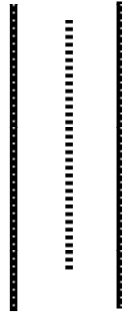
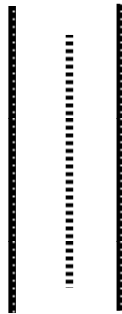


A Study  
on  
**INVESTMENT POLICY OF JOINT VENTURE  
COMMERCIAL BANKS**  
(With Special Reference to Himalayan Bank Ltd. and NEPAL  
SBI Bank Ltd)



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A Thesis Submitted to:

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In Partial Fulfillment of the Requirements of the Master Degree  
of Business Studies (MBS)

Kathmandu  
March 2011

## **RECOMMENDATION**

This is to certify that the thesis:

Submitted by

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### **INVESTMENT POLICY OF JOINT VENTURE COMMERCIAL BANKS**

(With Special Reference to Himalayan Bank Ltd. and NEPAL SBI Bank Ltd)

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(With Special Reference to Himalayan Bank Ltd. and NEPAL SBI Bank Ltd)

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**DECLARATION**

I hereby declare that the work reported in this thesis entitled "**INVESTMENT POLICY OF JOINT VENTURE COMMERCIAL BANKS** (With Special Reference to Himalayan Bank and NEPAL SBI Bank Ltd) " submitted to Shankar Dev Campus, Faculty of Management, Tribhuvan University, is my own created work reported in the form of partial fulfillment of the requirement of Master's Degree in Business Studies (MBS) course under the guidance and supervisor of Prof. Sneha Lata Kafle of Shankar Dev Campus.

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This study is mainly based on secondary data which were collected from Himalayan Bank Limited, Nepal SBI Bank Limited, Nepal Rastra Bank and other related institutions and information sources.

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.....

**ARJUN BHATTARAI**

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## ABBREVIATION

A. D.	Anno Domini / After Death
ATM	Automatic Teller Machine
BAFIA	Banking and Financial Institutions Act
B. S.	Bikram Sanbat
CRR	Cash Reserve Ratio
CV	Coefficient of Correlation
EBL	Everest Bank Limited
F/Y	Fiscal Year
GDP	Gross Domestic Product
Govt	Government
HBL	Himalayan Bank Limited
INGO	International Non Government Organization
JVBs	Joint Venture Banks
NBA	Non-Banking Assets
NBIL	Nepal Arab Bank Limited
NEFINSCO	Nepal Finance and Saving Company
NEPSE	Nepal Stock Exchange
NGO	Non Government Organization
NIBL	Nepal Investment Bank Limited
NPA	Non-Performing Assets
NPL	Non-Performing Loans
NRB	Nepal Rastra Bank
NSBI	Nepal SBI Bank Limited
P. Er.	Probable Error
ROE	Return on Equity
SCD	Shanker Dev Campus
S. D.	Standard Deviation
SCBL	Standard Chartered Bank Limited
TU	Tribhuvan University
WTO	World Trade Organization
WWW	World Wide Web

# Chapter I

## Introduction

### 1.1 Background of the Study

The development of any country depends upon economic development of the country and economic development is supported by financial infrastructure of the country. Banks play vital role in the economic growth of the country. Every well-organized financial institution including finance companies, commercial banks, joint venture banks and other financial institutions, plays significant, role for the development of the country. They collect scattered financial resources from the mass and invest them among those who are associated with the economic, commercial and social activities of the country. This provides fuel to development process. Integrated and speedy development of the country is possible only when competitive financial service reaches everywhere in the country. It has been well established fact that the economic activities of any country can hardly be carried forward without the assistance and support of financial institution.

Banks constitute an important segment of financial infrastructure of any country. Banking when properly organized, aids and facilitates the growth of trade and industry and enhance national economy. In the modern economy banks are considered as leaders of development. Besides contribution in overall development of the country, the commercial banks render numerous services to their customer in view of facilitating their economic and social life.

Investment is an important ingredient of overall national economic development because it ensures efficient allocation of fund to achieve the material and economic well being of the society. Investment policy is an important factor of the investment practice. Investment refers to sacrifice of current money for future money, generally two attributes are involved in it, they are time and risk.

In this study, the word investment conceptualized the investment of income, savings or other collected fund. The term investment covers a wide range of activities. It is widely known fact that an investment is only possible where there is adequate savings. If all the incomes and savings are used to fulfill the minimum needs, then there is no existence of investment. Thus, both saving and investment are interrelated.

Investment policy is the most important factor of the investment practice. The joint venture commercial banks formulate sound investment policies to make it more effective, which eventually contributes to the economic growth of the country. The sound investment policy helps the banks to maximize the quality and quantity of investment and helps to achieve the loan objective of profit maximization and social welfare. Formulation of sound investment policies and coordinated and planned efforts push forward to the forces of economic growth.

The commercial banks should be careful while performing the credit creation function. Investment policy should be formulated in such a way that maximizes the profit and minimizes the risk from lending. Nepalese joint venture commercial banks are far behind fulfilling the responsibility to invest in the crucial sectors of the economy for the upliftment of the national economy. Good investment policy ensures maximum amount of investment to all sectors with proper utilization.

