

# **CHAPTER -I**

## **INTRODUCTION**

### **1.1 BACKGROUND**

Nepal is a landlocked and agricultural country which lies in South East Asia. Nepal is one of the least developed countries in the world with per capita income of US\$ 272. The problem of fulfilling basic needs poses a huge burden.

Nepal is not able to produce the national requirement of goods and services for it self. In such a scenario, it was soon realized that it was not possible to attain economic and social development, without industrial development. For a developing country like Nepal, industrialization is the most essential element. The development of an economy requires expansion of productive activities, which in turn is the result of the capital formulation, which is the capital stock of the country. The change in the capital stock of the country is known as investment. Investment is one of the decisions of financial function that involves the decision of capital to establish commercial and industrial ventures. In other words it involves the commitment of funds to long term assets that would yield benefit in the future.

There are mainly three concepts concerning investments (Bhalla, 1983:2).

Economic investment – that is an economist’s definition of investment, investment in a more general or extended sense, which is used by “the man of street” and the sense in which we are going to be very much interested, namely financial investment.

Two aspects of investment decisions are:

- 1 The evaluation of the prospective profitability of new investment.
- 2 The measurement and comparison of cut off rate against the prospective return of new investment.

The increase in capital has always been a sort of prime mover in the process of materials growth and the rate of capital formation has been the principal variable in fitting the overall pace of the economic development. The network of a well organized financial system of a country has great bearing in this regard. It collects scattered financial resources from the masses and invests them among those engaged in commercial and economic activities of the country. In this way the financial institutions provide savings of highly liquid divisible assets at a lower risk while the investors receive a large pool of resources. Integrated and speedily development of a country is possible only when competitive financial service reaches nooks and corners of the country. It has been well established that the economic activities of any country cannot be carried forward with out the

assistance and support of financial institutions. Financial institutions have catalytic role on the process of economic development.

While talking about investment we cannot forget that saving is the primary factor for investment. If there had been no saving, no investment can be expected. So saving is the backbone of investment. Saving is needed to finance capital formation or investment to increase and maintain the productive capacity of the country. It is commonly known fact that an Investment is only possible where there is adequate savings. If all the income and savings are consumed to solve the problem of hand to mouth and of the other basic needs, then there is no existence of Investment. Therefore, saving and investment are interrelated. The central problem of Nepal is low rate of saving and therefore the investment is also low. It is by this cause that productivity of Nepal is also very low.

The financial institutions have used both short-term and long term finance. The demand and supply of all short term finance is called money market. Money market is designed for the making of short term loans, where individual and institutions with temporary surpluses of funds meet borrowers who have temporary cash shortages. The main functions of money market are to mobilize savings, provide short term loans, provide reserve, bridge the gap between receipts, effective monetary policy etc. So, the money market is an important part of a commercial bank. Money market is playing a vital role to achieve the goal of every financial institution. There are different kinds of money market instruments used in Nepal, such as commercial papers, treasury bills, negotiable certificates of deposits, repurchase agreements, banker's acceptance etc.

Similarly, an efficient capital market is an essential pre-requisite for the economic development of a country. The development of capital market in a country is dependent upon the availability of savings, proper organization of intermediary institutions to bring the investors and business ability together for mutual benefits, regulation of the investment etc. The institutions like saving banks, investment trusts or investment companies, specialized financial institutions and stock exchange are some of the members of capital market.

Commercial banks are major financial institutions of the world, which occupy quite an important place in the framework in the economical development sectors as well as savings and investment sector. It can play the effective role for the individuals, industries, and trade and business organizations by investing savings and collecting deposits. It also renders numerous services to its customers in view of facilitating their economic and social life in the community.

Commercial banks formulate sound investment policies to make it more effective, which eventually contribute to the economic growth of a country. The sound

policy help commercial banks maximize quality and quantity of investment and thereby, achieve their own objective of profit maximization and social welfare. Formulation of sound investment policies and coordination of planned efforts pushes forward forces of economic growth.

Commercial banks should be careful while performing the credit creation function. Investment policy should ensure minimum risk and maximum profit from lending. Nepalese commercial banks lack far behind while fulfilling the responsibility to invest in the crucial sector of the economy for the upliftment of the national economy. Thus the problem has become very serious for a developing country like Nepal, which can be solved through formulation of sound investment policy. Good investment policy ensures maximum amount of investment to all sectors with proper utilization.

Modern banking is said to be organized in Medieval, Italy. “Bank of Venice”, set up in 1557 A.D. in Venice, Italy is regarded as the first modern bank. Subsequently, “Bank of Barcelona” (1401) and “Bank of Genoa” (1407) were established. The Lombards migrated to England and other parts of Europe from Italy are regarded for their role in the development and expansion of the modern banking. Bank of Amsterdam set up in 1609 was very popular then. The Bank of Hindustan established in 1770 is regarded as the first bank in India. These modern banks gradually replaced goldsmiths and money lenders.

Though Bank of England was established in 1694, the growth of banks accelerated only after the introduction of Banking Act 1833 in United Kingdom as it allowed to open joint stock company banks.

The evaluation of the organized financial system in Nepal has a more recent history than in other countries of the world. Before the establishment of “Tejarath Adda” during the period of Rana Prime Minister Ranoddip Singh, the unorganized sectors i.e. Moneylenders, goldsmiths; landlords had their universal domination on the financial matters. They used to charge very high interest rates. The Adda was initiated to provide credit at a low rate against gold and silver. The area of its functioning was limited in Kathmandu valley and some urban areas of terai. “Tejarath Adda” may be regarded as the father of the modern banking institutions and for a long time it rendered a good service to government servants as well as to general public by mobilizing scattered savings in the country and provided credit to the people at cheaper rates.

Banking in true sense terms started from the establishment of the first commercial bank, Nepal Bank Limited in 1994 B.S. in non-government sector. The establishment of Nepal Rastra Bank, central bank of Nepal, in 2013 B.S. was a significant dimension in the development of banking sector. The second

commercial bank is Rastriya Banijya Bank Ltd., which was established in 2021 B.S. as a fully owned government bank. Thereafter other banks were established gradually.

According to Nepal commercial Bank Act 2031 B.S. “A commercial banks is the one which exchange money, deposits money, accepts deposits, grants loan and performs commercial banking functions and which is not a bank meant for cooperative agriculture, industries as for such specific purpose.”

When the government adopted liberal and market oriented economic policy since mid-1980, Nepal allowed foreign banks on joint venture basis to operate in the country after getting the approval from Nepal Rastra Bank. These foreign joint venture banks are allowed maximum of 50% foreign equity participation. As a result, only three JVB’s namely Nepal Arab Bank Ltd., Nepal Indo-Suez Bank Ltd. and Nepal Grind lays Bank Ltd. were established in 2041, 2042 B.S. respectively.

Now, there are 25 commercial banks in operation. Among them two are under government control and other 15 are non-government and joint venture banks. One of the most important achievements of the growth of commercial banks is domestic savings. JVB’s gave a new horizon to the financial sector of the country. They were expected to bring the foreign capital, technology, experience, healthy competition, expertise and skills in Nepal. The following table below shows in a chronological order a list of the licensed commercial banks and their branches operating in Nepal.

**Table 1.1**  
**List of Commercial banks**

<b>S.N.</b>	<b>Commercial Banks</b>	<b>Established Date</b>	<b>Head Office</b>
1.	Nepal Bank Ltd.	1937/11/15	Kathmandu
2.	Rastriya Banijya Bank	1966/01/23	Kathmandu
3.	Nabil Bank	1984/07/16	Kathmandu
4.	Nepal Investment Bank Ltd.	1986/02/27	Kathmandu
5.	Standard Chartered Bank	1987/01/30	Kathmandu
6.	Himalayan Bank Ltd.	1993/01/18	Kathmandu
7.	Nepal Bangladesh Bank	1993/06/05	Kathmandu
8.	Nepal SBI Bank Ltd.	1993/07/07	Kathmandu
9.	Everest Bank Ltd.	1994/10/18	Kathmandu
10.	Bank of Kathmandu Ltd.	1995/03/12	Kathmandu
11.	Nepal Credit and Commercial Bank	1996/10/14	Siddhartha Nagar
12.	Lumbini Bank Ltd.	1998/07/17	Naryanghat
13.	Nepal Industrial and Commercial Bank Ltd.	1998/07/2	Biratnagar
14	Macchapuchhre Bank Ltd.	2000/10/03	Kathmandu

15.	Kumari Bank Ltd	2001/04/03	Pokhara
16.	Laxmi Bank Ltd.	2002/04/03	Kathmandu
17.	Siddhartha Bank Ltd	2002/12/24	Kathmandu
18	Agricultural Development Bank Ltd.	1968/01/02	Kathmandu
19	Global Bank Ltd.	2007/01/02	Birgunj, Parsa
20	Citizen Bank Ltd.	2007/06/21	Kathmandu
21	Prime Bank Ltd.	2007/09/24	Kathmandu
22	Sunrise Bank Ltd.	2007/10/12	Kathmandu
23	Bank of Asia Nepal Ltd.	2007/10/12	Kathmandu
24	Nepal Development Bank Ltd.	2008	Kathmandu
25	NMB Bank Ltd	2008	Kathmandu

Source: <http://brf.nrb.org.np>

### 1.1.1 Profile of the Concern Banks

#### A. NABIL BANK LIMITED

NABIL Bank Ltd, the first joint venture commercial bank in Nepal was established in 1984 under the company act 1964 as Nepal Arab Bank Ltd. Dubai Bank Ltd. was the initial joint venture partner with fifty percent (50%) equity investment. The shares owned by Dubai Bank Ltd., (DBL) were transferred to Emirates Bank International Limited, Dubai by virtue of its annexation with the latter. Later on, Emirates Bank International Limited, Dubai sold its entire 50% equity holding to National Bank Ltd., Bangladesh. Being the largest equity holder, National Bank Ltd., Bangladesh is managing the bank in accordance with the technical services agreement signed between it (NBIL) and the bank on June 1995. Nepal Arab Bank Limited changed its name as Nabil Bank Limited (NABIL).

The promoters and their shares holding patterns of Nabil Bank Ltd are as follows:

National Bank Limited, Bangladesh	-	50.00%
Financial Institutions	-	20.00%
Nepalese Public	-	30.00%

#### Share Capital of Nabil Bank Ltd.

##### a. Authorized capital

5,000,000 ordinary shares @ Rs.100 per share = Rs. 500,000,000.

##### b. Issued capital

4,916,544 ordinary shares @ Rs. 100 per share = Rs. 491,654,400.

##### c. Paid up capital

4,916,544 ordinary share @ Rs. 100 per share = Rs. 491,654,400.

The bank has changed its name as Nabil Bank Ltd. The bank expanded its banking services towards the different regions and part of the country by establishing altogether seventeen branches in urban as well as rural areas of the country.

Beside banking facilities it provides other facilities too, they are given as:

- Tele Banking
- Credit Card Facilities
- Safe Deposit Locker
- International Trade and Bank Guarantee
- Western Union Money Transfer
- SWIFT (Society for Worldwide Inter bank financial Tele-communication)
- ATM (Automatic Teller machine)

### **B. Himalayan Bank Limited**

Himalayan Bank Limited was incorporated in 1992 by the distinguished business personalities of Nepal in partnership with Employees Provident Fund and Habib Bank Limited, one of the largest commercial banks of Pakistan. Banks operation was commenced from January 1993. It is the first commercial bank of Nepal with maximum share holding by Nepalese private sector. Beside commercial activities, the Bank also offers industrial and merchant banking. The promoters and their shares holding patterns of Himalayan Bank Ltd are as follows:

Nepali Promoters	-	51.00%
Habib Bank of Pakistan	-	20.00%
Karmachari Sanchaya Kosh	-	14.66%
General Public	-	15.34%

### **Share Capital of Himalayan Bank Ltd.**

a. Authorized capital

10,000,000 ordinary shares @ Rs.100 per share = Rs. 1000,000,000.

b. Issued capital

6,500,000 ordinary shares @ Rs. 100 per share = Rs. 6500000

c. Paid up capital

5362500 ordinary share @ Rs. 100 per share = Rs. 536250000

Beside banking facilities it provides other facilities too, they are given as:

- Tele Banking
- Credit Card Facilities
- Safe Deposit Locker
- International Trade and Bank Guarantee
- Western Union Money Transfer
- SWIFT (Society for Worldwide Inter bank financial Tele-communication)
- ATM (Automatic Teller machine)

### **C. Standard Chartered Bank Nepal Limited (SCBNL)**

Standard Chartered Bank Limited was established in 1985 as a second foreign joint venture bank under the Company Act 1964 by the name of Nepal Grindlays Bank Limited. ANZ Grindlays Bank PLC held 50 percent, 33.34 percent shares are held by Nepal Bank Limited and remaining 16.66 percent shares by general

public of Nepal. ANZ Grindlays Bank PLC is managing the bank under joint venture ad technical service agreement singed between ANZ Grindlays Bank Limited had changed its name as standard Chartered Bank Limited (SCBNL). Its share subscription is given as:

ANZ Grindlays Bank PLC	-	50.00%
Nepal Bank Limited	-	33.37%
Nepalese Public	-	16.66%

**Share Capital of SCBNL**

- b. Authorized capital  
10,000,000 ordinary shares @ Rs.100 per share = Rs. 1000,000,000.
- b. Issued capital  
5,000,000 ordinary shares @ Rs. 100 per share = Rs. 500,000,000.
- d. Paid up capital  
4,132,548 ordinary share @ Rs. 100 per share = Rs. 413,254,800.

The following extra facilities have been providing by the bank.

- ❖ Credit Cards
- ❖ Tele Banking
- ❖ Any Branch Banking
- ❖ ATM (Automatic Teller Machine)
- ❖ VISA Card
- ❖ 24 Hours Banking

**1.2 Statement of the Problem**

Various financial institutions have been established to assist the process of economic development of a country. All commercial banks have played a vital role by accepting deposits and providing various types of loans. Loan affects overall development of a country. The development of the country is directly related to the volume of loan, which is also obtained from commercial banks. The problem of lending has become very serious for a developing country like Nepal. This is due to lack of sound investment policy of commercial banks.

Investment greatly depends on saving behavior of citizens but the saving rate of Nepalese is very low because most of the citizens are below the poverty level. They don't have enough income for daily consumption. Some people hardly save some money but they want to save for the future. Only few people invest in industries. People must be motivated to use their savings and mobilize their excess fund in economic activities.

Commercial banks are fond of making loans only on short term basis against moveable merchandise. There is hesitation to invest on long term projects because they are much more safety minded. So, they follow conservative loan policy, which is based on strong security. They are found to be more interested in

investing in less risky and highly liquid sectors i.e. treasury bills, development bonds and other securities. They keep high liquid position and flow lower fund to the productive sectors, this results into lower profitability to commercial banks and ignorance to the national economic growth process.

Nepalese commercial banks have not formulated their investment policy in an organized manner. They mainly rely upon the instructions and guidelines of Nepal Rastra Bank. They don't have clear view towards investment policy. There is a lack of sound investment policy of commercial bank. Furthermore, the implementation of policy is not in an effective manner. Commercial bank invests their funds in limited areas to achieve higher amount o profit. This is regarded as a very risky step, which may lead to lose in profit as well as principle. The credit extended by commercial banks to agriculture and industrial sector is not satisfactory to meet the growing need of the present say.

Commercial banks are not properly utilizing their deposits because of lack of sound lending policy. So, this condition will lead the commercial banks to the position of liquidation. The lack of knowledge on financial risk, interest rate risk, management risk, business risk, liquidity risk, purchasing risk etc, Granting loan against insufficient deposit, overvaluation of goods pledged, land and building mortgaged, risk averting decisions regarding loan recovery and negligence in recovery of overdue loan are some of the basic lapse and the result of unsound investment policy sighted in the banks.

With some 25 commercial banks and many development banks operating in Nepal, the market seems over crowded and the banks are now finding a tough competition among themselves. Since the entry barriers are not so high due to the governments liberal policy, this competition is expected to be more intense in the near future, as there is always the possibility of a new player entering this sector.

Profit is must to a bank, not only from the point of view of bank but also from the view of shareholders and depositors. And profit is only possible if the bank makes proper and safe investment policy. Every bank must make profit to survive in the competitive market where there is excess money and very little investment opportunity exists. Therefore, appropriate investment policy is the basic function of all the commercial banks, joint venture banks and other financial institutions.

This study basically deals with following issues of the banks:

1. Utilization of available fund: Does Nabil Bank have a more effective and efficient fund mobilization and investment policy than Himalayan Bank and SCBNL.
2. What is the relationship of investment, loan and advances with total deposit and total net profit of Nabil Bank and compare this performance with that of Himalayan Bank and SCBNL?



3. Does the investment decision affect the total earning of the bank?
4. Are they maintaining sufficient liquidity position?

### **1.3 Objective of the Study**

The basic objective of this study is to examine and evaluate the investment policy of “Nabil Bank Ltd. and compare the same with Himalayan Bank Ltd. and SCBNL. To achieve this prime objective the following objectives are considered in the study:-

- a. To analyze the percentage of investment made by Himalayan Bank Ltd., SCBNL and Nabil Bank Ltd. and compare this with the total investment made by commercial banks.
- b. To identify investment sector of Nabil Bank Ltd., SCBNL and Himalayan Bank Ltd.
- c. To evaluate the liquidity assets management efficiency, profitability and risk position of Nabil Bank Ltd. in comparison to Himalayan Bank Ltd. and SCBNL.
- d. To study the relationship between investment and deposit of the Banks.
- e. To recommend the policies to be adopted by the sample organization based on the financial analysis for its future development.

### **1.4 Scope of the Study**

Investment is a primary factor for economic development of any country. Investment refers to as using present money to get long term benefit. Investment in its broadest sense means the sacrifice of current money for future money. Two different attributes are generally involved, they are time and risk. The sacrifice takes place in the present and is certain. The reward or result of sacrifice comes later and the magnitude is generally uncertain. Time and risk are predominates for investment. Such as investment in government bond time is predominating, where as in common stock time and risk both are important. (Sharpe; 2000:1)

The scope of the study lies mainly in filling a research gap on the study of investment policy of commercial banks. The study is basically confined to reviewing the investment policy of commercial banks in the five year period. The study is expected to definitely provide a useful feedback to the policy makers of commercial banks of Nepal, and also to the government and the central bank in formulating appropriate strategies for the improvement in the performance of commercial banks.

### **1.5 Limitation of the Study**

The study has the following limitation.

1. Among the various JVB's, the study focuses only on two JVB's namely, Nabil bank limited and Himalayan bank limited and SCBNL.

2. The study covers the period of five years only i.e. from FY 2002/03 to 2006/07.
3. The study is based on secondary data and therefore, the findings are based on the information provided by the banks.
4. The study deals with certain financial tools such as ratio analysis, trend projection, mean, CV, SD etc.

## **1.6 Organization of the Study**

This thesis is organized into five chapters. They are as follows:

### **Introduction**

Introduction phase deals on the focus of the study, statement of the problem, objective of the study, limitation of the study and organization of the study.

### **Literature Review**

It includes review of the book, review of legislation related to commercial banks and review of other relevant books; review of the bank reports and of the previous theses.

### **Research Methodology**

In the study, research methodology is used, which includes research design, sources of data, population and sampling method of data analysis. Research methodology describes the methods and process applied in the entire study. To accomplish the goal, the study follows the research methodology.

### **Data presentation and Analysis**

In the fourth chapter the data are presented, analyzed and interpreted using financial tools (ratio analysis) and statistical tools (tabular and graphical presentation, trend analysis).

### **Summary, Conclusion and Recommendations**

The final and last chapter contains the summary of the whole study. The conclusion or findings of the study have been presented and at last suitable and concrete measures are suggested in the form of recommendations.

## **CHAPTER - II**

### **REVIEW OF LITERATURE**

The first chapter highlighted the importance of Investment for economic development of the country and performance of commercial banks in terms of their Investment operation. It also introduces about the statement of the problem, objectives, importance, organization and limitation of the study and research methodology etc.

In the present chapter, the focus has been made on the review of literature relevant to the investment policy of commercial banks. Every possibility has been made to grasp knowledge and information that is available from libraries, document collection centre, Nepal stock exchange centre, other information managing bureau and concerned commercial banks(i.e. Nabil and Himalayan).In this section the following areas have been reviewed:

1. Theoretical Review
2. Features of sound lending and investment policy.
3. Review of books.
4. Review of thesis.
5. Review of research paper.
6. Review of articles.
7. Review of legislative provision.

#### **2.1 Theoretical Review**

Bank is a financial institution, which plays a significant role in the development of the country. It facilitates the growth of trade and industries and other sector of the national economy. It is a resource for economic development, which maintains the self confidence of segments of society and extends credit to the people. In short a Bank may be defined as an institution, which performs financial, economic and monetary activities.

The term 'bank' was originated from Italian word 'Banco'. "Bank is a business organization that receives and holds deposit and funds from, other makes loans and extends credits, and transfers fund by written order depositors (The Encyclopedia Americanl; 1984).

Commercial Bank Act 2031 has defined commercial bank in the following way "Commercial Bank" means a bank which operates currency exchange, transaction, accept deposits, provide loans and performs dealing relating to commerce and other than those banks have been specified from co-operative, agriculture, industry of likely any other specific objective.

### **2.1.1 Features of Sound Lending Policy**

The secured lending and investment operating are the main features of commercial Banks. The success of the bank is measured by its income and profit, which is dependent upon its lending procedure, lending policy and investment of its fund in different securities. A sound investment policy is not only prerequisite for bank's profitability, but also crucially significant for the promotion of commercial savings of backward country like Nepal.

The funds of the bank are generally invested either in those assets, which are non profitable, or those, which are profitable. Non- profitable assets include cash reserve and dead stock and the profitable assets includes call money, investments, advances and loans, cash credits, overdrafts, discounting of bills and acceptance etc.

The features of sound investment policy are as follows:-

#### **Safety and Security**

Every bank must take care while investing its fund. It should never invest its funds in those securities, which are subject to too much depreciation and fluctuation because a small change causes great loss. So, it must not invest funds into speculative businessman who may be bankrupt at once and who may earn million in a minute also. Bank should accept those types of securities, which are durable, marketable and high market prices. For this purpose 'MAST' should be followed.

Where MAST stands for:

M = Marketable

A = Ascertain ability

S = Stability

T = Transferability

Bank should never forget that its funds basically consists of money borrowed from customers on various accounts such as fixed account, saving account and current account etc bank deals with customer's money . Hence it must take care the belonging of public while investing and providing loan received in the form of deposits. The risk and return involved must be analyzed thoroughly, so that depositor's money is advanced safely where the risk of loss does not exist. The three 'C' should be followed in arriving at the decision regarding the advances of fund. The three 'C' stands for Character, Capacity and Capital.

#### **Liquidity**

Liquidity is the capacity of the bank to pay cash against deposits. People deposit money at bank in different account with the confidence that the bank will repay their money when they need it. In order to maintain the confidence of the depositors, the bank must always be ready to meet current or short term obligations when they become due for repayment. Hence, the liquidity position of

a bank is such an important factor that it must be able to meet its cash requirement either by its cash in vault or by the help of converting its assets into cash in case of demand for such from its customers. There is no sense if the bank has adequate assets but not liquid i.e. they can't serve the purpose of liquidity when required.

### **Profitability**

A bank should invest on those sectors from where more and more return can flow because through maximizing the return on its investments, bank can maximize its volume of wealth. The profit of commercial banks depends on the interest rate, volume of loan, its time period and nature of investment in different securities.

### **Purpose of Loan**

It is very important for a banker to know why a customer is in need of loan. If the borrower misuses the loan granted by the bank, he cannot repay it. Therefore to avoid this situation each and every bank should demand the essential detailed information about the scheme of project or activities.

### **Diversification of risk**

“A bank should not lay all its eggs in the same basket”. This saying is very important to the bank and it should be always careful not to grant loan only in one sector. To minimize the risk, a bank must diversify its investment on different sectors.

Diversification of loan helps to sustain loss according to the law of averages because, if securities of a company are deprived, there may be appreciation in the securities of other companies. In this way, the loss can be recovered.

### **Tangibility**

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

### **Legality**

Illegal securities will bring out many problems for the investors. A commercial bank must follow the rules and regulations as well as different directives issued by Nepal Rastra Bank, Ministry of finance, Ministry of Law and other while mobilizing its funds.

## **2.1.2 Meaning of Some Important Terms**

This study has been made to clarify the meaning of some important terms, which are frequently used in this study.

### **(a) Deposits**

Deposits means the amounts deposited in different accounts such as fixed account, saving account, current account etc. of bank or financial institutions. Deposit is the major sources of the liquidity for a commercial bank. It is also the main source of fund that a bank usually uses for the generation of profit. Therefore, the efficiency of the banks depends on its ability to attract deposits. The deposits of the bank are affected by various factors. They are as follows:

- Types of customers.
- Physical facilities of bank.
- Management accessibility of customer.
- Types and ranges of services offered by the bank.
- Interest rate paid on deposits.

In addition to the above, the prevailing economic conditions exert a decisive influence on the amount of deposit the bank receives.

Basically deposits are categorized in three headings for accounting and analysis purpose.

(1) Current deposits

(2) Saving deposits

(3) Fixed deposits

### **(b) Loan and Advances**

Loan, advances and overdrafts are the main sources of income and most profitable asset to a bank. Bank deposits can cross beyond a desired level but the level of loans, advances and overdrafts will never cross it. The facilities of granting loan, advances and overdrafts are the main services which, customer of the bank can enjoy. Funds borrowed from banks are much cheaper than those borrowed from unorganized moneylenders. The demand for loan has excessively increased due to cheaper interest rate. Furthermore, an increase in economic and business activity always increases the demand for funds. Due to limited resources, and increasing loans, there is some fear that commercial banks and other financial institutions too may take more preferential collateral while granting loans causing unnecessary botheration to the general customers. Such loan from these institutions would be available on special request only and there is a chance of utilization of resources in economically less productive fields. There lies the undesirable effect, of low interest rate.

In addition to this, some portion of loan, advances and overdraft includes that amount which is given to staff of the bank for house loan, vehicle loan, personal loan and others. In mobilization of commercial banks fund, loan, advances and overdrafts have occupied a large portion.

### **(c) Investment on Government Securities, Shares and Debentures**

Though commercial banks can earn some interest and dividend from the investment on government securities, shares and debentures, it is not the major portion of income, but it is treated as a second source of banking business. A

commercial bank may extend credit by purchasing government securities, bond and shares for several reasons.

Some of them are given as:

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

#### **(d) Investment on Other Company's Shares and Debentures**

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

#### **(e) Other Use of Funds**

A commercial bank must maintain the minimum bank balance with NRB i.e. 6% for fixed deposit and 8% for each of current and saving deposit account in local currency. Similarly 3% cash balance of local cash balance, in local currency accounts must be maintained in the vault of the bank. Again a part of the fund should be used for bank balance in foreign bank and to purchase fixed assets like land, building, furniture, computers, stationery etc.

#### **(f) Off-Balance Sheet Activities**

Off balance sheet activities involve contracts for future purchase and sale of assets and all these activities are contingent obligations. These are not recognized as assets or liabilities in balance sheet. Some good examples of these items are letter of credit (L/C), letter of guarantee, bills of collection, etc. Now a day, such activities are stressfully highlighted by some economist and finance specialist to expand the modern transaction of a bank.

## **2.2 Review of Relevant Studies**

### **2.2.1 Review of Books**

Banks are such an institution, which deals with credit and substitutes for money. They deal with credit and instruments. So good circulation of credit is important for any bank. Any financial intermediates (commercial banks, joint venture banks) or financial company utilize its fund in suitable area or sector. They cannot get its aim of profit earning without mobilizing its funds in suitable area or sector. They

cannot get its aim of profit earning without mobilizing its funds in right sectors and difference activities. Many types of activities and other things can originate for the purpose of receiving investment from the finance company. But finance should separate the useful and profitable sector for mobilization of its funds.

According to **William F. Sharpe, Gordon .T. Alexander and Jeffery V. Bialy**, “Investment in it’s broaden sense, means the sacrifice of current dollars for future dollars. Two difference attributes are generally involved: time and risk. The sacrifice takes places in the present and its magnitude as generally uncertain” (Sharpe, Alexander and Baily ; 1998 :1).

In the words of **Gitman and Joehnk**, “Investment is any vehicle into which funds can be placed with the expectation that will preserve or increase in value and generate positive returns” (Gitman & Joehnk ;1990: 258).

“The term investment can cover a wide range of activities. It often refers to investing money in certificate of deposits, bonds, common stocks or mutual funds. More knowledgeable investors would include other financial assets such as warrants, puts and calls future contracts and convertible securities. Investing encompasses very conservative position and aggressive speculation”(Charles ;1998 :248).

Frank K. Reilly defines investment as, “An investment may be defined as the current commitment of funds for a period of time to derive a future flow of funds that will compensate the investing unit for the time the funds are committed, for the expected rate of inflation and also for the uncertainty involved in the future flow of the funds.”

According to **I.M. Pandey**, “In investment decision expenditure and benefits should be measured in cash. In investment analysis, cash flow is more important than accounting profit. It may also be pointed out of that investment decision affects the firm’s value. The firm’s value will increase if investments are profitable and add to the shareholders wealth. Thus, investment should be evaluated on the basis of a criterion, which is compatible with the objective of the shareholder’s funds maximization. Investments will all to the shareholders wealth if it yield benefit in excess of the minimum benefits as per the opportunity cost of capital” (Pandey ;1999: 407).

Emphasizing the importance of investment policy, **H.D Crosse** puts his view in this way, “Lending is the essence of commercial banking, and consequently the formulation and implementation of sound policies are among the most important responsibilities of bank directors and management. Well conceived lending policies and careful lending practices are essential if a bank is to perform its credit



creation function effectively and minimize the risk inherent in any extension of credit” (Crosse ;1963: 358).

**S.P. Singh and S. Singh**, “ The investment (credit ) policies of banks are conditional, to great extent, by the national policy framework, every banker has to apply his own judgment for arriving at a credit decision, keeping of course, his bank’s credit policy also in mind” (Singh ;1983:128).

According to Mr. **Shakespeare Baidhya** on sound investment policy, he has said “A sound investment policy of a bank is such that its funds are distributed on different types of assets with good profitability on the one hand and provide maximum safety and security to the depositors and banks on the other hand. Moreover, risk in banking sectors tends to be concentrated in the loan portfolio. When a bank gets into serious financial trouble, its problem usually spring from significant amounts of loan that have become un-collectable due to mismanagement, illegal manipulation of loan, misguided lending policy or unexpected economic downturn. Therefore, the bank investment policy must be such that it ensures that it is sound and prudent in order to protect public funds”( Shakespeare Baidhya ;1997: 46-47).

**Dr Sunity Shrestha**, in her book “Portfolio behavior of commercial banks in Nepal” said “The commercial banks fulfill the credit needs of various sector of the economy including agriculture, industry, commercial and social service sectors. The lending policy of commercial banks is based on the profit maximization of the institution as well as the economic enhancement of the country” (Shrestha ;2003: 51-52).

“The term investment can cover a wide range of activities. It often refers to investing money in certificates of deposits, bonds, common stocks or mutual funds. More knowledgeable investors would include other financial assets such as warrants, puts and calls future contracts and convertible securities. Investing encompasses very conservative position and aggressive speculation” (Charles ;1998 :269).

“Financial investment is a form if this general or extended sense pf the term. It means an exchange of financial claims, stocks and bonds (collectively termed securities), real estate mortgages etc. Investors to differentiate between the pseudo investment concept of the consumer and the real investment of the businessman often use the term financial investment. Semantics aside, there is still a difference between an “Investment” in a ticket on a horse and the construction of a new plant; between the pawing of watch and the planting of a field of corn. Some investment are simple transaction among people, other involve nature. The later

are “real” investment. The former is “Financial” Investment. We now turn to a closer examination of finance and investment decision” (Bhalla ;1983: 245).

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

Investment management of bank is guided by the investment policy adopted by the bank. The investment policy of the bank helps the investment operation of the bank to be efficient and profitable by minimizing the inherent risk.

### **2.2.2 Review of Articles**

There are not much research papers of articles published about the Investment policy in Nepal.

**Dr. Pradhan, Radhe S. (1994)** on his research, “Financial Management and Practices in Nepal” in 1992. The survey mainly dealt with financial functions, sources and type of financing, financing decisions involving dept, effect of change in taxes on capital structure, financial distress, dealing with banks and dividend policy.

The major findings of study connected with financial management are given as:

- Banks and retained earnings are the two most widely used financing sources.
- The enterprises have a definite performance for bank loans at a lower level of debt.
- Generally, there is no definite time to borrow the issues stocks, that is Majorities of respondents are unable to predict when interest rate will be low or go up or are unable to predict when the stock will go down or up.
- Most enterprises do not borrow from one bank only and they do switch between banks whichever offer best interest rates.
- Most enterprises find that banks are flexible in interest rates and convenience.

**Dr. Shrestha Sunity, (1993)** in her research, “Investment planning of commercial banks in Nepal” has made remarkable efforts to examine the investment planning of commercial banks in Nepal. On the basis of the study she concludes that bank portfolio (loans and investment) of commercial banks has been influenced by the

variable securities rates. Investment planning of commercial banks in Nepal is directly traded to fiscal policy of government and heavy regulatory procedure of the central bank (NRB). So the investment is not made in professional manner. Investment planning and operation of commercial banks in Nepal has not been found satisfactory in terms of profitability, safety, liquidity, productivity and social responsibility. To overcome this problem, she has suggested, “commercial banks should take their investment function with proper business altitude and should perform lending and investment operation efficiently with proper analysis of the projects.”

**Shrestha, Shiba Raj, (2055)** Deputy Chief of Nepal Rastra Bank, Banking Operation Department, has given a short glimpse on the “portfolio management in commercial bank, theory and practice.”

Mr. Shrestha has highlighted following issues in the article. The portfolio management is a most important thing for both individuals and as well as institutions investors. All the investors would like to select a best mix of investment assets subject to following aspect:

- Higher return than other alternative opportunities, which is available according to the same risk class to the investors.
- High liquidity with adequate safety & profitability of investment.
- Maximum concession of tax.
- Certain capital gain.
- Flexible of investment.
- Economic, efficient and effective investment mix etc.

According to above aspects, following strategies are adopted:

- Do not put all the eggs in the same basket, i.e. don't hold any single securities, try to have a portfolio of different securities.
- Diversify the investment for adequate safety, liquidity and profitability.
- Decide such a portfolio of securities, which ensures maximum return with minimum risk or lower of return but added of wealth maximization.

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

- 1) To find out the assets to investment (generally known as securities) having scope for better returns depending upon individual characteristics like age, health, needed disposition, liquidity, tax ability etc.
- 2) To develop alternative investment strategies for selecting a better portfolio, this will ensure a trade- off between risk and return so as to attach the primary objectives of wealth maximization at lower risk.
- 3) To find out the risk of the securities dependent upon attitude of investors towards risk.
- 4) To identify securities for investment to refuse volatility of return and risk.

