of Nabil bank is less than Everest bank i.e. 24.40 < 24.92. The above position of growth rate shows that Everest bank used to increase its deposit than Nabil bank.

25 | 24.92% | 24.8 | 24.7 | 24.6 | 24.5 | 24.4 | 24.3 | 24.2 | 24.1 | Nabil | Everest

Figure 4.22: Bar-Diagram Showing Growth Ratio of Total Deposit

#### ii. Growth Ratio of Loan and Advances

Table 4.23
Growth Ratio of Loan and Advances (%)

**Banks** 

Fiscal year	Nabil	Everest
2005/06	12922.54	9801.30
2006/07	15545.78	13664.08
2007/08	21365.05	18399.08
2008/09	27589.93	23884.07
2009/10	32589.33	27556.35
Growth ratio	26.01	29.49

Source: Appendix -6.

The above table 23 shows the growth ratio of loan and advances. The growth rate of Nabil is less than Everest i.e. 26.01 < 29.49. This position of growth ratio indicates that the performance of Everest bank to grant loan and advances is better than that of Nabil bank.

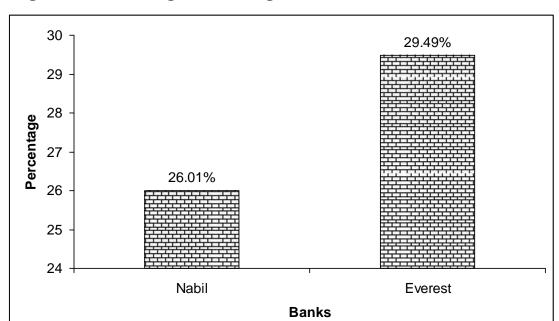


Figure 4.23: Bar-Diagram Showing Growth Ratio of Loan and Advances

#### iii. Growth Ratio of Total Investment

Table 4.24
Growth Ratio of Total Investment (%)

Fiscal year	Nabil	Everest
2005/06	6178.53	4200.51
2006/07	8945.31	4984.31
2007/08	9939.71	5059.57
2008/09	10826.37	5948.48
2009/10	13600.91	5008.30
Growth ratio	21.81	4.49

Source: Appendix -7.

The above table 24 shows the growth ratio of total investment of Nabil and Everest bank. The growth ratio of total investment of Nabil is greater than Everest bank i.e. 21.81 > 4.49. Which indicates that Nabil bank's performance is better than that of Everest.

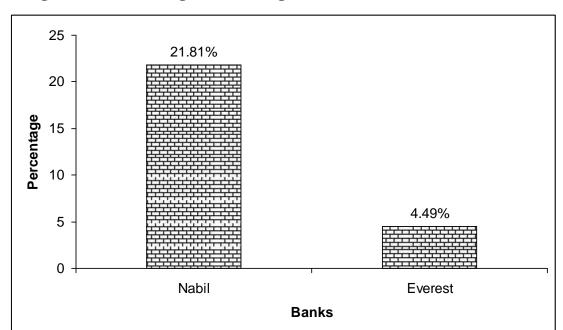


Figure 4.24: Bar-Diagram Showing Growth Ratio of Total Investment

#### v. Growth Ratio of Net Profit

Table 4.25
Growth Ratio of Net Profit

Fiscal year	Nabil	Everest
2005/06	635.26	273.29
2006/07	673.59	296.40
2007/08	746.46	431.21
2008/09	1031.46	638.73
2009/10	1138.50	831.76
Growth ratio	15.70	32.08

Source: Appendix -8.

The above table 4.25 shows that growth ratio of net profit of Nabil and Everest bank. The growth ratio of Nabil is les than Everest bank i.e. 15.70 < 32.08. The above position indicates that Everest bank has better position than Nabil bank.



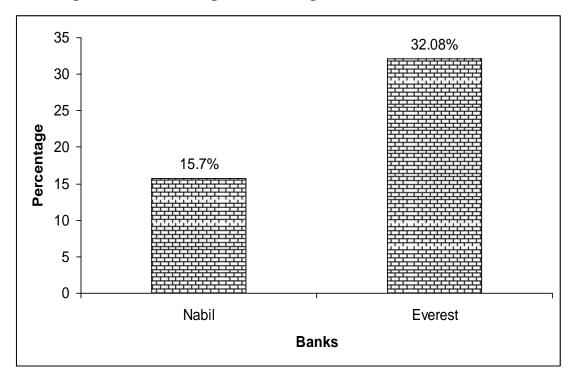
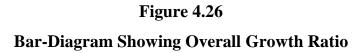
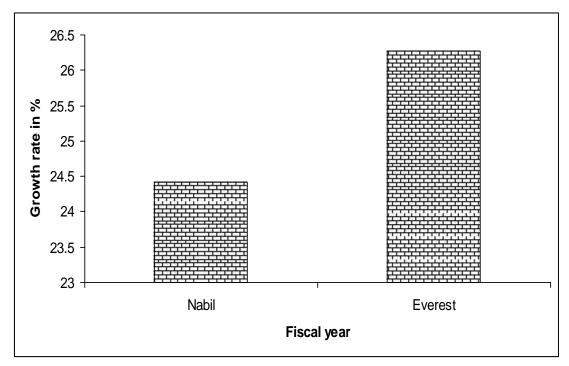


Table 4.26
Calculation of Overall Growth Ratio of Nabil Bank and Everest Bank Ltd.

Fiscal year	Nabil	Everest
	Ratio	Ratio
2005/06	9770.93	7019.368
2006/07	12126.74	9282.76
2007/08	15991.56	11966.54
2008/09	19199.05	15948.54
2009/10	23417.36	17582.43
Growth ratio	24.42	26.28

The above table 4.26 shows the overall growth ratio of both banks. The overall growth ratio of Nabil is less than EBL i.e. 24.42 < 26.28. It shows that EBL has maintaining its economic and financial position better than Nabil. Overall growth ratio of Nabil and Everest Bank Limited can be presented in below bardiagram.





#### **4.2 Statistical Analysis**

#### **4.2.1 Trend Analysis**

Under this topic an effort has been made to analyze and interpret trend of deposits, loan and advance, investment and net profit of Nabil and Everest to forecast them for next five years period.

#### i. Trend Analysis of Total Deposit

Under this topic an efforts has been made to calculated the trend values of deposits of Nabil and Everest for five years form 2005/06 to 2009/10 and forecasted for next five years from 2009/10 to 2014/15.

Table 4.27
Trend Value of Total Deposit of Nabil and Everest

Fiscal year	Nabil	Everest
2005/06	18060.18	12964.77
2006/07	24859.46	19104.40
2007/08	31658.74	25244.03
2008/09	38458.02	31383.66
2009/10	45257.14	37523.29
2010/11	52056.58	43662.92
2011/12	58855.86	49802.55
2012/13	65655.14	55942.18
2013/14	72454.42	62081.81
2014/15	79253.70	68221.44

Source: Appendix -9.

Trend analysis of loans and advances, total investment and net profit are calculated accordingly.

Figure 4.27
Trend Value of Total Deposit of Nabil and Everest Bank

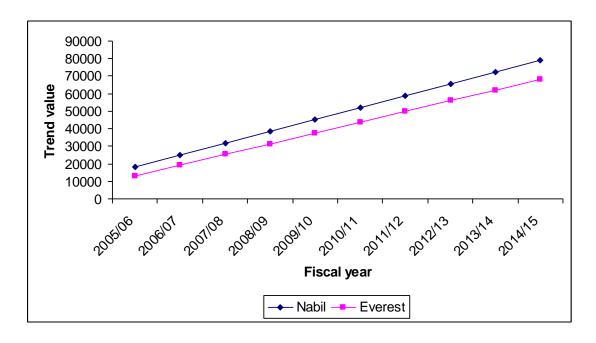


Table 4.27 and graph 4.27 shows the trend value of total deposit from 2005/06 to 2014/15 of two banks.