In the present context there is tough competition in the banking market but not enough opportunity to make investment. In this salutation, joint venture banks can take initiation in search of new opportunities to survive in the competitive market and earn satisfactory profit. There is high liquidity in the money market but here seems to be no profitable area to invest. Flow of money is more than requirement. Likewise, the banks and financial companies (institutions) are offering very low deposit interest rate. This indicates that the joint venture banks should be able to create new investment opportunities to make investment to survive and earn maximum profit in the highly competitive market.

For the entire development of the country the proper development of industry and trade is a must. Therefore, the banks should give priority for accelerating the economic growth of the country. As the strong economic condition of a country is represented by the development of industry, trade and business, which is the main sector of the banks to carry out its activities and to achieve its aim of profit maximizing. Proper investment practice assists the joint venture banks to make profitable investment which helps in the development of the country as well as achieve the objective of making the profit.

## **1.2 Commercial Bank and Investment Policy**

According to American Institution of Banking, 1972:345-346; Commercial bank is an entity, which accepts deposits and makes short-term loans to business enterprises, regardless of the scope of its other services.

Commercial banks are major financial institutions, which occupy quite an important place in the framework of every economy. Commercial banks render numerous services to their customer in view of facilitating their economic and social life. All the economic activities of each and every country are greatly influenced by the commercial banking business of that country. Commercial banks, by playing active roles, have changed the economic structure of the world. Thus, commercial banks have become the heart of financial system.

Commercial bank in current year presents a new picture a picture of innovation in practice of wider horizon and of new enterprises. The most remarkable diversification of banking function in the banks increasing participation in medium and long term financing industries and other sector so they are not only financial institution of finance agriculture and industry and other economic activities but are more than financial institution in the sense that they help saving, create deposits and make the subsequent distribution of such accumulated funds.

In addition to the acceptance of deposits, lending and investing they provide a multiple of services including accepting traveler's cheque and underwriting, purchase and sales of securities, government bonds of customers, buy and sale of foreign exchange, the insurance of commercial letter of credit supply of time credit and market information, providing remittance facilities and so on.

Commercial Bank act 2031 B.S. defines “A Commercial Bank is that bank which exchange money, accepts deposits, grants loan and performs banking function.” For the poor and least developed countries like Nepal, having low per capita income and GDP, faces many economic problems such as inflation and deflation of monetary trade, trade deficit and budget deficit. Commercial banks play important role in removing such problems by capital formulation for deficits spending units (trade and industry as well as general public). They also finance in small and cottage industries

and agricultural sector under priority sector investment scheme to serve the marginal people.

The American Institute of Banking has laid down the four major functions of the commercial banks such as receiving and handling deposits, handling payments for its clients, making loans and investment and creating money by extension of credit. Nepal commercial bank act 2031 B.S. has defined commercial bank as stated earlier and it has also emphasized on their functions. Major of them is as follows:-

1. They accept custody of funds with or without interest and open fixed accounts and saving accounts in the name of depositions.
2. They supply loans (Short term debt as well as long term debts whatever necessary for trade and commerce) or make investment.
3. They help to issue shares and debentures of any company or any others corporate body, guarantee or underwrite such shares or debentures and undertake any agency business but not become a managing agent.
4. Conduct transactions in bonds, provisionary notes or bills of exchange foreign exchange relating to commerce or corporation as are redeemable within the Nepal.
5. They grant overdraft.
6. They issue letter of credit draft and traveler's cheque.
7. They remit or transit fund to different place within or outside Nepal.
8. They purchase, sell or accept the securities of Nepal Government.

Besides this, the commercial bank arranges the amount of foreign exchange required by various organizations and travelers. Moreover foreign trade transactions are facilitated through the issuance of letter of credit. Bank also provides locker facilities or the customers to keep valuable ornaments and documents. Bank also provides reference about the financial position of their customers as and when required. The bank works as an agent of its customers to receive and make payments, pay and collect rent, pay insurance premium etc. In case of joint venture commercial bank it issues internationally valid credit cards, ATM cards, Tele banking etc. Besides bank has many more functions and roles in the development of national economy.

Commercial banks must mobilize its deposits and other funds to profitable, secured, stable and marketable sector. Then only it can earn more profit as well as it should be secured can be converted into cash whenever needed. But, commercial banks have to



pay due consideration while formulating investment policy regarding loan and investment. Investment policy is one facet of the overall spectrum of policies that guide bank's investment operations. A healthy development of any bank depends heavily upon its investment policy. A sound and viable investment policy attracts both borrowers and lenders, which helps to increase the volume and quality of deposits, loan and investment. Commercial bank should be careful while performing the credit creation function. The bank should never invest its funds in those securities, which are subject to too much depreciation and fluctuations because a little difference may cause a great loss. It must not invest its funds into speculative businessman who may be bankrupt at once and who may earn millions in a minute.

Commercial banks must follow the rules and regulation as well as different directions issued by the central bank, ministry of finance, ministry of law and other regulatory bodies while mobilizing its funds. So, the bank should invest its funds in legal securities only. Diana Mc Naughton in her research paper '**Banking Institutions in Developing Market**' states that investment policy should incorporate several elements such as regulatory environment, the availability of funds the selection of risk, loan portfolio balance and term structure of the liabilities (MC Naughton,1994:19).

Thus commercial banks should incorporate several elements while making investment policy. The loan provided by commercial bank is guided by several principles such as length of time, their purpose profitability, safety etc. These fundamental principles of commercial bank's investment are fully considered while making investment decisions.