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

At last, Shrestha has put the following conclusion remarks:

- The survival of every bank depends upon its own financial health and various activities.
- In order to develop and expand the portfolio management activities successfully the investment management methodology of a portfolio manager should reflect high standards and give their clients the benefits of global strengths, local insights and prudent philosophy.
- With the disciplined and systematic approval to the selection of appropriate countries, financial assets and the management of various risks, the portfolio manager could enhance the opportunity for each investor (client) to earn superior returns overtime.
- The Nepalese banks having greater network and access to national and international capital markets have to go for portfolio management activities for the increment of their fee based income as well as to enrich the client base and to contribute in national economy.

**Dr. Thapa Govinda Bahadur, (1994)** has presented his view that the commercial banks including foreign joint venture banks seem to be doing pretty well in mobilizing deposits. Likewise, loan and advances of these banks are also increasing. But compared to the high credit needs particularly by the newly emerging industries, the banks still seem to lack adequate funds. The banks are increasing their lending to non-traditional sectors along with the traditional sectors.

Nepal Bank Ltd. and Rastra Banijya Bank Ltd. are operating with a nominal profit, the later turning towards negative from time to time. Because of non-recovery of accrued interest, the margin between interest income and interest expenses is declining. Because of these two local banks, in traditional off-balance sheet operations, these banks have not been able to increase their income from commission and discount. On the other contrary, they have got heavy burden of personal and administrative overheads. Similarly, due to accumulated overdue and defaulting loans, profit of these banks has been seriously affected.

On the other hand, the foreign joint venture banks have been functioning in an extremely efficient way. They are making huge profit year after year and have been distributing large amount of bonus and dividends to its employees and shareholders. Because of their effective persuasion for loan recovery, overdue and defaulting loans have been limited resulting in high margins between interest income and interest expenses. Similarly, concentration of these banks to modern off-balance sheet operations and efficient personnel management has added to the maximization of their profits.

At the end of this article, he concluded that by its very nature of the public sector, the domestic banks couldn't compete with the private sector banks. So, only remedy to the problem of these banks, as the government decided, is to hand over the ownership as well as the management of these banks to the private hands.

Under this heading, effort has been made to examine and review some of the related articles published in different economic journals, Bulletin of World Bank dissertation papers, magazines, news papers and other related books.

**F. Morris**, in his discussion paper, "Latin America's banking system in the 1980's" has concluded that most of the banks concerned on compliance with central bank rules on reserve requirements, credit allocation and interest rates. While analyzing loan portfolio quality, operating efficiency and soundness of bank investment management has largely been overlooked. The huge losses now find in the bank's portfolio in many developing countries and testimony to the poor quality of this oversight investment function.

He further adds that mismanagement in financial institutions has involved inadequate and over optimistic loan appraisal, tax loan recovery, high risk diversification of lending and investment, high risk concentration connected and insider lending, loan mismatching. This had led many banks of developing countries to the failure on 1980's.

**Dr. Shrestha, Sunity (2055)** in her article entitled "Lending operation of Commercial Banks of Nepal and its impact on GDP" has presented an analysis of contribution of commercial bank's lending to Gross Domestic Product (GDP) of Nepal. In her setting hypothesis, there has been positive impact of lending of commercial banks to the GDP as the dependent variable and various sectors of lending i.e. agriculture, industrial, commercial, service and general & social sectors as independent variables. A multiple regression technique has been applied to analyze the contribution.

Except service sector lending the multiple analysis has shown that all the variables has positive impact on GDP. In conclusion, she has accepted the hypothesis i.e.

there has been positive impact by lending of commercial banks in various sectors of economy.

**Bajracharya (2047)** through his article, “Monetary Policy and deposit mobilization in Nepal” has concluded that mobilization of domestic savings is one of the prime objectives of the monetary policy in Nepal. For this purpose commercial banks stood as the vital and more active financial intermediary for generation resources in the form of deposit of private sector so far providing credit to the investor’s in the different sectors of the economy.

The article entitled. “Role of Foreign Banks in Nepal” of Mr. Sunil Chopra concluded that joint venture banks are playing an increasing, dynamic and vital role in the economic development of the country. This will undoubtedly increase with time.

Similarly, **Ramesh Lal Shrestha (2045)** in his article, “A study on deposits and credits of commercial bank in Nepal” concluded that the credit deposit ratio would be 51.30%, other things remaining the same, in 2004 AD, which was the lowest under the period of review. So he had strongly recommended that the commercial bank should try to give more credit entering new field as far as possible. Other wise, they might not be able to absorb even its total expenses.

### **2.2.3 Review of Theses**

Before this, various students, regarding the various aspects of commercial banks such as financial performance, lending policy, Investment policy, Interest rate structure, Resource mobilization and Capital Structure have conducted several theses works. Some of them, as a supported to relevant for the study and presented below:

**Bhattraï, Ramala** in her thesis paper outlined, “Lending Policy of Commercial Banks in Nepal” has tried to examine the lending policy of commercial banks and she has concluded that efficient utilization of resources is most important than collection of the same. Lower investment means lower capital formation that hampers economic development of the people and the country. So, she recommended that banks should give emphasis on efficient utilization of resources.

**Khanal, D.R.** in his research study, “Investment in priority sector by Commercial banks”, found that the investment in priority sector has increasing trend. Banks are giving due consideration to increase Investment in the sector. Yet, they cannot meet the NRB target of 10% investment of the deposit liabilities. Low interest rate but high overhead cost incurred in administration, super- vision etc, have negative relationship as shown by regression analysis. The chi-square test shows that the

investment program in rural and semi- urban areas is effective than that in urban areas. There is a wide gap between demand and supply of loan, since most of the loan requests are rejected due to the lack of sufficient security, lack of viable projects and inability to produce sufficient legal documents. The security oriented concept is being gradually eliminated for the consideration of loan disbursement in this sector that goes to the norms of modern development oriented banking.

He recommends that a scheduled supervision and frequent contact with the beneficiaries is a must to avoid wrong utilization of loan and also suggests for a staff commitment program implementation and time to time training to each staff.

**Shahi, Prem Bahadur, (1999)** conducted a study on “Investment policy of commercial banks in Nepal” with the main objectives of:

- To evaluate the liquidity, assets management efficiency and the profitability and risk position of Nepal bank limited to the joint venture banks.
- To discuss fund mobilization and investment policy of Nepal bank limited in respect to its fee based off- balance sheet transaction and fund based on- balance sheet transaction on comparison to the joint venture banks.
- To find out the empirical relationship between various important variables i.e., deposits, loan and advances, investment, net profit, etc. And compare them with the joint venture banks.
- To analyze the deposit utilization trend and its projection for next five years of the Nepal bank limited and compare it with that of the joint venture banks.
- To provide a package of workable suggestions and possible guidelines to improve investment policy of Nepal bank limited and the joint venture banks based on the findings of the analysis, for the improvement of financial performance of Nepal bank limited in future.

The research was conducted mainly on the basis of the secondary data.

The research findings of the study are as follows:

- The liquidity position of NBL is comparatively better than that of the JVBs. Highly fluctuating liquidity position shows that the bank has not formulated any stable policy. It can also be concluded that NBL has more portions of current assets as loan and advances but less portion as investment on government securities.
- The mean ratio of loan and advances to total deposit of NBL is slightly lower than that of the JVBS. The mean ratio of total investment to total deposit of NBL is lower than that of the JVBs. The mean ratio of investment on government securities to total working fund of NBL is slightly lower than that of the JVBs. The mean ratio of the total off- balance sheet operation to loan and advances of NBL is found significantly lower

than that of JVBs. So it was concluded that NBL is comparatively less successful in on-balance sheet as well as off-balance sheet operations than that of the JVBs. It hasn't followed any definite policy with regard to the management of its assets.

- Profitability position of NBL is comparatively not better than that of the JVBs. It indicates that NBL must maintain its high profit margin in future.
- There is comparatively higher risk in NBL than that of the JVBs regarding various aspects of the banking function.
- From the analysis of different growth ratios it can be concluded that NBL has not been more successful to increase its source of funds i.e., deposit and mobilization of it, i.e. loan and advances and total investment. Similarly it seems to have failed to maintain high growth rate of profit in comparison to that of other JVBs.
- NBL has higher trend analysis values of loan and advances and deposit, but lower trend values of net profit and total investment in comparison' to the JVBs for next five years.
- Highly fluctuation ratios of NBL show that it has not formulated any stable policy to maintain its liquidity in a consistent manner.

High portion of cash and bank balance in NBL shows its negligence and inefficiency in its best utilization. It has not considered the cost of fund and its opportunity costs.

Higher percentage of loan loss ratios shows that NBL is weak in credit collection. There is absence of a sound credit collection policy. NBL has not followed innovative appraisal, improper collateral evaluation, irregular supervision, etc is a severe problem for the bank's success.

**Tuladhar, Upendra, (2000)** conducted a study on “A Study on investment policy of Nepal Grindlays Bank Limited in comparison to other Joint venture Banks of Nepal.” with the objective:

- To study the fund mobilization and investment policy with respect to fee-based off-balance sheet transaction and fund based on-balance sheet transactions.
- To study the liquidity, efficiency of assets management and profitability position.
- To evaluate the growth ratios of loan and advances and total investment with respective growth rate of total deposit and net profit.
- To perform an empirical study of the customer's views and ideas regarding the existing services and adopted investment policy of the Joint Venture Banks.



The study is mainly based on secondary data and in some aspects of the study primary data are also collected through questionnaire survey of 100 respondents. The research findings of the survey are as follows:

From the analysis of primary data concerning in which sector should JVBs invest; 28.37% respondents emphasized on educational sector to be invested by these JVBs as the potential investment sector. Consequently poverty stricken and deprived sector was given second priority (26.24%), where as industrial sector (18.44%), tourism sector (16%), agriculture sector (16%) and construction sector (4.25%) are given third, fourth, fifth and sixth priority respectively.

From the analysis of secondary data, following conclusion was drawn:

- Nepal Grindlays Bank Ltd. has maintained consistent and successful liquidity than NABIL Bank Ltd and Himalayan Bank Ltd.
- The mean of total investment to total deposits ratio of Nepal Grindlays Bank Ltd is higher than the other JVBs. The mean of the loan and advances to total deposits ratio of Nepal Grindlays Bank Ltd. is less and inconsistent than NABIL Bank Ltd. and Himalayan Bank Ltd.
- Loan and advances to working fund ratio of Nepal Grindlays Bank Ltd. was found less than the mean ratio of other banks. Investment on government securities to working fund ratio of Nepal Grindlays Bank Ltd. has the highest mean ratio than NABIL Bank Ltd. and Himalayan Bank Ltd.
- It was found that total off-balance sheet operation to loan and advances ratio of Nepal Grindlays Bank Ltd. is found to be of highest mean ratio than that of NABIL Bank Ltd. and Himalayan Bank Ltd. It means Nepal Grindlays Bank Ltd. used to perform highest off-balance sheer operation than the other two JVBs i.e., used to give priority to provide letter of credit, guarantee and others (e.g. : trade finance) excessively than to others.
- The mean of investment on shares and debentures to total working fund ratio of Nepal Grindlays Bank Ltd. was found less than NABIL Bank Ltd. but higher than Himalayan Bank Ltd.
- The profitability position of Nepal Grindlays Bank Ltd. is higher than NABIL Bank Ltd and Himalayan Bank Ltd. as well as it use to provide interest to the customers for different activities consistently.
- The volume of growth ratio of loan and advances of Grindlays Bank Ltd. is found higher than that of NABIL Bank Ltd. but lower than Himalayan Bank Ltd. It indicates that all the JVBS used to provide loan and advances in increasing manner.
- From the analysis of growth ratio of total investment it is found that Nepal Grindlays Bank Ltd. and NABIL Bank Ltd. have negative growth ratios i.e., they used to reduce the investment during the study period. But it is increasing in the case of Himalayan Bank Ltd.

- The growth ratio of net profit of Nepal Grindlays Bank Ltd. seemed to be more satisfactory than NABIL Bank Ltd. but in case of Himalayan Bank Ltd. it seemed to be very high.

**Loudari, Shiba Raj, (2001)** conducted a study on “A study on Investment Policy of Nepal Investment Bank Ltd. in comparison to Nepal SBI Bank Ltd.” With the following objective:

- To examine the liquidity, assets 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 analyze relationship between deposit and investments, deposits and loan & advances, net profit and outside assets of Nepal Investment Bank Ltd. in comparison to Nepal SBI Bank Ltd.

The study was conducted through secondary data.

The research findings of the study are as follows:

- Current ratios for both the banks are satisfactory.
- Although cash reserve ratio (CRR) is managed by both banks as per Nepal Rastra Bank directives, both banks have not paid sufficient insight toward cash management. Their cash reserves have fluctuated in a high degree.
- Nepal SBI Bank Ltd. has increased investment in government securities where as Nepal Investment Bank Ltd. has decreased.
- Nepal Investment 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 Investment Bank Ltd. is less effective than that of Nepal SBI Bank Ltd. Further NIBL has invested lesser amount on government securities and shares and debenture than that of Nepal SBI Bank Ltd.
- NIBL 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 ratios of total deposit, loan and advances, total investment and net profit of NIBL are less than that of Nepal SBI Bank Ltd.
- The trend value of loan and advances to total deposits ratio is decreasing in case of both the banks. The trend value of total investment to total deposit ratio is also decreasing in case of both the banks.

**Ojha, Lila Prasad, (2002)** conducted a study on “Lending practices: A study of NABIL Bank Ltd., Standard Chartered Bank Ltd and Himalayan Bank Ltd.” With the following objective:

- To determine the liquidity position, the impact of deposit in liquidity and its effect on lending practices.
- To measure the bank’s lending strength.
- To analyze the portfolio behavior of lending and measuring the ratio and volume of loans and advances made in agriculture, priority and productive sector.
- To measure the lending performances in quality, efficiency and its contribution in total income.

The study was conducted on the basis of secondary data.

The research findings of the study are:

- The measurement of liquidity has revealed that the mean current ratio of all the three banks is not widely varied. All of them are capable in discharging their current liability by current assets.
- The measurement of lending strength in relative terms has revealed that the total liability to total assets of SCBNL has the highest ratio. The high ratio is the result of high volume of shareholder equity in the liability mix. Himalayan Bank Ltd. has high volume of saving and fixed deposits as compare to current deposit resulting into low ratio of non-interest bearing deposits to total deposits ratio compared to the combined mean of saving and fixed deposits as compare to current deposit resulting into low ratio of non-interest bearing deposits to total deposits ratio compared to the combined mean.
- SCBNL’s tendency to invest in government securities has resulted with the lowest ratio of loans and advances to total assets ratio where as NABIL Bank Ltd. has highest due to steady and high volume of loans and advances throughout the years.
- The ratio of investment to investment and loan & advances has measured the total portion of investment on total of investment and loans & advances. The mean ratio among the banks does not have deviated significantly.
- The loans & advances and investment to deposit ratio has shown that NABIL Bank Ltd. has deployed the highest proportion of its total deposits in earning activities. This is the indicative of that in fund mobilizing activities NABIL Bank Ltd. is significantly better.
- The absolute measures of lending strength have revealed that the mean volume of net assets and deposits is highest in SCBNL with moderate variation. The volume of net assets of Himalayan Bank Ltd. is the least due to the low share capital, reserve and surplus in its capital mix. But the volume contributes by Himalayan Bank Ltd. in case of loans and advances

- are highly appreciated as compare to its net assets. The volume of loans and advances contributed by NABIL Bank Ltd. is the greatest in five years of stuffy period. The mean investment of NABIL Bank Ltd. is highest but the investment on government securities of SCBNL is the highest.
- The portfolio analysis has revealed that the flow of loans and advances in agriculture sector is the lowest priority sector among these commercial banks. The contribution of all banks in industrial sector is appreciable. The contribution made by Himalayan Bank Ltd. in industrial sector is the greatest and that of SCBNL in the least.
  - The lending in commercial purpose is highest in case of NABIL Bank Ltd. and least in case of SCBNL. SCBNL has highest contribution in service sector lending. It has contributed 25.47% of its total credit in general use and social purpose.
  - The measurement of efficiency in lending has revealed that the loans loss provision to loans and advances analysis shows that NABIL Bank Ltd. has the highest mean ratio. According to Nepal Rastra Bank directive, the loan loss provision indicated the provision made against the performing loan (pass loan and sub-standard loan) only. It indicates that the volume of sub-standard loan in the loan mix of NABIL Bank Ltd. is higher and the volume of non- performing loan in the mix of NABIL Bank Ltd. is likely to increase in coming future.
  - The mean ratio of interest income to total income has concluded that the contribution of interest income in total income is higher in case of Himalayan Bank Ltd. and lower in case of SCBNL. The interest expenses to total deposit ratio indicate that the cost of fund in Himalayan Bank Ltd. is the highest and that of SBNL is the least.
  - The total income to total assets ratio measures the earning power of each rupee employed by the bank. NABIL's ratio in this is the best. The ratio of total income to total expenses reflects the earning capacity of a rupee if expenses. The productivity of expenses in SCBNL is the best.
  - The performance of SCBNL is significantly better than other two banks in case of profitability. EPS is highest in case of SCBNL.

**Raya T.K., (2003)** in his thesis, “Investment Policy and Analysis of Commercial Banks in Nepal” made a comparative study of Standard Chartered Bank Ltd. with Nepal Investment Bank and Nepal Bangladesh Bank Ltd. His main objectives were as follows:

- To discuss fund mobilization and Investment policy of SCBNL in respect to its fee based off-balance sheet transaction and fund based balance sheet transaction.
- To evaluate the liquidity, efficiency and profitability and risk position.
- To evaluate trend of deposit, Investment, loan and advances and projection for next five years.

His main findings were as follows:

- Mean current ratio of SCBNL is slightly higher than that of NIBL and NBBL
- Mean ratio of cash and bank balance to total deposit of SCBNL is lower than NIBL and NBB.
- Liquidity position of SCBNL is comparatively better than NIBL and NBBL. It has lowest cash and bank balance to current ratio. SCBNL has a good deposit collection. It has made enough Investment on government securities but it has maintained low investment policy on loan and advances.
- SCBNL is comparatively average successful in its on balance sheet operation. But off balance sheet operation activities in compared to NIBL and NBBL has maintained the strong position.
- SCBNL is comparatively higher position than that of other banks, as well as it uses to provide interest to the customers for different activities.
- There is significant relationship between deposit of loan and advances and between assets and net profit of SCBNL.

He recommended the SCBNL for effective portfolio management and for project oriented approach. He also suggested enhancing the off balance sheet operation.

**Joshi Jyoti (2005)** conducted a study on "Investment Policy of Commercial Banks in Nepal: A Comparative Study of Everest Bank Limited with NABIL Bank Limited and Bank of Kathmandu" with the objective of;

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

The study was conducted on the basis of secondary data.

The research findings of the study are:

- ❖ The liquidity position of the EBL is comparatively better than NABIL and BOK. EBL has the highest cash and bank balance to total deposits, cash and bank balance to current assets ratio. NABIL has the lowest liquidity position than that of other two banks. EBL has good deposit collection and has made enough investment on government securities but it has maintained moderate investment policy on loan & advances.

- ❖ From the analysis of assets management ratio or activity ratio, it can be concluded that EBL is comparatively average or in between successful in compared to NABIL and BOK. The total investment of EBL is in between in compared to other two banks.
- ❖ In the study, loan & advances to total deposit is higher in BOK but total investment to total deposit is higher in NABIL. Investment on shares and debentures to total working fund ratio is higher in BOK. But the coefficient of variation is higher in EBL.
- ❖ In analysis of profitability, total interest earned to total outside assets of EBL is lowest at all. But overall analysis of profitability ratios, EBL is average profitable in comparison to other compared banks i.e., NABIL and BOK. From the viewpoint of risk ratio, EBL has higher capital risk ratio but average of credit risk ratio in compared to NABIL and BOK.

### **2.3 Review of Legislative Provision**

There are various acts concerning the study, which are basically involved in this section; the review of acts framework (environment) under which the commercial banks are operating has been discussed. In this act, environment has significant impact on the commercial banks establishment, their mobilization and utilization of resources. All the commercial banks have to confirm to the act, provision specified in the Commercial Bank Act. 2031 and the rules and regulations formulated to facilitate the smooth running of commercial banks. The preamble of Nepal Bank Act, 1994 clearly states the need of commercial banks in Nepal, “In the absence of any bank in Nepal the economic progress of the country was being hampered and causing inconvenience to the people and therefore, with the objectives of fulfilling that need by providing services to the people and for the betterment of the country, this law is hereby promulgated for the established of the bank and its operation” (Nepal Bank Act; 1964).

As mentioned in this act, commercial banks will help in banking business by opening its branches in the different parts of the country. Under the direction of NRB, the main function of commercial banks was established. Providing this act will be exchange of money, to accept deposits and provide loans to commercial banks and business activities, that to mobilize banks deposits in different sectors of the different parts of the nation to prevent them from the financial problems. Central Bank (NRB) established a legal framework by formulating various rules and regulations (Prudential norms). These directives must have direct or indirect impact while making decision to discuss those rules and regulations, which are formulated by NRB in term of investment and credit to priority sector, deprived sector, and other institution. Single borrower limits, CRR, loan loss provision, capital adequacy relation, interest spread are the productive sector investment. A commercial bank is directly related to the fact that how much fund is needed to expand the branch 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

### **1. Provision for Investment in the Deprived Sector**

This provision is instructed by government (Ministry of Finance) and NRB. Some rules, which are formulated by NRB, effect the areas of credit and investment extension to the deprived sector by the commercial bank. According to the new provision, which effect from 16 July 2000, investment in shares of rural development banks by commercial banks, which used to be counted for the priority sector lending, only is new to be included under the deprived sector lending.

According to the provision, following banks are required to extend credit to the deprived sector as stipulated percentage mentioned below:

<b>Name of Banks</b>	<b>Minimum % of Total Outstanding Credit to be Extended for Deprived Sector</b>
Everest Bank Ltd. (EBL)	2.00
Nabil Bank Ltd. (NABIL)	3.00
Bank of Kathmandu Ltd (BOK)	1.75
Nepal Bank Ltd.(NBL)	3.00
Rastriya Banijya Bank (RBB)	3.00
Standard Chartered Bank Ltd.(SCBNL)	3.00
Nepal Investment Bank Ltd. (NIBL)	3.00
Himalayan Bank Ltd.(HBL)	2.00
Nepal SBI Bank Ltd. (NSBIBL)	2.00
Nepal Bangladesh Bank Ltd.(NBBL)	2.00
Nepal Credit and Commerce Bank Ltd. (NCCBL)	0.75
Nepal Industrial and commercial Bank Ltd (NICBL)	0.00
Lumbini Bank Ltd. (LBL)	0.25
Macchaphuchre Bank Ltd.(MBL)	0.25
Kumari Bank Ltd (KBL)	0.25

The computation of deprived sector credit is to be done on the trimester basis:

### **2. The Provision for Credit to the Priority Sector**

NRB requires commercial banks to extend loan and advances, amounting at least to 12% of their total outstanding credit to priority sector. Commercial banks credit to the deprived sector is also a part of priority sector, credit under priority sector , credit to agriculture and credit to cottage and small industries. Credit to service and counted commercial banks loan to the co-operative license by the NRB is also

to be computed as the priority sector credit from the fiscal year 1995/1996 onwards.

### **3. Provision for the Investment in Productive Sector**

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

### **4. Provision for the Single Borrowed Credit Limit**

With the objective of lowering the risk of over concentration of bank loans to a few big borrowers and to increase the access of small and middle size borrower to the bank loans. NRB directed commercial banks to seat 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% in the case of fund-based credit and 50% in the case of non-fund based credit such as the letter of credit, guarantee and acceptance letter. Commitment has been fixed as a proportion of capital funds of banks.

### **5. Directives to Raise Capital Funds (CAR)**

The commercial banks under operation and having low capital base have been directed to raise their capital funds art a minimum level of Rs. 500.00 Million with in 5 years of period i.e. by the end of FY 2006/2007.

Moreover, the commercial banks are allowed to include paid up capital and reserves for meeting the minimum capital requirement but they have to deduct the loss from such funds if they are in loss. Similarly, the commercial banks are directed to maintain the minimum capital fund on the basis of their risk –weighted assets i.e. CAR (Capital Adequacy Ratio) in the following ratio given below:

<b>Time Table</b>	<b>CAR of Risk Weighted Assets</b>	
	<b>Core Capital</b>	<b>Capital Fund Supplementary</b>
FY 2004/05	4.5	9.0
FY 2005/06	5.0	10.0
FY 2006/07	6.0	12.0

Source: NRB

Where, core capital includes Paid up capital, Share Premium, non- redeemable Preference share, general reserve fund and accumulated loss/profit.

Supplementary Capital includes General loan loss provision, exchange equalization reserve, assets revaluation reserve, hybrid capital instruments, subordinate term debt and free reserve.



There are two types of the total risk weighted asset as under as per directives:

**a. Risk weighted on Balance Sheet Assets**

Allocation of Risk Factor

<b>On- balance sheet Assets</b>	<b>Weights</b>
Cash balance	0
Gold (exchangeable)	0
Bank balance with NRB	0
Investment on Govt. Securities	0
Investment in NRB Securities	0
Fully Secured Loan against own FDR	0
Fully Secured Loan against HMG Securities	0
Cash balance at local banks and financial institutions	20
Fully Secured Loans against other banks' FDR	20
Balance at foreign bank	20
Money at call	20
Loan against guarantee of A+ rated International banks	20
Other investment at A+ rated International banks	20
Other Investment	100
Investment of share, debenture and bond	100
Other Loans, Advances, Bills purchased /discounted	100
Fixed assets	100
Misc. Assets	100

**b. Risk Weighted on Off- Balance Sheet Item**

Allocation of Risk Factor

<b>Off- Balance Sheet Items</b>	<b>Weights</b>
Bills Collection	0
Forward foreign exchange contract	10
Letter of credit with Maturity less than 6 Month	10
Guarantee against CG of A+ rated international Banks	20
Letters of Credit with maturity greater than 6 months	50
Bid bond	50
Performance Bond	50
Advance Payment Guarantee	100
Financial Guarantee	100
Irrevocable Loan Commitment	100
Contingent Tax Liability	100
Other Contingent Liabilities	100

A+ rated means bank who have been rated A+ by renowned rating agencies and banks termed first class by NRB from time to time.

## 6. Current Reserve Requirements (CRR)

To ensure adequate liquidity in the commercial banks, to meet the depositor's demand for cash at any time and to inject the confidence in depositors regarding the safety of their deposited funds, commercial banks are required to deposit minimum 8% of current and saving and 6% of fixed deposits in the NRB as primary cash reserve. The commercial banks are further required to have 3% cash of total deposits in their own bank as secondary reserve.

## 7. Loan Classification and Loss Provision

There are different types of loan provided by the banks, with the instruction of NRB and government. With the view of improving the quality of assets of commercial banks, NRB has directed commercial banks to classify their outstanding loan and advances, investment and other assets into four categories. The classification is done in two ways. The loans of more than one hundred thousands are to be classified as per debt service charge ratio, repayment situation and financial condition of borrower, management efficiency and quality of collateral. The loans of less than one hundred thousands have to be classified as per maturity period.

1. pass
2. Substandard
3. Doubtful
4. Loss

The loan loss provision that has to be maintained by the CBs is instructed by NRB. Furthermore, NRB has directed commercial banks to maintain certain reserve for loans. The existing loan loss provisioning is mentioned in the table below.

### Loan Loss Provisioning

Loan Classification	Loan Loss Provisioning (in percent of overdue loan)
Pass	1
Substandard	25
Doubtful	50
Loss	100

The above table shows the loan provisioning has affected bank's capability to extend loans and made them risk averse in issuing lower loans, particularly to the private sector and priority sector where the loan default is high.

## 8. Directive Regarding Interest Rate Spread

Interest rate spread is the difference between the interest charged on loan and advances and the interest paid to the depositors. The interest rate spread has widened significantly in the aftermath of deregulation in interest rate. This has caught lower financial intermediation. Therefore, NRB has directed the commercial banks to limit its interest rates spread with the maximum of 5%. NRB

has also provided commercial bank with new calculation method of interest rate spread for a certain period recently.

While reviewing the books and articles and past studies, it is found that banks are not just the storehouses of the country's wealth but are the reservoirs of resources necessary for economic development and employment generation. There are still different obstacles in the effective operation of the commercial banks in Nepal. Therefore these obstacles should be eradicated for the economic development of Nepal.

The review of above relevant literature helps me to better understand the Investment Policy of Commercial Banks and its main drawbacks and problems. On the basis of feedback derived form the literature review further analysis of my study has been under track

### **Research Gap**

The purpose of the research work is quite different from the studies made by the above person (related to Joint venture banks). The author focuses this study in effectiveness on investment policy analysis of Nepal Investment Bank and Nepal SBI 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, trend analysis, correlation and hypothesis. This study is a little bit different than previous studies. It may be the first research study in the field of investment policy taking the comparative study of Nabil Bank Limited, Standard Chartered Bank Nepal Ltd. and Himalayan Bank Ltd. This study tried to indicate the effectiveness of investment policy of commercial banks.

## **CHAPTER – III**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

In the previous chapter, general background of commercial banks has been highlighted and review of literature with possible review of relevant books, articles, theses and research findings has also been discussed. This has equipped me with the inputs necessary for my study and helped me to make choice of research methodology. Research methodology refers to various sequential steps to be adopted by a researcher in studying a problem with certain objectives in view. Research methodology describes the methods and process applied in the entire subject of the study.

This chapter attempts to have an insight into the Investment Policy adopted by HBL, SCBNL and NABIL. This will help to evaluate and analyze Investment performance of NABIL in comparison to HBL, SCBNL.

#### **3.2 Sources of Data**

Mainly, the study is conducted on the basis of the secondary data. The data required for the analysis are directly obtained from the balance sheet and the P/L account of the concerned bank's annual reports. Supplementary data and information are collected from number of institutions and regulating authorities like NRB, Economic Survey and National Planning Commission etc. All the secondary data are complied, processed and tabulated in the time series as per the need and objectives. Formal and informal talks with the concerned authorities of the banks were also helpful to obtain the additional information of the related problem.

Likewise, various data and information are collected from the economic journals, periodicals, bulletins, magazines and other published and unpublished reports and documents from the various sources.

#### **3.3 Research Design**

Research Design is the plan, structure and strategy of investigations conceived so as to obtain an answer to research question and to control variances. Descriptive and analytical research designs have been used to achieve the objectives of this study.

Descriptive techniques have been applied to evaluate investment performance of NABIL and compare it with HBL, SCBNL as well as some statistical and financial tools have been adopted to examine facts.

### 3.3.1 Population and Sample

There are all together 25 commercial banks functioning all over the kingdom and most of their stocks are traded actively in the stock market. In this study investment policy of NABIL is compared with the HBL, SCBNL which are selected from population. The populations are as follows:

**List of Commercial banks**

S.N.	Commercial Banks	Established Date	Head Office
1.	Nepal Bank Ltd.	1937/11/15	Kathmandu
2.	Rastriya Banijya Bank	1966/01/23	Kathmandu
3.	Nabil Bank	1984/07/16	Kathmandu
4.	Nepal Investment Bank Ltd.	1986/02/27	Kathmandu
5.	Standard Chartered Bank	1987/01/30	Kathmandu
6.	Himalayan Bank Ltd.	1993/01/18	Kathmandu
7.	Nepal Bangladesh Bank	1993/06/05	Kathmandu
8.	Nepal SBI Bank Ltd.	1993/07/07	Kathmandu
9.	Everest Bank Ltd.	1994/10/18	Kathmandu
10.	Bank of Kathmandu Ltd.	1995/03/12	Kathmandu
11.	Nepal Credit and Commercial Bank	1996/10/14	Siddhartha Nagar
12.	Lumbini Bank Ltd.	1998/07/17	Naryanghat
13.	Nepal Industrial and Commercial Bank Ltd.	1998/07/2	Biratnagar
14.	Macchapuchhre Bank Ltd.	2000/10/03	Kathmandu
15.	Kumari Bank Ltd	2001/04/03	Pokhara
16.	Laxmi Bank Ltd.	2002/04/03	Kathmandu
17.	Siddhartha Bank Ltd	2002/12/24	Kathmandu
18.	Agricultural Development Bank Ltd.	1968/01/02	Kathmandu
19.	Global Bank Ltd.	2007/01/02	Birgunj, Parsa
20.	Citizen Bank Ltd.	2007/06/21	Kathmandu
21.	Prime Bank Ltd.	2007/09/24	Kathmandu
22.	Sunrise Bank Ltd.	2007/10/12	Kathmandu
23.	Bank of Asia Nepal Ltd.	2007/10/12	Kathmandu
24.	Nepal Development Bank Ltd.	2008	Kathmandu
25.	NMB Bank Ltd	2008	Kathmandu

Source: <http://brf.nrb.org.np>

From these samples, Himalayan Bank Ltd., Standard Chartered Bank Ltd. and NABIL Bank Ltd. have been selected and its data related to investment performance are comparatively studied.

### 3.3.2 Data Analysis

To achieve the objective of this study, various financial, accounting and statistical tools have been used. The analysis of data will be done according to the pattern of

data available. Due to limited time and resources, simple analytical statistical tools such as percentage graph, Karl Person's Coefficient of Correlation, regression, the least square method, and test of hypothesis are used in the study. Likewise, some financial tools such as ratio analysis and trend analysis have also been used for financial analysis.

### **Financial Tools**

Financial tools are used to examine the strength and weakness of a bank. In this study financial tools like ratio analysis and financial statement analysis have been used.

#### **1. Ratio Analysis**

Ratio analysis is a part of the whole process of analysis of financial statement of any business or industrial concern especially to take output and credit decision. (Kothari;1984:54) Thus ratio analysis is used to compare a firm's financial performance and status to that of other firm's or to it self. The qualitative financial performance of a firm can be done with the help of ratio analysis. Even though, there are many ratios, only those ratios have been covered in this study, which are related to the Investment operation of the bank. This study contains the following ratios.

##### **A. Liquidity Ratios**

Liquidity ratios are used to judge the ability of banks to meet its short- term liabilities that are likely to mature in the short period. From them, much insight can be obtained into present cash solvency of the bank and its ability to remain solvent in the event of adversities. It is measurement of speed with which a bank's assets can be converted into cash to meet deposit withdrawl and other current obligations.

The following ratios are evaluated under liquidity ratios:

##### **i. Current Ratio**

The current ratio is the ratio of total current assets and current liabilities. It shows the relationship between current assets and current liabilities.

Mathematically it is represented as:

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

Where,

Current assets include cash and bank balance, money at call or short-term notice, loans and advances, investment in government securities and other interest

receivable and miscellaneous current assets where as current liabilities include deposits and other accounts of short-term loan, bills payable, tax provision, staff bonus, dividend payable and miscellaneous current liabilities.