Total deposits of Nabil and Everest have in the increasing trend. If all other things remain the same the total deposits of the Nabil will be highest deposit among the two banks under study period. Total deposit of Everest will be 68221.44 million. The total deposit Nabil will be 79253.7 million in 2015.

By analyzing above trend value it is found that the total deposit position collection of Nabil is better than Everest bank.

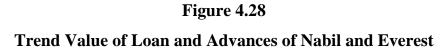
#### iii. Trend Analysis of Loan and Advances

Here, the trend values of loan and advances of Nabil and Everest has been calculated five years from 2005/06 to 2009/10 and forecast for next five years upto 2015.

Table 4.28
Trend Values of Loan and Advances of Nabil and Everest

Fiscal year	Nabil	Everest
2005/06	11803.07	9502.94
2006/07	16864.75	14573.06
2007/08	21926.43	18649.09
2008/09	26987.43	23222.15
2009/10	32049.79	27795.21
2010/11	37111.47	32368.27
2011/12	42173.15	36941.33
2012/13	47234.83	41514.39
2013/14	52296.51	46087.45
2014/15	57358.19	50660.51

Source: Appendix -10.



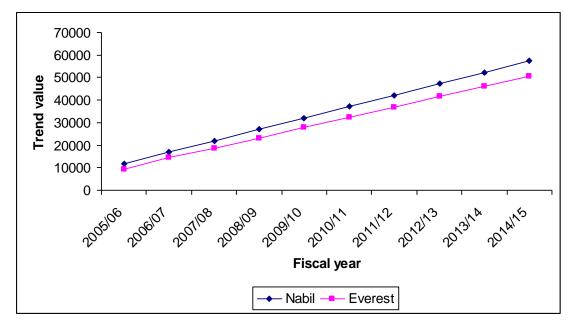


Table 4.28 and figure 4.28 shows trend value of loan and advances form 2005/06 to 2014/15 of two banks. Trend value of loan and advances of two banks have been in increasing trend. Total loan and advance of Nabil will 57358.19 and Everest will be 50660.51 million. Total loan and advance of Nabil is the highest among study period.

By analyzing above trend, Nabil provides more loan and advance than Everest bank and it indicates Nabil may use large portion of its deposit in providing loan.

#### iii. Trend Analysis of Total Investment

Under this, an effort has been made to calculate trend values of total investment form the 2005/06 to 2009/10 have been calculated and forecasted for next five years upto 2015.

Table 4.29
Trend Value of Total Investment of Nabil and Everest

(Rs. in million)

Fiscal year	Nabil	Everest
2005/06	6553.00	4536.28
2006/07	8225.58	4788.25
2007/08	9898.16	5040.23
2008/09	11570.74	5292.21
2009/10	13243.92	5544.18
2010/11	14916.5	5796.15
2011/12	16589.08	6048.13
2012/13	18261.66	6300.10
2013/14	19934.24	6552.08
2014/15	21606.82	6804.06

Figure 4.29
Trend Value of Total Investment of Nabil and Everest

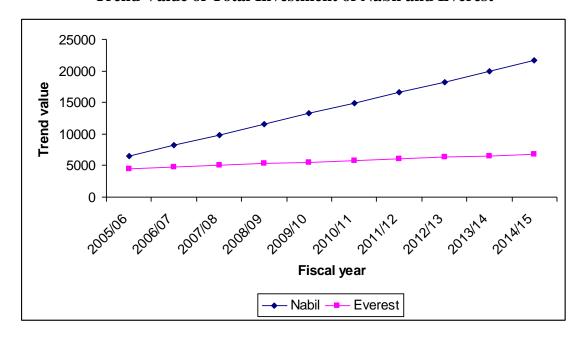


Table 4.29 and figure 4.29 shows trend value of total investment from 2005/06 to 2014/15 of two banks.

Total investment of Nabil and Everest have been in increasing trend. Total investment of the Nabil will be highest investment among the two banks under study period. Total investment of Everest will be 6804.06 and Nabil will be

21606.825 in 2015. The total investment trend of Nabil is satisfactory than Everest bank.

### iv. Trend Analysis of Net Profit

Under this topic an effort has been made to analyze net profit of Nabil and Everest form 2005/06 to 2009/10 and forecasted for next five years 2010/11 to 2014/15.

Table 4.30
Trend Analysis of Net Profit of Nabil and Everest

Fiscal year	Nabil	Everest
2005/06	572.03	180.83
2006/07	708.48	333.95
2007/08	844.92	487.07
2008/09	981.36	640.19
2009/10	1117.8	793.37
2010/11	1254.24	946.43
2011/12	1390.68	1099.55
2012/13	1527.12	1252.67
2013/14	1663.56	1405.79
2014/15	1800	1558.391

Source: Appendix -11.

Figure 4.30
Trend Analysis of Net Profit of Nabil and Everest

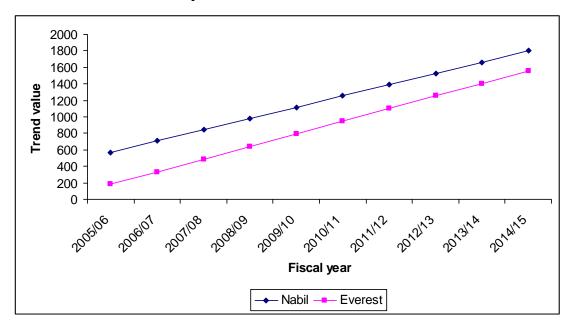


Table 4.30 and figure 4.30 shows the trend value of net profit from 2005/06 to 2014/15. Net profit of two banks have the increasing trend value. The net profit of Nabil will be 1800 million net profit of Everest will be 1558.91. Total net profit of Nabil is highest among the two banks during the study period.

#### 4.2.2 Test of Hypothesis

The test of hypothesis disclose the fact whether the difference between the computed statistic and hypothetical parameter is significant.

Types of hypothesis:

- i. Null hypothesis
- ii. Alternative hypothesis

### i. Null hypothesis (H<sub>0</sub>): $\overline{X}_1 = \overline{X}_2$

This hypothesis always rejects the difference and accepts of the assumption value and the actual value are same i.e. there is no significant difference between mean ratio of loan and advances to total deposit of Nabil and Everest bank limited.

### ii. Alternative hypothesis (H<sub>1</sub>): $\overline{X}_1$ $\overline{X}_2$

Complementary of null hypothesis is called alternative hypothesis i.e. there is significant difference between mean ratios of loan and advance to total deposit of Nabil and Everest bank.

Generally, following steps are taken for test of hypothesis:

- 1. Formulating hypothesis
  - a. Null hypothesis
  - b. Alternative hypothesis
- 2. Computing the test statistics
- 3. Fixing the level of significance
- 4. Finding critical region
- 5. Making decision

In this topic t-statistics is used to find out the test of significance regarding the parameter of population on the basis of sample drawn form the population.

#### t-test

If we draw a large number of small samples i.e. (n < 30) and compute the mean for each sample and then plot the frequency distribution of these mean, the resulting sampling distribution would be t-test. In this study, samples are taken only for five years i.e. (5 < 30).

Assumption made for using t-test in this case are:

- a. The parent populations form which samples are drawn are normally distributed.
- b. The two samples are random and independent of each other.

Based on above assumptions, following hypothesis are tested:

## 1. Test of hypothesis on loan and advance to total deposit ratio between Nabil and Everest bank

We take the mean ratio of loan and advance to total deposit of Nabil and Everest bank to carry out t-test.

Table 4.31
Test of Hypothesis on Loan and Advances to Total Deposit Ratio between
Nabil and Everest Bank

S.N.	Nabil	Everest
1	$ \phi X_1 = 343.82$	$\phi X_2 = 368.99$
2	$\overline{X}_{1} = 68.76$	$\overline{X}_2 = 73.79$
3	$ \phi X_1^2 = 38.77$	$ \phi X_2 ^2 = 21.43$

Source: Appendix- 10.