In developing countries especially like ours, there is always a dearth of capital. The government cannot contribute to the economic development all alone. Nevertheless, the private sector also cannot reinforce due to low per capita income and higher propensity to consume of the people. Hence due to low income, saving is low which on the other hand results in low capital formation. Thus, investment is one of the vital aspects in the improvement of the economic condition of a country.

An investment is a commitment of funds made in the expectation of the positive rate of return. If the investment is properly undertaken the return will be commensurate with the risk, the investor assumes. Investment is concerned with the management of

an investor's wealth, which is the sum of current income and present values of all future income funds to be invested, came from assets already owned borrowed money and saving or foregone consumption by the investor.

In general investment means to pay out money to get more and is generally uncertain. Investment has to undergo various types of risk e.g. Business risk, possibility of being wane in earning power of investment due to competition, uncontrollable cost, change in demand etc., market risk, possibility of change in market price and collateral value of securities and real properties. Therefore investment is a very risky job for a purposeful safe and profitable investment, making an investment is not sufficient one should follow sound investment policy. The fundamental principle of investment must be followed thoroughly for profitable investment. Investment policy should ensure maximum amount of investment to all sectors with proper utilization. There is high liquidity in the market and it seems no profitable place to invest these. Investment policy provides the bank several inputs through which they can handle their investment operation efficiently ensuring the maximum return with minimum risk, which ultimately leads the bank to the path of success to achieve its organizational objectives of shareholders wealth maximization.

This is a common factor that investment is possible only when there are adequate savings. If all of the income is spend on for daily usage, there will be no amount left for making investment. So, collection and investment are always inter-related and go hand in hand. Every people wish to collect or save their income and invest in highly return firm. In terms of bank, collection means deposits, borrowing, income saving of customers etc.

Investments are made in assets. Assets generally are of two types; Real assets (land, building, factories etc) and financial assets (Stocks, bonds, T-bill etc). These two types of investments are not competitive but complementary, highly-developed institutions for financial investment greatly facilitating real investment.

Investment policy fixes responsibilities for the investment deposition of the bank assets in term of allocation funds for investment and loan establishing responsibility for day to day management of those assets. **(James B. Baxley 1987:124;)**

Investment by individual, business and government involves a present sacrifice of income to get on expected future benefit; as a result investment raises a nation's standard of living. **(The World Book Encyclopedia, 1976; 232;)**

Investment is the sacrifice of current dollars for future dollars and time and risk is involved in investment. A sacrifice takes place in the present and is certain. The reward comes later, if at all, and the magnitude is generally uncertain. In some cases the element of time predominates. In other cases risk is the dominant attribute. **(William F. Sharpe, Alexander, Gordon J. and Jeffery V. Bailey, 1994:1;)**

an investment is a commitment of money that is expected to generate additional money. Every investment entails some degree of risk, it requires a present certain sacrifice for a future uncertain benefit. **(J. K. Francies, 1991:1)**

“Investment can be categorized as real investments and financial investments. Real investments generally involve some kinds of tangible assets such as land, machinery or factories. Financial investments involve contracts written on pieces of paper, such as common stocks and bonds.” **(According to Sharpe, Alexander and Bailey (1999)**

Define investment as, “Investment in its broadest sense, means the sacrifice of certain present value for (possible uncertain) future value.” **(William F. Sharpe and Alexander J. Gordon (1998)**

Above mentioned definition about the investment clarifies the investment means to trade money for exceed the current cash out flow which is the benefits to the investors for sacrificing the time and commitment or due to uncertainty and risk factors. Financial institution must be able to mobilize their deposits collection funds in profitable, secured and marketable sector so that they can earn good return to their investment.

The bank and finance companies are such type of financial institutions which deal in money and substitute of money, or deal with credit and credit instrument. Good management of credit and credit instrument is very important for the banks and financial institutions to collect funds and utilize it in good investment sector. Any way the goal of investment is the maximization of the owner's economic welfare. Intelligent investors always search for the project with minimum risk and higher return.

Investment in its broadest sense means the sacrifice of current rupee (dollars) and resources for the sake of future rupee (dollars) and resources. In other words, it is a commitment of money and other resources that are expected to generate additional money and resources in the future. Such a commitment takes place in the present and is certain to occur but the reward comes in the future and always remains uncertain. Therefore, every investment entails some degree of risk.

### **1.3 Brief History of the Evaluation of Banking**

The evolution of banking had started a long time ago. In ancient Greece, the famous temple of Delphi and Olympia served as the great depositories for people's surplus funds and these were the centers of money lending transactions. However, as a public enterprises banking started around the middle of the twelfth century in Italy. The first bank called the "**Bank of Vanice**" was established in Vanice, Italy in 1157 A.D. Later other banks were established. The bank of Barcelona and the bank of Genoa were come into existence in 1402 and 1407 respectively. The Lombards migrated to England and other parts of Europen from Italy are regarded for their role in the development and expansion of modern banking. In England, banks were introduced only in the middle of the sixteenth century. England's banking system was well established by the late seventeenth century. In England the banking began with the English goldsmiths only after 1640. The bank of Amsterdam set up in 1609 was the great bank of seventeenth century. There were three ancestors of origin of a bank.

#### **a) The Merchants**

The oldest ancestors of the modern banks were the merchants. The merchants used to exchange the gold, silver coins and deposit the valuable ornaments or goods made of gold, silver and gems.