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

**ii. Cash and Bank Balance to Total Deposit Ratio (Cash Reserve Ratio)**

Cash and bank balance 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 computed by dividing cash and bank balance by total deposit. This can be presented as,

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

Hence, cash and bank balance includes cash on hand, foreign cash on hand, cheque, and other cash items, balance with domestic banks and balance held in foreign banks. The total deposit encompasses current deposits, saving deposit, fixed deposits, money at call and short notice and other deposits.

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

This ratio is computed by dividing cash and bank balance by current assets. We can state it as,

$$\frac{\text{Cash and Bank Balance}}{\text{Current Assets}}$$

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

Investment on government securities includes treasury bills and development bonds etc. This ratio can be computed by dividing investment on government securities by current assets. This can be mentioned as:

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

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

This ratio can be computed by dividing loans and advances by current assets. Mathematically it is expressed as:

$$\frac{\text{Loan and Advances}}{\text{Current Assets}}$$

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

Assets management or activity or turnover ratios are employed to evaluate the efficiency with which the firm manages and utilize its assets. They indicate the speed with which assets are being converted or turned over. Thus, these ratios are used to measure the bank's ability to utilize their available resources.

### **i. Loan and Advances to Total Deposit Ratio**

This ratio is calculated to find out, how successfully the banks are utilizing their total deposits on loan and advances for profit generating purpose. Greater ratio implies the better utilization of total deposits. This ratio can be obtained by dividing loan and advances by total deposit, which can be stated as,

$$\frac{\text{Loan and Advances}}{\text{Total Deposit}}$$

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

Investment is one of the major forms of credit created to earn income. This implies the utilization of firm's deposit on investment on government securities and shares debentures of other companies and bank. This ratio can be obtained by dividing loan and advances by total deposit, which can be stated as,

$$\frac{\text{Total Investment}}{\text{Total Deposit}}$$

The numerator consist of investment on government securities, investment on debenture and bonds, shares in subsidiary companies, shares in other companies and other investment.

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

Loan and advance is the major component in the total working fund (total assets), which indicates the ability of bank to canalizes 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. This is stated as,

$$\frac{\text{Loan and Advances}}{\text{Total Working Fund}}$$

Here, the denominator includes all assets of on balance sheet items. In other words, this includes current assets, loans for development banks and other miscellaneous assets but excludes off balance sheet items like letter of credit, letter of guarantee etc.

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

This ratio shows the bank 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. This is presented as,

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



**v. Investment on Share and Debenture to Total Working Fund Ratio**

This ratio shows the bank investment on Share and Debenture in comparison to the total working fund. This ratio is calculated by dividing investment on Share and Debenture by total working fund. This is presented as,

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

**C. Profitability Ratios**

Profitability ratios are calculated to measure the efficiency of operation of a firm on term of profit. 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. Profitability position can be evaluated through following different way.

**i. Total Interest Earned to Total Outside Assets Ratio**

This ratio measures the interest earning capacity of the bank through the efficient utilization of out side assets. Higher ratio implies efficient use of outside assets to earn interest. This ratio is calculated by dividing total interest earned by total outside assets and can be mentioned as,

$$\frac{\text{Total Interest Earned}}{\text{Total Outside Assets}}$$

The denominator includes loan and advances, bills purchased and discounted and all types of investments. The numerator comprise total interest income form loans, advances, cash credit and overdrafts, government securities, inter bank and other investments.

**ii. Return on Loan and 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 (loss) by loan and advances. This can be expressed as,

$$\frac{\text{Net Profit}}{\text{Loan \& Advances}}$$

**iii. Return on Equity Ratio (ROE)**

The ratio measures how efficiently the banks have used the funds of the owners. The ratio is calculated by dividing net profit by total equity capital (net worth). This can be started as,

$$\frac{\text{Net Profit}}{\text{Total Equity Capital}}$$

#### **iv. Return on Total Assets Ratio**

Return on total assets ratio measures the overall profitability of all working funds i.e. total assets. It is also known as return on Assets (ROA). 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 Assets. This can be expressed as,

$$\text{ROA} = \frac{\text{Net Profit}}{\text{Total Assets}}$$

Here, Net profit includes income left to the internal equities after deducting all costs, charges and expenses.

#### **v. Total Interest Earned to Total Working Fund Ratio**

This ratio depicts the extent on which the banks are successful in mobilizing their total assets to generate high income as interest. It is calculated to find out the percentage of interest earned to total assets (working funds). Higher ratio implies the better performance of the bank in terms interest earning on its total working fund. This ratio is calculated by dividing total interest earned by total working fund. This can be stated as

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

#### **vi. Total Interest Paid to Total Working Fund Ratio**

This ratio measures the percentage of total interest paid on liabilities with respect to total working fund. A high ratio indicates the higher interest expenses on total working fund and vice versa. It is calculated by dividing total interest paid by total working fund. This can be mentioned as:-

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

The numerator consists of total interest expenses on deposit, liabilities, loan and advances (borrowing) and other deposit.

### **D. Risk Ratios**

There is risk associated with Investment, after all there is risk associated with most elements of our lives. Therefore if one needs return one must take a risk. Risk taking is the prime business of bank's investment management. It increases effectiveness and profitability of the bank. These ratios indicate the amount of risk associated with the various banking operations, which ultimately influences the banks investment policy.

The following ratios are calculated to measure the level of risk associated with banks daily operation.

**i. 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 and advances. Here, dividing total loan and advance by total assets derives this ratio. This can be stated as,

$$\frac{\text{Total Loan and Advances}}{\text{Total Assets}}$$

**ii. Liquidity risk ratio**

The liquidity risk ratio measures the level of risk associated with the liquid assets i.e. cash and 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. This ratio is calculated by dividing cash and bank balance by total deposits. This can be expressed as,

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

**E. Growth Ratios**

To examine and analyze the expansion and growth of the banks, businesses following growth ratios are calculated in this study.

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

**Statistical Tools**

To achieve the objective of this study, some statistical tools are used such as coefficient of correlation between different variables, trend analysis of important variable as well as hypothesis test (t-statistical), which are as follows:

**a. Coefficient of Correlation Analysis**

The correlation coefficient determines the relationship between two properties. 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. When two elements have zero correlation with each other they are unrelated on anyway and have zero variance. Positive correlation implies positive covariance. Karl-person’s co-efficient of correlation has been used to find out the relationship between the following variables:

- a) Co-efficient of correlation between deposit and loan & advances.
- b) Co-efficient of correlation between deposit and total investment.

- c) Co-efficient of correlation between total outside assets and net profit.

**b. Trend Analysis**

This topic analyzes the trend of deposits, loan and advances, investment and net profit of NABIL, SCBNL and HBL and makes the forecast for the next five years.

Under this topic following sub topics have been presented.

- a) Trend analysis of total deposit
- b) Trend analysis of total investment
- c) Trend analysis of net profit.

**c. Test 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.

- a) Test of Hypothesis on total investment to total deposit ratio of NABIL, SCBNL and HBL.
- b) Test of hypothesis on investment on government securities to current assets ratio of NABIL, SCBNL and HBL.
- c) Test of hypothesis on return on loan and advances ratio of NABIL, SCBNL and HBL.
- d) Test of hypothesis on total interest earned to total outside asset ratio of NABIL, SCBNL and HBL.

## CHAPTER - IV DATA ANALYSIS AND PRESENTATION.

The purpose of this chapter is to study, evaluate and analyze those major financial performances, which are mainly related to investment management and fund. Mobilization of Himalayan Bank Ltd. in comparison to that of Nabil Bank Ltd. and Standard Chartered Bank Ltd. There are many types of financial ratios but only those ratios are calculated and analyzed, which are very important to evaluate fund mobilization of commercial bank. Necessary figures and tables are also presented in this part to describe about the investment mechanism of the banks.

### 1. Ratio of NABIL, SCBNL and HBL Investment to Total Commercial Bank Investment

This ratio indicates the portion of Investment made by NABIL, HBL and SCBNL to total Investment made by, commercial banks of Nepal. It shows how much the sample banks are involved in Investment. And the ratio is derived by dividing Investment made by sample banks by Total Investment made by commercial banks.

**Table 4.1**  
**Ratio of NABIL, SCBNL and HBL Investment to Total Commercial Bank Investment**

Banks	Fiscal Years					Mean	S.D	C.V (%)
	2002/03	2003/04	2004/05	2005/06	2006/07			
NABIL	0.1544	0.137	0.0839	0.107	0.138	0.124	0.028	22.76
SCBNL	0.2616	0.2680	0.1909	0.22327	0.21031	0.231	0.033	14.376
HBL	0.538	0.519	0.488	0.460	0.466	0.494	0.033	6.788

(Source: From Annexure i,ii, iii)

The above table exhibits that the ratio of NABIL is in decreasing trend from FY 2002/03 to 2004/05 and increases in 2005/06 to 2006/07. SCBNL has followed the fluctuating trend and in case of HBL it has followed decreasing trend.

Mean ratio of NABIL i.e. 0.124 is lower than that of SCBNL i.e. 0.231 and HBL ie. 0.494.

It indicates that few portion of total investment of commercial banks is covered by NABIL's investment in comparison to SCBNL and HBL .

Similarly, Co - efficient of variation of NABIL Investment to total commercial bank investment is comparatively higher than that of SCBNL and HBL. It means there is more variability in Investment of NABIL than SCBNL and HBL.

### Segregation of Investment of NABIL, SCBNL and HBL

NABIL, SCBNL and HBL invest its collected funds in different sectors. Mostly commercial banks are found to invest in government securities, shares and debentures of other companies, NRB bonds and other Investment like. Mutual funds, local's foreign banks, certificate of deposits etc. Here an attempt is made to segregate the investments made by NABIL, SCBNL and HBL.

**Table 4.2**  
**Segregation of Investment of NABIL**

YEAR	Investment	Gov. Sec	%	Share & Deb	%	Others	%
2002/03	6031175	3588772	59.50	22220	0.368	2420183	40.13
2003/04	5835948	3672626	62.93	22220	0.368	2141222	36.69
2004/05	4269657	2413939	56.57	440282	10.31	1415436	33.15
2005/06	6178533	2301462	37.24	104192	1.68	3775002	61.09
2006/07	8945310	4808348	53.75	286957	3.21	3861003	43.16

(Source; From Annexure)

**Table 4.3**  
**Segregation of Investment of SCBNL**

YEAR	Investment	Gov. Sec	%	Share & Deb	%	Others	%
2002/03	10216199	6581348	64.42	11195	0.098	3623655	35.46
2003/04	11360328	7948218	69.96	11195	0.098	3400916	27.29
2004/05	9702553	7203066	74.24	13348	0.137	2486139	25.62
2005/06	12847536	8644855	67.29	15348	0.119	419.337	32.62
2006/07	13553233	7107937	52.44	44943	0.3316	6403353	47.24

(Source; From Annexure)

**Table 4.4**  
**Segregation of Investment of HBL**

YEAR	Investment (Rs.)	Gov. Sec (Rs.)	%	Share & Deb	%	Others	%
2002/03	10175435	3347102	32.89	34266	0.337	6142298	60.36
2003/04	9292103	3431729	36.93	34266	0.67	5826107	62.70
2004/05	11692342	5469729	46.78	39909	0.34	6182703	58.88
2005/06	10889031	5144313	47.24	39909	0.366	5706151	52.40
2006/07	11822985	6454873	54.59	73424	0.62	5294687	44.78

(Source; From Annexure)

The above table 4.2, 4.3, 4.4 shows the Investment made by NABIL, SCBNL and HBL is different sectors. NABIL is found to investment its funds in govern securities, shares and debentures of other industries and other i.e. Investment in local & foreign banks etc. From FY 2002/03 to 2004/05 most of its investment covers by government securities and only few portion is covered by other

investment and very few portion by shares & debentures. On FY 2005/06 it decreases its investments on government securities and started to invest its fund on other investment. On FY 2006/07 it increases its investment on government securities. In FY 2006/07 53.75% of total investment is covered by government securities, 3.2 % is covered by shares and debentures and 43.16% is covered by other investments.

On the other hand SCBNL seems to invest its funds mostly on government securities, only few portion of its collected funds is invested on shares and debentures and other investment. From FY 2005/06 to 2006/07 it slightly decreases its investment on government securities and increases its investment on other investments.

In FY 2006/07 52.44% of its total investment is covered by government Securities, 47.24% is covered by other investment and 0.3316% is covered by shares and debentures of other companies.

In case of HBL it is found to invest most of its funds on other investment and rest of the funds in government securities and shares and debentures. In FY 2002/03, 6.4% of its total Investment is invested on NRB bonds. From FY 2004/05 it starts to decrease its investment on other investment on government securities. On FY 2006/07, 54.59% of its total investment is covered by government securities, 44.78% by other investments and 0.62% by shares and debentures of other companies.

Investment on government securities is less risky but the return is usually low, from the investment pattern of NABIL, SCBNL and HBL. It seems that it started to invest less in government securities in current years, which means it started to taker risky investment to get high return.

#### **4.1 Financial Tools**

Financial analysis is the act of identifying the financial strength and weakness of the organization presenting the relationship between the items of balance sheet. For the purpose of this study, ratio analysis has been mainly used and with the help of it data have been analyzed. Various financial ratios related to the investment management and the fund mobilization are presented and discussed to evaluate and analyze the performance of NABIL in comparison to SCBNL and HBL. The ratios 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 mentioned below:

- a) Liquidity Ratio
- b) Assets management Ratio
- c) Profitability Ratio
- d) Risk Ratio
- e) Growth Ratio

#### 4.1.1 Liquidity Ratio

Liquidity ratio measures the ability of the firm to meet its current obligations. A commercial bank must maintain its satisfactory liquidity position to meet the credit need of the community demand for the deposits, with draws pay maturity in time and convert non-cash assets into cash to satisfy immediate need without loss to bank and consequent impact or long run profit.

The following ratios are evaluated and interpreted under liquidity ratios.

##### (i) Current Ratio

Current ratio indicates the ability of a bank to meet its current obligation. This is the broad measure of liquidity position of the financial institution. Current ratio is derived by dividing current assets by current liabilities.

We have

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

Where,

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

Current liabilities consist of deposits, loan and advances, bills payable, tax provision, staff bonus, dividend payable and miscellaneous current liabilities.

Current ratios of HBL, NABIL and SCBNL from the fiscal year 2002/03 to 2006/07 are given below in Table no. 4.5 (details in Annexure - A1). Mean is calculated by average (A: 1=A5), standard. Deviation is calculated by using the formula STDEV (Annexure A1: Annexure A5) and CV by  $\sigma \times 100\%$ . Calculations of all the tables are done in excel.

**Table 4.5**  
**Current Ratio (Times)**

Banks	Fiscal Year					Mean	S.D	C.V (%)
	2002/03	2003/04	2004/05	2005/06	2006/07			
NABIL	1.067	1.099	1.113	1.0732	1.155	1.1016	.035	3.21%
SCBNL	0.971	0.9698	1.0226	0.981	0.946	0.978	0.028	2.86%
HBL	0.854	0.993	1.098	1.103	1.446	0.898	0.498	55.49%

(Source; From Annexure)



The above table shows that current assets of NABIL is higher than current liabilities and ratios are in increasing trend from 2002/03 to 2004/05 and again increases in 2006/07. SCBNL has lower current assets than current liabilities in FY 2002/03 ,2003/04, 2005/06,2006/07 and higher C.A in 2004/05, it means SCBNL has not sound ability to pay short term obligations due to more liabilities. In case of HBL in FY 2002/03 to 2003/04 it's current assets if lower than current liabilities but from FY 2005/06 to 2006/07 it's current assets is greater than current liabilities and HBL ratio is in increasing trend during the study period.

In average liquidity position of NABIL is greater than other banks i.e.  $1.106 > 0.978 > 0.898$ . So, NABIL is sound in liquidity position than other banks.

Likewise the co-efficient of variation (C.V) of NABIL is less than HBL and slightly higher than SCBNL i.e.  $3.2\% > 2.86\%$  and  $3.2\% < 55.49\%$ . It can be said that current ratio of NABIL is more consistent than HBL and Less consistent than SCBNL.

Thus, it can be concluded that NABIL is capable to pay their current obligations in comparison to SCBNL and HBL.

**(ii) Cash and bank balance to total deposit ratio. (Cash reserve ratio)**

Cash and bank balance is said to be the first defense of every banks. The ratio between the cash and bank balance and total deposit measures the ability of the bank to meet the unanticipated cash and all types of deposits. Higher the ratio, the greater will be the ability to meet sudden demand of deposit and vice versa. But every high ratio is not desirable since bank has to pay interest on deposits. This will also maximize the cost of fund to the bank.

We have,

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

Where,

Cash and bank balance is composed of cash on hand including foreign cheques, other cash items; balance with domestic banks and abroad. Deposit includes current deposits, saving, deposits, fixed deposits, money at call or short notice and other types of deposits.

Cash and bank balance to total deposit ratio of NABIL, SCBNL and HBL from FY 2002/03 to FY 2006/07 are given below. (Details in Annexure - A2)

**Table 4.6**  
**Cash and Bank Balance to Total Deposit (%)**

Banks	Fiscal Year					Mean	S.D	C.V (%)
	2002/03	2003/04	2004/05	2005/06	2006/07			
NABIL	8.51	6.87	3.83	2.87	5.93	5.60	2.27	40%
SCBNL	8.06	9.56	5.75	5.53	8.21	7.42	1.73	24%
HBL	9.42	9.10	8.12	6.48	5.85	7.79	1.61	21%

(Source; From Annexure)

Table 4.6 shows that the cash and bank balance to total deposit ratio of NABIL has followed decreasing trend from FY 2002/03 to 2005/06 & it increases in 2006/07. Similarly, SCBNL has increases from 2002/03 to 2003/04 and decreases form FY 2004/05 to 2005/06 and again increases in 2006/07. On the case of HBL, it has followed decreasing trend during the study period i.e., FY 2002/03 to FY 2006/07.

In average, NABIL has maintained lower cash & bank balance to total deposit ratio than SCBNL i.e.  $5.60 < 7.42 < 7.79$ . It states that cash and bank balance in liquidity position of NABIL is lower than other tow banks. The C.V of NABIL is 40%, which is comparatively higher than that of SCBNL 24% and HBL 21%. So that NABIL shows the less consistent than that of SCBNL and HBL.

Comparatively NABIL has maintained low ratios, it shows some difficulties to meet the demand of its customers on their deposit to pay at any time but it may be earning more by investing cash to different sectors. But it should ensure to have enough liquid funds to serve its customer.

**(iii) Cash and bank balance to current assets ratio**

This ratio shows the bank liquidity capacity on the basis of cash and bank balance that is the most liquid asset. Higher ratio indicates the bank ability to meet the daily cash requirement of their customer deposit and vice versa. But higher ratio is not preferred, as the bank has to pay more interest on deposit and will increase the cost of fund. Lower ratio is also very dangerous, as the bank may not be able to make the payment against the cheques presented by the customers. Therefore, bank has to balance the cash and bank balance to current assets ratio in such a manner that it should have the adequate cash for the customers demand against deposit when required and less interest is required to be paid against the cash deposit. (Details in Annexure - A3)

We have,

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

**Table 4.7**  
**Cash and Bank Balance to Current Assets Ratio (%)**

Banks	Fiscal Year					Mean	S.D	C.V (%)
	2002/03	2003/04	2004/05	2005/06	2006/07			
NABIL	8.25	6.81	3.74	3.07	6.06	5.59	2.21	38%
SCBNL	8.85	10.76	5.53	5.94	9.18	7.91	2.04	26%
HBL	12.14	10.76	9.45	7.42	6.33	9.22	2.37	26%

(Source; Annexure - A3)

Above table exhibits that cash and bank balance to current assets ratio of NABIL has followed decreasing trend from FY 2002/03 to 2005/06 and increased in FY 2005/06. SCBNL has followed fluctuating trend from FY 2002/03 to 2005/06 & it followed increasing trend from 2005/06 to 2006/07. In case of HBL it has followed decreasing trend.

While examining the mean ratio, NABIL had maintained 5.59 which is less than SCBNL and HBL i.e. 7.91 and 9.22. It states that liquidity position of NABIL is lower than other two banks. In this regard, the co-efficient of variation between the above ratios of NABIL is 38% which is comparatively less than that of SCBNL & HBL i.e., 38% > 26% 26% it shows less consistent of NABIL than that of SCBNL & HBL. It shows the current ratios are less heterogeneous than that of other two banks.

Thus, it can be concluded that NABIL is low capable to maintain cash & bank balance is comparison to other two banks.

**(iv) Investment on government securities to current assets ratio.**

The commercial banks are interested to invest their collected funds in various government securities issued by government. Though government securities are not so much liquid as cash & bank balance, they can be easily sold in the market or they can be converted into cash in other ways. The main purpose of this ratio is to examine the portion of a commercial banks current assets that is invested on different government securities.

We have,

Investment on government securities to current assets ratio

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

The table below shows the ratio of investment of govt. Securities to current assets ratio of NABIL, SCBNL & HBL (details in Annexure -A4)

**Table 4.8**  
**Investment on Government Securities to Current Assets Ratio (%)**

Banks	Fiscal Year					Mean	S.D	C.V (%)
	2002/03	2003/04	2004/05	2005/06	2006/07			
NABIL	25.87	25.78	16.12	12.69	21.06	21.36	5.85	28.83%
SCBNL	38.52	39.56	37.28	40.22	32.27	36.97	3.23	8.75%
HBL	20.54	18.45	25.68	22.22	23.24	22.02	2.72	12.36%

The above table 4.8 shows that the ratio of NABIL is decreasing trend from FY 2002/03 to 2005/06 and increased in FY 2006/07. In the case of SCBNL & HBL its ratio is in fluctuating trend.

In overall, the mean ratio of investment in govt. securities to current assets ratio of NABIL is lower than that of SCBNL & HBL i.e.  $21.36 < 22.02 < 36.97$ . It means NABIL had invested its fewer portions of current assets on government securities, than other two banks. On the other had C.V in ratios of NABIL is greater than that of SCBNL & HBL ie  $28.83\% > 12.36\% > 8.75\%$ . Which means the variability's of ratios of NABIL is less consistent than that of SCBNL & HBL.

It can be concluded that NABIL has invested its less portion of current assets as government securities than that of SCBNL & HBL. NABIL's liquidity portion from the point of view of investment on government securities is poorer than that of other two banks.

**(v) Loan and advances to current assets ratio (%)**

Loan and advances are also included is the current assets of commercial banks because generally it provides short-term loan, advances/overdraft/ cash-credit, local and foreign bill purchased and discounted.

To make a high profit by mobilizing its fund in the best way, a commercial bank should not keep its all collected funds as cash and bank balance but they should be invested as loan and advances to the customers. If sufficient loan and advances cannot be granted, it should pay interest on those unutilized deposit funds and may lose some earnings, but high loan and advances may also be harmful to keep the bank is most liquid position because they can only be collected at the time of maturity only. Thus, the bank must maintain its loan and advances in appropriate level to find out portion of current asset, which is granted as loan and advances.

We have,

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

The table below shows the ratio of loan and advances to current assets ratio of NABIL, SCBNL & HBL (details in Annexure - 5)

**Table 4.9**  
**Loan & Advances to Current Assets Ratio (%)**

Banks	Fiscal Year					Mean	S.D	C.V (%)
	2002/03	2003/04	2004/05	2005/06	2006/07			
NABIL	55.93	57.50	70.71	71.26	68.11	64.70	7.40	11.45%
SCBNL	33.34	31.40	42.14	41.61	47.68	39.33	6.58	16.74%
HBL	66.56	69.45	63.07	68.08	59.59	65.34	4	6.12%

Above table exhibits that loan and advances to current assets ratio of NABIL is in increasing trend from FY 2002/03 to 2005/06 and then in decreasing trend from 2005/06 to 2006/07. In case of SCBNL & HBL ratio both are in fluctuating trend during the study period.

While examining the mean ratio, NABIL has maintained 64.70 which is slightly lower than HBL ie 65.34 and higher than SCBNL ie 39.33. On the other side co-efficient of variation of NABIL 11.45% is lower than SCBNL and higher than HBL ie 16.74>11.64>6.12.

From the above table it can be concluded that NABIL has succeeded to invest its fund is loan and advances in comparison to SCBNL but seen little weak in comparison to HBL in point of view of mean & C.V.

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

Assets management ratio measures the efficiency of the bank to manage its assets in profitable and satisfactory manner.

A commercial bank must manage its assets property to ear high profit. Under this chapter following ratios are studied.

##### **(i) Loan and Advances to Total Deposit Ratio.**

This ratio measures the extent to which the banks are successful to mobilize their total deposit on loan and advances.

We have,

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

The table below & shows the ratio of loan and advances to total deposit ratio of NABIL, SCBNL and HBL. (Details in Annexure -A7)

**Table 4.10**  
**Loan & Advances to Total Deposit Ratio (%)**

Banks	Fiscal Year					Mean	S.D	C.V (%)
	2002/03	2003/04	2004/05	2005/06	2006/07			
NABIL	57.67	5.8	72.57	66.79	66.61	34.33	5.72	8.89%
SCBNL	30.36	30.30	42.12	38.75	42.61	36.86	5.47	114.85%
HBL	51.62	58.70	54.21	59.50	56.57	56.12	2.94	5.24

In the table 4.10, all the banks have fluctuating trend regarding the ratios. During the study period, NABIL has highest ratio of 72.57 is FY 2004/05 ad lowest ratio 57.67 is FY 2002/03, SCBNL has highest ad lowest ratios 42061 and 30.30 is FY 2006/07 and 2003/04 and HBL has highest & lowest ratios 59.50 and 51.62 is FY 2005/06 and 2002/03 respectively.

In over all men ratio of loan & advances to total deposit of NABIL is higher than that of SCBNL & HBL is side co-efficient of variation of above banks. NABIL has 8.89% , which is comparatively higher than 5.24% of HBL and less than 14.85% of SCBNL. It shows that HBL is more 5 table than other banks.

In conclusion, NABIL has strong position regarding the mobilization of total deposit on loan ad advances and acquiring higher profit with compare to SCBNL & HBL. It states that NABIL is better is this regard.

**(ii) Total Investment to Total Deposit Ratio.**

A commercial bank mobilizes its deposits by investing its fund is different securities issued by government and other financial or no financial institutions. Now, effort has been made to measure the extent to which the banks are successful is mobilizing the total deposits on investment.

In the process of portfolio management of bank assets, various factors such as availability of fund, liquidity requirement Central banks norms etc are to be considered in general. A high ratio is the indicator of high success to mobilize the baking fund as investment and vice versa.

We have,

$$\text{Total investment to total deposit ration} = \frac{\text{Total Investment}}{\text{Total Deposit}}$$

**Table 4.11**  
**Total Investment to Total Deposit Ratio (%)**

Banks	Fiscal Year					Mean	S.D	C.V (%)
	2002/03	2003/04	2004/05	2005/06	2006/07			
NABIL	44.85	41.33	29.27	31.93	38.32	37.14	5.79	1.6%
SCBNL	54.47	53.68	50.18	55.71	55.10	53.83	1.94	3.6%
HBL	48.44	42.22	47.20	41.10	39.34	43.66	3.54	8.1%

The above table exhibits that the ratio of NABIL is in decreasing trend from 2002/03 to 2004/05 and is increasing trend from 2005/06 to 2006/07. In the case of SCBNL it's also in decreasing trend from 2002/03 to 2004/05 and increases in FY 2005/06 & 2006/07. And in case of HBL its ratio has fluctuating trend vice versa 48.44, 42.22, 47.20, 41.10 and 39.35 is the year 2002/03, 2003/04, 2004/05, 2005/06 & 2006/07.

In average NABIL has maintained lower, mean value i.e. 37.14 < 43.66, 53.83 than other two banks. SCBNL has maintained the highest mean value of 43.83.

The CV ratio of NABIL is 1.6% which is lower than 3.6% of SCBNL is more stable than that of other two banks.

In conclusion, NABIL is in weak condition to mobilize its deposits by investing in different sectors in comparison of other two banks.

**(iii) Loan & Advances to Total Working Fund Ratio**

Loan & advances is an important part of total assets (total working fund). Commercial bank must be very careful in mobilizing its total assets. As loan and advances in appropriate level to generate profit this ratio reflects the extent to which the commercial banks are successful in mobilizing their assets, loan & advances for the purpose of income generation. A high ratio indicates better mobilization of funds as loan and advances and vice versa.

We have,

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

Where, total working fund is the total assets. It is composed up of current assets, fixed assets, miscellaneous assets and investment: loans for development bank etc.

The table 1.12 shows the loan & advances total working fund ratio of NABIL, SCBNL & HBL, (details in annexure - A8)

**Table 4.12**  
**Loan & Advances to Total Working Fund Ratio %**

Banks	Fiscal Year					Mean	S.D	C.V (%)
	2002/03	2003/04	2004/05	2005/06	2006/07			
NABIL	46.82	48.91	61.60	57.87	57.04	54.45	6.29	11.56%
SCBNL	27.24	27.11	37.19	34.67	36.73	32.59	5.03	15.44
HBL	44.82	50.21	46.60	51.54	49.53	48.54	2.75	5.66

The above table exhibits that the ratio of NABIL & SCBNL is decreasing trend from 2003/04 to 2004/05 and increasing trend from 2005/06 to 2006/07. In case of HBL its ratio is in fluctuating trend.

On the basis of mean ratios, NABIL has maintained the higher ratio than that of SCBNL & HBL i.e.  $54.45 > 48.54 > 32.59$ . So, NABI is in good condition to mobilize its total working fund as loan and advances. Co-efficient of variation of NABIL is less than SCBNL and higher than HBL i.e.  $11.56\% > 15.44\% > 5.66\%$ . It indicates more uniform of NABIL is comparison to SCBNL and very less uniform than HBL.

Lastly, we can say that NABIL's fund mobilization in terms of loan & advances with respect of total working fund is more satisfactory than that of other two banks.

**(iv) Investment on Government Securities to Total Working Fund Ratio.**

All the resources to a bank is not used as loan and advances. A bank mobilize its fund in various ways. To some extent commercial bank seems to utilize its fund by purchasing government securities. A government securities is a safe medium of investment though it is not liquid as cash and bank balance. This ratio is very important to know the extent to which the banks are successful in mobilizing their total fund or different types of government securities to maximize its income. A high ratio indicates better mobilization of funds as investment on government securities is a current asset which is invested by external parties. These types of securities can be sold in the market.

We have,

$$\text{Investment on government securities to total working fund ratio} = \frac{\text{Investment on Government Securities}}{\text{Total Working Fund}}$$

Investment on government securities to total working fund ratio of NABIL, SCBNL & HBL from FY 2002/03 to 2006/07 are given below in table no: 9 (details in Appendix 9)



**Table 4.13**  
**Investment on Government Securities to Total Working Fund Ratio (%)**

Banks	Fiscal Year					Mean	S.D	C.V (%)
	2002/03	2003/04	2004/05	2005/06	2006/07			
NABIL	21.67	21.93	14.04	10.31	17.64	17.12	4.99	29%
SCBNL	31.47	33.62	31.90	33.54	24.85	31.28	30.70	11.8%
HBL	13.82	13.34	18.94	16.82	18.81	16.35	2.67	16.31%

From the above table it is clearly seen that investment on government securities to working fund ratio of NABIL, SCBNL & HBL is in fluctuating trend.

On the basis of mean, NABIL has maintained slightly higher ratio than HBL and lower ratio than SCBNL i.e.  $17.12 > 16.35 < 31.28$ . The co-efficient of variation of NABIL is higher than that of SCBNL & HBL i.e.  $29\% > 16.31\% > 11.28\%$ .

From the above analysis, it can be concluded that NABIL's fund mobilization in terms of government securities with respect of total working fund is not more satisfactory than that of other two banks. And NABIL is not satisfactory of ratios point of view is fund mobilizing term and less homogeneous.

**(iv) Investment on shares and Debentures to Total Working Fund Ratio.**

To study the investment management of NABIL, SCBNL & HBL bank, total investment has been separated into two parts i.e. Investment on government securities and investment on shares and debentures. Now a day a commercial bank is interested to invest its funds not only on government securities but also in shares & debentures of other different companies and regional development banks.

Investment on shares and debentures to total assets ratio reflects the extent to which the banks are successful to mobilize their assets on purchase of shares and debentures of other companies to generate incomes and utilize their excess fund. A high ratio indicates more portion of investment on share and debentures out of total working fund and vice versa.

We have,

$$\text{Investment on shares and debentures to total working fund ratio} = \frac{\text{Investment on shares \& debentures}}{\text{Total working fund}}$$

Investment on shares and debentures to total working fund ratio of NABIL, SCBNL & HBL from FY 2002/03 to 2006/07 are given below in the table 4.14 (details in Annexure - 10)

**Table 4.14**  
**Investment on Shares & Debenture to Total Working Fund Ratio (%)**

Banks	Fiscal Year					Mean	S.D	C.V (%)
	2002/03	2003/04	2004/05	2005/06	2006/07			
NABIL	0.13	0.13	2.56	0.47	1.053	0.87	1.02	11.7%
SCBNL	0.05	0.05	0.06	0.06	0.16	0.076	0.047	62.13%
HBL	0.14	0.13	0.14	0.13	0.21	0.15	0.03	22.6%

The above table exhibits that the ratio of NABIL & SCBNL is in increasing trend incase of HBL it is in fluctuating trend.

On the basis of mean ratios, NABIL has higher investment than other two banks ie.  $0.87\% > 0.15 > 0.076$ . Moreover, (V of NABIL is less than other two banks ie  $11.7\% < 22.6\% < 62.13\%$ , which states that the position of NABIL is better in this regard.

It can be concluded that NABIL has invested more portion of its total working fund on shares & debentures than other two banks. And also NABIL is more consistent and homogeneous than SCBNL & HBL.

#### **4.1.3 Profitability Ratio**

Profit is the lock bone of the financial institutions and commercial banks. The main objective of a commercial bank is to earn profit providing different types of banking services to its customers. To meet various objectives like to have a good liquidity position, meet fixed internal obligation, overcome the future contingencies, grab hidden investment opportunities, expend banking transitions in different places and finance government in need of development funds etc, a commercial bank must earn sufficient profit.

Profitability ratios are the best indicators of overall efficiency. Here mainly those ratios are presented and analyzed which are related with profit as well as investments. An effort has bee made to measure the profit earning capacity of NABIL, SCB & HBL through the following ratios.

##### **(i) Return on total working fund ratio**

It measures the profit earning capacity by utilizing available resources ie, total assets.

Return will be higher if the banks working fund is well managed and are efficiently utilized, maximizing taxes with in legal options available will also improve the return.

We have,

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

Where,

Net profit includes the profit that is left to the internal equities after all costs, chares & expenses. Return on total working fund ratio of NABIL, SCBNL & HBL from FY 2002/03 to 2006/07 is given below in table 4.15 (details in Annexure – 11)

**Table 4.15**  
**Return on Total Working Fund Ratio (%)**

Banks	Fiscal Year					Mean	S.D	C.V (%)
	2002/03	2003/04	2004/05	2005/06	2006/07			
NABIL	2.51	2.72	3.02	2.84	2.47	2.71	0.23	8.47%
SCBNL	2.42	2.27	2.46	2.55	2.42	2.42	0.10	4.18%
HBL	0.88	1.02	1.06	1.50	1.43	1.18	0.27	23.05%

The above table exhibits that the ratio of NABIL is in increasing trend from 2002/03 to 2004/05 and decreasing from 2005/06 to 2006/07. In case of SCBNL its in fluctuating trend and incase of HBL its in increasing trend from 2002/03 to 2005/06 & its decreases on 2006/07.