Setting hypothesis,

Null hypothesis (H<sub>0</sub>):  $\overline{X}_1 = \overline{X}_2$ , i.e. there is no significant difference between mean ratios of loan and advances to total deposit of Nabil and Everest bank.

Alternative hypothesis (H<sub>1</sub>):  $\overline{X}_1$   $\overline{X}_2$  (two-tailed test), i.e. there is significant difference between the mean ratios of loan and advances to total deposit of Nabil and Everest bank.

The test statistics under H<sub>0</sub> is

$$t = \frac{\overline{X}_1 Z \overline{X}_2}{\sqrt{S^2 \frac{1}{n_1} \Gamma \frac{1}{n_2}}}$$

Where, 
$$S^2 = \frac{1}{n_1 \Gamma n_2 Z_2} (X_1^2 \Gamma X_2^2 \Gamma)$$

$$= \frac{1}{5 \,\Gamma 5 \,\mathrm{Z2}} (38.77 \,\Gamma 21.43)$$

$$=7.525$$

Now, 
$$t = \frac{68.76 \text{ Z}73.79}{\sqrt{7.525 \frac{1}{5} \Gamma \frac{1}{5}}}$$

$$= -2.907$$

Calculated value of |t| = 2.907

Tabulated value of 't' (two-tailed test) at 5% level of significance of  $(n_1+n_2-2)$  d.f. i.e. 8 d.f. is 2.306.

Decision: Since the calculated value of |t| i.e. 2.907 is greater than that of tabulated value i.e. 2.306 at 5% LOS for two tailed test. Null hypothesis rejected, i.e. there is significant difference between mean ratios of loan and advance to total deposit ratio of Nabil and Everest bank.

# ii. Test of Hypothesis on Total Investment to Total Deposit Ratio between Nabil and Everest

We take the mean ratio of total investment to total deposits of Nabil and Everest bank are taken and carried out under t-test of significance difference.

Table 4.32
Test of Hypothesis on Total Investment to Total Deposit Ratio between
Nabil and Everest Bank

S.N.	Nabil	Everest
1	$ \phi X_1 = 159.7$	$\phi X_2 = 110.34$
2	$\overline{X}_1 = 31.94$	$\overline{X}_2 = 22.068$
3	$ \phi X_1 ^2 = 56.92$	$ \phi X_2^2 = 189.47$

Source: Appendix- 10.

Setting hypothesis,

Null hypothesis (H<sub>0</sub>):  $\overline{X}_1 = \overline{X}_2$ , i.e. there is no significant difference between mean ratios of total investment to total deposit of Nabil and Everest bank.

Alternative hypothesis (H<sub>1</sub>):  $\overline{X}_1$   $\overline{X}_2$  (two-tailed test), i.e. there is significant difference between the mean ratios of total investment to total deposit of Nabil and Everest bank.

The test statistics under H<sub>0</sub> is

$$t = \frac{\overline{X}_1 Z \overline{X}_2}{\sqrt{S^2 \frac{1}{n_1} \Gamma \frac{1}{n_2}}}$$
Where,  $S^2 = \frac{1}{n_1 \Gamma n_2 Z 2} (X_1^2 \Gamma X_2^2)$ 

$$= \frac{1}{5 \Gamma 5 Z 2} (56.92 \Gamma 189.47)$$

$$= 30.798$$
Now,  $t = \frac{31.94 Z 22.068}{\sqrt{30.798 \frac{1}{5} \Gamma \frac{1}{5}}}$ 

Calculated value of t = 2.812

= 2.812

Tabulated value of 't' (two-tailed test) at 5% level of significance of  $(n_1+n_2-2)$  d.f. i.e. 8 d.f. is 2.306.

Decision: Since the calculated value of t i.e. 2.812 is greater than that of tabulated value i.e. 2.306 at 5% LOS for two tailed test. Null hypothesis rejected, i.e. there is significant difference between mean ratios of total investment to total deposit ratio of Nabil and Everest bank.

## iii. Test of hypothesis on Government Securities to Current Assets Ratio between Nabil and Everest Bank

Here, mean ratios of government securities to current assets of Nabil and Everest bank are taken and carried out under t-test of significance difference.

Table 4.33
Test of Hypothesis on Government Securities to Current Assets Ratio between Nabil and Everest Bank

S.N.	Nabil	Everest
1	$ \phi X_1 = 80.18$	$\phi X_2 = 86.31$
2	$\overline{X}_1 = 16.04$	$\overline{X}_2 = 17.26$
3	$ \phi X_1 ^2 = 74.32$	$\phi X_2^2 = 98.08$

Source: Appendix- 10.

Setting hypothesis,

Null hypothesis (H<sub>0</sub>):  $\overline{X}_1 = \overline{X}_2$ , i.e. there is no significant difference between mean ratios of government securities to current assets of Nabil and Everest bank.

Alternative hypothesis (H<sub>1</sub>):  $\overline{X}_1$   $\overline{X}_2$  (two-tailed test), i.e. there is significant difference between the mean ratios of government securities to current assets of Nabil and Everest bank.

The test statistics under  $H_0$  is

$$t = \frac{\overline{X}_1 \ Z \overline{X}_2}{\sqrt{S^2 \ \frac{1}{n_1} \Gamma \frac{1}{n_2}}}$$

Where, 
$$S^2 = \frac{1}{n_1 \Gamma n_2 Z^2} (X_1^2 \Gamma X_2^2)$$

$$= \frac{1}{5 \,\Gamma 5 \,\mathrm{Z2}} (74.32 \,\Gamma 98.08)$$

$$= 21.55$$

Now, t = 
$$\frac{16.04 \text{ Z}17.26}{\sqrt{21.55 \frac{1}{5} \Gamma \frac{1}{5}}}$$

= -0.414

Calculated value of |t| = 0.414

Tabulated value of 't' (two-tailed test) at 5% level of significance of  $(n_1+n_2-2)$  d.f. i.e. 8 d.f. is 2.306.

Decision: Since the calculated value of t i.e. 0.414 is greater than that of tabulated value i.e. 2.306 at 5% LOS for two tailed test. Null hypothesis rejected, i.e. there is significant difference between mean ratios of government securities to current assets ratio of Nabil and Everest bank.

## iv. Test of Hypothesis on Loan and Advance to Current Assets between Nabil and Everest Bank

Here, mean ratio of loan and advance to current assets of Nabil and SBI bank taken and carried out under t-test of significance difference.

Table 4.34

Test of Hypothesis on Loan and Advance to Current Assets Ratio between

Nabil and Everest Bank

S.N.	Nabil	Everest
1	$ \phi X_1 = 362.76$	$\phi X_2 = 338.56$
2	$\overline{X}_{1} = 72.55$	$\overline{X}_2 = 67.71$
3	$ \phi X_1 ^2 = 121.86$	$\phi X_2^2 = 16.82$

Source: Appendix- 10.

Setting hypothesis,

Null hypothesis (H<sub>0</sub>):  $\overline{X}_1 = \overline{X}_2$ , i.e. there is no significant difference between mean ratios of loan and advances to current assets of Nabil and Everest bank.

Alternative hypothesis (H<sub>1</sub>):  $\overline{X}_1$   $\overline{X}_2$  (two-tailed test), i.e. there is significant difference between the mean ratios of loan and advance to current assets of Nabil and Everest bank.