#### **b) The Money Lenders**

The money lenders were second ancestors of the modern banks. Lending and borrowing are almost as old as money itself and the village moneylenders, is found even in quite primitive communities.

#### **c) The Goldsmith**

The goldsmiths were the third ancestors of the modern banks. The goldsmith used to give receipts, which were knows as Goldsmith Note. It was made payable to

bearer and on demand which transformed the said receipt into the position of a bank note. It gained circulation and currency in due course of the time. These notes with the passage of time became payable to bearer in demand and enjoyed circulation. Thus, the goldsmith became the precursor of the modern bank note and the forerunners of the modern banking institutions.

They were chiefly involved in lending and borrowing of money when money was invented. But modern banking system were not developed till the nineteenth century and spread all over the world.

### **1.3.1 Growth of Banking in Nepal**

The modern banking system is not so old in Nepal. The origin of the bank in Nepal and its beginning of growth is controversial. Even though the specific date of the beginning of money and banking deal in Nepal is not oblivious, it is speculated that during the reign of the king Manadev, the coin "Manak" and "Gunanu" were in use. Sadashiva Dev introduced silver coins, King Jayasthiti Malla, had given the responsibility to a caste of society called "Tankadhari" while he had given the name of the caste and their profession for the purpose of transaction of money in the society.

The establishment of "Tejarath Adda" during the year 1877 A.D. was the first step in institutional development to provide loan of a lower rate against collateral of 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 modern banking institutions. The development of trade with different countries increases the necessity of eh institutional banker. This can act more widely to enhance the trade and commerce and to touch the remote non banking sector in the economy. Taking into consideration this situation the "Ugyog Parishad" was constituted in 1963 A.D. After one year, it formulated the "Company Act" and "Nepal Bank Act" in 1937 A.D. Nepal Bank Limited was established under Nepal Bank Act in 1937 A.D. as a first commercial bank of Nepal with 10 million authorized capital.

Modern banking practices emerged with the establishment of Nepal Bank Limited in 1934 A.D. However the establishment of Nepal Bank Limited alone was not sufficient and satisfactory to conduct the banking activities in Nepal. As a result, "Nepal Rastra Bank" was established in 1956 A.D. as a central bank under Nepal Rastra Bank Act 1956 A.D. with an objective of supervision, protecting and directing the functions of commercial banking activities. Another commercial bank fully owned by the

government named "Rastriya Banijya Bank" was established in 1966 to spread banking services to both rural and urban areas. Similarly, "Agricultural Development Bank" was established in 1967 A.D. with an objective to develop and modernize agricultural sector.

After the restoration of democracy, the first elected government in 1991 adopted liberalized and market oriented economic policies followed by liberalization in the financial sector. These include the deregulation of interest rate, free entry of banks and financial institutions, removal of statutory liquidity ratio, formulation of new commercial banks, finance company and development banks act so as to encourage private sector including foreign banks and financial institutions. Since then, various financial institutions i.e. joint venture banks, domestic commercial banks, development banks, finance companies, co-operative banks, credit guarantee corporation, employee provided fund, national insurance corporation, Nepal stock exchange have come into existence to fulfill the financial needs of the country and assisting the financial development of the country.

Nepal Arab Bank Limited (NABIL) was the first joint venture bank established in 1984 A.D., which was joint venture with Dubai Bank Limited. This is the first modern bank with latest banking technology. Then a lot of commercial banks have been opened in the country. Nepal Indosuez Bank was established in 1985 A.D. as a private joint venture bank. In this day, this bank is known as Nepal Investment Bank Limited. Nepal Grindlays was established as a joint venture between ANZ Grindlays and Nepal Bank Ltd. This bank is now known as Standard Chartered bank since July 2001. After the opening Nepal Indosuez Bank and Nepal Grindlays Bank, Nepalese really saw modern banking. Now there are 27 commercial banks in Nepal.

Table No. 1.1

## List of the Commercial Banks

S.N.	Commercial Banks
1.	Nepal Bank Ltd
2.	Rastriya Baniya Bank
3.	Nabil Bank
4.	Nepal Investment Bank Ltd.
5.	Standard Chartered Bank
6.	Himalayan Bank Ltd.
7.	Nepal Bangladesh Bank
8.	Nepal SBI Bank Ltd.
9.	Everest Bank Ltd.
10.	Bank of Kathmandu Ltd.
11.	Nepal Credit and Commercial Bank
12.	Lumbini Bank Ltd.
13.	Nepal Industrial and Commercial Bank Ltd.
14.	Macchapuchhre Bank Ltd.
15.	Kumari Bank Ltd.
16.	Laxmi Bank Ltd.
17.	Siddhartha Bank Ltd.
18.	Agricultural Development Bank Ltd.
19.	Global Bank Ltd.
20.	Citizen Bank Ltd.
21.	Prime Bank Ltd.
22.	Sunrise Bank Ltd.
23.	Bank of Asia Nepal Ltd.
24.	Nepal Development Credit Bank Ltd.
25.	NMB Bank
26.	Kist Bank
27.	Janta Bank Limited
28.	MEGA Bank
29.	Commerz and Trust Bank
30.	Civil Bank

At present there are 30 commercial banks. These banks have a country wide network which are providing financial services in various ways to the country in various parts of the country. Commercial banks perform the functions of accepting deposits, lending money, letter of credit, guarantee, remittance, bills and others.