In the mean ratios, it is observed that the NABIL has the highest mean value ie. 2.71>2.24>1.18. So, NABIL is highly efficient to earn net profit and return as well. On the other hand C.V of NABIL is less than HBC and higher than SCBNL ie. 8.47%<23.05%>4.18%.

From the above analysis it can be concluded that NABIL is in strong position is the earning capacity by utilizing available resources than other banks. A its less consistent and homogeneous than SCBNL & more than HBL.

**(ii) Total Interest Earned to Total outside Assets Ratio**

It reflects that the extent to which the bank is successful to earn interests as major income on all the outside Assets. Higher the ratio higher will be the earning power of total outside assets. This is very important ratio, as the main asset is the outside Assets of a commercial bank.

We have,

$$\text{Total interest earned to Total outside Assets} = \frac{\text{Total interest earned}}{\text{Total outside asset.}}$$

The total outside assets include loan & advances investment n government securities, share and debentures and other all types of investment.

The table below exhibits total interest earned to total outside assets ratio from FY 2002/03 to 2006/07. (details in Annexure -12)

**Table 4.16**  
**Total Interest Earned to Total Outside Assets Ratio (%)**

Banks	Fiscal Year					Mean	S.D	C.V (%)
	2002/03	2003/04	2004/05	2005/06	2006/07			
NABIL	7.38	7.14	7.20	6.86	6.50	7.02	0.34	4.89%
SCBNL	14.9	5.86	5.93	5.46	5.87	7.66	4.08	53.72%
HBL	5.71	5.61	5.75	6.10	6.10	5.85	0.23	3.94%

The above comparative table reveals that NABIL has fluctuating trend from FY 2002/03 to 2005/06 and on FY 2006/07 its increasing. SCBNL has fluctuating trend during the study period and HBL has fluctuating trend from 2002/03 to 2005/06 its stable is 2006/07.

On the basis of mean ratios NABIL is less than SCBNL  $7.02 < 7.66$  & higher than HBL ie.  $7.02 > 5.85$  in respect to total interest earned to total outside assets. On the other hand, C.V of NABIL is less than that of SCBNL and higher than HBL.

From the above analysis, it can be concluded the NABIL is in strong position is earning high interest income from its total outside assets is comparison to SCBNL & HBL is view point of mean & C.V ratio. Moreover, SCBNL is comparatively efficient to earn high interest income from outside assets than other banks.

**(iii) Return on Loan & Advances Ratio**

Return on loan & advances ratio measures the earning capacity of a commercial bank on its mobilized fund based loan and advances. A high ratio indicates a greater success to mobilize fund and vice versa.

We have,

$$\text{Return Loan \& Advances Ratio} = \frac{\text{Net profit}}{\text{Loan \& advances}}$$

The table below shows return on loan & advances of NABIL, SCBNL, HBL for the FY 2002/03 to 2006/07. (details in Annexure – 13)

**Table 4.17**  
**Return on Loan & Advances Ratio (%)**

Banks	Fiscal Year					Mean	S.D	C.V (%)
	2002/03	2003/04	2004/05	2005/06	2006/07			
NABIL	5.37	5.56	4.90	4.92	4.33	5.02	.48	9.5%
SCBNL	8.9	8.41	6.62	7.37	6.6	7.58	1.64	13.77%
HBL	1.96	2.03	2.30	2.90	2.89	2.42	0.45	18.8%

The above table exhibits that the ratio of NABIL has maintained fluctuating trend. SCBNL has decreasing trend at first i.e. from FY 2002/03 to 2004/05 and then followed fluctuating trend from 2005/06 to 2006/07. HBL has maintained increasing trend from 2002/03 to 2005/06 and then decreases in 2006/07.

The mean of the NABIL is higher than HBL i.e.  $5.02 > 2.42$  and lower than SCBNL i.e.  $5.02 < 7.58$  in respect to return on loan & advances ratio. On the other hand C.V of NABIL is less than that of other two banks. So NABIL has maintained high return with variability ratios.

From the above analysis, it can be concluded that NABIL is significantly able to earn high return on its loan and advances in comparison of other two banks in point of view of average mean & low C.V ratio.

**(iv) Total Interest Earned to Total Working Fund Ratio.**

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

We have,

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

The following table shows total interest earned to total working fund ratios of NABIL, SCBNL & HBL (details in Annexure – 14)

**Table 4.18**  
**Total Interest Earned to Total Working Fund Ratio (%)**

Banks	Fiscal Year					Mean	S.D	C.V (%)
	2002/03	2003/04	2004/05	2005/06	2006/07			
NABIL	6.15	5.98	6.22	5.87	5.88	6.01	0.17	2.84%
SCBNL	4.81	4.41	4.83	4.61	5.94	4.72	0.21	4.45%
HBL	4.96	4.84	5.01	5.32	5.17	4.96	0.22	4.40%

The above comparative table reveals that NABIL & SCBNL has followed fluctuating trend during the study period. In the case of HBL it is in fluctuating trend from FY 2002/03 to FY 2005/06 and decreasing is 2006/07 like wise 4.94, 4.84, 5.01, 5.32, 5.17 is FY 2002/03 to 2006/07.

The mean of NABIL is greater than that of other two banks ie.  $6.01 > 4.96 > 4.72$ . So, we can say that NABIL is in strong position to generate interest income from the total working fund than other two banks. On the other hand, C.V of NABIL is lower than that of SCBNL & HBL ie,  $2.84\% < 4.40\% < 4.45\%$ . It means more consistent their two banks.

Thus, it can be concluded that the ratio of total interest earned to total working fund ratio of NABIL is satisfactory is compared to other two banks. That means the total interest earned to total working fund ratio of NABIL is stable in comparison to SCBNL & HBL.

**(v) Total interest paid to total working fund ratio.**

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

We have,

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

The following table shows the total interest paid to total working fund ratios of NABIL, SCBNL & HBL (details in Annexure – 15)

**Table 4.19  
Total Interest Paid to Total Working Fund Ratio**

Banks	Fiscal Year					Mean	S.D	C.V (%)
	2002/03	2003/04	2004/05	2005/06	2006/07			
NABIL	1.91	1.70	1.42	1.55	2.04	1.72	0.25	14.76%
SCBNL	1.22	1.20	1.16	1.20	1.44	1.24	0.11	9.02%
HBL	2.31	1.91	1.95	2.12	2.24	2.11	0.17	8.3%

The above comparative table reveals that total interest paid to total working fund ratio of NABL and SCBNL is in decreasing trend at first 3 years i.e. FY 2002/03 to 2004/05 and then it is in increasing trend from 2005/06 to 2006/ 07 . In case of HBL it's ratio is in decreasing trend from FY 2002/03 to 2003/04 and in increasing trend from 2004/05 to 2005/06.

The mean ratio of NABIL i.e. 1.72 is average between SCBNL and HBL i.e. 1.24 and 2.11. It means NABIL pays average interest than other two banks during the study period. On the other hand NABIL'S coefficient of variable is higher i.e. 14.76%. in comparison to SCBNL and HCL i.e. 9.02% and 8.3%. It indicates that NABIL ratio is less consistent than other two banks.

In conclusion we can say that NABIL is in better position from payment of interest point of view (less expenses generate the high income generate theory). It seems to be successful to collect it's working fund from less expensive sources in comparison to HBL and less than SCBNL.

**(vi) Return on Equity**

Equity capital of any banks is it's owned capital. The prime objective of any banks is wealth maximization or in other words to earn high profit and maximizing return to it's shareholders. ROE is the measuring rod of the profitability of banks. It reflects the extent to which the banks has been successful to mobilize it's equity capital. A high ratio indicates higher success to mobilize its owned capital and vice versa.

We have,

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

Equity capital includes paid up equity capital, reserve, general loan loss provision etc. The table below shows the ROE of the NABIL, SCBNL & HBL. (details in Annexure - 16)

**Table 4.20**  
**Return on Equity Ratio (%)**

BANKS	Fiscal Year					Mean	SD	CV (%)
	2002/03	2003/04	2004/05	2005/06	2006/07			
NABIL	35.12	30.77	31.30	33.91	32.79	32.88	1.42	4.32%
SCBNL	37.03	35.96	33.89	37.55	32.68	35.42	2.08	5.86%
HBL	19.95	19.87	19.99	25.90	36.89	24.52	7.38	30.10%

The above table exhibits that ratios of NABIL followed decreasing trend from FY 2002/03 to FY 2003/04 and then increased from FY 2004/05 to 2005/06 and again decreased is FY 2006/07. In case of SCBNL ratio, it followed decreasing trend from FY 2002/03 to 2004/05 then increasing trend from 2005/06 to 2006/07. In case of HBL ratio, it followed decreasing trend is FY 2002/03 to FY 2003/04 and then increased from FY 2004/05 to 2006/07.

In the mean ratios, it is observed that NABIL has the average mean value ie, 32.79 which is less than 35.42 of SCBNL and higher than 24.52 of HBL. The coefficient of variation of NABIL is less than other two banks ie,  $4.32\% < 5.86\% < 30.10\%$ .

In the point of view of average mean and lower C.V it can be concluded that comparatively NABIL has mobilized its equity capital more efficiently than other two banks. So, NABIL has sound investment policy on equity capital more over its lower C.V shows its more homogenous during the study period.

#### 4.1.4 Risk Ratios

The possibility of risk makes bank's investment a challenging task. Bank has to take risk to get return on its investment. The risk taken is compensated by the increase in profit. A bank has to take high risk if it expects high return on its investment. So, the banks opting for high profit has to accept the risk and manage it efficiently. Through following ratios effort has been made to measure the level of risk.

- (i) Credit Risk Ratio
- (ii) Capital Risk Ratio

##### (i) Credit Risk Ratio

Bank utilize its collected funds is providing credit to different sectors. There is risk of default or non-repayment of loan. While making investment, bank examines the credit risk involved in the project. Generally credit risk ratio shows the proportion of non-performing assets is the loan & advances of a bank. But due to unavailability of the relevant data, here we have presented the credit risk as the ratio of loan and advances to total assets.

We have,

$$\text{Credit risk ratio} = \frac{\text{Total loan and advances}}{\text{Totalo assets}}$$

The following table shows the comparative credit ratio of NABIL, SCBNL & HBL for the year 2002/03 to 2006/07. (details in Annexure – 17)

**Table 4.21**  
**Credit Risk Ratio (%)**

BANKS	Fiscal Year					Mean	SD	CV (%)
	2002/03	2003/04	2004/05	2005/06	2006/07			
NABIL	46.82	48.91	61.61	57.87	57.04	54.45	6.29	11.56%
SCBNL	27.24	27.11	37.2	34.70	36.73	32.59	5.03	15.46%
HBL	44.82	50.21	46.59	51.54	49.53	48.54	2.75	5.68%



The above table exhibits that the credit risk ratio of NABIL is in increasing trend from FY 2002/03 to FY 2004/05 and then in increasing trend from 2005/06 to 2006/07. In case of SCBNL & HBL it is in fluctuating trend.

The mean ratio of NABIL is 54.45 is higher than that of SCBNL is 32.59 and HBL 48.54. It means credit risk of NABIL is higher than that of other two banks. The C.V ratio of NABIL is in between SCBNL and HBL is 5.68% < 11.56% < 15.46%.

From the above analysis it can be concluded that NABIL's degree of risk is higher than other two banks and its more variable than HBL & less than SCBNL.

**(ii) Capital Risk Ratio**

The capital risk of a bank indicates how much assets value may decline before the position of deposition and other coeditors is jeopardized. Therefore a bank must maintain adequate capital in relation to the nature and condition of its assets, its deposits liabilities and other corporate responsibilities. Capital risk ratio measures banks ability to attract deposits and inter-bank funds. It also determines the level of profit, a bank can earn if a bank chooses to take high capital risk, and its ROE will be higher and vice versa.

We have,

$$\text{Capital risk ratio} = \frac{\text{Capital}}{\text{Risk weighted assets}}$$

(Risk weighted assets is taken from the financial report of concerned banks)

The following table shows the capital risk ratio of the NABIL, SCBNL and HBL. (Deposit Annexure - 18)

**Table 4.22  
Capital Risk Ratio (%)**

BANKS	Fiscal Year					Mean	SD	CV (%)
	2002/03	2003/04	2004/05	2005/06	2006/07			
NABIL	4.411	4.14	3.46	2.89	2.56	3.49	0.79	22.6%
SCBNL	2.312	2.22	2.04	1.88	1.00	1.87	0.50	27.18
HBL	4.28	5.11	6.42	6.24	5.72	5.55	0.87	15.76

The above table exhibits that the credit risk ratio of NABIL and SCBNL is in decreasing trend. In case of HBL it is in increasing trend decreases in FY 2006/07.

The mean ratio of NABIL i.e, 3.49 is higher than SCBNL i.e. 1.81 and lower than HBL ie. 5.55.

The CV ratios of NABIL is in between SCBNL and HBL i.e  $215.76 < 22.6\% < 27.18$ .

From the above analysis it can be concluded that NABIL" degree of capital risk is higher that SCBNL and its more variable than HBL and less then SCBNL.

#### 4.1.5 Growth Ratio

Growth ratios are directly related to the fund mobilization and investment management of a commercial bank. It represents how well the commercial bank are maintaining the economic and financial position. Under this topic, four of growth ratio are studies which are as follows:

- (i) Growth Ratio of Total Deposit.
- (ii) Growth of Total Loan and Advances.
- (iii) Growth of Total Investment.
- (iv) Growth ratio of Total Net Profit.

The calculation method of growth ratio is shown is Annexure - B 1

**Table 4.23**  
**Growth Ratio of Total Deposit (%)**

Banks	Fiscal Year					Growth Ratio (%)
	2002/03	2003/04	2004/05	2005/06	2006/07	
NABIL	13448	14119	24587	19347	23342	14.74%
SCBNL	18756	21161	19335	23061	24647	7.06%
HBL	21007	22010	24814	26490	30048	9.36%

The above comparative table shows that the growth ratio of NABIL deposit is higher thus that of SCBNL deposit is higher than that of SCBNL and HBL ie,  $14.74\% > 9.36\% > 7.06\%$ . it means that the performance of NABIL to collect greater deposit compared to SCB & HBL is better year-by-year.

**Table 4.24**  
**Growth Ratio of Loan and Advances (%)**

Banks	Fiscal Year					Growth Ratio (%)
	2002/03	2003/04	2004/05	2005/06	2006/07	
NABIL	7756	8190	10586	12923	15546	18.98%
SCBNL	5696	3410	8143	8935	10502	16.53%
HBL	10845	12920	13451	15762	17794	13.18%

The above comparatives table no. 19 shows that the growth ratio of NABIL has maintained ratio of 18.98% where as SCBNL & HBL maintained 16.53% and 13.18% respectively. It means the performance of HBL to grant loan and advances in comparison to other banks is better year-by-year.

**Table 4.25**  
**Growth Ratio of Total Investment**

Banks	Fiscal Year					Growth Ratio (%)
	2002/03	2003/04	2004/05	2005/06	2006/07	
NABIL	6031	5836	4270	6179	8945	10.35%
SCBNL	10216	11360	9703	12848	13553	7.32%
HBL	10175	9292	11692	10889	11823	3.82%

The above comparative table shows that growth ratio of total investment of NABIL is higher than SCBNL & HBL i.e. 10.35% > 7.32% > 3.82%. So we can say that NABIL has better growth level for investment sector even FY 2003/04 to 2004/05 has decreasing growth amount and then increasing growth amount there after.

**Table 4.26**  
**Growth Ratio of Total Net Profit**

Banks	Fiscal Year					Growth Ratio (%)
	2002/03	2003/04	2004/05	2005/06	2006/07	
NABIL	416	455	518	635	674	12.82%
SCBNL	507	538	540	659	692	8.08%
HBL	212	263	308	457	492	23.43%

The above comparative shows that the growth ratio of NABIL's net profit i.e. 12.82% is lower than HBL i.e. 23.43% and higher than SCBNL i.e. 8.08%. In the view of net profit NABIL has average position in comparison to other two banks.

## **4.2 Statistical Tools**

Under this heading some statistical tools such as co-efficient of correlation analysis between different various, trend analysis of deposits, loan and advances, investment and net profit as well as hypothesis test (+- statistics) are used to achieve the objectives of the study.

### **4.2.1 Coefficient of Correlation Analysis**

Under this chapter, Karl Person's coefficient of correlation is used to find out the relationship between deposit and loan & advances and total investment, outside assets and net profit.

#### **(i) Co-efficient of correlation between deposit and loan & advances.**

It is already mentioned that investment is dependent upon saving i.e. deposit. Longer the duration of deposit, higher the banker's ability to acquire long term asset. In the other words banker can't invest more on long term assets if the

duration of deposit is short. In this sense it can be said that investment is the function of deposit.

Theoretically it is assumed that long-term asset yield higher return. It means longer the duration of deposit, higher would be the profitability of the bank. But investment may not be the function of deposit only. Sometimes investment is made from the funds raised from other sources. In such situation investment is not dependent upon deposit only. Co-efficient of correlation between deposit and loan and advances measures the degree of relationship between these two variables. In this analysis deposits is independent variable (y) and loan and advances is dependent variable (x).

The detail calculations in this regards are done in Annexure - C1 and the following table show the value of  $r_{xy}$ ,  $r^2$  and P.E and 6 P.E between those variable of NABIL, SCBNL and Himalayan Bank Ltd. during the study period.

**Table 4.27**  
**Correlation between Deposits and Loan and Advances**

Evaluation Criteria				
Banks	r	$r^2$	P.Er.	6 P.E.r
NABIL	0.967	0.9351	0.0195	0.117
SCBNL	0.825	0.6806	0.09630	0.5778
HBL	0.958	0.9177	0.0248	0.1488

From the above table, all bank's co-efficient of correlation between the deposit and loan and advances shows high degree of positive relation ship. In case of NABIL, it is fund that co-efficient of correlation between deposit and loan and advances is 0.967. When we consider, the value of coefficient of determination ( $r^2$ ), it is 0.935% of the variation is the dependent variable (loan and advances) has been explained by the independent variable (deposit).

Similarly, considering the valued of (r) i.e. 0.967 and comparing it with 6 PER ie 0.117 we ca find that (r) is greater than the value of 6 PER. This reveals that the value of r is significant. In other words there is significant relationship between total deposit and loan and advances in case of NABIL.

Likewise, in the case of SCBNL & HBL, it has high degree of positive correlation between deposit and loan & advances., However by application of coefficient of determination ( $r^2$ ) it indicates that SCBNL and HBL has 68.06% and 91.77% respectively of the variation in the dependent variable i.e. loan and advances has been explained by the independent variable i.e. deposits. Moreover considering the probable error, in case of SCBNL and HBL. (r) is greater then 6 P.Er is can be said

that the value of (r) is significant i.e., there is significant relationship between total deposit and loan & advances.

Lastly, we can draw the conclusion from the above analysis that in NABIL and other two banks, there is positive relationship between deposits and loan & advances. The relationship is significant and the value of ( $r^2$ ) shows high percent in the dependent variable which has been explained by the independent variable. This indicates that three sample banks are successful to mobilize their deposits in proper way as loan & advances. Moreover, we can further conclude that NABIL has higher correlation between deposit and loan & advances as well as higher value of ( $r^2$ ) than those of SCBNL & HBL. Which indicates that it is in strong condition to grant loan & advances for mobilizing the collected deposits in comparison to other two banks.

**(ii) Co-efficient of correlation between deposit and total investment.**

Co-efficient of correlation (r) between deposit and investment measures the degree of relationships between these two variables. Here, deposit is independent variable (x) and total investment is dependent variable (y). The purpose of computing co-efficient of correlation between deposit and total investment is to find out whether deposit is significantly used as investment or not.

The table 4.27 shows the value of r,  $r^2$ , P.Er and 6 P.Er between deposit and total investment of NABIL, SCBNL & HBL for the study period of 2002/03 to 2006/07. (details in Annexure-C2)

**Table 4.28  
Correlation between Deposit and Total Investment**

Evaluation Criteria				
Banks	r	$r^2$	P.Er.	6 P.Er.
NABIL	0.823	0.6779	0.0971	0.155
SCBNL	0.956	0.9139	0.0259	0.4521
HBL	0.787	0.619605	0.11474	0.6884

From the above table 4.28, we find that co-efficient of correlation between deposits (independent) and total investment (dependent) value of 'r' is 0.823 in case of NABIL. It shows highest degree of positive relationship between two variables. However, by application of coefficient of determination the value of ( $r^2$ ) is 0.6779 which indicates 67.79% of the variation of the dependent variable (total investment) has been explained by the independent variable (deposits). Moreover, by considering the probable error. Since the value of r i.e. 0.823 is greater than 6P.Er i.e. 5828%. So, we can say that there is significant relationship between total deposits and total investments.

On the other hand in case of SCBNL and HBL, both has high degree of correlation between deposit and total investment. However, by the application of coefficient of determination i.e.  $r^2$  it indicates SCBNL to be 91.39% and HBL to be 61.95% respectively of the variation in the dependent variable i.e. total investment has been explained by the independent variables i.e. deposit more over considering the probable error since the value of  $r$  i.e. 0.956 of SCBNL and 0.9131 of HBL is more than 6 P.Er. So we can say that there is significant relationship between total deposit and total investment of SCBNL & HBL.

Lastly, we can draw the conclusion from the above analysis that NABIL, SCBNL & HBL as high degree of positive relationship between deposit & investment. The relationship is significant and the value of ( $r^2$ ) shows high percent in the dependent variable which has been explained by the independent variable. This indicates that three banks are successful to invest their deposit in proper way. More over, we can further conclude that NABIL has slightly lower correlation between investment & deposit as well as lower value of  $r^2$  in comparison to SCBNL and higher value in comparison to HBL. It indicates that NABIL is in average position to follow the policy of maximizing the investment of their deposits in comparison to SCBNL and HBL.

**(iii) Coefficient of correlation between outside assets and net profit.**

Coefficient of correlation 'r' between outside assets and net profit measures the degree of relationship between these two variables. Here, outside assets are independent variable (x) and net profit is dependent variable (y). The purpose of computing co-efficient of correlation between outside assets and net profit is to find out whether the net profit is significantly correlated with respective total assets or not.

Table 4.29 shows the value of  $r$ ,  $r^2$ , P.Er, 6 P.Er between outside assets and net profit of NABIL, SCBNL & HBL for the study period of 2003/04 (details in Annexue - C3)

**Table 4.29**  
**Co-efficient of Correlation between Outside Assets and Net Profit**

Evaluation Criteria				
Banks	$r$	$r^2$	P.Er.	6 P.Er.
NABIL	0.92768	0.86059	0.0420	0.252
SCBNL	0.8305	0.6897	0.0935	0.5614
HBL	0.956	0.91393	0.0259	0.1557

(Source; Annexure - C3)

From the above listed table it has been found that the coefficient of correlation between total outside assets (independent) and net profit (dependent) is 0.92768 high degree of positive correlation between these two variables. On the other hand, considering the value of co-efficient of determination  $r^2$  i.e. 0.86059 indicates that

86.59% of the variation in the dependent variables (net profit) has been explained by the independent variables (total outside assets) moreover by considering the probable error. We can further say that there is significant relationship between total outside assets and net profit because the value of  $r$  i.e. 0.92768 is greater than 6 P.Er i.e. 0.252. It indicates that NABIL is capable to earn net profit by mobilizing total outside assets.

Similarly, co-efficient of correlation between outside assets and net profit in case of SCBNL and HBL is found to be 0.8305 and 0.956 respectively, which indicates high degree of correlation between these two variables. On the other hand, considering the value of co-efficient of determination  $r^2$  i.e. it indicates SCBNL to be 68.97% and HBL to 91.39% respectively of the variation in the dependent variable i.e. net profit has been explained by the independent variables i.e. outside assets moreover, considering the probable error since the value of  $r$  i.e. 0.8305 of SCBNL & 0.956 of HBL is more than 6 P.Er. So we can say that there is significant relationship between net profit and total outside assets of SCBNL & HBL.

Lastly, we can draw the conclusion from the above analysis that NABIL, SCBNL & HBL has high degree of positive relationship between deposit & investment. The relationship is significant and value of  $r^2$  shows the high percent in the dependent variable which has been explained by the independent variable. This indicates that three sample banks are successful to mobilize fund and get return i.e. net profit from such mobilized assets. Moreover, we can further conclude that NABIL has slightly lower correlation between net profit & outside assets as well as lower value of  $r^2$  in comparison to HBL and higher value in comparison to SCBNL. It means NABIL is in average position in its efficiency to get return i.e. net profit from outside assets.

#### **4.2.2. Trend Analysis and Projection for Next Five Years**

Under this topic, analysis trend of deposit collection, its utilization and net profit of NABIL, SCBNL and HBL are studied. To utilize deposits a commercial bank may grant loan and advances and invest government securities and share & debentures of other companies. Under this topic an attempt is made to analyze trend of deposit. Investment and income of NABIL, SCBNL and HBL and also forecast their trend for next five years. The projections are based on the following assumptions:

- a. The main assumption is that other things will remain unchanged.
- b. The forecast will be true only when the limitation of least square method is carries out.
- c. The bank will run in present position.
- d. The economy will remain in the present stage.
- e. Nepal Rastra Bank will not change its guidelines to commercial bank.

**(i) Trend analysis of total deposit**

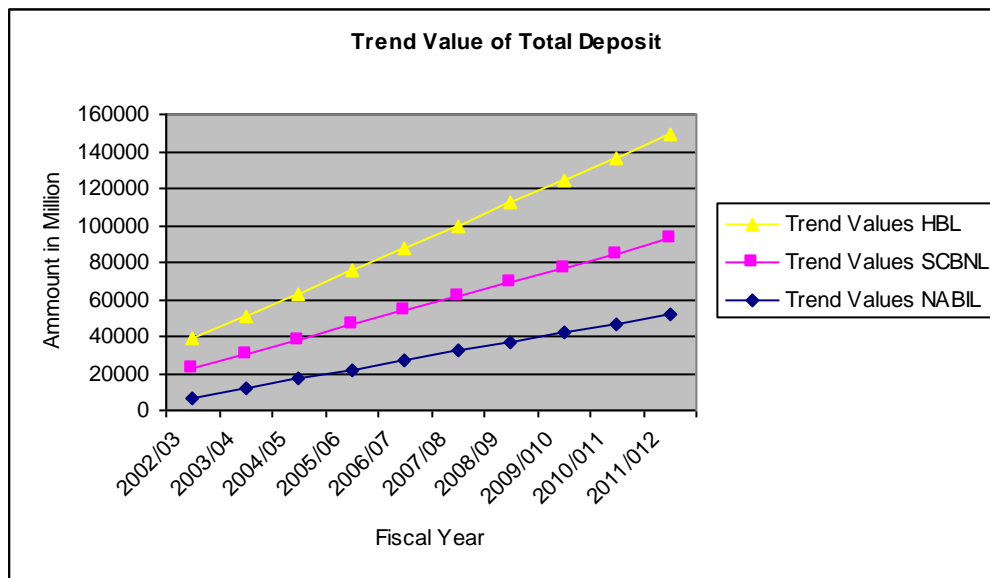
Under this topic, an effort has been made to calculate the trend values of deposit of NABIL, SCBNL & HBL for 5 years from 2002/03 to 2006/07 and forecast for next 5 years till 2012. The following table shows the trend values to total deposit for 10 years from 2002/03 to 2006/07 (details in Annexure D1)

**Table 4.30**  
**Trend Value of Total Deposit (Rs. in million)**

Year	Trend Values NABIL	Trend Values SCBNL	Trend Values HBL
2002/03	6962.2	15919.2	15849
2003/04	11965.4	18655.6	20361.4
2004/05	16968.6	21392	24873.8
2005/06	21971.8	24128.4	29386.2
2006/07	26975	26864.8	33898.6
2007/08	31978.2	29601.2	38411
2008/09	36981.4	32337.6	42923.4
2009/010	41984.6	35074	47435.8
2010/011	46987.8	37810.4	51948.2
2011/012	51991	40546.8	56460.6

(Source; Annexure D1)

**Figure 4.1**



The above table shows that the deposit of all the three banks have the increasing trend. If other thing remains the same, the total deposit of the same, the total deposit of NABIL will be 51991 million in FY 2011/012 which is average deposit among the three banks. Similarly deposit of SCBNL & HBL will be 40546.8 million and 56460.6 million for the FY 2011/012 respectively.



From the above trend analysis, it is found that the deposit collection position of NABIL is weak in comparison to HBL and better in comparison to SCBNL. The calculated trend values of total deposit of NABIL, SCBNL & HBL are fitted in trend line.

**(ii) Trend analysis of investment**

Under this topic, the trend values of total investment for five years from 2002/03 to 2006/07 have been calculated and forecasted for next five years from 2007/08 to 2011/12.

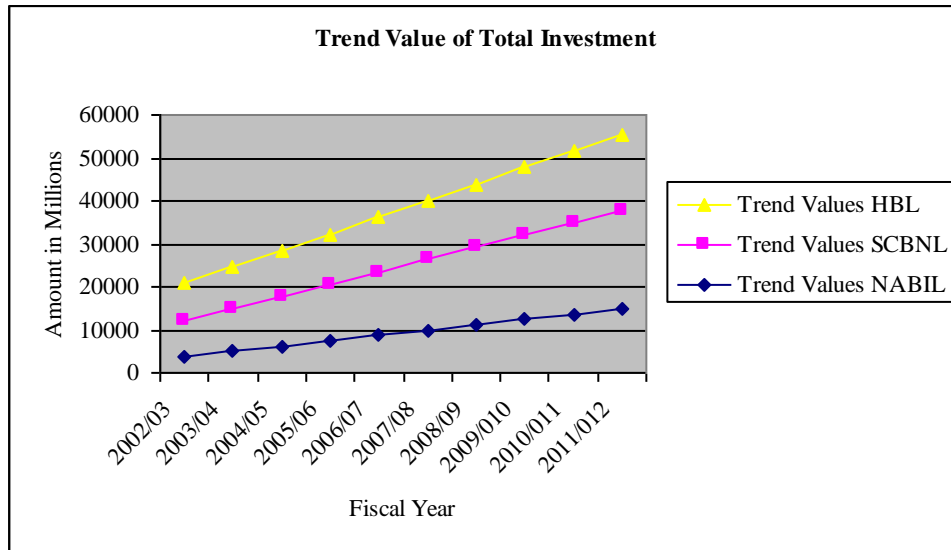
The following table 4.31 shows the trend values of total investment for trend values of total investment for ten years from 2007/08 to 2011/12 of NABIL, SCBNL & HBL (details in Annexure -D2)

**Table 4.31  
Trend Value of Total Investment (Rs in million)**

Year	Trend Values NABIL	Trend Values SCBNL	Trend Values HBL
2002/03	3783.8	8189.2	8817
2003/04	5018	9821.4	9795.6
2004/05	6252.2	11435.3	10774.2
2005/06	7486.4	13067.8	11752.8
2006/07	8720.6	14700	12731.4
2007/08	9954.8	16350.2	13710
2008/09	11189	17982.4	14688.6
2009/10	12423.2	19614.6	15667.2
2010/11	13657.4	21246.8	16645.8
2011/12	1489.6	2287.9	17624.4

(Source; Annexure D2)

**Figure 4.2**



The above table shows the total investment of NABIL, SCBNL & HBL has the increasing trend value. Other things remaining the same the total investment of NABIL will be 14891.6 million in the mid July 2012. That is the average deposit among three banks. Similarly, the deposit of SCBNL & HBL will be 2287.9 million and 17624.4 million respectively.

From the above trend analysis, it is found that the total investment of NABIL is lower in compared to SCBNL & HBL. The calculated trend values of total investment of NABIL, SCBNL and HBL are fitted in the trend line.

**(iii) Trend analysis of net profit**

Under this topic, the trend values of net profit for five years from mid July 2002/03 to 2006/07 have been calculated and forecasted for next five years from mid July 2006/07 to 2011/012.

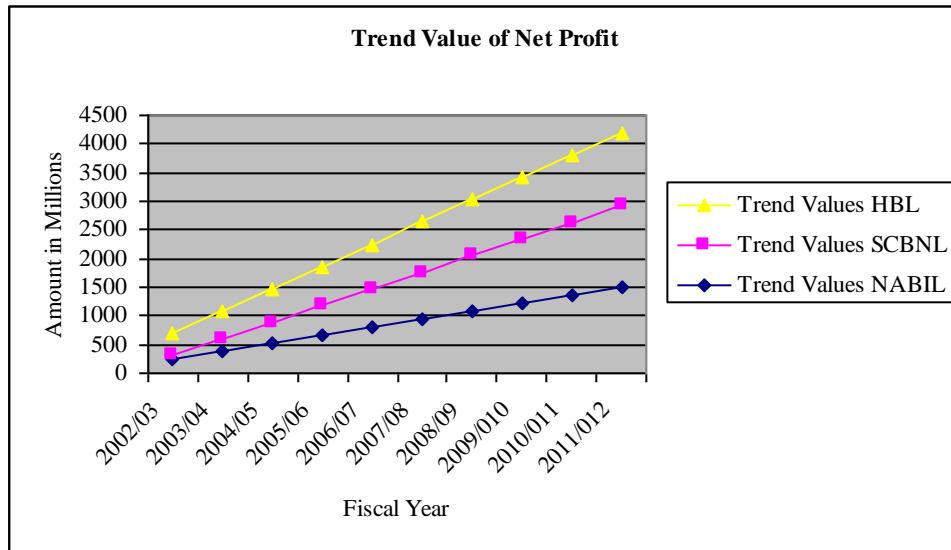
The following table 4.32 shows the trend values of net profit for ten years from mid July 2001/03 to 2011/012 of NABIL, SCBNL and HBL. (Details in Annexure - D3)

**Table 4.32**  
**Trend Value of Net Profit (Rs in million)**

Year	Trend Values NABIL	Trend Values SCBNL	Trend Values HBL
2002/03	261.2	44.8	390.6
2003/04	400.4	195.6	488.8
2004/05	539.6	346.4	587
2005/06	678.8	497.2	685.2
2006/07	818	648	783.4
2007/08	957.2	798.8	881.6
2008/09	1096.4	949.6	979.8
2009/010	1235.6	1100.4	1078
2010/011	1374.8	1251.2	1176.2
2011/012	1514	1402	1274.4

(Source; Annexure D3)

**Figure 4.3**



The above table shows that the net profit of NABIL, SCBNL & HBL is in increasing trend value. Other things remaining the same, the net profit of NABIL will be 1514 million in the mid July. 2012. That is the highest among the three during the study period. Similarly, the net profit of SCBNL and HBL will be 1274.4 million and 1402 million in mid 2012 respectively.