The test statistics under  $H_0$  is

$$t = \frac{\overline{X}_{1} Z \overline{X}_{2}}{\sqrt{S^{2} \frac{1}{n_{1}} \Gamma \frac{1}{n_{2}}}}$$
Where,  $S^{2} = \frac{1}{n_{1} \Gamma n_{2} Z 2} (X_{1}^{2} \Gamma X_{2}^{2})$ 

$$= \frac{1}{5 \Gamma 5 Z 2} (121.86 \Gamma 16.82)$$

$$= 17.33$$
Now,  $t = \frac{72.55 Z 67.71}{\sqrt{17.33 \frac{1}{5} \Gamma \frac{1}{5}}}$ 

= 1.84

Calculated value of t = 1.84

Tabulated value of 't' (two-tailed test) at 5% level of significance of  $(n_1+n_2-2)$  d.f. i.e. 8 d.f. is 2.306.

Decision: Since the calculated value of t i.e. 1.84 is greater than that of tabulated value i.e. 2.306 at 5% LOS for two tailed test. Null hypothesis rejected, i.e. there is significant difference between mean ratios of loan and advances to current assets ratios of Nabil and Everest bank.

## v. Test of Hypothesis on Return on Loan and Advance Ratio between Nabil and Everest Bank

Here, mean ratio on loan and advances to Nabil and Everest bank are taken and carried out under t-test of significant difference.

Table 4.35

Test of Hypothesis on Return on Loan and Advance Ratio between Nabil and Everest Bank

S.N.	Nabil	Everest
1	$ \phi X_1 = 17.9$	$\phi X_2 = 12.98$
2	$\overline{X}_1 = 3.58$	$\overline{X}_2 = 2.59$
3	$ \phi X_1 ^2 = 1.1774$	$\phi X_2^2 = 0.4529$

Source: Appendix- 10.

Setting hypothesis,

Null hypothesis (H<sub>0</sub>):  $\overline{X}_1 = \overline{X}_2$ , i.e. there is no significant difference between mean ratios of return on loan and advances of Nabil and Everest bank.

Alternative hypothesis (H<sub>1</sub>):  $\overline{X}_1$   $\overline{X}_2$  (two-tailed test), i.e. there is significant difference between the mean ratios of return on loan and advances of current assets of Nabil and Everest bank.

The test statistics under H<sub>0</sub> is

t = 
$$\frac{\overline{X}_1 Z \overline{X}_2}{\sqrt{S^2 \frac{1}{n_1} \Gamma \frac{1}{n_2}}}$$
  
Where,  $S^2 = \frac{1}{n_1 \Gamma n_2 Z 2} (X_1^2 \Gamma X_2^2)$   
=  $\frac{1}{5 \Gamma 5 Z 2} (1.1774 \Gamma 0.4529)$   
= 0.203

Now, t = 
$$\frac{3.58 \text{ Z} 2.59}{\sqrt{0.203 \frac{1}{5} \Gamma \frac{1}{5}}}$$
  
= -3.485

Calculated value of t = 3.485

Tabulated value of 't' (two-tailed test) at 5% level of significance of  $(n_1+n_2-2)$  d.f. i.e. 8 d.f. is 2.306.

Decision: Since the calculated value of |t| i.e. 3.485 is greater than that of tabulated value i.e. 2.306 at 5% LOS for two tailed test. Null hypothesis rejected, i.e. there is significant difference between mean ratios of return on loan and advances of Nabil and Everest bank.

#### 4.2.3 Correlation Analysis

It is statistical tool sued to describe the degree to which one variable is linearly related to another. The coefficient of correlation always lies between +1 and -1. Correlation is notified by 'r'. When r is +1 there is perfect position relation between two variables, when r is -1, there is perfect negative between two variables and when r is 0 there is no relationship between the variables.

Here, correlation matrix of both banks (Nabil and EBL) has been made to show the relationship between the different ratios.

Table 4.36

Correlation Matrix of the Different Ratio of Nabil

Ratio	Liquidity	Activity	Profitability	Risk	Growth
Liquidity	-				
Activity	0.025248	_			
Profitability	-0.40965	0.07808	-		
Risk	-0.40384	0.45516	0.09332	-	
Growth	-0.45383	-0.28389	0.80982	0.32402	-

Table 4.36 shows that the relationship between the different ratios of Nabil bank.

In the above table, it shows that correlation between liquidity and activity ratio is 0.025248, it means there is least positive relationship between liquidity and

activity ratio. The correlation between liquidity and profitability ratio, liquidity and risk ratio and liquidity and growth ratio are -0.40965, -0.40384, -0.45383 respectively. This shows that there is negative correlation between these ratios. Correlation of activity with profitability and risk is positive and which growth is negative. Correlation between profitability and risk least positive and with growth showing highly positive relation i.e. 0.80982. Correlation between risk and growth is positive i.e. 0.32402.

Table 4.37
Correlation Matrix of the Different Ratio of EBL

Ratio	Liquidity	Activity	Profitability	Risk	Growth
Liquidity	-				
Activity	-0.20322	-			
Profitability	0.81972	-0.48852	-		
Risk	0.88063	-0.5633	0.78915	-	
Growth	0.82827	-0.62282	0.75756	0.99488	-

Table 4.37 shows that the relationship between the ratios of EBL.

In the above table, it shows that correlation of liquidity with activity is negative and with all of three highly positive. Correlation of activity with profitability, risk and growth is negative. Correlation of profitability with risk and growth is positive. And the correlation between risk and growth is highly positive.

#### 4.3 Major finding of the study

The major findings of the study are derived with the help of analysis of financial and statistical tools of Nabil and Everest bank are as follows.

- The current ratio of Nabil bank is less than Everest bank. It states Everest bank has better liquidity position than Nabil bank.
- The mean ratio of cash and bank balance to total deposit of Nabil bank is less than that of Everest bank. It state that liquidity position of Everest bank is better than Nabil bank.

- The mean ratio of cash and bank balance to current assets ratio of Nabil is less than that of Everest bank. Everest bank has higher consistency than Nabil, which indicates that Everest bank has utilized its fund more efficiently.
- The mean ratio of investment on government securities to current assets of Everest is higher than Nabil bank. It indicates the Everest bank invest its current assets in government securities more than Nabil bank.
- The mean ratio of loan & advance to current asset of Nabil bank is higher than that of Everest bank. It revels that Nabil provides more loan & advance than Everest bank.
- The above result shows that liquidity position of Nabil is comparatively lower than Everest bank. It has lower cash and bank balance to total deposit, cash and bank balance to current assets and investment on government securities to current assets. It has maintained highest ratio on loan & advance to current assets.
- The mean ratio of loan & advance to total deposit of Nabil is lower than Everest bank. It indicates Everest has utilizing its deposit in loan & advance better than Nabil bank.
- The mean ratio of total investment to total deposit of Nabil is higher than that of Everest bank, which indicates that Nabil is successful in utilizing its deposit in a better way.
- The mean ratio of loan& advance to total working fund ratio of Nabil is lower than Everest bank, which indicates that it is utilizing its fund lower than Everest bank.
- Investment on government securities to total working fund ratio of Nabil is lower than Everest bank. It indicates that the investment policy of Everest is better to utilize its working fund.
- The mean ratio of investment on shares and debenture to total working fund of Nabil is higher than Everest bank.

The mean ratio of return on total working fund ratio of Nabil is higher than Everest bank. Nabil bank is successful to maintain higher ratio investment return on total working fund. The mean ratio of return on loan & advance of Nabil is higher than Everest bank. It indicates it is successful to maintain higher return on loan & advance. The mean ratio of return on total working fund ratio of Nabil bank is higher than Everest bank. Nabil bank is successful to maintain higher ratio of investment return on total working fund. The mean ratio of total interest paid to total working fund of Nabil is lower than Everest bank, which means Nabil has paid low interest than Everest bank. The risk ratio of Nabil and Everest bank shows that: The mean ratio of liquidity risk of Nabil is lower than that of Everest bank. The mean ratio of credit risk ratio of Nabil is lower than that of Everest bank. Nabil has maintained higher mean ratio of capital risk than Everest bank. From the above finding we can conclude that Nabil has average risk ratio. The bank should maintain risk against credit fund to earn high profit. The growth ratio of total deposit of Nabil bank is lower than Everest bank, which indicates that the performance of Everest bank to collect deposit is better than Nabil bank. The growth ratio of loan &advance of Nabil lower than Everest bank, which indicates that the performance of Everest to grant loan& advance is better than Nabil bank. The growth ratio of total investment of Nabil is higher than Everest

bank. It indicates investment policy of Nabil is better than Everest bank.