### **1.3.2 Introduction of Joint Venture Banks**

**Gupta, 1994; 15-24;** The commercial bank formed by joining two or more enterprises is known as joint venture bank. The main purpose of joint venture bank is to join economic forces in order to achieve desired goal. Joint venture banks are more efficient and effective monetary institution in modern banking field than other old types of bank in Nepalese context. The primary objective of the joint venture banks is always to earn profit by investing the loan to the people associate with trade, business, industry etc.

"Joint venture is joining of force between two or more enterprises for the purpose of carrying out a specific operation (industrial and commercial investment production or trade)"

#### **Joint Venture Banks of Nepal**

The history of joint venture banks is not so long. After establishment of democracy, the government adopted liberal and market oriented economic policy which facilitated the establishment and development of joint venture banks. At present there are six joint venture banks in Nepal which are listed as follows:

Table No. 1.2  
List of the Joint Venture Banks

S.N.	Name of Banks	Established Date	Head Office
1.	NABIL	2041/03/29	Kathmandu
2.	SCBNL	2043/10/16	Kathmandu
3.	HBL	2049/10/05	Kathmandu
4.	NBBL	2050/02/23	Kathmandu
5.	NSBIBL	2050/03/23	Kathmandu
6.	EBL	2051/07/01	Kathmandu



### **1.3.3 Profile of Concern Banks**

#### **A. Himalayan Bank Limited (HBL)**

Himalayan Bank Limited was incorporated in 1992 by few distinguished business personalities of Nepal in partnership with Employees Provident Fund and Habib Bank Limited, one of the largest commercial bank of Pakistan. Banking operation commenced from January 1993. It is the first commercial bank of Nepal whose maximum shares are held by the Nepalese private sector. Besides commercial banking services, the bank also offers industrial and merchant banking services. Authorized capital and paid-up capital are Rs. 2,000,000,000 and Rs 1,216,215,000.

Besides commercial activities, the bank also offers industrial and merchant banking. Products such as Premium Savings Account, HBL Proprietary Card and Millionaire Deposit Scheme besides services such as ATMs and Tele banking were first introduced by HBL. At present, the bank has 23 branches working around the country. The bank has a very aggressive plan of establishing more branches in different parts of the Nepal in near future. The bank provides services like 'Any Branch Banking Facility', Internet Banking and SMS Banking. Living up to the expectations and aspirations of the customers and other stakeholders of being innovative, HBL very recently introduced several new products and services. Millionaire Deposit Scheme, Small Business Enterprises Loan, Pre-paid Visa Card, International Travel Quota Credit Card, Consumer Finance through Credit Card and online TOEFL, SAT, IELTS, etc. fee payment facility are some of the products and services. Himalayan Bank's policy is to extend quality and personalized services to its customers as promptly as possible. To extend more efficient services to its customers, Himalayan bank has been adopting innovative and latest banking technology. Himalayan bank is committed to be a "BANK WITH A DIFFEERENCE"

#### **B. Nepal SBI Bank Limited (NSBI)**

Nepal SBI Bank Ltd. (NSBL) is the first Indo-Nepal joint venture in the financial sector sponsored by three institutional promoters, namely State Bank of India, Employees Provident Fund and Agricultural Development Bank of Nepal through a Memorandum of Understanding signed on 17th July 1992. NSBL was incorporated as a public limited company at the Office of the Company Registrar on April 28, 1993 under Regn. No. 17-049/50 with an Authorized Capital of Rs.12 Crores and was licensed by Nepal Rastra Bank on July 6, 1993 under license No.

NRB/I.Pa./7/2049/50. NSBL commenced operation with effect from July 7, 1993 with one full-fledged office at Durbar Marg, Kathmandu with 18 staff members. The staff strength has since increased to 351. Under the Banks & Financial Institutions Act, 2063, Nepal Rastra Bank granted fresh license to NSBL classifying it as an "A" class licensed institution on April 26, 2006 under license No. NRB/I.Pra.Ka.7/062/63. The Authorized and Issued Capitals have been increased to Rs. 200 Crores and Rs. 87.45 Crores, respectively. The management team and the Managing Director who is also the CEO of the Bank are deputed by NSBI. NSBI also provides management support as per the Technical Services Agreement. Fifty five percent of the total share capital of the Bank is held by the State Bank of India, fifteen percent is held by the Employees Provident Fund and thirty percent is held by the general public.

#### **1.4 Focus of Study**

Commercial bank is an entity, which accepts deposits and makes short-term loans to business enterprises, regardless of the scope of its other services. Investment 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. Investment policy is an important factor of the investment practice. Investment refers to sacrifice of current money for future money, generally two attributes are involved in it, they are time and risk. In this study, the word investment conceptualized the investment of income, savings or other collected fund. The term investment covers a wide range of activities. It is widely known fact that an investment is only possible where there is adequate savings. If all the incomes and savings are used to fulfill the minimum needs, then there is no existence of investment. Thus, both saving and investment are interrelated. Investment policy is the most important factor of the investment practice.