From the above trend analysis, it is fund that the net profit of NABIL us the highest among three sample banks. The calculated trend values of net profit of NABIL, SCBNL and HBL are fitted in the trend line.

### 4.2.3 Test of Hypothesis

Under this topic, effort has been made to test the significance regarding the parameter of the population on the basis of sample drawn from the population. Generally, following steps are followed for the test of hypothesis.

- a. Formulating hypothesis
  - I. Null hypothesis
  - II. Alternative hypothesis
- b. Computing the test statistics
- c. Fixing the level of significance
- d. Finding critical region
- e. Deciding two-tailed or one-tailed test
- f. Making decision

In the following lines, some of hypothesis tests are calculated and decision is made.

Null Hypothesis ( $h_0$ ):  $\mu_1 = \mu_2 = \mu_3$  i.e., there is no significant difference between mean ratios of loan & advances total deposit of HBL, NABIL and SCBNL.

Alternative Hypothesis ( $h_1$ ):  $\mu_1 \neq \mu_2 \neq \mu_3$  e.e., there is significant difference between mean ratios of loans & advances to total deposits of HBL, NABIL and SCBNL.

#### 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 means, the resulting sampling distribution would be t-test. On these study sample are taken only for five years i.e. ( $5 < 30$ ).

#### Assumption

- i. The parent population from which the sample is drawn is normal or approximately normal.
- ii. The given sample is drawn by random sampling method.
- iii. The population standard deviation ( $\sigma$ ) is not known.
  - I. Test of hypothesis on loan and advances to total deposit of NABIL, SCBNL & HBL are taken and carried out under t-test of significance difference. (Details in Annexure-A6)

**Table no. 4.33**  
**Test of Hypothesis**

S.W.	Fiscal Year	NABIL			SCBNL			HBL		
		x	x <sub>1</sub>	x <sub>1</sub> <sup>2</sup>	x <sub>2</sub>	x <sub>2</sub>	x <sub>2</sub> <sup>2</sup>	x <sub>3</sub>	x <sub>3</sub>	x <sub>3</sub> <sup>2</sup>
0										
1	2002/03	57.67	- 6.66	44.36	30.36	- 6.47	41.86	51.62	- 4.5	20.25
2	2003/04	58.00	- 6.33	40.07	30.30	- 6.53	42.65	58.70	2.58	6.66
3	2004/05	72.57	8.24	67.89	42.12	5.29	27.98	54.21	- 1.91	3.65
4	2005/06	66.79	2.46	6.05	38.75	1.92	3.69	59.50	3.38	11.42
5	2006/07	66.61	2.28	5.21	42.61	5.78	33.41	56.57	0.45	0.2025
		EX <sub>1</sub> = 321.64		EX <sub>1</sub> <sup>2</sup> = 163.57	EX <sub>2</sub> = 184.14		EX <sub>2</sub> <sup>2</sup> = 149.59	EX <sub>3</sub> = 280.6		EX <sub>3</sub> <sup>2</sup> = 42.18

$$\bar{x}_1 = \frac{EX_1}{n} \quad \bar{x}_2 = \frac{EX_2}{n} \quad \bar{x}_3 = \frac{EX_3}{n}$$

$$\bar{x}_1 = \frac{321.64}{5} \quad \bar{x}_2 = \frac{184.14}{5} \quad \bar{x}_3 = \frac{280.6}{5}$$

$$\bar{x}_1 = 64.33 \quad \bar{x}_2 = 36.83 \quad \bar{x}_3 = 56.12$$

$$\text{Again, } \bar{x}_1 = (x_1 - \bar{x}_1) \quad \bar{x}_2 = (x_2 - \bar{x}_2) \quad \bar{x}_3 = (x_3 - \bar{x}_3)$$

a. Test of significance of difference between NABIL and SCBNL

Here,

$$\text{Null Hypothesis } H_0: \bar{x}_1 = \bar{x}_2$$

i.e. there is no significant difference between mean ratios of loan and advances to total deposit of NABIL & SCBNL.

Alternative hypothesis (H<sub>1</sub>):  $\bar{x}_1 \neq \bar{x}_2$  (two tailed)

i.e. there is significant difference between mean ratios of loan and advances to total deposit of NABIL and SCBNL (where  $\bar{x}_1$  is mean ratio of NABIL and  $\bar{x}_2$  is mean ratio is SCBNL)

Under H<sub>0</sub> the test statistics is given by  $t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{S^2 \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}}$  with.....d.f. = n<sub>1</sub>+n<sub>2</sub>-2

$$\begin{aligned}
\text{Where } s^2 &= \frac{1}{n_1+n_2-2} (EX_1^2 + EX_2^2) \\
&= \frac{1}{5+5-2} (163.57+149.59) \\
&= \frac{1}{8} \times 313.16 \\
&= 39.145
\end{aligned}$$

### 4.3 Major Findings of the Study

The main findings of the study are derived on the analysis of financial data of NABIL, SCBNL and HBL is given below.

#### 1. Liquidity ratio

The liquidity position of NABIL, SCBNL and HBL reveals that:

- From the analysis of current ratio it is found that the mean of ratio of NABIL is higher than that of SCBNL and HBL . It means NABIL has maintained the higher liquidity. and lower risk in compare to other banks. The ratio of NABIL is more consistent than HBL and less consistent than SCBNL.
- The mean ratio of cash and bank balance to total deposits of NABIL is lower than SCBNL and HBL, It states that cash and bank balance in liquidity position of NABIL lower than other two banks. And the ratio of NABIL is less consistent than that of SCBNL and HBL.
- The mean ratio of cash and bank balance to current assets of NABIL is lower than SCBNL and HBL. It states that the liquidity position of NABIL is poorer than that of SCBNL and HBL. and the ratio of HBL is more variable than that of other two banks.
- The mean ratio of investment on government securities to current assets of NABIL is lower in compared to SCBNL and HBL. It reveals that investment on government securities of NABIL is poorer than other two banks. The ratio of NABIL is less consistent than that of SCBNL and HBL.
- The mean ratio of loan and advances to current assets of NABIL is higher than HBL and slightly lower than SCBNL. The ratio of NABIL is more consistent than SCBNL and less consistent than HBL.

#### 2 Assets management Ratio (Activity Ratio)

- The assets management ratio of NABIL, SCBNL and HBL reveals that.

- The mean ratio of loan and advances to total deposit of NABIL is higher than that of SCBNL and HBL. The ratio of NABIL is more stable than SCBNL and less than HBL.
- The mean ratio of total investment to total deposit of NABIL is lower than SCBNL and HBL. The variability of ratios is lower than that of SCBNL and HBL.
- The mean ratio of loan and Advances to total working fund of NABIL is higher than SCBNL and HBL. The variability of ratios is higher than HBL and lower than SCBNL.
- The mean of investment on government securities to total working fund ratio of NABIL is higher than HBL and lower than SCBNL. However NABIL seems to have more variable and ununiform ratios than that of two compared banks.
- The mean ratio of Investment on share and debentures to total working fund of NABIL is higher than SCBNL and HBL and also NABI is more consistent and homogeneous than SCBNL and HBL.
- From the above findings it helps to conclude that NABIL, is comparatively successful in its on balance sheet operation is compared to SCBNL and HBL. It predicts, that NABIL has succiffully. maintained and managed its assets towards different income generating activities.

### 3.Profitability Ratio

The profitability ratio of NABIL, SCBNL and HBL reveal that:

- The mean ratio of return on total working fund is higher than SCBNL and HBL. On the other hand NABIL is less consistent and homogeneous than SCBNL and more than HBL.
- The mean ratio of return on total working fund is higher than SCBNL and HBL. On the other hand NABIL is less consistent and homogeneous than SCBNL and more than HBL.
- The mean ratio of total interest earned to total outside Assets of NABIL is higher than HBL and slightly lower than SCBNL. The variability of the ratio of NABIL is in between in comparision to SCBNL and HBL.
- The mean ratio of return on loan and advances of NABIL is higher than of NABIL is more consistent than other two banks.
- The mean ratio of total Interest earned to total working fund of NABIL is higher than that of SCBNL and HBL. The ratio of NABIL is more consistent than that of other two banks.
- The mean ratio of total interest pais to total working fund is higher than SCBNL and lower than HBL. NABIL'S ratio is less consistant than other two banks.
- From the above findings of profitability ratios, it can be concluded that the NABIL is comparatively in higher position than that of SCBNL and

HBL So, the profit earning capacity of NABIL is high in comparison to other two banks.

#### 4. Risk Ratios.

The risk ratios of NABIL, SCBNL and HBL reveals that:

- The mean credit risk ratio of NABIL is higher than SCBNL and HBL. The ratio of NABIL is less consistent than SCBNL and more than HBL.
- The mean of capital risk ratio is

#### 5. Growth Ratios.

From the analysis of growth ratios of NABIL, SCBNL and HBL it reveals that:

- The growth ratio of NABIL's deposit is higher than that of SCBNL and HBL. It means the performance of NABIL to collect deposit is greater than SCBNL and HBL.
- The growth ratio of NABIL's loan and advances is higher than that of SCBNL and HBL. It means the performance of NABIL to grant loan and advances in compared to other two banks is better.
- The growth ratio of total investment is higher than that of SCBNL and HBL it indicates that NABIL has succeeded on the investment than other two banks.
- The growth ratio of NABIL's net profit is higher than SCBNL and lower than HBL. It means the performance of NABIL to earn profit is in moderate position in comparison to other two banks.
- From the above analysis, it can be concluded that NABIL has maintained high growth ratios on total deposit, loanadvances and total Investment but it has moderate position on net profit. We must say that the bank is successful in increasing its sources and its mobilization.

6. Co-efficient of correlation Analysis from the Co-efficient of correlation analysis between different variables of NABIL, SCBNL and HBL, it reveals that:

- NABIL has highest value of Co-efficient of correlation between deposit and loan and advances in compared to SCBNL and HBL
- NABIL has lower value of Co-efficient of correlation between total deposit and total investment in comparison to SCBNL and Higher value in comparison to HBL. It means NABIL is in average position to follow the policy of maximizing the investment of their deposits in comparison to SCBNL and HBL.
- NABIL has higher value of co-efficient of correlation between net profit and outside assets in comparison to SCBNL and lower value in comparison to HBL. NABIL is in average position in its efficiency to get return i.e. netprofit from outside assets. From the above analysis, it



can be concluded that there is high degree of significant relation ship between deposit and loan and advance, deposit and total investment and outside assets and net profit of EBL.

#### 7. Trend Analysis and projection for Next five years.

The trend analysis of total deposit loan and advances, total investment and net profit and projection for next five years of NABIL, SCBNL and HBL reveals that:

- Total deposits of all the three banks have increasing trend. The total deposit of NABIL will be 51991 million in the mid July of 2012, which is the moderate deposit among the sample banks similarly the total deposit of SCBNL and HBL will be 40546.8 million and 56460.6 million respectively in the mid July of 2012. The deposit collection of NABIL is higher than SCBNL and lower than HBL.
- The total investment of all the three banks have increasing trend. The total investment of NABIL will be 14891.6 million in the mid of July 2012 similarly, the total investment of SCBNL and HBL will be 22879 million and 17624.4 million in the mid July 2002. The total investment of NABIL is not better incomparision to SCBNL and HBL.
- The net profit of all three banks have increasing trend. The net profit of NABIL will be 1514 million in the mid of July 2012 that is the highest net profit among three banks. Similarly the net profit of SCBNL and HBL will be 1402 million and 1274.4 million respectively in the mid July 2012.

#### 8. Test of Hypothesis.

From the test of significance regarding the parameter of the population, it has been found that

- There is significant difference between mean ratio of loan and advances to total deposit of NABIL and SCBNL and NABIL and HBL
- There is significant difference, between mean ratios of investment in government securities to current Assets of NABIL and SCBNL but there is no significant difference between mean ratios of investment in government securities to current Assets ratio of NABIL and HBL.
- There is significant difference between mean ratios of Return on loan and advances of NABIL and SCBNL and NABIL and HBL.
- There is no significant difference between mean ratios of total interest earned to total outside assets of NABIL and SCBNL but there is significant difference between mean ratios of total interest earned to total outside assets of NABIL and HBL.

## **CHAPTER V**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

The last chapter of this study is summary, conclusion and recommendations developed from the comparative analysis of various aspects of the investment of commercial banks by using some important financial as well as statistical tools. After completing the basic analysis required for the study the final and the most important task of the researcher is to be summarized the study and recommend for the further importance. This would be meaningful to the top management of the bank to initiate the action and achieve the desired result. The findings of the study are summarized and conclusion and some recommendation drawn as below;

#### **5.1 Summary and Conclusion**

Economic development of a country cannot be imagined without the development of commerce and industry. No doubt, banking promotes the development of commerce to its, extreme, as banking itself is the part of commerce.

In the study the word investment conceptualized the investment of income, savings or other collected fund. The term investment covers the wide range of activities. It is only possible where there is adequate savings. Investment policy is an important ingredient of overall national economic development because it ensures efficient allocation of fund to achieve the materials and economic well being of the society as a whole.

Commercial banks play an important role for economic development of a country as they provide capital for the development of industry trade and business by investing the saving collected as deposits from public joint venture banks are the commercial banks firm by joining the two or more enterprises for the purpose of carrying out specific operation such as investment in trade, business and industry as well as in the form of negotiation between various groups of industries or traders to achieve mutual exchange of goods and services.

Commercial Banks formulate sound investment policies to make it more effective, which eventually contribute to the economic growth of a country.

Commercial banks should be careful while performing the credit creation function. Investment policy should ensure minimum risk and maximum profit from lending good investment policy ensures maximum of investment to all sector with proper utilization.

Banking in Nepal true sense terms started from the establishment of the first commercial banks, Nepal Bank Limited in 1994 B.S. government sector. The

establishment of Nepal Rastra Bank, Central Bank of Nepal, in 2013 BS. was a significant dimension in the development of banking sector.

When the government adopted liberal and market oriented economic policy since mid -1980, Nepal allowed foreign banks on joint venture banks to operate in the country after getting the approval from Nepal Rastra Bank.

Now, there are 25 commercial bank in operation. Among them the research has taken in to consideration on three JVBS are as follows;

NABIL Bank Ltd:- NABIL Bank Limited was the first joint venture commercial bank established in 1984 by joint investment of Dubai Bank Ltd. and Nepali Promoters.

Standard Chartered Bank Nepal Ltd;- SCBNL was established in 1985 as a second foreign joint venture bank by joint investment of ANZ Grindlays Bank P/L, Nepal Bank Ltd. and Nepali promoters.

Himalayan Bank Limited: HBL was incorporated in 1992 by the distinguished business personalities of Nepal in partnership with Employees. Provident fund and Habib Bank Limited, one of the largest commercial bank of Pakistan.

The study basically deals with the utilization of available fund, relationship of investment loan and advances with total deposit and total Net Profit, Investment decision and liquidity position of concerned banks i.e. NABIL, SCBNL and HBL.

The objective of the study is examine and evaluate the investment policy of NABIL and compare it with HBL and SCBNL.

The features of sound lending and investment policy are;

- ❖ Safety and security
- ❖ Profitability
- ❖ Liquidity
- ❖ Purpose of Loan
- ❖ Diversification
- ❖ Tangible
- ❖ Legality

Some important banking term for which effort have been made to clarify the meaning which are frequently used in this study are,

- ❖ Deposits
- ❖ Loan and Advances
- ❖ Investment on Government Securities, shares and debentures

- ❖ Other use of funds
- ❖ Off -Balance sheet Activities

On the second chapter the focus has been made on the review of literatures relevant to the investment policy of commercial banks for this the following areas have been reviewed.

In the study the financial tools ratio analysis viz, liquidity ratio, assets management ratio, profitability ratio, risk ratio growth ratios are used. The statistical tools like co-efficient of correlation, trend analysis and test of hypothesis have been used for the analysis and interpretation of the data. The data which were employed in this research are secondary in nature. They are obtained from annual reports of the concerned banks, likewise, the financial statement of five years (2002/03 to 2006/07) were selected for the purpose of evaluation.

Theoretical review, features of sound lending and investment policy, review of books, Review of thesis, review of articles and review of legislative provision.

The liquidity position of NABIL is comparatively better than SCBNL and HBL. NABIL has maintained highest current assets ratio but it has lower mean ratio of cash and bank balance to total deposit and cash and bank balance to current assets ratio. NABIL has minimum deposit collection. It has made average investment on loan & advances and it has maintained low investment policy on government securities.

From the analysis of assets management ratio it can be concluded that NABIL has successfully maintained and managed its assets towards different income generating activities. The ratio of loan and advances to total deposit is higher but the mean ratio of total investment to total deposit is lower than SCBNL and HBL but Investment on government securities to total working fund is in moderate position in compare to other two banks. The mean ratio of Investment on share and debenture to total working fund of NABIL is higher than SCBL and HBL. NABIL is more consistent and homogeneous than SCBNL and HBL.

In profitability ratio, the mean of return on total working fund and total interest earned to total working fund of NABIL is higher than SCBNL and HBL. The mean ratio of total interest earned to total outside Assets return on loan and advances and total interest paid to total working fund of NABIL is in moderate position in comparison to SCBNL and HBL. So, the profit earning capacity of NABIL is high in comparison to other two banks.

From the view point of risk ratios, NABIL has higher capital Risk ratio but average credit risk ratio in compared to SCBNL and HBL.

The growth ratio NABIL is successful in increasing its sources and its mobilization.

There is high degree of significant relationship between deposit ad loan and advances, deposit and total investment and outside assets and net profit of NABIL is compare to SCBNL and HBL.

Total deposit, total investment and net profit of three sample banks are in increasing trend. Other things remaining the total deposit of NABIL will be on average position in compare to other two banks but total investment trend of NABIL is not better in comparison to SCBNL and HBL. The net profit of NABIL will be highest among three banks.

From the above analysis, it can be concluded that all three banks have significant difference between loan and advances, return on loan and advances. There is no significance difference between investment on government securities to current assets of NABIL and HBL and ratios of total interest earned to total outside assets of NABIL and SCBNL. But there is significant difference between investment on government securities to current assets of NABIL and SCBNL and significant difference between total interest earned to total outside assets of NABIL and HBL.

## **5.2 Recommendations**

- ❖ Current ratio of three sample banks are not sufficient to achieve standard ratio i.e. 2:1, so it is recommended to both banks to maintain required current ratio. They need to maintain the present mean current ratio for the proper management of their liquidity position.
- ❖ The liquidity position of a bank may be affected by external as well as internal factors. The affecting factors may be interest rates, supply as demand position of loan and advances as well as savings, investment situations, central banks directives, the lending policies, capability of management, strategic planning and funds flow situation. As NABIL has maintained lower cash and banker to total deposit and current assets ratio, NABIL is recommended to increase cash and bank balance to meet current obligations and loan demand.
- ❖ To get success is competitive banking environment, depositors money must be utilized as loan and advances. Negligence in administering this assets could be the main cause of liquidity crisis in the bank and one of the main reasons of a bank failure. It has been found from the study that NABIL has greater ratios at all, because its large portion of fund invested as loan and advances and negligence to invest on other sector. HBL and SCBNL have not properly used their existing fund as loan and advances to over comethis situation, NABIL and SCBNL are strongly recommended to follow liberal lending policy.

- ❖ As bank of private sector commercial banks cannot keep this eyes closed from the profit motive. They should be careful is increasing profit is a real sense to maintain the confidence of shareholders, depositors and its all customers. NABIL has high profit earning capacity, but HBL's profitability position is worse than that of other two banks. So, HBL is strongly recommended to utilize risk assets and shareholders fund to gain highest profit margin. Similarly, it should reduce its expenses and should try to collect cheaper fund being more profitable.
- ❖ Out of working fund, NABIL has not invested its more funds as total investment in comparison to other two banks. Though, the percentage of invested by all three banks have very nominal. So, it is recommended to all three banks to invest their more funds in different types of companies indifferent areas.
- ❖ Portfolio condition of all three banks should be examined carefully from time to time and attention should be made to maintain equilibrium in the portfolio condition as far as possible. So it ca be said, "all eggs should not be kept in the same basket". The bank should make continuous efforts to explore new competitive and high yielding investment opportunities to optimize their investment portfolio.
- ❖ In terms of recovery of loan of NABIL is worse in comparison to SCBNL and HBL. The loan loss ratio is comparatively high that makes negative impact on profit. It may be facing a lot of problems on recovering loans. It has large no-performing asset as loan unrecovered. Therefore it is recommended to apply recovery act that would help to realize overdue loan in time.
- ❖ Most of the joint venture banks have focused their banking services especially to big clients such as multinational companies, large-scale industries, manufactures and exporters of garments and carpets. The minimum level bank balance and the amount needed to open an account in there banks are very high amount. So, small depositors are very far from enjoying the banking facilities provided by such joint venture banks. So, all three banks should open its doors to the small depositors and entrepreneurs for promoting and mobilizing small investors' funds and to attract depositors through variety of deposit schemes and facilities like cumulative deposit scheme, prize bonds scheme, gift cheques scheme, recurring deposit scheme (life insurance), monthly interest scheme etc.
- ❖ The project oriented approach has to be encouraged in lending business of the banks, in which, security is not necessary, risk is high but the project is important from the point of view of national economy. The project should be allowed to make them capable to generate their own funds and to repay loans timely. So, it is recommended to all three banks should followed project oriented approach for the their efficient performances. Because the chance of loan loss can be minimize by the project - oriented approach.

- ❖ One of the main objectives to operate joint venture banks of Nepal is to boost foreign investments in to the kingdom. However, these three banks don't seem to be successful in this aspect. Therefore, all three banks is recommended to activate for increasing foreign investment in Nepal by means of their wide international banking networks.
- ❖ Thought joint venture banks have played important role in the economic development of the country, they are not efficiently playing the role of a merchant bank. So, the three banks is suggested to play the role of financial intermediary and merchant banking like underwriting of securities brokers, development of capital markets and supportive role to the security exchange center.
- ❖ In the light of growing competition in the banking sector, the business of the bank should be customer oriented. It should strengthen and activate its marketing function, as it is an effective tool of attracting and retaining customers. For this purpose, the banks should develop an "Innovative approach to Bank Marketing" and formulate new strategies of serving customers in a more convenient and satisfactory way.
- ❖ Although NABIL has recently expanded it's Nine braches all over the country but NABIL do not have branches in the rural areas of the country. Its branches are limited to the urban areas only. Therefore, NABIL Bank is recommended to open branches in rural areas too to help in economic development of the country. HMG/N has also encouraged the joint venture banks to expand baking service in rural areas and communities without making unfavorable impact in their profit.

NABIL Bank is taken as the one of the most leading joint venture bank in Nepal. It is the one of the most successful bank in Nepal with widest network than any other joint venture banks in Nepal. Today is the world of competition; the competition is growing day by day in the baking sector. It must mobilize its deposits and other funds to profitable, secured and marketable sector so that it can earn a handsome profit as well as it should be secured and can be converted onto cash whenever needed.

An income and profit of the bank depends upon its lending procedure, lending policy and investment of its fund in different securities. The greater the credit created by the bank the higher will be the profitability. NABIL Bank limited has achieved a remarkable success in banking sector in terms of market share and profitability compared to joint venture banks because of its reliable and professional services. NABIL Bank is the innovator in introducing many new products such as credit cards, Tele Banking, Any branch Banking, ATM, E-banking, 24 Hours Banking correspondent Network. Due to their prompt and quality services NABIL Bank has achieved its remarkable success in banking sector and has proved its high status in the eye of public. NABIL Bank has been improving its performance from very beginning since its establishment.

The bank is recognized as a premier financial institution in Nepal in terms of its range and quality banking services, human capital, asset quality and income. After two decades of operation the bank has clearly exhibited that through consistently keeping its philosophy and its customers at the core of its business it stands today as the premier bank in the kingdom, poised to be the Bank of 1st choice to all its stakeholders, going forward. NABIL Bank today is full service bank in every sense, able to meet the entire large range of financial requirements of its customers. To achieve its mission, NABIL Bank has set its values of Customer Focused, Result Oriented, Innovative, Synergistic and Professional (CRISP).



## CHAPTER - IV

### DATA ANALYSIS AND PRESENTATION.

The purpose of this chapter is to study, evaluate and analyze those major financial performances, which are mainly related to investment management and fund. Mobilization of Himalayan Bank Ltd. in comparison to that of Nabil Bank Ltd. and Standard Chartered Bank Ltd. There are many types of financial ratios but only those ratios are calculated and analyzed, which are very important to evaluate fund mobilization of commercial bank. Necessary figures and tables are also presented in this part to describe about the investment mechanism of the banks.

#### **1. Ratio of NABIL, SCBNL and HBL Investment to Total Commercial Bank Investment**

This ratio indicates the portion of Investment made by NABIL, HBL and SCBNL to total Investment made by, commercial banks of Nepal. It shows how much the sample banks are involved in Investment. And the ratio is derived by dividing Investment made by sample banks by Total Investment made by commercial banks.

**Table 4.1**  
**Total Commercial Banks Investment to NABIL, SCBNL and HBL Investment Ratio**

(Rs in Million)

Banks	Fiscal Years					Mean	S.D	C.V (%)
	2002/03	2003/04	2004/05	2005/06	2006/07			
NABIL	0.1544	0.137	0.0839	0.107	0.138	0.124	0.028	22.76
SCBNL	0.2616	0.2680	0.1909	0.22327	0.21031	0.231	0.033	14.376
HBL	0.538	0.519	0.488	0.460	0.466	0.494	0.033	6.788

(Source: From Annexure i,ii, iii)

The above table exhibits that the ratio of NABIL is in decreasing trend from FY 2002/03 to 2004/05 and increases in 2005/06 to 2006/07. SCBNL has followed the fluctuating trend and in case of HBL it has followed decreasing trend.

Mean ratio of NABIL i.e. 0.124 is lower than that of SCBNL i.e. 0.231 and HBL ie. 0.494.

It indicates that few portion of total investment of commercial banks is covered by NABIL's investment in comparison to SCBNL and HBL .

Similarly, Co - efficient of variation of NABIL Investment to total commercial bank investment is comparatively higher than that of SCBNL and HBL. It means there is more variability in Investment of NABIL than SCBNL and HBL.

### **Segregation of Investment of NABIL, SCBNL and HBL**

NABIL, SCBNL and HBL invest its collected funds in different sectors. Mostly commercial banks are found to invest in government securities, shares and debentures of other companies, NRB bonds and other Investment like. Mutual funds, local's foreign banks, certificate of deposits etc. Here an attempt is made to segregate the investments made by NABIL, SCBNL and HBL.

**Table 4.2**

#### **Segregation of Investment of NABIL**

YEAR	Investment	Gov. Sec	%	Share & Deb	%	Others	%
2002/03	6031175	3588772	59.50	22220	0.368	2420183	40.13
2003/04	5835948	3672626	62.93	22220	0.368	2141222	36.69
2004/05	4269657	2413939	56.57	440282	10.31	1415436	33.15
2005/06	6178533	2301462	37.24	104192	1.68	3775002	61.09
2006/07	8945310	4808348	53.75	286957	3.21	3861003	43.16

(Source; From Annexure)

**Table 4.3**  
**Segregation of Investment of SCBNL**

YEAR	Investment	Gov. Sec	%	Share & Deb	%	Others	%
2002/03	10216199	6581348	64.42	11195	0.098	3623655	35.46
2003/04	11360328	7948218	69.96	11195	0.098	3400916	27.29
2004/05	9702553	7203066	74.24	13348	0.137	2486139	25.62
2005/06	12847536	8644855	67.29	15348	0.119	419.337	32.62
2006/07	13553233	7107937	52.44	44943	0.3316	6403353	47.24

(Source; From Annexure)

**Table 4.4**  
**Segregation of Investment of HBL**

YEAR	Investment (Rs.)	Gov. Sec (Rs.)	%	Share & Deb	%	Others	%
2002/03	10175435	3347102	32.89	34266	0.337	6142298	60.36
2003/04	9292103	3431729	36.93	34266	0.67	5826107	62.70
2004/05	11692342	5469729	46.78	39909	0.34	6182703	58.88
2005/06	10889031	5144313	47.24	39909	0.366	5706151	52.40
2006/07	11822985	6454873	54.59	73424	0.62	5294687	44.78

(Source; From Annexure)

The above table 4.2, 4.3, 4.4 shows the Investment made by NABIL, SCBNL and HBL is different sectors. NABIL is found to investment its funds in govern securities, shares and debentures of other industries and other i.e. Investment in local & foreign banks etc. From FY 2002/03 to 2004/05 most of its investment covers by government securities and only few portion is covered by other investment and very few portion by shares & debentures. On FY 2005/06 it

decreases its investments on government securities and started to invest its fund on other investment. On FY 2006/07 it increases its investment on government securities. In FY 2006/07 53.75% of total investment is covered by government securities, 3.2 % is covered by shares and debentures and 43.16% is covered by other investments.

On the other hand SCBNL seems to invest its funds mostly on government securities, only few portion of its collected funds is invested on shares and debentures and other investment. From FY 2005/06 to 2006/07 it slightly decreases its investment on government securities and increases its investment on other investments.

In FY 2006/07 52.44% of its total investment is covered by government Securities, 47.24% is covered by other investment and 0.3316% is covered by shares and debentures of other companies.

In case of HBL it is found to invest most of its funds on other investment and rest of the funds in government securities and shares and debentures. In FY 2002/03, 6.4% of its total Investment is invested on NRB bonds. From FY 2004/05 it starts to decrease its investment on other investment on government securities. On FY 2006/07, 54.59% of its total investment is covered by government securities, 44.78% by other investments and 0.62% by shares and debentures of other companies.

Investment on government securities is less risky but the return is usually low, from the investment pattern of NABIL, SCBNL and HBL. It seems that it started to invest less in government securities in current years, which means it started to taker risky investment to get high return.

## **4.1 Financial Tools**

Financial analysis is the act of identifying the financial strength and weakness of the organization presenting the relationship between the items of balance sheet. For the purpose of this study, ratio analysis has been mainly used and with the help of its data have been analyzed. Various financial ratios related to the investment management and the fund mobilization are presented and discussed to evaluate and analyze the performance of NABIL in comparison to SCBNL and HBL. The ratios 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 mentioned below:

- a) Liquidity Ratio
- b) Assets management Ratio
- c) Profitability Ratio
- d) Risk Ratio
- e) Growth Ratio

### **4.1.1 Liquidity Ratio**

Liquidity ratio measures the ability of the firm to meet its current obligations. A commercial bank must maintain its satisfactory liquidity position to meet the credit need of the community demand for the deposits, with draws pay maturity in time and convert non-cash assets into cash to satisfy immediate need without loss to bank and consequent impact or long run profit.

The following ratios are evaluated and interpreted under liquidity ratios.

**(i) Current Ratio**

Current ratio indicates the ability of a bank to meet its current obligation. This is the broad measure of liquidity position of the financial institution. Current ratio is derived by dividing current assets by current liabilities.

We have

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

Where,

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

Current liabilities consist of deposits, loan and advances, bills payable, tax provision, staff bonus, dividend payable and miscellaneous current liabilities.

Current ratios of HBL, NABIL and SCBNL from the fiscal year 2002/03 to 2006/07 are given below in Table no. 4.5 (details in Annexure - A1). Mean is calculated by average (A: 1=A5), standard. Deviation is calculated by using the formula STDEV (Annexure A1: Annexure A5) and CV by  $\sigma \times 100\%$ . Calculations of all the tables are done in excel.

**Table 4.5**  
**Current Ratio (Times)**

Banks	Fiscal Year					Mean	S.D	C.V (%)
	2002/03	2003/04	2004/05	2005/06	2006/07			
NABIL	1.067	1.099	1.113	1.0732	1.155	1.1016	.035	3.21%
SCBNL	0.971	0.9698	1.0226	0.981	0.946	0.978	0.028	2.86%
HBL	0.854	0.993	1.098	1.103	1.446	0.898	0.498	55.49%

(Source; From Annexure)

The above table shows that current assets of NABIL is higher than current liabilities and ratios are in increasing trend from 2002/03 to 2004/05 and again increases in 2006/07. SCBNL has lower current assets than current liabilities in FY 2002/03 ,2003/04, 2005/06,2006/07 and higher C.A in 2004/05, it means SCBNL has not sound ability to pay short term obligations due to more liabilities. In case of HBL in FY 2002/03 to 2003/04 it's current assets if lower than current liabilities but from FY 2005/06 to 2006/07 it's current assets is greater than current liabilities and HBL ratio is in increasing trend during the study period.

In average liquidity position of NABIL is greater than other banks i.e.  $1.106 > 0.978 > 0.898$ . So, NABIL is sound in liquidity position than other banks.

Likewise the co-efficient of variation (C.V) of NABIL is less than HBL and slightly higher than SCBNL i.e.  $3.2\% > 2.86\%$  and  $3.2\% < 55.49\%$ . It can be said that current ratio of NABIL is more consistent than HBL and Less consistent than SCBNL.

Thus, it can be concluded that NABIL is capable to pay their current obligations in comparison to SCBNL and HBL.

**(ii) Cash and bank balance to total deposit ratio. (Cash reserve ratio)**

Cash and bank balance is said to be the first defense of every banks. The ratio between the cash and bank balance and total deposit measures the ability of the bank to meet the unanticipated cash and all types of deposits. Higher the ratio, the greater will be the ability to meet sudden demand of deposit and vice versa. But every high ratio is not desirable since bank has to pay interest on deposits. This will also maximize the cost of fund to the bank.

We have,

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

Where,

Cash and bank balance is composed of cash on hand including foreign cheques, other cash items; balance with domestic banks and abroad. Deposit includes current deposits, saving, deposits, fixed deposits, money at call or short notice and other types of deposits.

Cash and bank balance to total deposit ratio of NABIL, SCBNL and HBL from FY 2002/03 to FY 2006/07 are given below. (Details in Annexure - A2)

**Table 4.6**  
**Cash and Bank Balance to Total Deposit (%)**

Banks	Fiscal Year					Mean	S.D	C.V (%)
	2002/03	2003/04	2004/05	2005/06	2006/07			
NABIL	8.51	6.87	3.83	2.87	5.93	5.60	2.27	40%
SCBNL	8.06	9.56	5.75	5.53	8.21	7.42	1.73	24%
HBL	9.42	9.10	8.12	6.48	5.85	7.79	1.61	21%

(Source; From Annexure)

Table 4.6 shows that the cash and bank balance to total deposit ratio of NABIL has followed decreasing trend from FY 2002/03 to 2005/06 & it increases in 2006/07. Similarly, SCBNL has increases from 2002/03 to 2003/04 and decreases form FY 2004/05 to 2005/06 and again increases in 2006/07. On the case of HBL, it has followed decreasing trend during the study period i.e., FY 2002/03 to FY 2006/07.

In average, NABIL has maintained lower cash & bank balance to total deposit ratio than SCBNL i.e.  $5.60 < 7.42 < 7.79$ . It states that cash and bank balance in



liquidity position of NABIL is lower than other two banks. The C.V of NABIL is 40%, which is comparatively higher than that of SCBNL 24% and HBL 21%. So that NABIL shows the less consistent than that of SCBNL and HBL.