- The growth ratio of net profit of Nabil is lower than Everest bank, which indicates Everest is successful to earn more profit than Nabil.
- From above finding, it can be conclude that Everest bank has maintained high growth ratio in total deposit, loan & advance, net profit. Nabil has higher position in investment.
- The trend analysis of total deposit of Nabil and Everest bank has increasing trend. From trend analysis it is forecasted that the total deposit of Nabil will be79253.70 million in 2011. Similarly the total deposit of Everest will be 68221.44 million in 2011. The deposit collection of Nabil is better than Everest bank.
- The trend analysis of loan & advance of both banks have increasing trend. The total loan & advance of Nabil will be 57358.19 million in 2011, which is highest amount than Everest bank i.e. 50660.51 million in 2011.
- Total investment of both banks has increasing trend. The total investment of Nabil will be 21606.92 million in 2011. Similarly total investment of Everest bank will be 6804.06 million in 2011. It shows total investment of Nabil is greater than Everest bank.
- The net profit of two banks has increasing trend. The net profit of Nabil is higher than Everest bank i.e. 1800 million and 1558.91 million respectively.
- From the above analysis, it can be concluded that, Nabil may use relatively large portion of their deposit to invest in potential sectors.
- There is significant different between mean ratio of loan & advance to total deposit ratio Nabil and Everest bank.
- There is significant different between mean ratio of total investment to total deposit of Nabil and Everest bank.
- There is no significant different between mean ratio of government securities to current assets of Nabil and Everest bank.

- There is no significant different between mean ratio of loan & advance to current assets ratio of Nabil and Everest bank.
- There is significant different between mean ratio of return on loan & advance ratio of Nabil and Everest bank.
- Correlation matrix of Everest Bank shows, liquidity ratio has negative relation with activity and highly positive with others. Activity has negative relation with profitability risk, growth. profitability has positive relation with risk and growth. Risk has positive relation with growth.
- Correlation matrix of Nabil shows liquidity ratio has positive relation with activity and negative relation with profitability risk, growth. Activity has positive relation with profitability and risk and negative with growth. Profitability has positive relation with risk and growth and risk has positive relation with growth ratio.

#### **CHAPTER-V**

#### SUMMARY, CONCLUSION AND RECOMMENDATIONS

Based on the major findings summary and conclusion have been drawn. Then based on the finding and conclusion we recommend certain measure for further improvement. With the help of some financial and statistical tools, the researcher has tried to analysis investment policy of concerned banks. Summary, conclusion and recommendations have been made below:

#### 5.1 Summary

Economic prosperity of a country depends upon the development of commerce and industry. And, there is no any doubt; banking promotes the development of commerce because banking itself is the part of commerce. The process of economic development depends upon various factors, however economists are now convinced that capital formation and its proper utilization plays a paramount role for rapid economic development.

The evolution of the organized financial system in Nepal has more recent history than in other countries of the world. In Nepalese context, the history of banking is not more than six decade. After the announcement of liberal and free market economic based policy Nepalese banks and financial sectors having greater network and access to national and international markets. Commercial banks plays a vital role which deals with other people's money and stimulate saving by mobilized idle resources to those sectors where have investment opportunities. Modern bank provides various services to their customer in view of facilitating their economic and social life.

The objective of the commercial banks is always to earn more profit by investing or granting loan and advances into profitable, secured and marketable sector. But commercial bank should be careful while performing the credit creation function; the banks should never invest its funds in those securities, which are too much fluctuations. And commercial banks must follow the rules

and regulations as well as different directions issued by central banks and ministry of finance.

There has been number of commercial bank established, the research has taken into consideration.

'Nabil Bank Ltd' – Nabil bank limited was the first joint venture commercial banks incorporated in 1984 by joint investment of Dubai bank limited and Nepali promoters. This bank is awarded by "Bank of year in '2004"

**Everest Bank Ltd'** - Everest bank limited is joint venture with Punjab national bank incorporated in 1994. This bank is awarded by "Bank of year in 2066"

In the study, the word investment covers a wide range of activities i.e. the investment of income, savings or other collected fund. If there is no savings, there is no existence of investment therefore, savings and investment are interrelated. Investment policy is a one fact of the overall of policies that guide banks investment operations and it ensures efficient allocation of funds to achieve the well being economic development of the nation. A sound and viable investment policy attracts both borrowers and lenders, which help to increase the volumes and quality of deposits, loan and investment. Therefore, the investment policy should be carefully analyzed.

Some sources of funds for the investment of the bank are capital, general reserves, accumulated profit, deposits and external & internal borrowings. Similarly, some important banking terms, which are frequently used in this study, are loan and advances, investment on government securities, shares and debentures, deposits and other use of funds.

In this study, for the analysis and interpretation of the data different financial & statistical tools are used. In the financial tools liquidity ratios, assets management ratios, profitability ratios, risk ratios and growth ratio have been used. Where, as in statistical tools trend analysis and test of hypothesis have been used. Only the secondary data have been used for the analysis in this research. The data are obtained from annual reports of concerned banks,

likewise, the financial statement of five years i.e. 2005/2006 to 2009/2010 were selected for the purpose evaluation.

#### **5.2 Conclusion**

Based on the major findings presented in chapter four following conclusion have been drawn as follows:

- The liquidity position of Nabil is comparatively lower than Everest bank but it has highest loan & advance to current assets ratio.
- Nabil bank has highest ratio in investment to total deposit and lower in loan & advance to total deposit, loan & advance to total working fund, investment in government securities.
- Analyzing the profitability ratio, we found that return on total working fund and return on loan & advance, total interest earned to total working fund ratio of Nabil is higher than Everest bank. But, total interest paid to total working fund of Nabil lower than Everest bank.
- Liquidity risk ratio, credit risk ratio of Nabil is lower than Everest bank, whereas it is higher in case of capital risk.
- From growth ratio we found that, Nabil has lower growth rate in total deposit, loan& advance and net profit, but it has highest growth rate in total investment.
- From trend analysis, we found that total deposit, loan & advance, total investment and net profit of Nabil is better than Everest bank.
- Through the analysis and finding we can summarize that investment policy of Nabil is better in every sector and profitability ratio is also good. Similarly trend analysis shows that position of Nabil will be better in future. However liquidity position growth rate is not satisfactory and it has average risk ratio.

#### 5.3 Recommendations

On the basis of above summary and conclusion, following recommendation are made:

- Commercial bank must maintain its satisfactory liquidity position to meet the credit need of its customer, however internal as well as external

factor affect the liquidity position of the bank. As Nabil bank has maintained lower ratio of cash and bank balance to total deposit and current assets than Everest bank. Nabil is recommended to increase cash and bank balance to meet the requirement of cash for various purposes. Everest bank is able to maintain higher liquidity ratio but it should be careful that it's not more than required level.

- Profitability is the main indicator of the financial performance. In this study, profitability ratio of Nabil is good from the view of return. So Everest bank is recommended to increase its interest earning capacity by investing more funds on loan & advance.
- Besides giving priority on government securities, Everest bank is recommended to invest its fund purchase of shares and debenture of other finance companies. Government securities offer lower interest rate than others.
- The growth ratio represent how well the commercial bank maintaining their economic and financial position; it is directly related to fund mobilization and investment. Everest bank growth ratio is better Nabil bank. Nabil bank is recommended to increase growth ratio into deposit, loan & advance, net profit.
- If bank expect high return on its investment, it has to accept risk. The risk taken by Nabil, capital risk is high whereas liquidity risk and credit risk is lower than Everest bank. The bank should not take high risk. Both bank should carefully analyze the risks to achieve higher return.
- In the light of growing competition in the banking sector, the business of the bank should be customer oriented. The bank is recommended to adopt new technology and services such as financial switch system (SWIFT), automatic teller machine (ATM) cards, visa electron debit card, international credit card, locker services, lending against goal and silver services, parking service, 24 hour services etc. The bank should involve in different kind of social and community development activities. The bank has been able to provide more personalized services and a better environment for its customer, it is an effective tool to attract and retain the customers.