The commercial banks formulate sound investment policies to make it more effective, which eventually contributes to the economic growth of the country. The sound investment policy helps the banks to maximize the quality and quantity of investment and helps to achieve the loan objective of profit maximization and social welfare. Formulation of sound investment policies and coordinated and planned efforts push forward to the forces of economic growth. The commercial banks should careful while performing the credit creation function. Investment policy should be formulated in such a way that maximizes the profit and minimizes the risk from lending. Nepalese commercial banks are far behind fulfilling the responsibility to invest in the crucial sectors of the economy for the upliftment of the national economy.

Good investment policy ensures maximum amount of investment to all sectors with proper utilization. In the present context there is tough competition in the banking market but not enough opportunity to make investment. In this salutation, banks can take initiation in search of new opportunities to survive in the competitive market and earn satisfactory profit. There is high liquidity in the money market but here seems to be no profitable area to invest. Flow of money is more than requirement. Likewise, the banks and financial companies (institutions) are offering very low deposit interest rate. This indicates that the joint venture banks should be able to create new investment opportunities to make investment to survive and earn maximum profit in the highly competitive market.

For the entire development of the country the proper development of industry and trade in must. Therefore, the banks should give priority for the accelerating the economic growth of the country. As the strong economic condition of a country is represented by the development of industry, trade and business, which is main sector of the banks to carry out its activities and to achieve its aim of profit maximizing. Proper investment practice assists the banks to make profitable investment which helps in the development of country as well as achieve the objective of making the profit.

### **1.5 Statement of the Problem**

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

There are various problems in resources mobilization by financial institution in Nepal. The most important problem is poor investment climate prevailing in Nepal due to heavy regulatory procedure, uncertain government policy, NRBs stringent directives, unsecured social environment etc. Lack of sound investment policy is another reason

for a commercial bank not to properly utilizing its deposits that is making loan and advances or lending for a profitable project. This condition may the commercial bank to the position of liquidation.

As with everything in Nepal, every commercial bank has an investment in the same sectors. They are in consumer lending, tourism, garments and in trading sector. They are the major sectors. But given the current situation of the country, it is not up to them to them to decide which sector they want to go into. The main factor for success of any organization is the security situation. Once the security situation stabilizes, then only commercial banks consider rationally as to where they should to invest and grow. So, security problem is the burning problem for every commercial bank to invest their funds in our any sectors.

### **1.6 Significance of the Study**

The main focus of the study is to highlight the investment policies of Himalayan Bank Limited and Nepal SBI Bank Limited expecting that the study can be bridge the gap between deposits and investment policies. On the other hand, the study would provide information to management of the bank that would help them to take collective action.

Further from the study, the shareholders would get information to make decision while making investment on shares of various banks. Having completed the basic analysis required for the study, the researcher must point out the mistakes and errors and also correct them by giving suitable suggestions for further improvement. Since researcher has the banking experience of about four years which also includes working in the “Assets Liability Management Committee (ALCO)” of commercial banks, the recommendations prescribed herewith will have more practical touch. Therefore, this summarized and recommended tasks of the researcher of the study would be meaningful to the top management of the bank to initiate the action and achieve the desired result.

## **1.7 Objectives of the Study**

The main objective of this study is to evaluate the investment policy of the selected commercial banks and to recommend corrective measures, if any, in order to improve its performance. Besides, these may be other objectives too.

1. To determine the growth rate of bank in terms of deposits, loans and advances, investment and profitability of the bank.
2. To evaluate the liquidity, assets management, profitability and risk position of the selected commercial banks.
3. To analyze the investment policy of the Himalayan Bank Limited and Nepal SBI Bank Limited.
4. To recommend the policies to be adopted by the sample organization based the financial analysis for its future development.

## **1.8 Limitations of the Study**

This research is mainly concerned with the investment policy of the Himalayan Bank Limited and Nepal SBI Bank Limited. However, some commonly attributed limitations are as follows:

1. This study covers only a period of 5 years (i.e. 2061/62 to 2065/66)
2. This study is mainly based on annual reports and other publication of commercial banks, publication of NEPSE, and publication of other authorities regarding the investment and other aspect of the bank.
3. Out of the numerous affecting factors, this study concentrates only on those factors, which are related with investment policy, and available in the form required for analyzing the different issues.
4. Data used in the study are secondary nature.
5. The study was carried out on the financial statement and records of official data. Therefore the decision methods of the bank are not analyzed.
6. Although efforts were made focus on the activities and investment policy of the commercial banks. It may not cover all important and pertinent investment procedure of the corporation.
7. Due to wide range of data deficiencies only simple technique have been used for the analysis of the data.

## **1.9 Organization of the Study:**

The whole study has been divided into five chapters.

### Chapter I: Introduction

First is introduction chapter, which includes general background, statement of the problem, focus & signification of the study, objectives of the study and limitations of the study and chapter plan.

### Chapter II: Review of Literature

Second chapter deals with the review of available literatures in the field of the study being conducted. This includes review of the theories of the concerned topic, review of supportive text, review of related articles and review of previous thesis.

### Chapter III: Research Methodology

Third chapter explains the research methodology employed to conduct the study and tools and techniques used in analysis of the data as well. This chapter includes, research design, sources of data, population and samples, method of data analysis, various financial and statistical tools.

### Chapter IV: Analysis and Interpretation of Data

Fourth chapter is devoted to the presentation and analysis of data through definite course of research methodology. The main working of this chapter is to analyze different financial ratios related to the investment of HBL and NSBI. Major findings of the study are also included in this chapter.