Comparatively NABIL has maintained low ratios, it shows some difficulties to meet the demand of its customers on their deposit to pay at any time but it may be earning more by investing cash to different sectors. But it should ensure to have enough liquid funds to serve its customer.

**(iii) Cash and bank balance to current assets ratio**

This ratio shows the bank liquidity capacity on the basis of cash and bank balance that is the most liquid asset. Higher ratio indicates the bank ability to meet the daily cash requirement of their customer deposit and vice versa. But higher ratio is not preferred, as the bank has to pay more interest on deposit and will increase the cost of fund. Lower ratio is also very dangerous, as the bank may not be able to make the payment against the cheques presented by the customers. Therefore, bank has to balance the cash and bank balance to current assets ratio in such a manner that it should have the adequate cash for the customers demand against deposit when required and less interest is required to be paid against the cash deposit. (Details in Annexure - A3)

We have,

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

**Table 4.7**  
**Cash and Bank Balance to Current Assets Ratio (%)**

Banks	Fiscal Year					Mean	S.D	C.V (%)
	2002/03	2003/04	2004/05	2005/06	2006/07			
NABIL	8.25	6.81	3.74	3.07	6.06	5.59	2.21	38%
SCBNL	8.85	10.76	5.53	5.94	9.18	7.91	2.04	26%
HBL	12.14	10.76	9.45	7.42	6.33	9.22	2.37	26%

(Source; Annexure - A3)

Above table exhibits that cash and bank balance to current assets ratio of NABIL has followed decreasing trend from FY 2002/03 to 2005/06 and increased in FY 2005/06. SCBNL has followed fluctuating trend from FY 2002/03 to 2005/06 & it followed increasing trend from 2005/06 to 2006/07. In case of HBL it has followed decreasing trend.

While examining the mean ratio, NABIL had maintained 5.59 which is less than SCBNL and HBL i.e. 7.91 and 9.22. It states that liquidity position of NABIL is lower than other two banks. In this regard, the co-efficient of variation between the above ratios of NABIL is 38% which is comparatively less than that of SCBNL & HBL i.e., 38% > 26% 26% it shows less consistent of NABIL than that of SCBNL & HBL. It shows the current ratios are less heterogeneous than that of other two banks.

Thus, it can be concluded that NABIL is low capable to maintain cash & bank balance is comparison to other two banks.

**(iv) Investment on government securities to current assets ratio.**

The commercial banks are interested to invest their collected funds in various government securities issued by government. Though government securities are not so much liquid as cash & bank balance, they can be easily sold in the market or they can be converted into cash in other ways. The main purpose of this ratio is to examine the portion of a commercial banks current assets that is invested on different government securities.

We have,

Investment on government securities to current assets ratio

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

The table below shows the ratio of investment of govt. Securities to current assets ratio of NABIL, SCBNL & HBL (details in Annexure -A4)

**Table 4.8**

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

Banks	Fiscal Year					Mean	S.D	C.V (%)
	2002/03	2003/04	2004/05	2005/06	2006/07			
NABIL	25.87	25.78	16.12	12.69	21.06	21.36	5.85	28.83%
SCBNL	38.52	39.56	37.28	40.22	32.27	36.97	3.23	8.75%
HBL	20.54	18.45	25.68	22.22	23.24	22.02	2.72	12.36%

The above table 4.8 shows that the ratio of NABIL is decreasing trend from FY 2002/03 to 2005/06 and increased in FY 2006/07. In the case of SCBNL & HBL its ratio is in fluctuating trend.

In overall, the mean ratio of investment in govt. securities to current assets ratio of NABIL is lower than that of SCBNL & HBL i.e.  $21.36 < 22.02 < 36.97$ . It means NABIL had invested its fewer portions of current assets on government securities, than other two banks. On the other had C.V in ratios of NABIL is greater than that of SCBNL & HBL ie  $28.83\% > 12.36\% > 8.75\%$ . Which means the variability's of ratios of NABIL is less consistent than that of SCBNL & HBL.

It can be concluded that NABIL has invested its less portion of current assets as government securities than that of SCBNL & HBL. NABIL's liquidity portion from the point of view of investment on government securities is poorer than that of other two banks.

**(v) Loan and advances to current assets ratio (%)**

Loan and advances are also included in the current assets of commercial banks because generally it provides short-term loan, advances/overdraft/ cash-credit, local and foreign bill purchased and discounted.

To make a high profit by mobilizing its fund in the best way, a commercial bank should not keep its all collected funds as cash and bank balance but they should be invested as loan and advances to the customers. If sufficient loan and advances cannot be granted, it should pay interest on those unutilized deposit funds and may lose some earnings, but high loan and advances may also be harmful to keep the bank in most liquid position because they can only be collected at the time of maturity only. Thus, the bank must maintain its loan and advances in appropriate level to find out portion of current asset, which is granted as loan and advances.

We have,

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

The table below shows the ratio of loan and advances to current assets ratio of NABIL, SCBNL & HBL (details in Annexure - 5)

**Table 4.9**  
**Loan & Advances to Current Assets Ratio (%)**

Banks	Fiscal Year					Mean	S.D	C.V (%)
	2002/03	2003/04	2004/05	2005/06	2006/07			
NABIL	55.93	57.50	70.71	71.26	68.11	64.70	7.40	11.45%
SCBNL	33.34	31.40	42.14	41.61	47.68	39.33	6.58	16.74%
HBL	66.56	69.45	63.07	68.08	59.59	65.34	4	6.12%

Above table exhibits that loan and advances to current assets ratio of NABIL is in increasing trend from FY 2002/03 to 2005/06 and then in decreasing trend from

2005/06 to 2006/07. In case of SCBNL & HBL ratio both are in fluctuating trend during the study period.

While examining the mean ratio, NABIL has maintained 64.70 which is slightly lower than HBL ie 65.34 and higher than SCBNL ie 39.33. On the other side coefficient of variation of NABIL 11.45% is lower than SCBNL and higher than HBL ie 16.74>11.64>6.12.

From the above table it can be concluded that NABIL has succeeded to invest its fund in loan and advances in comparison to SCBNL but seen little weak in comparison to HBL in point of view of mean & C.V.

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

Assets management ratio measures the efficiency of the bank to manage its assets in profitable and satisfactory manner.

A commercial bank must manage its assets properly to earn high profit. Under this chapter following ratios are studied.

##### **(i) Loan and Advances to Total Deposit Ratio.**

This ratio measures the extent to which the banks are successful to mobilize their total deposit on loan and advances.

We have,

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

The table below & shows the ratio of loan and advances to total deposit ratio of NABIL, SCBNL and HBL. (Details in Annexure -A7)

**Table 4.10**  
**Loan & Advances to Total Deposit Ratio (%)**

Banks	Fiscal Year					Mean	S.D	C.V (%)
	2002/03	2003/04	2004/05	2005/06	2006/07			
NABIL	57.67	5.8	72.57	66.79	66.61	34.33	5.72	8.89%
SCBNL	30.36	30.30	42.12	38.75	42.61	36.86	5.47	114.85%
HBL	51.62	58.70	54.21	59.50	56.57	56.12	2.94	5.24

In the table 4.10, all the banks have fluctuating trend regarding the ratios. During the study period, NABIL has highest ratio of 72.57 is FY 2004/05 ad lowest ratio 57.67 is FY 2002/03, SCBNL has highest ad lowest ratios 42061 and 30.30 is FY 2006/07 and 2003/04 and HBL has highest & lowest ratios 59.50 and 51.62 is FY 2005/06 and 2002/03 respectively.

In over all men ratio of loan & advances to total deposit of NABIL is higher than that of SCBNL & HBL is side co-efficient of variation of above banks. NABIL has 8.89% , which is comparatively higher than 5.24% of HBL and less than 14.85% of SCBNL. It shows that HBL is more 5 table than other banks.

In conclusion, NABIL has strong position regarding the mobilization of total deposit on loan ad advances and acquiring higher profit with compare to SCBNL & HBL. It states that NABIL is better is this regard.

**(ii) Total Investment to Total Deposit Ratio.**

A commercial bank mobilizes its deposits by investing its fund is different securities issued by government and other financial or no financial institutions. Now, effort has been made to measure the extent to which the banks are successful is mobilizing the total deposits on investment.

In the process of portfolio management of bank assets, various factors such as availability of fund, liquidity requirement Central banks norms etc are to be considered in general. A high ratio is the indicator of high success to mobilize the banking fund as investment and vice versa.

We have,

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

**Table 4.11**  
**Total Investment to Total Deposit Ratio (%)**

Banks	Fiscal Year					Mean	S.D	C.V (%)
	2002/03	2003/04	2004/05	2005/06	2006/07			
NABIL	44.85	41.33	29.27	31.93	38.32	37.14	5.79	1.6%
SCBNL	54.47	53.68	50.18	55.71	55.10	53.83	1.94	3.6%
HBL	48.44	42.22	47.20	41.10	39.34	43.66	3.54	8.1%

The above table exhibits that the ratio of NABIL is in decreasing trend from 2002/03 to 2004/05 and is increasing trend from 2005/06 to 2006/07. In the case of SCBNL it's also in decreasing trend from 2002/03 to 2004/05 and increases in FY 2005/06 & 2006/07. And in case of HBL its ratio has fluctuating trend vice versa 48.44, 42.22, 47.20, 41.10 and 39.35 is the year 2002/03, 2003/04, 2004/05, 2005/06 & 2006/07.

In average NABIL has maintained lower, mean value i.e. 37.14 < 43.66, 53.83 than other two banks. SCBNL has maintained the highest mean value of 53.83.

The CV ratio of NABIL is 1.6% which is lower than 3.6% of SCBNL is more stable than that of other two banks.

In conclusion, NABIL is in weak condition to mobilize its deposits by investing in different sectors in comparison of other two banks.

**(iii) Loan & Advances to Total Working Fund Ratio**

Loan & advances is an important part of total assets (total working fund). Commercial bank must be very careful in mobilizing its total assets. As loan and advances in appropriate level to generate profit this ratio reflects the extent to which the commercial banks are successful in mobilizing their assets, loan & advances for the purpose of income generation. A high ratio indicates better mobilization of funds as loan and advances and vice versa.

We have,

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

Where, total working fund is the total assets. It is composed up of current assets, fixed assets, miscellaneous assets and investment: loans for development bank etc.

The table 1.12 shows the loan & advances total working fund ratio of NABIL, SCBNL & HBL, (details in annexure - A8)

**Table 4.12**  
**Loan & Advances to Total Working Fund Ratio %**

Banks	Fiscal Year					Mean	S.D	C.V (%)
	2002/03	2003/04	2004/05	2005/06	2006/07			
NABIL	46.82	48.91	61.60	57.87	57.04	54.45	6.29	11.56%
SCBNL	27.24	27.11	37.19	34.67	36.73	32.59	5.03	15.44
HBL	44.82	50.21	46.60	51.54	49.53	48.54	2.75	5.66



The above table exhibits that the ratio of NABIL & SCBNL is decreasing trend from 2003/04 to 2004/05 and increasing trend from 2005/06 to 2006/07. In case of HBL its ratio is in fluctuating trend.

On the basis of mean ratios, NABIL has maintained the higher ratio than that of SCBNL & HBL i.e.  $54.45 > 48.54 > 32.59$ . So, NABI is in good condition to mobilize its total working fund as loan and advances. Co-efficient of variation of NABIL is less than SCBNL and higher than HBL i.e.  $11.56\% > 15.44\% > 5.66\%$ . It indicates more uniform of NABIL is comparison to SCBNL and very less uniform than HBL.

Lastly, we can say that NABIL's fund mobilization in terms of loan & advances with respect of total working fund is more satisfactory than that of other two banks.

**(iv) Investment on Government Securities to Total Working Fund Ratio.**

All the resources to a bank is not used as loan and advances. A bank mobilize its fund in various ways. To some extent commercial bank seems to utilize its fund by purchasing government securities. A government securities is a safe medium of investment though it is not liquid as cash and bank balance. This ratio is very important to know the extent to which the banks are successful in mobilizing their total fund or different types of government securities to maximize its income. A high ratio indicates better mobilization of funds as investment on government securities is a current asset which is invested by external parties. These types of securities can be sold in the market.

We have,

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

Investment on government securities to total working fund ratio of NABIL, SCBNL & HBL from FY 2002/03 to 2006/07 are given below in table no: 9 (details in Appendix 9)

**Table 4.13**

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

Banks	Fiscal Year					Mean	S.D	C.V (%)
	2002/03	2003/04	2004/05	2005/06	2006/07			
NABIL	21.67	21.93	14.04	10.31	17.64	17.12	4.99	29%
SCBNL	31.47	33.62	31.90	33.54	24.85	31.28	30.70	11.8%
HBL	13.82	13.34	18.94	16.82	18.81	16.35	2.67	16.31%

From the above table it is clearly seen that investment on government securities to working fund ratio of NABIL, SCBNL & HBL is in fluctuating trend.

On the basis of mean, NABIL has maintained slightly higher ratio than HBL and lower ratio than SCBNL i.e.  $17.12 > 16.35 < 31.28$ . The co-efficient of variation of NABIL is higher than that of SCBNL & HBL i.e.  $29\% > 16.31\% > 11.28\%$ .

From the above analysis, it can be concluded that NABIL's fund mobilization in terms of government securities with respect of total working fund is not more satisfactory than that of other two banks. And NABIL is not satisfactory of ratios point of view is fund mobilizing term and less homogeneous.

**(iv) Investment on shares and Debentures to Total Working Fund Ratio.**

To study the investment management of NABIL, SCBNL & HBL bank, total investment has been separated into two parts i.e. Investment on government securities and investment on shares and debentures. Now a day a commercial bank

is interested to invest its funds not only on government securities but also in shares & debentures of other different companies and regional development banks.

Investment on shares and debentures to total assets ratio reflects the extent to which the banks are successful to mobilize their assets on purchase of shares and debentures of other companies to generate incomes and utilize their excess fund. A high ratio indicates more portion of investment on share and debentures out of total working fund and vice versa.

We have,

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

Investment on shares and debentures to total working fund ratio of NABIL, SCBNL & HBL from FY 2002/03 to 2006/07 are given below in the table 4.14 (details in Annexure - 10)

**Table 4.14**

**Investment on Shares & Debenture to Total Working Fund Ratio (%)**

Banks	Fiscal Year					Mean	S.D	C.V (%)
	2002/03	2003/04	2004/05	2005/06	2006/07			
NABIL	0.13	0.13	2.56	0.47	1.053	0.87	1.02	11.7%
SCBNL	0.05	0.05	0.06	0.06	0.16	0.076	0.047	62.13%
HBL	0.14	0.13	0.14	0.13	0.21	0.15	0.03	22.6%

The above table exhibits that the ratio of NABIL & SCBNL is in increasing trend incase of HBL it is in fluctuating trend.

On the basis of mean ratios, NABIL has higher investment than other two banks ie.  $0.87\% > 0.15 > 0.076$ . Moreover, (V of NABIL is less than other two banks ie  $11.7\% < 22.6\% < 62.13\%$ , which states that the position of NABIL is better in this regard.

It can be concluded that NABIL has invested more portion of its total working fund on shares & debentures than other two banks. And also NABIL is more consistent and homogeneous than SCBNL & HBL.

#### **4.1.3 Profitability Ratio**

Profit is the lock bone of the financial institutions and commercial banks. The main objective of a commercial bank is to earn profit providing different types of banking services to its customers. To meet various objectives like to have a good liquidity position, meet fixed internal obligation, overcome the future contingencies, grab hidden investment opportunities, expend banking transitions in different places and finance government in need of development funds etc, a commercial bank must earn sufficient profit.

Profitability ratios are the best indicators of overall efficiency. Here mainly those ratios are presented and analyzed which are related with profit as well as investments. An effort has been made to measure the profit earning capacity of NABIL, SCB & HBL through the following ratios.

##### **(i) Return on total working fund ratio**

It measures the profit earning capacity by utilizing available resources ie, total assets.

Return will be higher if the banks working fund is well managed and are efficiently utilized, maximizing taxes with in legal options available will also improve the return.

We have,

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

Where,

Net profit includes the profit that is left to the internal equities after all costs, chares & expenses. Return on total working fund ratio of NABIL, SCBNL & HBL from FY 2002/03 to 2006/07 is given below in table 4.15 (details in Annexure – 11)

**Table 4.15**  
**Return on Total Working Fund Ratio (%)**

Banks	Fiscal Year					Mean	S.D	C.V (%)
	2002/03	2003/04	2004/05	2005/06	2006/07			
NABIL	2.51	2.72	3.02	2.84	2.47	2.71	0.23	8.47%
SCBNL	2.42	2.27	2.46	2.55	2.42	2.42	0.10	4.18%
HBL	0.88	1.02	1.06	1.50	1.43	1.18	0.27	23.05%

The above table exhibits that the ratio of NABIL is in increasing trend from 2002/03 to 2004/05 and decreasing from 2005/06 to 2006/07. In case of SCBNL its in fluctuating trend and incase of HBL its in increasing trend from 2002/03 to 2005/06 & its decreases on 2006/07.

In the mean ratios, it is observed that the NABIL has the highest mean value ie. 2.71>2.24>1.18. So, NABIL is highly efficient to earn net profit and return as

well. On the other hand C.V of NABIL is less than HBC and higher than SCBNL ie.  $8.47\% < 23.05\% > 4.18\%$ .

From the above analysis it can be concluded that NABIL is in strong position is the earning capacity by utilizing available resources than other banks. A its less consistent and homogeneous than SCBNL & more than HBL.

**(ii) Total Interest Earned to Total outside Assets Ratio**

It reflects that the extent to which the bank is successful to earn interests as major income on all the outside Assets. Higher the ratio higher will be the earning power of total outside assets. This is very important ratio, as the main asset is the outside Assets of a commercial bank.

We have,

$$\text{Total interest earned to Total outside Assets} = \frac{\text{Total interest earned}}{\text{Total outside asset.}}$$

The total outside assets include loan & advances investment n government securities, share and debentures and other all types of investment.

The table below exhibits total interest earned to total outside assets ratio from FY 2002/03 to 2006/07. (details in Annexure -12)

**Table 4.16**  
**Total Interest Earned to Total Outside Assets Ratio (%)**

Banks	Fiscal Year					Mean	S.D	C.V (%)
	2002/03	2003/04	2004/05	2005/06	2006/07			
NABIL	7.38	7.14	7.20	6.86	6.50	7.02	0.34	4.89%
SCBNL	14.9	5.86	5.93	5.46	5.87	7.66	4.08	53.72%
HBL	5.71	5.61	5.75	6.10	6.10	5.85	0.23	3.94%

The above comparative table reveals that NABIL has fluctuating trend from FY 2002/03 to 2005/06 and on FY 2006/07 its increasing. SCBNL has fluctuating trend during the study period and HBL has fluctuating trend from 2002/03 to 2005/06 its stable is 2006/07.

On the basis of mean ratios NABIL is less than SCBNL  $7.02 < 7.60$  & higher than HBL ie.  $7.02 > 5.85$  in respect to total interest earned to total outside assets. On the other hand, C.V of NABIL is less than that of SCBNL and higher than HBL.

From the above analysis, it can be concluded the NABIL is in strong position is earning high interest income from its total outside assets is comparison to SCBNL & HBL is view point of mean & C.V ratio. Moreover, SCBNL is comparatively efficient to earn high interest income from outside assets than other banks.

### **(iii) Return on Loan & Advances Ratio**

Return on loan & advances ratio measures the earning capacity of a commercial bank on its mobilized fund based loan and advances. A high ratio indicates a greater success to mobilize fund and vice versa.

We have,

$$\text{Return Loan \& Advances Ratio} = \frac{\text{Net profit}}{\text{Loan \& advances}}$$

The table below shows return on loan & advances of NABIL, SCBNL, HBL for the FY 2002/03 to 2006/07. (details in Annexure – 13)

**Table 4.17**  
**Return on Loan & Advances Ratio (%)**

Banks	Fiscal Year					Mean	S.D	C.V (%)
	2002/03	2003/04	2004/05	2005/06	2006/07			
NABIL	5.37	5.56	4.90	4.92	4.33	5.02	.48	9.5%
SCBNL	8.9	8.41	6.62	7.37	6.6	7.58	1.64	13.77%
HBL	1.96	2.03	2.30	2.90	2.89	2.42	0.45	18.8%

The above table exhibits that the ratio of NABIL has maintained fluctuating trend. SCBNL has decreasing trend at first i.e. from FY 2002/03 to 2004/05 and then followed fluctuating trend from 2005/06 to 2006/07. HBL has maintained increasing trend from 2002/03 to 2005/06 and then decreases in 2006/07.

The mean of the NABIL is higher than HBL i.e.  $5.02 > 2.42$  and lower than SCBNL i.e.  $5.02 < 7.58$  in respect to return on loan & advances ratio. On the other hand C.V of NABIL is less than that of other two banks. So NABIL has maintained high return with variability ratios.

From the above analysis, it can be concluded that NABIL is significantly able to earn high return on its loan and advances in comparison of other two banks in point of view of average mean & low C.V ratio.

**(iv) Total Interest Earned to Total Working Fund Ratio.**

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



We have,

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

The following table shows total interest earned to total working fund ratios of NBIL, SCBNL & HBL (details in Annexure – 14)

**Table 4.18**  
**Total Interest Earned to Total Working Fund Ratio (%)**

Banks	Fiscal Year					Mean	S.D	C.V (%)
	2002/03	2003/04	2004/05	2005/06	2006/07			
NABIL	6.15	5.98	6.22	5.87	5.88	6.01	0.17	2.84%
SCBNL	4.81	4.41	4.83	4.61	5.94	4.72	021	4.45%
HBL	4.96	4.84	5.01	5.32	5.17	4.96	0.22	4.40%

The above comparative table reveals that NABIL & SCBNL has followed fluctuating trend during the study period. In the case of HBL it is in fluctuating trend from FY 2002/03 to FY 2005/06 and decreasing is 2006/07 like wise 4.94, 4.84, 5.01, 5.32, 5.17 is FY 2002/03 to 2006/07.

The mean of NABIL is greater than that of other two banks ie.  $6.01 > 4.96 > 4.72$ . So, we can say that NABIL is in strong position to generate interest income from the total working fund than other two banks. On the other hand, C.V of NABIL is lower than that of SCBNL & HBL ie,  $2.84\% < 4.40\% < 4.45\%$ . It means more consistent their two banks.

Thus, it can be concluded that the ratio of total interest earned to total working fund ratio of NABIL is satisfactory is compared to other two banks. That means

the total interest earned to total working fund ratio of NABIL is stable in comparison to SCBNL & HBL.

**(v) Total interest paid to total working fund ratio.**

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

We have,

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

The following table shows the total interest paid to total working fund ratios of NABIL, SCBNL & HBL (details in Annexure – 15)

**Table 4.19**  
**Total Interest Paid to Total Working Fund Ratio**

Banks	Fiscal Year					Mean	S.D	C.V (%)
	2002/03	2003/04	2004/05	2005/06	2006/07			
NABIL	1.91	1.70	1.42	1.55	2.04	1.72	0.25	14.76%
SCBNL	1.22	1.20	1.16	1.20	1.44	1.24	0.11	9.02%
HBL	2.31	1.91	1.95	2.12	2.24	2.11	0.17	8.3%

The above comparative table reveals that total interest paid to total working fund ratio of NABL and SCBNL is in decreasing trend at first 3 years i.e. FY 2002/03 to 2004/05 and then it is in increasing trend from 2005/06 to 2006/ 07 . In case of HBL it's ratio is in decreasing trend from FY 2002/03 to 2003/04 and in increasing trend from 2004/05 to 2005/06.

The mean ratio of NABIL i.e. 1.72 is average between SCBNL and HBL i.e. 1.24 and 2.11. It means NABIL pays average interest than other two banks during the study period. On the other hand NABIL'S coefficient of variable is higher i.e. 14.76%. in comparison to SCBNL and HCL i.e. 9.02% and 8.3%. It indicates that NABIL ratio is less consistent than other two banks.

In conclusion we can say that NABIL is in better position from payment of interest point of view (less expenses generate the high income generate theory). It seems to be successful to collect it's working fund from less expensive sources in comparison to HBL and less than SCBNL.

#### **(vi) Return on Equity**

Equity capital of any banks is it's owned capital. The prime objective of any banks is wealth maximization or in other words to earn high profit and maximizing return to it's shareholders. ROE is the measuring rod of the profitability of banks. It reflects the extent to which the banks has been successful to mobilize it's equity capital. A high ratio indicates higher success to mobilize its owned capital and vice versa.

We have,

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

Equity capital includes paid up equity capital, reserve, general loan loss provision etc. The table below shows the ROE of the NABIL, SCBNL & HBL. (details in Annexure - 16)

**Table 4.20**  
**Return on Equity Ratio (%)**

BANKS	Fiscal Year					Mean	SD	CV (%)
	2002/03	2003/04	2004/05	2005/06	2006/07			
NABIL	35.12	30.77	31.30	33.91	32.79	32.88	1.42	4.32%
SCBNL	37.03	35.96	33.89	37.55	32.68	35.42	2.08	5.86%
HBL	19.95	19.87	19.99	25.90	36.89	24.52	7.38	30.10%

The above table exhibits that ratios of NABIL followed decreasing trend from FY 2002/03 to FY 2003/04 and then increased from FY 2004/05 to 2005/06 and again decreased is FY 2006/07. In case of SCBNL ratio, it followed decreasing trend from FY 2002/03 to 2004/05 then increasing trend from 2005/06 to 2006/07. In case of HBL ratio, it followed decreasing trend is FY 2002/03 to FY 2003/04 and then increased from FY 2004/05 to 2006/07.

In the mean ratios, it is observed that NABIL has the average mean value ie, 32.79 which is less than 35.42 of SCBNL and higher than 24.52 of HBL. The c0-efficient of variation of NABIL is less than other two banks ie,  $4.32\% < 5.86\% < 30.10\%$ .

In the point of view of average mean and lower C.V it can be concluded that comparatively NABIL has mobilized its equity capital more efficiently than other two banks. So, NABIL has sound investment policy on equity capital more over its lower C.V shows its more homogenous during the study period.

#### **4.1.4 Risk Ratios**

The possibility of risk makes bank's investment a challenging task. Bank has to take risk to get return on its investment. The risk taken in compensated by the increase in profit. A bank has to take high risk if it expects high return on its

investment. So, the banks opting for high profit has to accept the risk and manage it efficiently. Through following ratios effort has been made to measure the level of risk.

- (iii) Credit Risk Ratio
- (iv) Capital Risk Ratio

**(ii) Credit Risk Ratio**

Bank utilize its collected funds is providing credit to different sectors. There is risk of default or non-repayment of loan. While making investment, bank examines the credit risk involved in the project. Generally credit risk ratio shows the proportion of non-performing assets is the loan & advances of a bank. But due to unavailability of the relevant data, here we have presented the credit risk as the ratio of loan and advances to total assets.

We have,

$$\text{Credit risk ratio} = \frac{\text{Total loan and advances}}{\text{Totalo assets}}$$

The following table shows the comparative credit ratio of NABIL, SCBNL & HBL for the year 2002/03 to 2006/07. (details in Annexure – 17)

**Table 4.21**  
**Credit Risk Ratio (%)**

BANKS	Fiscal Year					Mean	SD	CV (%)
	2002/03	2003/04	2004/05	2005/06	2006/07			
NABIL	46.82	48.91	61.61	57.87	57.04	54.45	6.29	11.56%
SCBNL	27.24	27.11	37.2	34.70	36.73	32.59	5.03	15.46%
HBL	44.82	50.21	46.59	51.54	49.53	48.54	2.75	5.68%

The above table exhibits that the credit risk ratio of NABIL is in increasing trend from FY 2002/03 to FY 2004/05 and then in increasing trend from 2005/06 to 2006/07. In case of SCBNL & HBL it is in fluctuating trend.

The mean ratio of NABIL is 54.45 is higher than that of SCBNL is 32.59 and HBL 48.54. It means credit risk of NABIL is higher than that of other two banks. The C.V ratio of NABIL is in between SCBNL and HBL is  $5.68\% < 11.56\% < 15.46\%$ .

From the above analysis it can be concluded that NABIL's degree of risk is higher than other two banks and its more variable than HBL & less than SCBNL.

### **(ii) Capital Risk Ratio**

The capital risk of a bank indicates how much assets value may decline before the position of depositors and other creditors is jeopardized. Therefore a bank must maintain adequate capital in relation to the nature and condition of its assets, its deposits liabilities and other corporate responsibilities. Capital risk ratio measures banks ability to attract deposits and inter-bank funds. It also determines the level of profit, a bank can earn if a bank chooses to take high capital risk, and its ROE will be higher and vice versa.

We have,

$$\text{Capital risk ratio} = \frac{\text{Capital}}{\text{Risk weighted assets}}$$

(Risk weighted assets is taken from the financial report of concerned banks)

The following table shows the capital risk ratio of the NABIL, SCBNL and HBL.

(Deposit Annexure - 18)

**Table 4.22**  
**Capital Risk Ratio (%)**

BANKS	Fiscal Year					Mean	SD	CV (%)
	2002/03	2003/04	2004/05	2005/06	2006/07			
NABIL	4.411	4.14	3.46	2.89	2.56	3.49	0.79	22.6%
SCBNL	2.312	2.22	2.04	1.88	1.00	1.87	0.50	27.18
HBL	4.28	5.11	6.42	6.24	5.72	5.55	0.87	15.76

The above table exhibits that the credit risk ratio of NABIL and SCBNL is in decreasing trend. In case of HBL it is in increasing trend decreases in FY 2006/07.

The mean ratio of NABIL i.e, 3.49 is higher than SCBNL i.e. 1.81 and lower than HBL ie. 5.55.

The CV ratios of NABIL is in between SCBNL and HBL i.e  $215.76 < 22.6\% < 27.18$ .

From the above analysis it can be concluded that NABIL" degree of capital risk is higher that SCBNL and its more variable than HBL and less then SCBNL.

#### **4.1.5 Growth Ratio**

Growth ratios are directly related to the fund mobilization and investment management of a commercial bank. It represents how well the commercial bank are maintaining the economic and financial position. Under this topic, four of growth ratio are studies which are as follows:

- (i) Growth Ratio of Total Deposit.
- (ii) Growth of Total Loan and Advances.
- (iii) Growth of Total Investment.
- (iv) Growth ratio of Total Net Profit.

The calculation method of growth ratio is shown is Annexure - B 1

**Table 4.23**  
**Growth Ratio of Total Deposit (%)**

Banks	Fiscal Year					Growth Ratio (%)
	2002/03	2003/04	2004/05	2005/06	2006/07	
NABIL	13448	14119	24587	19347	23342	14.74%
SCBNL	18756	21161	19335	23061	24647	7.06%
HBL	21007	22010	24814	26490	30048	9.36%

The above comparative table shows that the growth ratio of NABIL deposit is higher thus that of SCBNL deposit is higher than that of SCBNL and HBL ie,  $14.74\% > 9.36\% > 7.06\%$ . it means that the performance of NABIL to collect greater deposit compared to SCB & HBL is better year-by-year.

**Table 4.24**  
**Growth Ratio of Loan and Advances (%)**

Banks	Fiscal Year					Growth Ratio (%)
	2002/03	2003/04	2004/05	2005/06	2006/07	
NABIL	7756	8190	10586	12923	15546	18.98%
SCBNL	5696	3410	8143	8935	10502	16.53%
HBL	10845	12920	13451	15762	17794	13.18%

The above comparatives table no. 19 shows that the growth ratio of NABIL has maintained ratio of 18.98% where as SCBNL & HBL maintained 16.53% and 13.18% respectively. It means the performance of HBL to grant loan and advances in comparison to other banks is better year-by-year.



**Table 4.25**  
**Growth Ratio of Total Investment**

Banks	Fiscal Year					Growth Ratio (%)
	2002/03	2003/04	2004/05	2005/06	2006/07	
NABIL	6031	5836	4270	6179	8945	10.35%
SCBNL	10216	11360	9703	12848	13553	7.32%
HBL	10175	9292	11692	10889	11823	3.82%

The above comparative table shows that growth ratio of total investment of NABIL is higher than SCBNL & HBL i.e.  $10.35\% > 7.32\% > 3.82\%$ . So we can say that NABIL has better growth level for investment sector even FY 2003/04 to 2004/05 has decreasing growth amount and then increasing growth amount there after.

**Table 4.26**  
**Growth Ratio of Total Net Profit**

Banks	Fiscal Year					Growth Ratio (%)
	2002/03	2003/04	2004/05	2005/06	2006/07	
NABIL	416	455	518	635	674	12.82%
SCBNL	507	538	540	659	692	8.08%
HBL	212	263	308	457	492	23.43%

The above comparative shows that the growth ratio of NABIL's net profit i.e. 12.82% is lower than HBL i.e. 23.43% and higher than SCBNL i.e. 8.08%. In the view of net profit NABIL has average position in comparison to other two banks.

## **4.2 Statistical Tools**

Under this heading some statistical tools such as co-efficient of correlation analysis between different various, trend analysis of deposits, loan and advances, investment and net profit as well as hypothesis test (+- statistics) are used to achieve the objectives of the study.

### **4.2.1 Coefficient of Correlation Analysis**

Under this chapter, Karl Person's coefficient of correlation is used to find out the relationship between deposit and loan & advances and total investment, outside assets and net profit.

#### **(i) Co-efficient of correlation between deposit and loan & advances.**

It is already mentioned that investment is dependent upon saving ie. deposit. Longer the duration of deposit, higher the banker's ability to acquire long term asset. In the other words banker can't invest more on long term assets if the duration of deposit is short. In this sense it can be said that investment is the function of deposit.

Theoretically it is assumed that long-term asset yield higher return. It means longer the duration of deposit, higher would be the profitability of the bank. But investment may no be the function of deposit only. Sometimes investment is made from the funds raised from other sources. In such situation investment is not dependent upon deposit only. Co-efficient of correlation between deposit and loan and advances measures the degree of relationship between these two variables. In this analysis deposits is independent variable (y) and loan and advances is dependent variable (x).

The detail calculations in this regards are done in Annexure - C1 and the following table show the value of  $r_{xy}$ ,  $r^2$  and P.E and 6 P.E between those variable of NABIL, SCBNL and Himalayan Bank Ltd. during the study period.

**Table 4.27**  
**Correlation between Deposits and Loan and Advances**

Evaluation Criteria				
Banks	r	$r^2$	P.Er.	6 P.E.r
NABIL	0.967	0.9351	0.0195	0.117
SCBNL	0.825	0.6806	0.09630	0.5778
HBL	0.958	0.9177	0.0248	0.1488

From the above table, all bank's co-efficient of correlation between the deposit and loan and advances shows high degree of positive relation ship. In case of NABIL, it is fund that co-efficient of correlation between deposit and loan and advances is 0.967. When we consider, the value of coefficient of determination ( $r^2$ ), it is 0.935% of the variation is the dependent variable (loan and advances) has been explained by the independent variable (deposit).