- To get success in competitive banking environment, depositor's money must be utilized as loan and advances. The largest item of the bank in the asset side is loan and advances. If it is neglected, then it could be the main cause of liquidity crisis in the bank. Nabil's loan & advances to total deposit ratio and loan & advances to total working fund ratio is lower than Everest bank. To overcome this situation Nabil is strongly recommended to follow liberal lending policy and invest more and more percentage of total deposit and total working fund in loan & advances.

#### **BIBLIOGRAPHY**

#### **Books**

- Bajracharys Pushkar, Ojha Khagendra Pd., Goet Jogindre and Sharma Sagar (2005). *Managerial Accounting: Nepalese perspective*, Kathmandu: Asmita Books Publishers and Distributors.
- Bhattarai, R. (2009), *Investment Theory and Practice*, Kathmandu: Buddha Academic Publication.
- Bowlin Oswald, Martin John D. and Scott David F. (1990). *Guide to Financial Analysis*, USA: McGraw Hall Publishing Company
- Charles, J.P. (1999), *Investment Analysis and Management*, Bombay: Himalayan Publishing House.
- Gitman, L.J. and Joehnk (1990), *Fundamental of Investment*, New York: Harper and Row.
- John, M. Cheney and Edward, A Moses (1998), *Fundamental of Investment*, St. Pant: West Publishing Company.
- Pandey, I.M. (2000), *Financial Management*, New Delhi: Vikash Publishing House Pvt. Ltd.
- Singh, P. (1992), *Investment Management*, New Delhi: Himalayan Publication House.
- Van Horne, James C. (1998), *Financial Management and Policy*, (10<sup>th</sup> ed.). New Delhi: Prentice Hall Pvt. Ltd.
- Weston and Brigham (1980), *Management Finance* (7<sup>th</sup> Ed.). USA: The Dryden Press Hindsdale, Illinois.
- Weston, J. Fred and Brigham Eugene F. (1987). *Essential of Managerial Finance*, Orland: The Dryden Press, Orland.

#### Theses:

- Laudari, S. (2001). A Study on Investment Policy of Nepal Indosuez Bank Ltd. in Comparison to Nepal SBI Bank Ltd., An Unpublished Master's Degree Thesis Submitted to CDM, T.U.
- Pandit, K. (2003). A Study on Investment Policy Analysis of S.C. Bank Ltd., An Unpublished Master Degree Thesis, T.U.

- Pandit, R. (2004). *Investment Policy Analysis of Joint Venture Banks with Special Reference to Nepal SBI Bank, Bank of Kathmandu and Everest Bank Limited.* An Unpublished Master's Degree Thesis Submitted to Shanker Dev Campus, T.U.
- Regmi, G. (2006). A Comparative Study on Investment Policy of Everest Bank Ltd. and Himalayan Bank Ltd., An Unpublished Master's Degree Thesis Submitted to CDM, T.U.
- Shrestha, K. (2006). A study on investment portfolio of commercial banks in Nepal, An Unpublished Master's Degree Thesis Submitted to CDM, T.U.
- Shrestha, S. (2007). A Comparative Analysis on Investment Performance of Commercial Banks in Nepal, An Unpublished Master's Degree Thesis Submitted to CDM, T.U.

#### Journals and Periodicals:

Annual Reports of Nabil and EBL.

Mahat, L.D. (2009). Efficient banking. Business Age. pp. 3-7.

Shrestha, S.R. (Baishakh 2065). *Portfolio management in commercial banks, theory and practice*. Nepal Bank Patrika. p. 25.

Thapa, C. (2009). Managing Banking Risk. Business Age. p. 23.

Timilsina, S (2000) Managing Investment Portfolio. Business Age. p. 7.

#### Websites:

http://www.everestbanklimited.com

http://www.nabilbanklimited.com

www.nrb.org.np

#### **APPENDICES**

## Appendix-I Liquidity Ratio

#### I. Current Ratio

#### Calculation of Current Ratio of Nabil and EBL

#### Rs. in million

Particulars		Fiscal year							
	2005/06	2006/07	2007/08	2008/09	2009/10				
Nabil Bank									
Total current assets	17589.15	22317.48	30639.43	40493.21	39456.89				
Total current liabilities	20192.69	24917.29	34098.51	48093.36	40096.77				
Ratio (times)	0.87	0.89	0.89	0.84	0.98				
<b>Everest Bank Limited</b>									
Total current assets	14969.5	20760.13	26174.53	35195.09	39729.72				
Total current liabilities	14699.9	18342.92	24273.53	34123.78	38152.59				
Ratio (times)	1.02	1.13	1.08	1.03	1.04				

## II. Cash and Bank Balance to Total Deposit Ratio

Calculation of cash and bank balance to total deposit ratio of Nabil and Everest bank.

Rs. in million

Particulars		Fiscal year					
	2005/06	2006/07	2007/08	2008/09	2009/10		
Nabil Bank							
Cash and bank balance	630.24	1399.83	2671.14	3372.51	1400.09		
Total deposit	19347.39	23342.28	39915.05	37348.26	46340.70		
Ratio (%)	3.25	5.99	8.37	9.02	3.02		
<b>Everest Bank Limited</b>							
Cash and bank balance	1522.96	2391.42	2667.97	6164.37	7818.81		
Total deposit	13802.44	18186.25	23976.29	33322.9	36932.31		
Ratio (%)	11.03	13.14	11.13	18.49	21.17		

Source: Annual report of Nabil and Everest.

#### III. Cash and Bank Balance to Current Assets Ratio

#### Rs. in million

				1100	111 1111111011	
Particulars		Fiscal year				
	2005/06	2006/07	2007/08	2008/09	2009/10	
Nabil Bank						
Cash and bank balance	630.24	1399.83	2671.14	3372.51	1400.09	
Current assets	17589.15	22317.48	30635.51	40493.21	39456.89	
Ratio (%)	3.58	6.27	8.72	8.32	3.55	
<b>Everest Bank Limited</b>						
Cash and bank balance	1522.96	2391.42	2667.97	6164.37	7818.81	
Current assets	14969.9	20760.13	26174.53	35195.09	39729.72	
Ratio (%)	10.17	11.51	10.19	17.51	19.68	

# IV. Investment on Government Securities to Current Assets Ratio Calculation of government securities to current assets ratio of Nabil and Everest bank

Rs. in million

Particulars		Fiscal year							
	2005/06	2006/07	2007/08	2008/09	2009/10				
Nabil Bank									
Government securities	3448.62	4704.63	4821.60	5146.05	4354.35				
Current assets	17589.15	22317.48	30635.51	40493.21	39456.89				
Ratio (%)	19.61	21.08	15.74	12.71	11.04				
<b>Everest Bank Limited</b>									
Government securities	2301.46	4808.35	4646.88	3706.10	7941.56				
Current assets	14969.9	20760.13	26174.53	35195.09	39729.72				
Ratio (%)	15.37	23.16	17.75	10.05	19.98				

Source: Annual report of Nabil and Everest.