### Chapter V: Summary, Conclusion and Recommendations

Fifth is the last chapter of the study, which provides summary, conclusion and recommendations for improving the future performance of the sample banks.

Besides these, a bibliography and appendices will also present at the end of the study. Similarly, acknowledgement, table of contents, list of tables, list of figures, abbreviations are included in the front part of the thesis report.

## **Chapter II**

### **Review of Literature**

The word literature refers to writings on specific subject or printed information. It is an analytical expression on the concerned topic. Review of Literature refers to the analyzing, assessing, reevaluating and reexamining the previously written works. It is a stocktaking of available literature in the field of research. This chapter is basically concerned with review of literature to the investment policy of commercial banks. It covers the theories and previous study on topic done by academicians and researchers within the country. This chapter has been divided into different parts, which have been arranged into the following order.

#### **2.1 Meaning of Some Terminologies**

##### **1. Deposit**

The sum of money collected by the banks from the depositors in different accounts is called deposit. The banks collect deposit from customers in various accounts like current account, saving account and fixed deposit account. Deposit is the main source of fund for the bank. Thus deposit is the lifeblood of the joint venture commercial banks; the success of a bank greatly depends upon the extent to which it may attract more and more deposits. As deposits are borrowed amount from depositors, it is liability for the banks.

##### **2. Loan and Advances**

Loan and advances is the main sources of income and most profitable assets to a bank. A bank is always willing to lend as possible since they constitute the larger part of revenue. A commercial bank hardly lends money for a long period. The commercial banks lend money for a short period of time that can be collected at a short period. The commercial banks never bounded to provide long-term loan because the banks have to synchronize the loans and advances with the nature of deposit they receive. The banks provide loan and advances against the personal security of the borrower or against the security of the immovable and movable properties. The banks provide loans in the various forms like overdraft, cash credit, direct, direct loan and discount bills of exchange.

### **3. Investment in Government Securities, Shares and Debentures**

Securities are the source of long term financing which involve shares and debenture issued by the government. The banks can extend credit by purchasing government securities i.e. share and debentures issued by government. However it is not major sources of income.

### **4. Investment on other Company's Shares and Debentures**

The joint ventures commercial banks also utilize their funds to purchase the shares and debentures of other companies. There are two motive behind investment of funds on other company's shares and debentures by the banks the first is to earn profit and the next is to meet the direct of Nepal Rastra Bank.

### **5. Assets**

Every bank has its own assets. The resources or properties owned by the business are known as assets. Some examples of assets are cash, building, land, furniture, goodwill etc. such assets are owned by the banks to get current or future benefit.

### **6. Liabilities**

The amount or money payable by the banks to the outsiders within a certain period of time is known is liabilities of the bank. Liabilities are the financial obligation for the banks which must be met within a stated time. Liabilities should not be taken negatively as they are the sources of assets.

### **7. Off – balance sheet Transaction**

Off – balance sheet cover the contingent liabilities. These activities are not recognized as asset and liabilities in balance sheet. They are Letter of Credit, Guarantee, Commission, Bills for collection etc. Even though they have risk, these transactions are very important as they are the good source of profit to the bank.

## **2.2 Features of Sound Lending and Investment Policy**

The 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. A sound lending and investment policy is not only pre-requisite for profitability, but also crucially important for the promotion of commercial savings of backward country like Nepal. Many authors as under have



given some necessities for sound lending and investment policies, which most of the bank must consider:

- **Safety and Security**

The bank should never invest its funds in those securities, which are subject to too much depreciation and fluctuation because a little difference may cause a great loss. It must not invest its funds into speculative businessman who may be bankrupt at once and who may earn million in a minute also. The bank should accept that type of securities, which are commercial, durable and marketable and have high market prices. In this case, “Mast” should be applied for the investment.

Where,

M=Marketability.

A=Ascertainity.

S=Stability.

T=Transferability

- **Profitability**

A commercial bank can maximize its volume of wealth through maximization of return on their investment and lending. So, they must invest their funds where they gain maximum profit. The profit of commercial bank mainly depends on the interest rate, volume of loan, its time period and nature of investment in different securities.

- **Liquidity**

People deposit money at the bank in different account with confidence that the bank will repay their money when they need. To maintain such confidence of depositors, the bank must keep this point in mind while investing its excess funds in different securities or at the same time of lending. So, that it can meet current or short-term obligations when they become due for payment.

- **Purpose of Loan**

Why is customer in need of loan? This is very important question for any banker. If borrower misuses the loan granted by the bank, they can never repay and the bank will possess heavy bad debts. Detailed information about the scheme of the project or activities would be examined before lending.

- **Diversification**

“A bank should not lay all its eggs on the same basket.” This saying is very important to the bank and it should be always careful not to grant loan in only one sector. To minimize risk, a bank must diversify its investment on different sectors. Diversification of loan helps to sustain loss according to the law of average because if securities of a company deprived, there may be appreciation in the securities of other companies. In this way, the loss can be recovered.

- **Tangibility**

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

- **Legality**

Illegal securities will bring out many problems for the investor. A Commercial bank must follow the rules and regulation as well as different directions issued by Nepal Rastra Bank, Ministry of Law and other mobilizing its funds.