Similarly, considering the valued of (r) i.e. 0.967 and comparing it with 6 PEr ie 0.117 we ca find that (r) is greater than the value of 6 PEr. This reveals that the value of r is significant. In other words there is significant relationship between total deposit and loan and advances in case of NABIL.

Likewise, in the case of SCBNL & HBL, it has high degree of positive correlation between deposit and loan & advances., However by application of coefficient of determination ( $r^2$ ) it indicates that SCBNL and HBL has 68.06% and 91.77% respectively of the variation in the dependent variable i.e. loan and advances has been explained by the independent variable i.e. deposits. Moreover considering the

probable error, in case of SCBNL and HBL. ( $r$ ) is greater than 6 P.Er is can be said that the value of ( $r$ ) is significant i.e., there is significant relationship between total deposit and loan & advances.

Lastly, we can draw the conclusion from the above analysis that in NABIL and other two banks, there is positive relationship between deposits and loan & advances. The relationship is significant and the value of ( $r^2$ ) shows high percent in the dependent variable which has been explained by the independent variable. This indicates that three sample banks are successful to mobilize their deposits in proper way as loan & advances. Moreover, we can further conclude that NABIL has higher correlation between deposit and loan & advances as well as higher value of ( $r^2$ ) than those of SCBNL & HBL. Which indicates that it is in strong condition to grant loan & advances for mobilizing the collected deposits in comparison to other two banks.

**(ii) Co-efficient of correlation between deposit and total investment.**

Co-efficient of correlation ( $r$ ) between deposit and investment measures the degree of relationships between these two variables. Here, deposit is independent variable ( $x$ ) and total investment is dependent variable ( $y$ ). The purpose of computing co-efficient of correlation between deposit and total investment is to find out whether deposit is significantly used as investment or not.

The table 4.27 shows the value of  $r$ ,  $r^2$ , P.Er and 6 P.Er between deposit and total investment of NABIL, SCBNL & HBL for the study period of 2002/03 to 2006/07. (details in Annexure-C2)

**Table 4.28**  
**Correlation between Deposit and Total Investment**

Evaluation Criteria				
Banks	r	$r^2$	P.Er.	6 P.Er.
NABIL	0.823	0.6779	0.0971	0.155
SCBNL	0.956	0.9139	0.0259	0.4521
HBL	0.787	0.619605	0.11474	0.6884

From the above table 4.28, we find that co-efficient of correlation between deposits (independent) and total investment (dependent) value of 'r' is 0.823 in case of NABIL. It shows highest degree of positive relationship between two variables. However, by application of coefficient of determination the value of ( $r^2$ ) is 0.6779 which indicates 67.79% of the variation of the dependent variable (total investment) has been explained by the independent variable (deposits). Moreover, by considering the probable error. Since the value of r i.e. 0.823 is greater than 6P.Er i.e. 5828%. So, we can say that there is significant relationship between total deposits and total investments.

On the other hand in case of SCBNL and HBL, both has high degree of correlation between deposit and total investment. However, by the application of coefficient of determination i.e.  $r^2$  it indicates SCBNL to be 91.39% and HBL to be 61.95% respectively of the variation in the dependent variable i.e. total investment has been explained by the independent variables i.e. deposit more over considering the probable error since the value of r i.e. 823 of SCBNL and 0.9131 of HBL is more than 6 P.Er. So we can say that there is significant relationship between total deposit and total investment of SCBNL & HBL.

Lastly, we can draw the conclusion from the above analysis that NABIL, SCBNL & HBL as high degree of positive relationship between deposit & investment. The

relationship is significant and the value of ( $r^2$ ) shows high percent in the dependent variable which has been explained by the independent variable. This indicates that three banks are successful to invest their deposit in proper way. More over, we can further conclude that NABIL has slightly lower correlation between investment & deposit as well as lower value of  $r^2$  in comparison to SCBNL ad higher value in comparison to HBL. It indicates that NABIL is in average position to follow the policy of maximizing the investment of their deposits in comparison to SCBNL and HBL.

**(iii) Coefficient of correlation between outside assets and net profit.**

Coefficient of correlation 'r' between outside assets and net profit measures the degree of relationship between these two variables. Here, outside assets are independent variable (x) and net profit is dependent variable (y). The purpose of computing co-efficient of correlation between outside assets and net profit is to find out whether the net profit is significantly correlated with respective total assets or not.

Table 4.29 shows the value of r,  $r^2$ , P.Er, 6 P.Er between outside assets and net profit of NABIL, SCBNL & HBL for the study period of 2003/04 (details in Annexue - C3)

**Table 4.29**  
**Co-efficient of Correlation between Outside Assets and Net Profit**

Evaluation Criteria				
Banks	r	$r^2$	P.Er.	6 P.Er.
NABIL	0.92768	0.86059	0.0420	0.252
SCBNL	0.8305	0.6897	0.0935	0.5614
HBL	0.956	0.91393	0.0259	0.1557

(Source; Annexure - C3)

From the above listed table it has been found that the coefficient of correlation between total outside assets (independent) and net profit (dependent) is 0.92768 high degree of positive correlation between these two variables. On the other hand, considering the value of co-efficient of determination  $r^2$  i.e. 0.86059 indicates that 86.59% of the variation in the dependent variables (net profit) has been explained by the independent variables (total outside assets) moreover by considering the probable error. We can further say that there is significant relationship between total outside assets and net profit because the value of  $r$  i.e. 0.92768 is greater than 6 P.Er i.e. 0.252. It indicates that NABIL is capable to earn net profit by mobilizing total outside assets.

Similarly, co-efficient of correlation between outside assets and net profit in case of SCBNL and HBL is found to be 0.8305 and 0.956 respectively, which indicates high degree of correlation between these two variables. On the other hand, considering the value of co-efficient of determination  $r^2$  i.e. it indicates SCBNL to be 68.97% and HBL to 91.39% respectively of the variation in the dependent variable i.e. net profit has been explained by the independent variables i.e. outside assets moreover, considering the probable error since the value of  $r$  i.e. 0.8305 of SCBNL & 0.956 of HBL is more than 6 P.Er. So we can say that there is significant relationship between net profit and total outside assets of SCBNL & HBL.

Lastly, we can draw the conclusion from the above analysis that NABIL, SCBNL & HBL has high degree of positive relationship between deposit & investment. The relationship is significant and value of  $r^2$  shows the high percent in the dependent variable which has been explained by the independent variable. This indicates that three sample banks are successful to mobilize fund and get return i.e. net profit from such mobilized assets. Moreover, we can further conclude that NABIL has slightly lower correlation between net profit & outside assets as well

as lower value of  $r^2$  in comparison to HBL and higher value in comparison to SCBNL. It means NABIL is in average position in its efficiency to get return i.e, net profit from outside assets.

#### **4.2.2. Trend Analysis and Projection for Next Five Years**

Under this topic, analysis trend of deposit collection, its utilization and net profit of NABIL, SCBNL and HBL are studied. To utilize deposits a commercial bank may grant loan and advances and invest government securities and share & deventures of other companies. Under this topic an attempt is made to analyze trend of deposit. Investment and income of NABIL, SCBNL and HBL and also forecast their trend for next five years. The projections are based on the following assumptions:

- f. The main assumption is that other things will remain unchanged.
- g. The forecast will be true only when the limitation of least square method is carries out.
- h. The bank will run in present position.
- i. The economy will remain in the present stage.
- j. Nepal Rastra Bank will not change its guidelines to commercial bank.

##### **(i) Trend analysis of total deposit**

Under this topic, and effort has been made to calculate the trend values of deposit of NABIL, SCBNL & HBL for 5 years from 2002/03 to 2006/07 and forecast for next 5 years till 2012. The following table shows the trend values to total deposit for 10 years from 2002/03 to 2006/07 (details in Annexure D1)



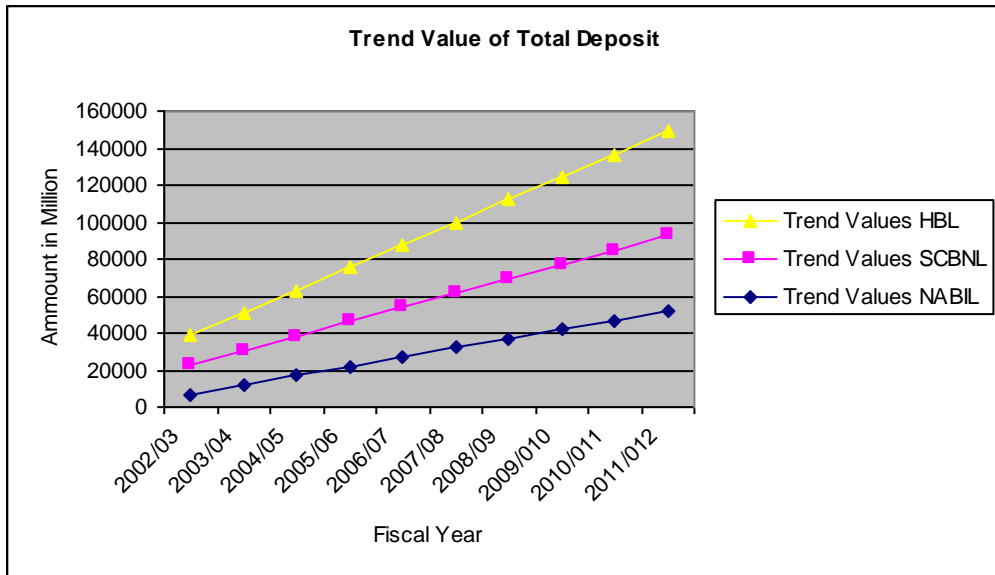
**Table 4.30**

**Trend Value of Total Deposit (Rs. in million)**

Year	Trend Values NABIL	Trend Values SCBNL	Trend Values HBL
2002/03	6962.2	15919.2	15849
2003/04	11965.4	18655.6	20361.4
2004/05	16968.6	21392	24873.8
2005/06	21971.8	24128.4	29386.2
2006/07	26975	26864.8	33898.6
2007/08	31978.2	29601.2	38411
2008/09	36981.4	32337.6	42923.4
2009/010	41984.6	35074	47435.8
2010/011	46987.8	37810.4	51948.2
2011/012	51991	40546.8	56460.6

(Source; Annexure D1)

**Figure 4.4**



The above table shows that the deposit of all the three banks have the increasing trend. If other thing remains the same, the total deposit of the same, the total

deposit of NABIL will be 51991 million in FY 2011/012 which is average deposit among the three banks. Similarly deposit of SCBNL & HBL will be 40546.8 million and 56460.6 million for the FY 2011/012 respectively.

From the above trend analysis, it is found that the deposit collection position of NABIL is weak in comparison to HBL and better in comparison to SCBNL. The calculated trend values of total deposit of NABIL, SCBNL & HBL are fitted in trend line.

**(ii) Trend analysis of investment**

Under this topic, the trend values of total investment for five years from 2002/03 to 2006/07 have been calculated and forecasted for next five years from 2007/08 to 2011/012.

The following table 4.31 shows the trend values of total investment for trend values of total investment for ten years from 2007/08 to 2011/012 of NABIL, SCBNL & HBL (details in Annexure -D2)

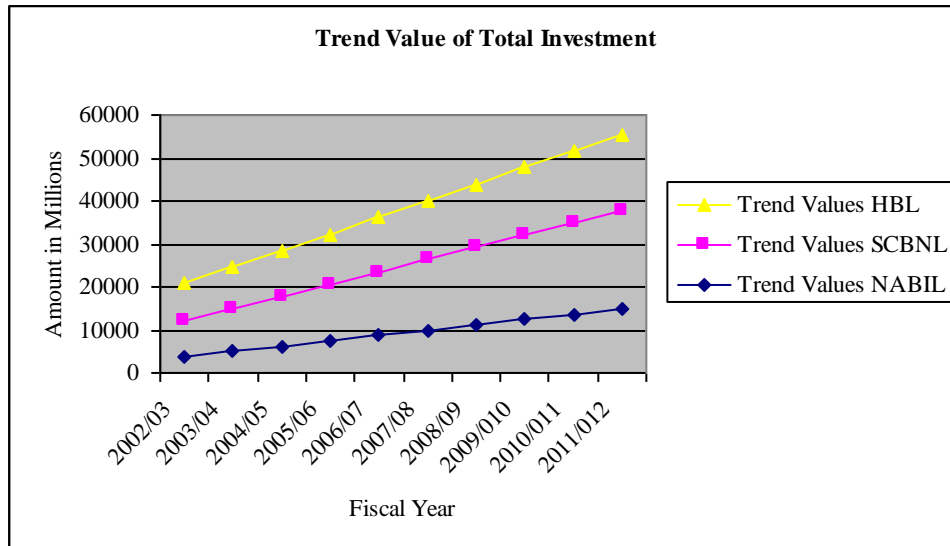
**Table 4.31**

**Trend Value of Total Investment (Rs in million)**

Year	Trend Values	Trend Values	Trend Values HBL
	NABIL	SCBNL	
2002/03	3783.8	8189.2	8817
2003/04	5018	9821.4	9795.6
2004/05	6252.2	11435.3	10774.2
2005/06	7486.4	13067.8	11752.8
2006/07	8720.6	14700	12731.4
2007/08	9954.8	16350.2	13710
2008/09	11189	17982.4	14688.6
2009/010	12423.2	19614.6	15667.2
2010/011	13657.4	21246.8	16645.8
2011/012	1489.6	2287.9	17624.4

(Source; Annexure D2)

**Figure 4.5**



The above table shows the total investment of NABIL, SCBNL & HBL has the increasing trend value. Other things remaining the same the total investment of NABIL will be 14891.6 million in the mid July 2012. That is the average deposit

among three banks. Similarly, the deposit of SCBNL & HBL will be 2287.9 million and 17624.4 million respectively.

From the above trend analysis, it is found that the total investment of NABIL is lower in compared to SCBNL & HBL. The calculated trend values of total investment of NABIL, SCBNL and HBL are fitted in the trend line.

**(iii) Trend analysis of net profit**

Under this topic, the trend values of net profit for five years from mid July 2002/03 to 2006/07 have been calculated and forecasted fro next five years from mid July 2006/07 to 2011/012.

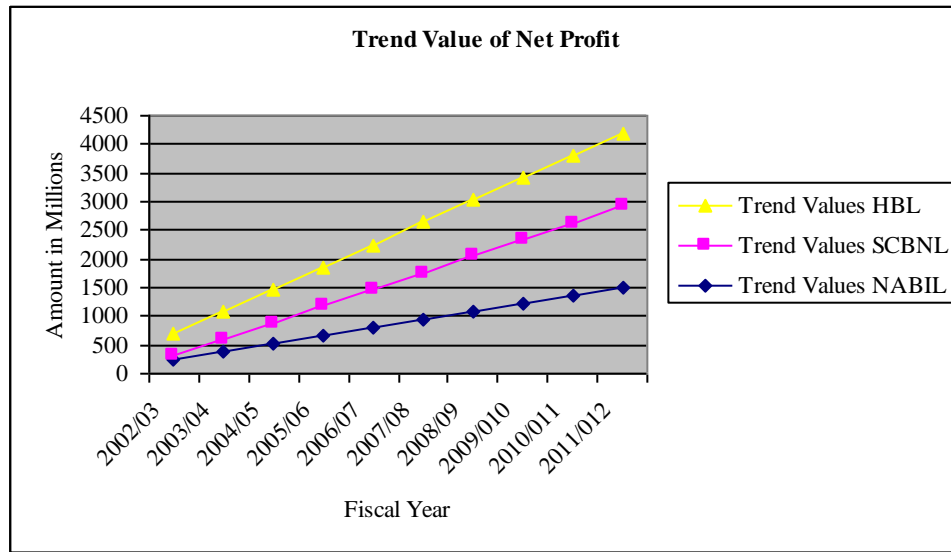
The following table 4.32 shows the trend values of net profit for ten yeas from mid July 2001/03 to 2011/012 of NABIL, SCBNL and HBL. (Details in Annexure - D3)

**Table 4.32**  
**Trend Value of Net Profit (Rs in million)**

Year	Trend Values NABIL	Trend Values SCBNL	Trend Values HBL
2002/03	261.2	44.8	390.6
2003/04	400.4	195.6	488.8
2004/05	539.6	346.4	587
2005/06	678.8	497.2	685.2
2006/07	818	648	783.4
2007/08	957.2	798.8	881.6
2008/09	1096.4	949.6	979.8
2009/010	1235.6	1100.4	1078
2010/011	1374.8	1251.2	1176.2
2011/012	1514	1402	1274.4

(Source; Annexure D3)

**Figure 4.6**



The above table shows that the net profit of NABIL, SCBNL & HBL is in increasing trend value. Other things remaining the same, the net profit of NABIL will be 1514 million in the mid July, 2012. That is the highest among the three during the study period. Similarly, the net profit of SCBNL and HBL will be 1274.4 million and 1402 million in mid 2012 respectively.

From the above trend analysis, it is found that the net profit of NABIL is the highest among three sample banks. The calculated trend values of net profit of NABIL, SCBNL and HBL are fitted in the trend line.

#### **4.2.3 Test of Hypothesis**

Under this topic, effort has been made to test the significance regarding the parameter of the population on the basis of sample drawn from the population. Generally, following steps are followed for the test of hypothesis.

- g. Formulating hypothesis
  - I. Null hypothesis
  - II. Alternative hypothesis

- h. Computing the test statistics
- i. Fixing the level of significance
- j. Finding critical region
- k. Deciding two-tailed or one-tailed test
- l. Making decision

In the following lines, some of hypothesis tests are calculated and decision is made.

Null Hypothesis ( $h_0$ ):  $\mu_1 = \mu_2 = \mu_3$  i.e., there is no significant difference between mean ratios of loan & advances total deposit of EBL, NABIL and BOK.

Alternative Hypothesis ( $h_1$ ):  $\mu_1 \neq \mu_2 \neq \mu_3$  e.e., there is significant difference between mean ratios of loans & advances to total deposits of EBL, NABIL and BOK.

### **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 means, the resulting sampling distribution would be t-test. On these study sample are taken only for five years i.e. ( $5 < 30$ ).

### **Assumption**

- iv. The parent population from which the sample is draw is normal or approximately normal.
- v. The given sample is drawn by random sampling method.
- vi. The population standard deviation ( $\sigma$ ) is not known.

I. Test of hypothesis on loan ad advances to total deposit of NABIL, SCBNL & HBL are taken and carried out under t-test of significance difference. (Details in Annexure-A6)

**Table no. 28**

S.W.	Fiscal Year	NABIL			SCBNL			HBL		
		x	x <sub>1</sub>	x <sub>1</sub> <sup>2</sup>	x <sub>2</sub>	x <sub>2</sub>	x <sub>2</sub> <sup>2</sup>	x <sub>3</sub>	x <sub>3</sub>	x <sub>3</sub> <sup>2</sup>
0										
1	2002/03	57.67	-	44.36	30.36	-	41.86	51.62	-	20.25
			6.66			6.47			4.5	
2	2003/04	58.00	-	40.07	30.30	-	42.65	58.70	2.58	6.66
			6.33			6.53				
3	2004/05	72.57	8.24	67.89	42.12	5.29	27.98	54.21	-	3.65
									1.91	
4	2005/06	66.79	2.46	6.05	38.75	1.92	3.69	59.50	3.38	11.42
5	2006/07	66.61	2.28	5.21	42.61	5.78	33.41	56.57	0.45	0.2025
		EX <sub>1</sub> = 321.64		EX <sub>1</sub> <sup>2</sup> = 163.57	EX <sub>2</sub> = 184.14		EX <sub>2</sub> <sup>2</sup> = 149.59	EX <sub>3</sub> = 280.6		EX <sub>3</sub> <sup>2</sup> = 42.18

$$\bar{x}_1 = \frac{EX_1}{n} \quad \bar{x}_2 = \frac{EX_2}{n} \quad \bar{x}_3 = \frac{EX_3}{n}$$

$$\bar{x}_1 = \frac{321.64}{5} \quad \bar{x}_2 = \frac{184.14}{5} \quad \bar{x}_3 = \frac{280.6}{5}$$

$$\bar{x}_1 = 64.33 \quad \bar{x}_2 = 36.83 \quad \bar{x}_3 = 56.12$$

$$\text{Again, } \bar{x}_1 = (x_1 - \bar{x}_1) \quad \bar{x}_2 = (x_2 - \bar{x}_2) \quad \bar{x}_3 = (x_3 - \bar{x}_3)$$

b. Test of significance of difference between NABIL and SCBNL

Here,

Null Hypothesis  $H_0: \bar{x}_1 = \bar{x}_2$

i.e. there is no significant difference between mean ratios of loan and advances to total deposit of NABIL & SCBNL.

Alternative hypothesis ( $H_1$ ):  $\bar{x}_1 \neq \bar{x}_2$  (two tailed)

i.e. there is significant difference between mean ratios of loan and advances to total deposit of NABIL and SCBNL (where  $\bar{x}_1$  is mean ratio of NABIL and  $\bar{x}_2$  is mean ratio of SCBNL)

Under  $H_0$  the test statistics is given by  $t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{S^2 \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}}$  with.....d.f. =  $n_1 + n_2 - 2$

$$\begin{aligned} \text{Where } s^2 &= \frac{1}{n_1 + n_2 - 2} (EX_1^2 + EX_2^2) \\ &= \frac{1}{5+5-2} (163.57 + 149.59) \\ &= \frac{1}{8} \times 313.16 \\ &= 39.145 \end{aligned}$$

### 4.3 Major Findings of the Study

The main findings of the study are derived on the analysis of financial data of NABIL, SCBNL and HBL is given below.

#### 2. Liquidity ratio

The liquidity position of NABIL, SCBNL and HBL reveals that:

- From the analysis of current ratio it is found that the mean of ratio of NABIL is higher than that of SCBNL and HBL. It means NABIL has



maintained the higher liquidity. and lower risk in compare to other banks. The ratio of NABIL is more consistent than HBL and less consistent than SCBNL.

- The mean ratio of cash and bank balance to total deposits of NABIL is lower than SCBNL and HBL, It states that cash and bank balance in liquidity position of NABIL lower than other two banks. And the ratio of NABIL is less consistent than that of SCBNL and HBL.
- The mean ratio of cash and bank balance to current assets of NABIL is lower than SCBNL and HBL. It states that the liquidity position of NABIL is poorer than that of SCBNL and HBL. and the ratio of HBL is more variable than that of other two banks.
- The mean ratio of investment on government securities to current assets of NABIL is lower in compared to SCBNL and HBL. It reveals that investment on government securities of NABIL is poorer than other two banks. The ratio of NABIL is less consistent than that of SCBNL and HBL.
- The mean ratio of loan and advances to current assets of NABIL is higher than HBL and slightly lower than SCBNL. The ratio of NABIL is more consistent than SCBNL and less consistent than HBL.

## 2 Assets management Ratio (Activity Ratio)

- The assets management ratio of NABIL, SCBNL and HBL reveals that.
- The mean ratio of loan and advances to total deposit of NABIL is higher than that of SCBNL and HBL. The ratio of NABIL is more stable than SCBNL and less than HBL.
- The mean ratio of total investment to total deposit of NABIL is lower than SCBNL and HBL. The variability of ratios is lower than that of SCBNL and HBL.

- The mean ratio of loan and Advances to total working fund of NABIL is higher than SCBNL and HBL. The variability of ratios is higher than HBL and lower than SCBNL.
- The mean of investment on government securities to total working fund ratio of NABIL is higher than HBL and lower than SCBNL. However NABIL seems to have more variable and ununiform ratios than that of two compared banks.
- The mean ratio of Investment on share and debentures to total working fund of NABIL is higher than SCBNL and HBL and also NABI is more consistent and homogeneous than SCBNL and HBL.
- From the above findings it helps to conclude that NABIL, is comparatively successful in its on balance sheet operation is compared to SCBNL and HBL. It predicts, that NABIL has succiffully. maintained and managed its assets towards different income generating activities.

### 3.Profitability Ratio

The profitability ratio of NABIL, SCBNL and HBL reveal that:

- The mean ratio of return on total working fund is higher than SCBNL and HBL. On the other hand NABIL is less consistent and homogeneous than SCBNL and more than HBL.
- The mean ratio of return on total working fund is higher than SCBNL and HBL. On the other hand NABIL is less consistent and homogeneous than SCBNL and more than HBL.
- The mean ratio of total interest earned to total outside Assets of NABIL is higher than HBL and slightly lower than SCBNL. The variability of the ratio of NABIL is in between in comparision to SCBNL and HBL.
- The mean ratio of return on loan and advances of NABIL is higher than of NABIL is more consistent than other two banks.

- The mean ratio of total Interest earned to total working fund of NABIL is higher than that of SCBNL and HBL. The ratio of NABIL is more consistent than that of other two banks.
- The mean ratio of total interest paid to total working fund is higher than SCBNL and lower than HBL. NABIL'S ratio is less consistent than other two banks.
- From the above findings of profitability ratios, it can be concluded that the NABIL is comparatively in higher position than that of SCBNL and HBL. So, the profit earning capacity of NABIL is high in comparison to other two banks.

#### 4. Risk Ratios.

The risk ratios of NABIL, SCBNL and HBL reveals that:

- The mean credit risk ratio of NABIL is higher than SCBNL and HBL. The ratio of NABIL is less consistent than SCBNL and more than HBL.
- The mean of capital risk ratio is

#### 5. Growth Ratios.

From the analysis of growth ratios of NABIL, SCBNL and HBL it reveals that:

- The growth ratio of NABIL's deposit is higher than that of SCBNL and HBL. It means the performance of NABIL to collect deposit is greater than SCBNL and HBL.
- The growth ratio of NABIL's loan and advances is higher than that of SCBNL and HBL. It means the performance of NABIL to grant loan and advances in compared to other two banks is better.
- The growth ratio of total investment is higher than that of SCBNL and HBL it indicates that NABIL has succeeded on the investment than other two banks.

- The growth ratio of NABIL's net profit is higher than SCBNL and lower than HBL. It means the performance of NABIL to earn profit is in moderate position in comparison to other two banks.
- From the above analysis, it can be concluded that NABIL has maintained high growth ratios on total deposit, loan advances and total Investment but it has moderate position on net profit. We must say that the bank is successful in increasing its sources and its mobilization.

6. Co-efficient of correlation Analysis from the Co-efficient of correlation analysis between different variables of NABIL, SCBNL and HBL, it reveals that:

- NABIL has highest value of Co-efficient of correlation between deposit and loan and advances in compared to SCBNL and HBL
- NABIL has lower value of Co-efficient of correlation between total deposit and total investment in comparison to SCBNL and Higher value in comparison to HBL. It means NABIL is in average position to follow the policy of maximizing the investment of their deposits in comparison to SCBNL and HBL.
- NABIL has higher value of co-efficient of correlation between net profit and outside assets in comparison to SCBNL and lower value in comparison to HBL. NABIL is in average position in its efficiency to get return i.e. net profit from outside assets. From the above analysis, it can be concluded that there is high degree of significant relationship between deposit and loan and advance, deposit and total investment and outside assets and net profit of EBL.

7. Trend Analysis and projection for Next five years.

The trend analysis of total deposit loan and advances, total investment and net profit and projection for next five years of NABIL, SCBNL and HBL reveals that:

- Total deposits of all the three banks have increasing trend. The total deposit of NABIL will be 51991 million in the mid July of 2012, which is the moderate deposit among the sample banks similarly the total deposit of SCBNL and HBL will be 40546.8 million and 56460.6 million respectively in the mid July of 2012. The deposit collection of NABIL is higher than SCBNL and lower than HBL.
- The total investment of all the three banks have increasing trend. The total investment of NABIL will be 14891.6 million in the mid of July 2012 similarly, the total investment of SCBNL and HBL will be 22879 million and 17624.4 million in the mid July 2002. The total investment of NABIL is not better in comparison to SCBNL and HBL.
- The net profit of all three banks have increasing trend. The net profit of NABIL will be 1514 million in the mid of July 2012 that is the highest net profit among three banks. Similarly the net profit of SCBNL and HBL will be 1402 million and 1274.4 million respectively in the mid July 2012.

#### 8. Test of Hypothesis.

From the test of significance regarding the parameter of the population, it has been found that

- There is significant difference between mean ratio of loan and advances to total deposit of NABIL and SCBNL and NABIL and HBL
- There is significant difference, between mean ratios of investment in government securities to current Assets of NABIL and SCBNL but there is no significant difference between mean ratios of investment in government securities to current Assets ratio of NABIL and HBL.

- There is significant difference between mean ratios of Return on loan and advances of NABIL and SCBNL and BABIL and HBL.
- There is no significant difference between mean ratios of total interest earned to total outside assets of NABIL and SCBNL but there is significant difference between mean ratios of total interest earned to total outside assets of NABIL and HBL.

## **CHAPTER V**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

The last chapter of this study is summary, conclusion and recommendations developed from the comparative analysis of various aspects of the investment of commercial banks by using some important financial as well as statistical tools. After completing the basic analysis required for the study the final and the most important task of the researcher is to be summarized the study and recommend for the further importance. This would be meaningful to the top management of the bank to initiate the action and achieve the desired result. The findings of the study are summarized and conclusion and some recommendation drawn as below;

#### **5.1 Summary and Conclusion**

Economic development of a country cannot be imagined without the development of commerce and industry. No doubt, banking promotes the development of commerce to its, extreme, as banking itself is the part of commerce.

In the study the word investment conceptualized the investment of income, savings or other collected fund. The term investment covers the wide range of activities. It is only possible where there is adequate savings. Investment policy is an important ingredient of overall national economic development because it ensures efficient allocation of fund to achieve the materials and economic well being of the society as a whole.

Commercial banks play an important role for economic development of a country as they provide capital for the development of industry trade and business by investing the saving collected as deposits from public joint venture banks are the commercial banks formed by joining the two or more enterprises for the purpose of

carrying out specific operation such as investment in trade, business and industry as well as in the form of negotiation between various groups of industries or traders to achieve mutual exchange of goods and services.

Commercial Banks formulate sound investment policies to make it more effective, which eventually contribute to the economic growth of a country.

Commercial banks should be careful while performing the credit creation function. Investment policy should ensure minimum risk and maximum profit from lending good investment policy ensures maximum of investment to all sector with proper utilization.

Banking in Nepal true sese terms started from the establishment of the first commercial banks, Nepal Bank Limited in 1994 B.S. government sector. The establishment of Nepal Rastra Bank, Central Bank of Nepal, is 2013 BS. was a significant dimension in the development of banking sector.

When the government adopted liberal and market oriented economic policy since mid -1980, Nepal allowed foreign banks on joint venture banks to operate in the country after getting the approval from Nepal Rastra Bank.

Now, there are 23 commercial bank in operation. Among them the research has taken in to consideration on three JVBS are as follows;

NABIL Bank Ltd:- NABIL Bank Limited was the first joint venture commercial bank established in 1984 by joint investment of Dubai Bank Ltd. and Nepali Promoters.



Standard Chartered Bank Nepal Ltd;- SCBNL was established I 1985 as a second foreign joint venture bank by joint investment of ANZ Grindlays Bank P/L, Nepal Bank Ltd. ad Nepali promoters.

Himalayan Bank Limited: HBL was incorporated in 1992 by the distinguished business personali8ties of Nepal in partnership with Employees. Provident fund and Habib Bank Limited , one of the largest commercial bank of Pakistan.

The study basically deals with the utilization of available fund, relationship of investment loan and advances with total deposit and total Net Profit, Investment decision and liquidity position of concerned banks i.e. NABIL, SCBNL and HBL.

The objective of the study is examine and evaluate the investment policy of NABIL and compare it with HBL and SCBNL.

The features of sound lending and investment policy are;

- ❖ Safty and security
- ❖ Profitability
- ❖ Liquidity
- ❖ Purpose of Loan
- ❖ Diversification
- ❖ Tangible
- ❖ Legality

Some important banking term for which effort have been made to clarify the meaning which are frequently used in this study are,

- ❖ Deposits
- ❖ Loan and Advances
- ❖ Investment on Government Securities, shares and debentures

- ❖ Other use of funds
- ❖ Off -Balance sheet Activities

On the second chapter the focus has been made on the review of literatures relevant to the investment policy of commercial banks for this the following areas have been reviewed.

In the study the financial tools ratio analysis viz, liquidity ratio, assets management ratio, profitability ratio, risk ratio growth ratios are used. The statistical tools like co-efficient of correlation, trend analysis and test of hypothesis have been used for the analysis and interpretation of the data. The data which were employed in this research are secondary in nature. They are obtained from annual reports of the concerned banks, likewise, the financial statement of five years (2002/03 to 2006/07) were selected for the purpose of evaluation.

Theoretical review, features of sound lending ad investment policy, review of books, Review of thesis, review of articles and review of legislative provision.

The liquidity position of NABIL is comparatively better than SCBNL and HBL. NABIL has maintained highest current assets ratio but it has lower mean ratio of cash and bank balance to total deposit and cash and bank balance to current assets ratio. NABIL has minimum deposit collection. It has made average investment on loan & advances and it has maintained low investment policy on government securities.

From the analysis of assets management ratio it ca be concluded that NABIL has successfully maintained ad managed its assets towards different income generating activities. The ratio of loan and advances to total deposit is higher but the mean ratio of total investment to total deposit is lower than SCBNL and HBL but

Investment on government securities to total working fund is in moderate position in compare to other two banks. The mean ratio of Investment on share and debenture to total working fund of NABIL is higher than SCBL and HBL. NABIL is more consistent and homogeneous than SCBNL and HBL.

In profitability ratio, the mean of return on total working fund and total interest earned to total working fund of NABIL IS higher than SCBNL and HBL. The mean ratio of total interest earned to total outside Assets return on loan and advances and total interest paid to total working fund of NABIL is in moderate position in comparison to SCBNL and HBL. So, the profit earning capacity of NABIL is high is comparison to other two banks.

From the view point of risk ratios, NABIL has higher capital Risk ratio but average credit risk ratio in compared to SCBNL and HBL.

The growth ratio NABIL is successful in increasing its sources and its mobilization.

There is high degree of significant relationship between deposit ad loan and advances, deposit and total investment and outside assets and net profit of NABIL is compare to SCBNL and HBL.

Total deposit, total investment and net profit of three sample banks are in increasing trend. Other things remaining the total deposit of NABIL will be on average position in compare to other two banks but total investment trend of NABIL is not better in comparison to SCBNL and HBL. The net profit of NABIL will be highest among three banks.

From the above analysis, it can be concluded that all three banks have significant difference between loan and advances, return on loan and advances. There is no significance difference between investment on government securities to current assets of NABIL and HBL and ratios of total interest earned to total outside assets of NABIL and SCBNL. But there is significant difference between investment on government securities to current assets of NABIL and SCBNL and significant difference between total interest earned to total outside assets of NABIL and HBL.