## V. Investment on Loan and Advances to Current Assets Ratio

#### Rs. in million

Particulars	Fiscal year								
	2005/06	2006/07	2007/08	2008/09	2009/10				
Nabil Bank									
Loan and advances	12922.54	15545.78	21365.05	27589.93	32268.87				
Current assets	17589.15	22317.48	30635.51	40493.21	39456.89				
Ratio (%)	73.46	69.65	69.74	68.13	81.78				
<b>Everest Bank Limited</b>									
Loan and advances	9801.31	13664.08	18339.08	23884.73	27556.35				
Current assets	14969.9	20760.13	26174.53	35195.09	39729.72				
Ratio (%)	65.47	65.82	70.06	67.86	69.35				

## **Appendix-II**

## **Activity Ratio**

## I. Loan and Advance to Total Deposit Ratio Calculation of Loan and Advances to Total Deposit Ratio

Rs. in million

					111 1111111011	
Particulars		Fiscal year				
	2005/06	2006/07	2007/08	2008/09	2009/10	
Nabil Bank						
Loan and advances	12922.54	15545.78	21365.05	27589.93	32268.87	
Total deposit	19347.39	23342.28	31315.05	37348.26	46340.70	
Ratio (%)	66.79	66.59	66.94	73.87	69.63	
<b>Everest Bank Limited</b>						
Loan and advances	9801.31	13664.08	18339.08	23884.73	27556.35	
Total deposit	13802.44	18186.25	23976.29	33322.9	36932.31	
Ratio (%)	71.10	75.13	76.48	71.67	74.61	

Source: Annual report of Nabil and Everest.

## II. Total Investment to Total Deposit Ratio

#### Rs. in million

Particulars		Fiscal year					
	2005/06	2006/07	2007/08	2008/09	2009/10		
Nabil Bank							
Total investment	6178.53	8945.31	9939.71	10826.37	13600.91		
Total deposit	19347.39	23342.28	31915.05	37348.26	46340.70		
Ratio (%)	31.93	38.32	31.14	28.97	29.34		
<b>Everest Bank Limited</b>							
Total investment	4200.51	4984.31	5059.57	5948.49	5008.30		
Total deposit	13802.44	18186.25	23976.29	33322.9	36932.33		
Ratio (%)	30.43	27.40	21.10	17.85	13.56		

Source: Annual report of Nabil and Everest.

#### III. Loan and Advances to Total Working Fund

#### Rs. in million

Particulars		Fiscal year					
	2005/06	2006/07	2007/08	2008/09	2009/10		
Nabil Bank							
Total investment	12922.54	15545.78	21365.05	27589.93	32268.87		
Total deposit	22329.97	27253.39	37132.75	43867.39	52079.72		
Ratio (%)	57.87	57.04	57.53	62.98	61.96		
<b>Everest Bank Limited</b>							
Total investment	9801.30	13664.08	18339.08	23884.67	27556.35		
Total deposit	15959.28	21432.57	27149.34	36916.84	41382.76		
Ratio (%)	61.41	63.75	67.54	64.69	66.58		

## IV. Investment on Government Securities to Total Working Fund Ratio (%)

Rs. in million

Particulars		Fiscal year					
	2005/06	2006/07	2007/08	2008/09	2009/10		
Nabil Bank							
Investment on	3448.62	4704.63	4821.60	5146.05	4354.35		
government securities							
Total working fund	22329.97	27253.39	37132.75	43867.39	52079.72		
Ratio (%)	15.44	17.26	12.98	11.73	8.39		
<b>Everest Bank Limited</b>							
Investment on	2301.46	4808.35	4808.35	3706.10	7941.56		
government securities							
Total working fund	15959.28	21432.57	21432.57	36916.84	41382.76		
Ratio (%)	14.42	22.43	22.43	10.03	19.19		

Source: Annual report of Nabil and Everest.

## V. Investment on Shares and Debenture to Working Fund Ratio

## Rs. in million

Particulars		Fiscal year								
	2005/06	2006/07	2007/08	2008/09	2009/10					
Nabil Bank										
Investment on shares and	104.19	286.95	323.23	354.93	346.85					
debentures										
Working fund	23329.97	27253.39	37132.75	43867.39	52079.72					
Ratio (%)	0.44	1.05	0.87	0.81	0.67					
<b>Everest Bank Limited</b>										
Investment on shares and	19.88	19.88	101.15	102.03	102.03					
debentures										
Working fund	15959.28	21432.57	27149.34	36916.84	41382.76					
Ratio (%)	0.13	0.093	0.37	0.27	0.25					

## Appendix-3 Profitability Ratio

## A. Return on Total Working Fund Ratio

Rs. in million

Particulars	Fiscal year					
	2005/06	2006/07	2007/08	2008/09	2009/10	
Nabil Bank	1	1				
Net profit	635.26	673.59	746.46	1031.05	1138.57	
Total working fund	23329.97	27253.39	37132.75	43867.39	52079.72	
Ratio (%)	2.73	2.47	2.01	2.35	2.18	
<b>Everest Bank Limited</b>						
Net profit	237.29	296.40	451.21	638.73	831.76	
Total working fund	15959.28	21432.57	27149.34	36916.84	41382.76	
Ratio (%)	1.48	1.38	1.59	1.73	2.00	

Source: Annual report of Nabil and Everest.

#### **B.** Return on Loan and Advances Ratio

## Calculation of Return on Loans and Advances Ratio of Nabil and Everest Rs. in million

Particulars		Fiscal year					
	2005/06	2006/07	2007/08	2008/09	2009/10		
Nabil Bank							
Net profit	635.26	673.59	746.46	1031.46	1138.50		
Loan and advances	12922.54	15545.78	21365.05	27589.93	32268.87		
Ratio (%)	2.82	4.33	3.49	3.74	3.52		
<b>Everest Bank Limited</b>							
Net profit	273.29	296.40	431.21	638.73	831.76		
Loan and advances	9801.30	13664.68	18339.08	23884.67	27556.35		
Ratio (%)	2.78	2.17	2.35	2.67	3.01		

## C. Total Interest Earned to Total Working Fund Calculation

Rs. in million

Particulars	Fiscal year							
	2005/06	2006/07	2007/08	2008/09	2009/10			
Nabil Bank								
Total interest earned	1309.99	1587.75	1978.69	2798.48	4047.72			
Working fund	23329.97	27253.39	37132.75	43867.39	52079.73			
Ratio (%)	5.61	5.83	5.32	6.38	7.77			
<b>Everest Bank Limited</b>		,						
Total interest earned	903.41	1144.40	1548.65	2186.81	3102.45			
Working fund	15959.28	21432.57	27149.34	36916.84	41382.76			
Ratio (%)	5.66	5.33	5.70	5.92	7.49			

Source: Annual report of Nabil and Everest.

## D. Total Interest Paid to Total Working Fund

Rs. in million

Particulars	Fiscal year							
	2005/06	2006/07	2007/08	2008/09	2009/10			
Nabil Bank								
Total interest paid	357.16	555.71	758.43	11536.28	1960.10			
Total working fund	23329.97	27253.39	37132.75	43867.39	52079.72			
Ratio (%)	1.53	2.03	2.04	2.62	3.76			
<b>Everest Bank Limited</b>			l.	l.	I			
Total interest paid	401.39	517.16	632.61	1012.87	1572.79			
Total working fund	15959.28	21432.57	27149.34	36916.84	41382.76			
Ratio (%)	2.52	2.41	2.33	2.74	3.80			

#### **Risk Ratios**

## A. Liquidity Risk Ratio

## Rs. in million

Particulars		Fiscal year					
	2005/06	2006/07	2007/08	2008/09	2009/10		
Nabil Bank							
Cash and bank balance	630.23	1399.82	2671.14	3372.51	1400.09		
Total deposit	19347.36	23342.28	31915.05	37348.26	46340.70		
Ratio (%)	3.25	5.99	8.36	9.02	3.202		
<b>Everest Bank Limited</b>							
Cash and bank balance	1552.96	2391.42	2667.97	6164.37	6164.37		
Total deposit	13802.44	18186.25	23976.29	33322.9	33322.9		
Ratio (%)	11.25	13.15	11.12	18.49	18.49		

Source: Annual report of Nabil and Everest.