## **5.2 Recommendations**

- ❖ Current ratio of three sample banks are not sufficient to achieve standard ratio i.e. 2:1, so it is recommended to both banks to maintain required current ratio. They need to maintain the present mean current ratio for the proper management of their liquidity position.
- ❖ The liquidity position of a bank may be affected by external as well as internal factors. The affecting factors may be interest rates, supply as demand position of loan and advances as well as savings, investment situations, central banks directives, the lending policies, capability of management, strategic planning and funds flow situation. As NABIL has maintained lower cash and banker to total deposit and current assets ratio, NABIL is recommended to increase cash and bank balance to meet current obligations and loan demand.
- ❖ To get success is competitive banking environment, depositors money must be utilized as loan and advances. Negligence in administering this assets could be the main cause of liquidity crisis in the bank and one of the main reasons of a bank failure. It has been found from the study that NABIL has greater ratios at all, because its large portion of fund invested as loan and advances and negligence to invest on other sector. HBL and SCBNL have not properly used their existing fund as loan and advances to over comethis

- situation, NABIL and SCBNL are strongly recommended to follow liberal lending policy.
- ❖ As bank of private sector commercial banks cannot keep this eyes closed from the profit motive. They should be careful is increasing profit is a real sense to maintain the confidence of shareholders, depositors and its all customers. NABIL has high profit earning capacity, but HBL's profitability position is worse than that of other two banks. So, HBL is strongly recommended to utilize risk assets and shareholders fund to gain highest profit margin. Similarly, it should reduce its expenses and should try to collect cheaper fund being more profitable.
  - ❖ Out of working fund, NABIL has not invested its more funds as total investment in comparison to other two banks. Though, the percentage of invested by all three banks have very nominal. So, it is recommended to all three banks to invest their more funds in different types of companies indifferent areas.
  - ❖ Portfolio condition of all three banks should be examined carefully from time to time and attention should be made to maintain equilibrium in the portfolio condition as far as possible. So it ca be said, "all eggs should not be kept in the same basket". The bank should make continuous efforts to explore new competitive and high yielding investment opportunities to optimize their investment portfolio.
  - ❖ In terms of recovery of loan of NABIL is worse in comparison to SCBNL and HBL. The loan loss ratio is comparatively high that makes negative impact on profit. It may be facing a lot of problems on recovering loans. It has large no-performing asset as loan unrecovered. Therefore it is recommended to apply recovery act that would help to realize overdue loan in time.
  - ❖ Most of the joint venture banks have focused their banking services especially to big clients such as multinational companies, large-scale

- industries, manufactures and exporters of garments and carpets. The minimum level bank balance and the amount needed to open an account in there banks are very high amount. So, small depositors are very far from enjoying the banking facilities provided by such joint venture banks. So, all three banks should open its doors to the small depositors and entrepreneurs for promoting and mobilizing small investors' funds and to attract depositors through variety of deposit schemes and facilities like cumulative deposit scheme, prize bonds scheme, gift cheques scheme, recurring deposit scheme (life insurance), monthly interest scheme etc.
- ❖ The project oriented approach has to be encouraged in lending business of the banks, in which, security is not necessary, risk is high but the project is important from the point of view of national economy. The project should be allowed to make them capable to generate their own funds and to repay loans timely. So, it is recommended to all three banks should followed project oriented approach for the their efficient performances. Because the chance of loan loss can be minimize by the project - oriented approach.
  - ❖ One of the main objectives to operate joint venture banks of Nepal is to boost foreign investments in to the kingdom. However, these three banks don't seem to be successful in this aspect. Therefore, all three banks is recommended to activate for increasing foreign investment in Nepal by means of their wide international banking networks.
  - ❖ Thought joint venture banks have played important role in the economic development of the country, they are not efficiently playing the role of a merchant bank. So, the three banks is suggested to play the role of financial intermediary and merchant banking like underwriting of securities brokers, development of capital markets and supportive role to the security exchange center.
  - ❖ In the light of growing competition in the banking sector, the business of the bank should be customer oriented. It should strengthen and activate its

marketing function, as it is an effective tool of attracting and retaining customers. For this purpose, the banks should develop an "Innovative approach to Bank Marketing" and formulate new strategies of serving customers in a more convenient and satisfactory way.

- ❖ Although NABIL has recently expanded its Nine branches all over the country but NABIL do not have branches in the rural areas of the country. Its branches are limited to the urban areas only. Therefore, NABIL Bank is recommended to open branches in rural areas too to help in economic development of the country. HMG/N has also encouraged the joint venture banks to expand banking service in rural areas and communities without making unfavorable impact in their profit.

NABIL Bank is taken as the one of the most leading joint venture bank in Nepal. It is the one of the most successful bank in Nepal with widest network than any other joint venture banks in Nepal. Today is the world of competition; the competition is growing day by day in the banking sector. It must mobilize its deposits and other funds to profitable, secured and marketable sector so that it can earn a handsome profit as well as it should be secured and can be converted onto cash whenever needed.

An income and profit of the bank depends upon its lending procedure, lending policy and investment of its fund in different securities. The greater the credit created by the bank the higher will be the profitability. NABIL Bank limited has achieved a remarkable success in banking sector in terms of market share and profitability compared to joint venture banks because of its reliable and professional services. NABIL Bank is the innovator in introducing many new products such as credit cards, Tele Banking, Any branch Banking, ATM, E-banking, 24 Hours Banking correspondent Network. Due to their prompt and quality services NABIL Bank has achieved its remarkable success in banking

sector and has proved its high status in the eye of public. NABIL Bank has been improving its performance from very beginning since its establishment.

The bank is recognized as a premier financial institution in Nepal in terms of its range and quality banking services, human capital, asset quality and income. After two decades of operation the bank has clearly exhibited that through consistently keeping its philosophy and its customers at the core of its business it stands today as the premier bank in the kingdom, poised to be the Bank of 1st choice to all its stakeholders, going forward. NABIL Bank today is full service bank in every sense, able to meet the entire large range of financial requirements of its customers. To achieve its mission, NABIL Bank has set its values of Customer Focused, Result Oriented, Innovative, Synergistic and Professional (CRISP).



## BIBLIOGRAPHY

### Books

- Baidhaya, Shakespear (1997). *Banking Management*. Nepal: Monitor Nepal.
- Bajracharya, Bodhi B. (2047). *Monetary Policy of Deposit Mobilization in Nepal*, Kathmandu: **Smarika**, Rastriya Banijya Bank.
- Bhalla, V.K. (1983). *Investment Mangement*. New Delhi: S. chand and Com .Ltd.
- Charles, P. Jones, John Wiley & Sons (1998). *Investment Analysis and Management*. USA Print.
- Crossee (1963). *Management Policies of Commercial Banks*, Englewood Cliffs: Prentice Hall Inc.
- Frank and Reilly (1986). *Investment*. Japan: The Dryden Press, CBS Publishing Ltd.
- Gitman L.T. & Jochnk (1990). *Fundamentals of Investing*. New York: Harper & Row Publishers.
- Pandey I.M. (1993). *Financial Management*. New Delhi: Vikash Publishing House Pvt. Ltd.
- Pradhan Radhe S. (1994). *Financial Management Practices in Nepal*. New Delhi: Vikash Publishing House.

Sharpe, William F., Alexander Gordon J. and Bailey Jeffery V. (2000),  
*Investment*. New Delhi: Prentice Hal of India Pvt. Ltd.

Shrestha Sunity (1994). *Investment Planning of Commercial Banks in Nepal*.  
Ph.D. Thesis.

Shrestha Shiba Raj (2055), *Portfolio Mangement in Commercial Bank Theory and  
Practice*. Kathmandu: Nepal Bank Patrika.

Shrestha, Ramesh Lal (2045). *A Study in Deposit and Credit of Commercial Banks  
on Nepal*, Nepal: Nepal Rastriya Bank Samachar.

Shrestha, Sunity (1995), *Portfolio Behavior of Commercial Banks in Nepal*:  
Kathmandu:

Singh, S.P. (1983). *Financial Analysis for Credit Management in Banks*. New  
Delhi: Vikash Publishing House Pvt. Ltd.

**Unpublished Masters Degree and Ph. D Thesis.**

Joshi Jyoti(2005). *A Study on Investment Policy of Commerial Banks in Nepal. A  
Comparative Study of Everest bank Limited With Nabil Bank Ltd. and Bank  
of Kathmandu Ltd.* An Unpublished Master Degree Thesis, Shanker Dev  
Campus. T.U.

Khadka, Raju Ram (1997). *A Study on the Investment Policy of Nepal Arab Bank  
Ltd. (NABIL) in Comparision to other Joint Venture Banks of Nepal.* An  
Unpublished Master Degree Thesis, Central Department of Management,  
T.U.

- Khanal, P. (1987). *Investment in Priority Sector by Commercial Banks*. An Unpublished Master Degree Thesis, Shanker Dev Campus.
- Laudatri, Shiva Raj (2001). *A Study on Investment Policy of Nepal Indosuez Bank Ltd. in Comparison to Nepal SBI Bank Ltd.* An Unpublished Master Degree Thesis, Shamker Dev Campus, T.U.
- Ojha, Lila Prasad (2002). *A Study of Lending Practices of Nabil Bank Ltd, Standard Chartered Bank Ltd, and Himalayan Bank Ltd.* An Unpublished Master Degree Thesis, Shanker Dev Campus, T.U.
- Raya, T.K. (2003). *Investment Policy and Analysis of Commercial Banks in Nepal.* An Unpublished Master Degree Thesis, Shanker Dev Campus, T.U.
- Shahi, Prem Bahadur(1999), *Investment Policy of Commercial Banks in Nepal: A comparative Study of Nepal Bank Ltd. and Joint Venture Banks.* An Unpublished Master Degree Thesis, Central Department of Management, T.U.
- Shrestha, Deependra (2000). *A Comparative Study on Investment Practices of Joint Venture Commercial Banks :With Special Reference to NABIL, SCBNL, NSBI.* An Unpublished Masters Degree Thesis, Shanker Dev Campus, T.U.

### **Booklets, Periodicals and Journals**

Annual Report 2002/03 NABIL, SCBNL and HBL.

Annual Report 2003/04 NABIL, SCBNL and HBL.

Annual Report 2004/05 NABIL, SCBNL and HBL.

Annual Report 2005/06 NABIL, SCBNL and HBL.

Annual Report 2006/07 NABIL, SCBNL and HBL.

Jha, Resta ( 2007). Bank and Risk Management, The Boss , Vol.5.Issue.7:92-93

## Annexure-A1

Current Ratio Times (Rs. in 000 )

### NABIL

Fiscal year	2002/03	2003/04	2004/05	2005/06	2006/07
Current Assets	13868307	14244337	14971801	18133814	22829535
Current liabilities	15248441	15263802	15528692	20454682	25196342
Ratio	0.90949	.933201	0.964138	.892254	.906066

### SCBL

Fiscal year	2002/03	2003/04	2004/05	2005/06	2006/07
Current Assets	170844108	20093715	19322679	21472350	22025802
Current Liabilities	19542063	22146321	20311163	24022194	26480336
Ratios	.874238	.907316	.951333	.893855	.831779

### HBL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Cash and bank balance	1979209	2001184	2014471	1717352	1757341
Total deposit	21007379	22010333	54814012	26490852	30048418
Ratio	9.42	9.092	8.12	6.84	5.85

## ANNEXURE - A2

### Cash and Bank balance to Total Deposit Ratio (%)

#### NABIL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Cash and bank balance	1144767	970486	559380	556176	1383821
Total deposit	13447661	14119032	14586608	19347399	2334285
Ratio	8.51	6.87	3.83	2.87	5.93

#### SCBL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Cash and bank balance	1512304	2023164	1111117	1276241	2021021
Total deposit	18755635	21161442	19335095	23061032	24647021
Ratio	8.06	9.56	5.75	5.53	8.21

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Current Assets	16297029	18602009	21326260	23153115	27775533
Current Liabilities	2229209	23437859	25516411	27334214	27404792
Ratios	.731067	.793674	.835786	.847038	1.013528

#### HBL

### **ANNEXURE – A3**

Cash and Bank Balance to current Assets Ratio (%)

#### **NABIL**

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Cash and bank balance	1144767	970486	559380	556176	1383821
Current Assets	13868307	14244337	14971801	18133814	22829535
Ratio	8.25	6.81	3.74	3.07	6.06

#### **SCBL**

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Cash and bank balance	1512304	2023164	1111117	1276241	2021021
Current Assets	17084409	20093715	19322679	21472350	22025802
Ratio	8.85	10.07	5.529	5.94	9.18

#### **HBL**

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Cash and bank balance	1979209	2001184	2014471	1717352	
Current Assets	16297019	18602009	21326260	23153115	2777553
Ratio	12.14	10.76	9.45	7.42	6.33

### **ANNEXURE – A4**

Investment on Government Securities to Current Assets Ratio (0%)

#### **NABIL**

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Investment got. Securities	3588772	3672626	2413939	2301462	4808348
Current Assets	13868307	14244337	14971801	18133814	22829535
Ratio	25.87	25,78	16.12	12.69	21,06

**SCBL**

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Investment got. Securities	6581348	7948217	7203066	8635875	7107937
Current Assets	1708440	20093715	19322679	21472350	22025802
Ratio	38.52	39.56	37.28	40.22	32.27

**HBL**

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Investment got. Securities	3347102	3431728	5469729	5144312	6454873
Current Assets	16297019	18602009	21326260	23153115	2777533
Ratio	20.54	18.45	25.65	22.22	23.24

**ANNEXURE – A5**

Loan and Advances to Current Assets Ratio (Rs. in 000) (%)

**NABIL**

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Loan and Advances	7755951	818992	10586170	12922543	15545778
Current Assets	13868307	14244337	14971801	18133814	22829535
Ratio	55.93	57.50	70.71	71.26	68.11

**SCBL**

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Loan and Advances	5695823	6410242	8143208	8935418	10502637
Current Assets	17084409	20093715	1932679	21472350	22025802
Ratio	33.34	31.90	42.14	41.61	47.68

**HBL**

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Loan and Advances	10844599	12919631	13451168	15761977	16997997
Current Assets	16297019	18602009	21326260	23153115	27775533
Ratio	66.54	69.45	63.07	68.08	61.20

## ANNEXURE – A6

Loan and Advances to Total Deposit Ratio (%)

### NABIL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Loan and Advances	7755952	8189993	10586170	12922543	15545779
Total Deposit	13447661	14119032	14586608	19347399	23342285
Ratio	57.67	58.00	72.57	66.76	66.61

### SCBL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Loan and Advances	5695823	6410242	8143208	8935418	10502637
Current Assets	18755635	21161442	19335095	23061032	24647021
Ratio	30.36	30.30	42.12	38.75	42.61

### HBL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Loan and Advances	10844599	12919631	13451168	15761977	16997797
Current Assets	21007379	22010333	24814012	26490852	30048418
Ratio	51.62	58.70	54.21	59.50	56.57

## ANNEXURE – A7

Total Investment to Total Deposit Ratio (0%)

### NABIL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Total Investment	6031175	5835948	4269657	6178533	8945310
Total Deposit	13447661	14119032	14586608	19347399	23342285
Ratio	44.85	41.33	29.27	31.93	38.32

### SCBL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Total Investment	10216199	11360328	9702553	12847536	13553233
Total Deposit	18755635	21161442	19335095	23061032	24647021
Ratio	54.47	53.68	50.18	55.71	55.10



**HBL**

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Total Investment	10175435	9292103	11692342	10889031	11822985
Total Deposit	21007379	22010333	24814012	26496852	30048418
Ratio	48.44	42.22	47.20	41.10	39.35

**ANNEXURE – A8**

Loan and Advances to Total Working Fund Ratio (Rs. in 000)

**NABIL**

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Loan and Advances	7755952	8189993	10586170	12922543	15545779
Total Working Fund	16562624	16745486	17186331	22329971	27253393
Ratio	46.82	48.91	61.60	57.87	57.04

**SCBL**

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Loan and Advances	5695823	6410242	8143208	8935418	10502637
Total Working Fund	20910970	23642060	21893578	25776332	28596689
Ratio	27.24	21.11	37.19	34.67	36.73

**HBL**

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Loan and Advances	10844599	12919631	13451168	15761977	16997997
Total Working Fund	24197974	25729787	28871343	30579808	34315868
Ratio	44.82	50.21	46.60	51.54	49.53

## ANNEXUR – A9

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

### NABIL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Investment govt. Securities	3588772	3672626	2413939	2301462	4808348
Total Working Fund	16562624	16745486	17186331	22329971	27253393
Ratio	21.67	21.93	14.04	10.31	17.64

### SCBL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Investment govt. Securities	6581348	7948218	7203066	8644855	7107937
Total Working Fund	20910970	23642060	21893578	25776332	28596689
Ratio	31.47	33.62	32.90	33.54	24.85

### HBL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Investment govt. Securities	3347102	3431729	5469729	5144313	6454873
Total Working Fund	24197974	25729787	28871343	30579808	34315868
Ratio	13.82	13.34	18.94	16.82	18.81

## ANNEXURE – A10

Investment on Share and Debenture to Total Working Fund Ratio (%)

### NABIL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Investment Share and Debenture	22220	22220	440282	104192	286957
Total Working Fund	16562624	16745486	17186331	22329971	27253393
Ratio	0.13	0.13	2.56	0.47	1.053

**SCBL**

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Investment Share and Debenture	11195	11195	13348	15348	44943
Total Working Fund	20910970	23642060	21893578	25776332	28596689
Ratio	0.05	0.05	0.06	0.06	0.06

**HBL**

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Investment Share and Debenture	34266	34266	39909	39909	73424
Total Working Fund	24197974	25729787	28871343	30579808	34315868
Ratio	0.14	0.13	0.14	0.13	0.21

**ANNEXURE – A11**

Return Total Working Fund Ratio (%)

**NABIL**

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Net Profit	416236	455311	518336	635263	673959
Total Working Fund	16562624	16745486	17186331	22329971	27253393
Ratio	2051	2.72	3.01	2.84	2.47

**SCBL**

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Net Profit	506932	537800	539204	658756	691668
Total Working Fund	20910970	23642060	21893578	25776332	28596689
Ratio	2.424	2.27	2.46	2.55	2.42

**HBL**

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Net Profit	212132	263052	308277	457458	491823
Total Working Fund	24197974	25729787	28871343	30579808	34315868
Ratio	0.88	1.02	1.06	1.50	1.43

## ANNEXURE – A12

Total Interest Earned to Total Outside Assets Ratio (Rs. in 000) (%)

### NABIL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Total Interest Earned	1017872	1001616	1068746	1309998	1587749
Total Outside Assets	13787127	14025942	14853403	19101076	24491089
Ratio	7.38	7.14	7.20	6.86	6.50

### SCBL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Total Interest Earned	1001359	1042175	1058677	1189603	1411942
Total Outside Assets	6722023	17770570	17845761	21782954	24055870
Ratio	14.90	5.86	5.93	5.46	5.87

### HBL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Total Interest Earned	1201233	1245895	1446468	1626474	1775583
Total Outside Assets	21020034	22211734	25143510	26651008	29616709
Ratio	5.71	5.61	5.75	6.10	6.10

## ANNEXURE – A13

Return on Loan and Advances (5%)

### NABIL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Net Profit	416236	455311	518336	635263	673959
Loan and Advances	7755951	8189992	10586170	12922543	15545778
Ratio	5.37	5.56	4.90	4.92	4.33

### SCBL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Net Profit	506932	537800	539204	658756	691668
Loan and Advances	5695823	6410242	8143208	8935418	10502637
Ratio	8.9	8.41	6.62	7.37	6.6

**HBL**

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Net Profit	212132	263052	308277	457458	491823
Loan and Advances	10844599	12919331	13451168	15761977	16997997
Ratio	1.96	2.03	2.30	2.90	2.89

**ANNEXURE – A14**

Total Interest Earned to Total working fund Ratio (%)

**NABIL**

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Total Interest Earned	1017872	1001616	1068746	1309998	1587749
Total Working Fund	16562624	16745486	17186331	22329971	2723393
Ratio	6.15	5.98	6.22	5.87	5.83

**SCBL**

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Total Interest Earned	1001359	1042175	1058677	1189603	1411982
Total Working Fund	20910970	23642060	21893578	25776332	28596689
Ratio	4.81	4.41	4.83	4.61	4.94

**HBL**

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Total Interest Earned	1201233	1245895	1446468	1626474	1775583
Total Working Fund	24197974	25729787	28871343	30579808	34315868
Ratio	4.96	4.84	5.01	5.32	5.17

## ANNEXURE – A15

Total Interest Paid to Total Working Fund Ratio (%)

### NABIL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Total Interest Paid	317348	282948	243545	347161	555710
Total Working Fund	16562624	16745486	17186331	22329971	27253393
Ratio	1.91	1.10	1.42	1.55	2.04

### SCBL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Total Interest Paid	255154	275809	254127	303198	413055
Total Working Fund	20910970	23642060	21893578	25776332	28596689
Ratio	1.22	1.2	1.16	1.20	1.44

### HBL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Total Interest Paid	554128	491543	561964	648842	167411
Total Working Fund	24197974	25729787	28871343	30579808	34315868
Ratio	2.31	1.91	1.95	2.12	2.24

## ANNEXURE – A16

Return on Equity Ratio (RoE) (%)

### NABIL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Net Profit	416236	455311	518336	635263	273959
Equity Capital	1165221	1479880	1656875	1873203	2055115
Ratio	35.72	30.77	31.30	33.91	32.79

### SCBL

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Net Profit	506932	537800	539204	658756	691668
Equity Capital	13689	1495739	1582415	1754139	2116353
Ratio	37.03	35.96	33.89	37.55	32.68

**HBL**

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Net Profit	212132	263052	308277	457458	491823
Equity Capital	1905883	2291928	2568395	2885593	2146538
Ratio	11.13	11.47	12	15.85	22.91

**ANNECURE – A17**

Credit Risk Ratio (%)

**NABIL**

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Loan and Advances	7755951	8189992	10586170	12922543	15545778
Total Assets	16562624	16745486	17186331	22329971	27253393
Ratio	46.82	48.91	61.61	57.87	57.04

**SCBL**

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Loan and Advances	5695823	6410242	8143208	8935418	10502637
Total Assets	20910970	23642060	21893578	25776332	28596689
Ratio	27.24	27.11	37.2	34.70	36.73

**HBL**

Fiscal Year	2002/03	2003/04	2004/05	2005/06	2006/07
Loan and Advances	10844599	12919631	13451168	15761977	16997997
Total Assets	24197974	25729787	28871343	30579808	34315868
Ratio	44.82	50.21	46.59	51.54	49.53

## ANNEXURE - B 1

Sample Calculation of Growth Rate of Total Deposit of NABIL, SCBL and HBL

Growth rate is calculated from.

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

$D_n$  = Total deposit of  $n^{\text{th}}$  year.

$D_o$  = Total deposit of initial year.

$G$  = Growth rate.

$N$  = Number of year.

Here,

$$D_{2006/07} = 23342$$

$$D_{2002/03} = 13448$$

$$N = 5$$

$$D_{2006/07} = D_{2002/03}1 + g)^{n-1}$$

$$\text{Or, } 23342 = 13448(1+g)^{5-1}$$

$$\text{Or, } 1.735 = (1+g)^4$$

$$\text{Or, } 1+g = (1.735)^{\frac{1}{4}}$$

$$g = 1.14769-1$$

$$\therefore g = .1477 \text{ or } 14.77\%$$

Growth rate of other banks are calculated and fed in the corresponding tables according to the above formula.

## ANNEXURE - C 1

Calculation of correlation between deposit & loan and advances. (Rs. in Million)

### NABIL

Fiscal Year	Loan & Advances (x)	Deposit (y)	$dx = (x - \bar{x})$	$dx^2$	$d4 = (y - \bar{y})$	$dy^2$	$dx dy$
2002/03	7756	13448	-2830	8008900	-1139	1297321	3223370
2003/04	8190	14119	-2396	5740816	-468	219024	1121328
2004/05	10586	14587	0	0	0	0	0
2005/06	12922	19347	2336	5456896	4760	22657600	11119360
2006/07	15546	23342	4960	24601600	8755	76650025	43424800
			$\text{Edx} = 2070$	$\text{Edx}^2 = 43808212$	$\text{Edy} = 11908$	$\text{Edy}^2 = 100823970$	$\text{Edxdy} = 58888858$



$$\begin{aligned}
R_{xy} &= \frac{NEdxdy - Edx.Edy}{\sqrt{NEdx^2 - (Edx)^2} \sqrt{NEdy^2 - (Edy)^2}} \\
&= \frac{5 \times 58888858 - 270 \times 11928}{\sqrt{(5 \times 43808212 - (2070)^2)} \sqrt{5 \times 100823970 - (11928)^2}} \\
&= \frac{294444290 - 24649560}{\sqrt{(219041060 - 4284900)(504119850 - 3640464)}} \\
&= \frac{269794730}{\sqrt{214756160 \times 500479386}} \\
&= \frac{269794731}{327842997.6} = 0.823 \\
&= \therefore r = 0.823
\end{aligned}$$

Calculation of probable error:

$$\begin{aligned}
P.E_r &= 0.6745 \frac{1-r^2}{\sqrt{N}} \\
&= 0.6745 \frac{1-0.823^2}{\sqrt{5}} \\
&= 0.0985
\end{aligned}$$

$$6 PE_r = 6 \times 0.0985$$

$$= 0.5912$$

$r > 6PE$  Therefore

Co-relation is significant

## ANNEXURE - C 2

Calculation of correlation between Investment and Deposits

### SCBL

Fiscal Year	Deposit x	Investment	dx	dx <sup>2</sup>	dy = (y- $\bar{y}$ )	dy <sup>2</sup>	dx dy
2002/03	18756	10216	-579	335241	513	263169	-297027
2003/04	21161	11360	1826	3334276	1657	2745649	3025682
2004/05	19335	9703	0	0	0	0	0
2005/06	23061	12846	3726	13883076	3143	9878449	11710818
2006/07	24647	13553	5312	28217344	3850	14822500	20451200
			Edx = 10285	Edx <sup>2</sup> = 45769937	Edy = 9163	Edy <sup>2</sup> = 27709767	Edx dy = 34890673

$$\begin{aligned}
 R_{xy} &= \frac{NEdx \times dy - Edx \times Eddy}{\sqrt{N(Edx^2 - (Edx)^2)} \sqrt{NEdy^2 - (Eddy)^2}} \\
 &= \frac{5 \times 34890673 - 10285 \times 9163}{\sqrt{(5 \times 45769937) - (10285)^2} \sqrt{5 \times 27709767 - (9163)^2}} \\
 &= \frac{174453365 - 94241455}{\sqrt{(228849685 - 105781225)(138548835 - 83960569)}} \\
 &= \frac{80211910}{\sqrt{123068460 \times 54588266}} \\
 &= \frac{80211910}{81963978.86} \\
 &= 0.9786239
 \end{aligned}$$

Calculation of probable Error (PE)

$$\begin{aligned} \text{Probable Error(PE)} &= 0.6745 \times \frac{1-r^2}{\sqrt{N}} \\ &= 0.6745 \times \frac{1-0.978624}{\sqrt{5}} \\ &= 0.012758 \end{aligned}$$

$$6 PE_r = 6 \times 0.012758 = 0.076548$$

$r > 6PE$  therefore correlation is significant

### ANNEXURE - C 3

Calculation of correlation between outside Assets and Net Profit (Rs. in Million)

#### HBL

Fiscal Year	Outside Assets x	Netprofit y	dx	dx <sup>2</sup>	dy	dy <sup>2</sup>	dx dy
2002/03	21020	212	- 4123	16999129	- 96	9216	395808
2003/04	22212	263	- 2931	8590761	- 45	2025	131895
2004/05	25143	308	0	0	0	0	0
2005/06	26651	457	1508	2274064	149	22201	224692
2006/07	29617	492	4474	20016676	184	33856	823216
			Edx = - 1072	Edx <sup>2</sup> = 47880630	Edy = 192	Edy <sup>2</sup> = 67298	Edx dy = 1575611

$$\begin{aligned}
R_{xy} &= \frac{NEd \times dy - Ed \times E_d y}{\sqrt{NEd^2 - (Edx)^2} \sqrt{Nedy^2 - (Edy)^2}} \\
&= \frac{5 \times 1575611 - (-1072)(192)}{\sqrt{5 \times 47880630 - (-1072)^2} \sqrt{5 \times 67298 - (192)^2}} \\
&= \frac{7878055 + 205824}{\sqrt{239403150 - 1149784} \sqrt{336490 - 36864}} \\
&= \frac{8083879}{238253966 \times 299626} \\
&= \frac{8083879}{8449087.391} = 0.957
\end{aligned}$$

$$\begin{aligned}
\text{Probable Error (E)} &= 0.6745 \times \frac{1-r^2}{\sqrt{N}} \\
&= 0.6745 \times \frac{1-0.957^2}{\sqrt{S}} \\
&= 0.6745 \times \frac{1-0.915849}{2.23606} \\
&= 0.6745 \times 0.03763 \\
&= 0.02538
\end{aligned}$$

$$6 \text{ PE} \times 6 \times 0.02538 = 0.1522$$

$r = 6\text{PE} \setminus$  Correlation is significant.

## ANNEXURE - D 1

Calculation of deposit trend for next 5 years. (Rs. in Million)

### SCBL

Fiscal Year	Deposit (y)	x (x- $\bar{x}$ )	y (y- $\bar{y}$ )	xy	x <sup>2</sup>
2002/03	18756	- 2	- 579	1158	4
2003/04	21161	- 1	1926	1826	1
2004/05	19335	0	0	0	0
2005/06	23061	1	3726	3726	1
2006/07	24647	2	2312	10624	4
		Ex = 0	Ey = 10285	Exy = 13682	Ex <sup>2</sup> = 10

We have,

$$y = a+bx \quad \text{-(i)}$$

$$Ey = Na+bEx \quad \text{-(ii)}$$

$$Exy = aEx+bEx^2 \quad \text{-(iii)}$$

From eg. (ii) we get

$$Ey = Na+bEx$$

$$10285=5a+b \times 0$$

$$a = 10285/5$$

$$\therefore a = .2057$$

From,

eg.(iii)we get

$$Exy = aEx+bex^2$$

$$13682=2057 \times 0+b \times 10$$

$$b = 13682/10$$

$$\therefore b=1368.2$$

from eg (i) we get

$$y =a+bx$$

$$(y-\bar{y})=a+b(x-\bar{x})$$

$$y-\bar{y}=a+b(x-\bar{x})$$

Now,

$$y_{2007/08} = 19335 + 2057 + 1368.2(2007/08 - 2004/05)$$

$$= 21392 + 1368.2 \times 3$$

$$= 25496.6$$

$$y_{2008/09} = 21392 + 1368.2(2008/09 - 2004/05)$$

$$= 26864.8$$

$$y_{2009/10} = 21392 + 1368.2(2009/10 - 2004/05)$$

$$= 28233$$

$$y_{2010/11} = 21392 + 1368.2(2010/11 - 2004/05)$$

$$= 29601.2$$

$$y_{2011/12} = 21392 + 1368.2(2011/12 - 2004/05)$$

$$= 30969.4$$

## ANNEXURE - D 2

Calculation of Investment Trend for next 5 years.

### NABIL

Fiscal Year x	Investment (y)	x (x- $\bar{x}$ )	y (y- $\bar{y}$ )	xy	x <sup>2</sup>
2002/03	6031	- 2	1761	- 3522	4
2003/04	5836	- 1	1566	- 1566	1
2004/05	4270	0	0	0	0
2005/06	6179	1	1909	1939	1
2006/07	8945	2	4675	9350	4
		Ex = 0	Ey = 991	E <sub>xy</sub> = 6171	E <sub>x<sup>2</sup></sub> = 10

We have,

$$y=a+bx.....(i)$$

$$Ey=Na+bEx.....(ii)$$

$$Exy=aEx+bEx^2.....(iii)$$

From eg (ii) we get

$$Ey=Na+bEx$$

$$9911=5a+b \times 0$$

$$a = 9911/5$$

$$\therefore a = 1982.2$$

From eg (iii) we get

$$Exy = aEx+bEx^2$$

$$6171=1982.2 \times 0+b \times 10$$

$$\therefore b = 6171/10$$

$$= 617.1$$

From eg we get

$$y = a+bx$$

$$(y-\bar{y}) = a+b(x-\bar{x})$$

$$y = \bar{y}+a+b(x-\bar{x})$$

Now,

$$y_{2007/08} = 4270 + 1982.2 + 617.1 \text{ (2007/08-2004/05)}$$

$$= 6252.2 + 1851.3$$

$$= 8103.5$$

$$y_{2008/09} = 6252.2 + 617.1 \text{ (2008/09-2004/05)}$$

$$y_{2009/10} = 6252.2 + 617.1 \text{ (2009/10-2004/05)}$$

$$= 9337.7$$

$$y_{2010/11} = 6252.2 + 617.1 \text{ (2010/11-2004/05)}$$

$$= 9954.8$$

$$y_{2011/12} = 6252.2 + 617.1 \text{ (2011/12-2004/05)}$$

$$= 10571.9$$

### ANNEXURE - D 3

Calculation of net profit trend for next 5 years.

Fiscal Year x	Net profit y	x (x- $\bar{x}$ )	y (y- $\bar{y}$ )	xy	x <sup>2</sup>
2002/03	212	- 2	- 96	192	4
2003/04	263	- 1	- 45	45	1
2004/05	308	1	0	0	0
2005/06	457	0	149	149	1
2006/07	492	2	184	368	4
		Ex = 0	Ey = 192	Exy = 754	Ex <sup>2</sup> = 10

We have,



$$y = a+bx.....(i)$$

$$Ey = Na+bEx.....(ii)$$

$$Exy=aEx+bEx^2....(iii)$$

From eg we get

$$\begin{aligned} Ey &= Na+bEx \\ 192 &= 5\times a+b\times 0 \\ a &= 192/5 \\ \therefore a &= 38.4 \end{aligned}$$

From eg (iii) we get

$$\begin{aligned} Exy &= aEx+bEx^2 \\ 754 &= 38.4\times 0+b\times 10 \\ \therefore b &= 754/10 \\ \therefore b &= 75.4 \end{aligned}$$

From eg (i) we get

$$\begin{aligned} y &= a+bx \\ (y-\bar{y}) &= a+b(x-\bar{x}) \\ y &= \bar{y}+a+b(x-\bar{x}) \end{aligned}$$

Now,

$$y_{2007/08} = 308 + 38.4 + 75.4 \text{ (2007/08-2004/05)}$$

$$= 346.4 + 226.2$$

$$= 572.6$$

$$y_{2008/09} = 308 + 38.4 + 75.4 \text{ (2008/09-2004/05)}$$

$$= 648$$

$$y_{2009/10} = 308 + 38.4 + 75.4 \text{ (2009/10-2004/05)}$$

$$= 723.4$$

$$y_{2010/11} = 308 + 38.4 + 75.4 \text{ (2010/11-2004/05)}$$

$$= 798.8$$

$$y_{2011/12} = 308 + 38.4 + 75.4 \text{ (2011/12-2004/05)}$$

$$= 874.2$$