#### **B.** Credit Risk Ratio

## Rs. in million

Particulars		Fiscal year					
	2005/06	2006/07	2007/08	2008/09	2009/10		
Nabil Bank							
Loan and advance	12922.54	15545.78	21365.05	27589.93	32268.87		
Total assets	23329.97	27253.39	37132.75	43867.39	52079.72		
Ratio (%)	57.87	57.04	57.53	62.98	61.96		
<b>Everest Bank Limited</b>							
Loan and advance	9801.30	13664.08	18339.08	23884.67	27556.35		
Total assets	15959.28	21432.57	27149.34	36916.84	41382.76		
Ratio (%)	61.41	63.75	67.54	64.69	66.58		

Source: Annual report of Nabil and Everest.

## C. Calculation Capital Risk Ratio

#### Rs. in million

Particulars		Fiscal year					
	2005/06	2006/07	2007/08	2008/09	2009/10		
Nabil Bank							
Capital	1874.99	2057.04	2439.19	3130.23	3254.57		
Risk weighted assets	16976.36	19166.76	27010.56	34816.50	41822.66		
Ratio (%)	11.04	10.73	9.03	8.99	7.78		
<b>Everest Bank Limited</b>							
Capital	932.8	1201.51	1921.23	2203.62	2509.99		
Risk weighted assets	11291.13	14976.73	21039.87	22003.84	27499.89		
Ratio (%)	8.26	8.02	9.13	10.01	9.12		

## A. Growth Ratio of Total Deposit

#### **Calculation of Growth Ratio**

Let,

Dn = Variable in 5<sup>th</sup> year

Do = Variable in initial year

n = No. of period study

$$Dn = Do (1+g)^{n-1}$$

#### **Nabil Bank**

$$D_{2009/10}\!=D_{2005/06}\left(1\!+\!g\right)^{5\text{-}1}$$

$$46340.70 = 19347.39 (1+g)^{5-1}$$

$$2.3951 = (1+g)^4$$

$$1+g = (2.3951)^{1/4}$$

$$g = (2.3951)^{1/4} - 1$$

#### **Everest bank**

$$D_{2009/10}\!=D_{2005/06}\left(1\!+\!g\right)^{5\text{-}1}$$

$$27499.89 = 11291.13 (1+g)^{5-1}$$

$$1+g = \begin{array}{c} 27499.89 \\ \hline 11291.13 \end{array}^{1/4}$$

$$g = 24.92\%$$

#### **Growth Ratio of Loan and Advances**

## **Nabil Bank**

$$D_{2009/10}\!=D_{2005/06}\left(1\!+\!g\right)^{5\text{-}1}$$

$$32589.93 = 12922.54 (1+g)^{5-1}$$

$$g = \frac{32589.93}{12922.54}^{1/4} Z1$$

#### **Everest Bank**

$$D_{2009/10}\!=D_{2005/06}\left(1\!+\!g\right)^{5\text{-}1}$$

$$27556.35 = 9801.30 (1+g)^{5-1}$$

$$g = \frac{27556.35}{9801.30}^{1/4} Z1$$

## **Nabil Bank**

$$D_n \! = D_0 \left( 1 \! + \! g \right)^{n \! - \! 1}$$

$$13600.91 = 6178.53 (1+g)^{5-1}$$

$$g = \frac{13600.91}{6178.53}^{1/4} Z1$$

## **Everest Bank**

$$D_n \! = D_0 \left( 1 \! + \! g \right)^{n \! - \! 1}$$

$$5008.30 = 4200.51 (1+g)^{5-1}$$

$$g = \frac{5008.30}{4200.51}^{1/4} Z1$$

## **Nabil Bank**

$$D_n \! = D_0 \left( 1 \! + \! g \right)^{n \! - \! 1}$$

$$1138.50 = 635.26 (1+g)^{5-1}$$

$$g = \frac{1138.50}{635.26}^{1/4} Z1$$

## **Everest Bank**

$$D_n \! = D_0 \left( 1 \! + \! g \right)^{n \! - \! 1}$$

$$831.76 = 273.29 (1+g)^{5-1}$$

$$g = \frac{831.76}{273.29}^{1/4} Z1$$

## **Trend Analysis**

## Sample Calculation of Trend Analysis Trend Analysis of Total Deposit Nabil Bank

#### Rs. in million

Year (t)	Total	x = t - 2008	$x^2$	xy	Yc = a + bx
	deposit (y)				
2005/06	19347.39	-2	4	-38694.78	18060.18
2006/07	23342.28	-1	1	-23342.28	24799.46
2007/08	31915.05	0	0	0	31658.74
2008/09	3734826	1	1	37348.26	38458.02
2009/10	46340.70	2	4	92681.4	45257.14
N = 5	фy=	$\phi \mathbf{x} = 0$	$\phi x^2 = 10$	фxy=	
	158893.68			67992.88	

$$a = \frac{y}{N} X \frac{158293.68}{5} = 31658.74$$

$$b = \frac{xy}{x^2} X \frac{67992.88}{10} = 6799.28$$

## Project rend value of total deposit for next five years

Year (t)	x = t - 2008	Yc = a + bx
2010/11	3	52056.58
2011/12	4	58855.86
2012/13	5	65655.14
2013/14	6	72454.42
2014/15	7	79253.7

## **Everest Bank**

Year (t)	Total	x = t - 2008	$\mathbf{x}^2$	xy	Yc = a + bx
	deposit (y)				
2005/06	13802.44	-2	4	-27604.88	12964.77
2006/07	18186.25	-1	1	-18186.25	19104.4
2007/08	23976.29	0	0	0	25244.03
2008/09	33322.9	1	1	33322.9	31383.66
2009/10	36932.31	2	4	73864.62	37523.29
N = 5	фy=	$\phi \mathbf{x} = 0$	$\phi x^2 = 10$	фxy =	
	126220.19			613963.9	

$$a = \frac{y}{N} X \frac{126220.19}{5} = 25244.03$$

$$b = \frac{xy}{x^2} X \frac{61396.39}{10} = 6139.63$$

Project rend value of total deposit for next five years

Year (t)	x = t - 2008	Yc = a + bx
2010/11	3	43662.92
2011/12	4	49802.55
2012/13	5	55942.18
2013/14	6	62081.81
2014/15	7	68221.44

Trend analysis of loans advances, total investment and net profit are calculated accordingly.

Appendix-10

Calculation of Hypothesis on Loan and Advances to Total Deposit Ratio of

Nabil and Everest Bank

Fiscal year	Nabil			Everest			
	$\mathbf{X}_1$	$x_1 (X_1-$	$x_1^2$	$X_2$	$x_2 (X_2 -$	$x_2^2$	
		$\overline{X}_{1}$			$\overline{X}_{2}$ )		
2005/06	66.79	-1.974	3.8966	71.10	-2.698	7.2792	
2006/07	66.59	-2.174	4.7262	75.13	1.332	1.7742	
2007/08	66.94	-1.824	3.3269	76.48	2.682	7.1931	
2008/09	73.87	5.106	26.0712	71.67	-2.128	4.5283	
2009/10	69.63	0.866	0.7499	74.61	0.812	0.6593	
N = 5	$\phi x_1 =$	$\phi x_1 = 0$	$\phi x_1^2 =$	$\phi x_2 =$	$\phi x_2 = 0$	$\phi x_2^2 =$	
	343.82		38.7708	368.99		21.4341	

Here,

$$\overline{X}_1 = \frac{x_1}{n}$$
 $\overline{X}_2 = \frac{x_2}{n}$ 

$$= \frac{343.82}{5}$$

$$= 68.764$$

$$= 73.798$$

Test of significance of different between (other ratios) Nabil and Everest bank are calculated accordingly.