- **Tax Benefits**

Before investing in any sector the bank should check in about the tax benefits. Every country's government has exempted tax in some specific sectors like environment, bio-energy etc. Because of tax exemption, return from investment will be free from tax hassles which help to increase profit. Government tax also influences the investment decisions significantly.

### **Other factors affecting the investment policies**

Beside above mentioned basic principles, some basic factors really affect the investment policies and composition of the components. However, their degree of affecting power may vary. These other factors that have significant affecting power are given as follows:

- **Regulatory Provision**

Regulatory Provision has the maximum impact upon the investment policies and the composition of portfolio. Usually, in every state there will be the legal restrictions for the investors to invest their funds in various components. Such restrictions might be in the form of the limitation of the investible amount on particular securities or the allowed sectors of the investment.

- **Management Perception**

Another factor affecting the investment policy and component will be the management's attitude as well as the self imposed limitation from their side. If management wishes to increase the yield, investment policy will be to divert the fund to the high yielding portfolios, rather than the more safe but low yielding components or vice-versa. Beside this, the management may impose self – limitation of investment components according to the condition of the business and it also capable of changing the investment portfolio.

- **Present composition of the investment portfolio**

Investment policy and the composition are also affected by the size, maturity stage, and interest or return rate on the capital etc. if it already holds the component having mid- term maturity, then the consideration of upcoming investments will be on the long or short term maturing components. Thus the composition of the investment in hand also affects the investment policy.

- **Availability and accessibility of the investment components**

When best-suited investment components are not available or accessible, then also the investment policy can be affected. When best-suited investment sector will not be available, then a strong search for the investment area should be made. We can take the example of present condition of our Nepal in which the investment horizon has gone to minimum the situation is because of the political condition in the country.

## **2.3 Policy of Legislative Provision**

In this section, the review of legislative provision under which the commercial banks are operating has been discussed. This legislative environment has significant impact on the commercial banks establishments, mobilization of their banks have to confirm to the legislative provisions specified in the act of bank and financial institution 2063

NRB issue new policy to establishment of bank and financial institution on 2063/03/29 and timely changed on 2063/12/13 and the rules and regulations formulated to facilitate the smooth running of commercial banks.

### **2.3.1 Policy Guidelines on Establishment of Commercial Banks**

**Paid up Capital:** To establish new commercial banks for national level paid up capital must be Rs. 2000 million

**Share Capital:** In general, the share of commercial banks will be available for the promoters (70 percent) and general public (30 percent). To operation joint venture of the foreign banks and financial institution could have a maximum of 85 percent to minimum 20 percent share investment on the commercial banks of national level. In order to provide adequate opportunity for investment to the Nepali promoters in national level banks, only 15 percent of total share capital will be made available to general public on the condition that the foreign bank and financial institutions are going to acquire more than 50 percent of the total share. Within 15 percent the bank and financial institution put off provision 5 percent for its staff.

**Banks already in operation:** Banks that is already in operation and those who have already acquired letter of intent before the enforcement of these provisions have to bring their capital level within seven years, i.e. by 30 Ashad 2070, as per the recently declared provision.

**Legal procedure:** Banks to be established with foreign promoter's participation have also to be registered fulfilling all the legal processes prescribed by the prevalent Nepal laws.

**Promoter's share payment procedures:** Of the total committed sharer capital, the promoters has to deposit in NRB an amount equal to 5 percent along with the application and another 45 percent at the time of receiving the letter of intent on a interest free basis. The bank should put into operation within one year of receiving the letter of intent. The promoters have to pay fully the remaining balance of committed total share capital before the bank comes into operation. Normally, within 4 months from the date of filling of the application, NRB should give its decision on the establishment of the bank whether it is in favor or against it. If it declines to issue license, it has to inform in writing with reasons to the concerned body.

**Promoters' qualification and experience:** action on the application from promoters will not be initiated if it is proved that their collateral has been put on auction by bank and financial institution as a result of non-payment of loans in the past, who have not cleared such loans or those in the black list of the credit information Bureau and 3 years have not elapsed from the date of the removal of their name from such list. The application will be deemed automatically cancelled irrespective of it being on any stage of process for license issuance if the above events are proved. Of the total promoter, one-third should be at least a graduate of Tribhuvan University or recognized institution with major in economics or accountancy, finance, law, banking or statistics. Likewise, one-fourth promoters should have the work experience of bank or financial institution or similar nature.

**Promoters' share:** Promoter Group's share can be disposed or transferred only on the condition that the bank has been brought in operation, the share allotted to the general public has been floated in the market and after completion of 3 years from the date it has been registered in the Stock Exchange. But before the disposal of such shares it is mandatory to get approval from NBR. The share allotted to general public has to be issued and sold within 3 years from the date the bank cannot issue bonus shares or declare and distribute dividends, shareholders of the promoters group and their family members cannot have access to loans or facilities from the same institution.

**Disqualify from becoming director:** An individual who is already serving as a director in one of the bank or financial institutions licensed by NRB cannot be considered eligible to become the director in other banks or financial institutions. Also, stock brokers, market makers and also an individual and institution involved as an auditor of the bank and institutions carrying on financial transactions cannot be director.

**Investment:** One person, family, firm, invest maximum 15 percent of a firm and 1 percent of another firm.

**Promoter:** No more than one promoter from one family in one firm.

### **2.3.2 Directives Issued by NRB**

The banks and financial institutions that are governed by BAFIA has to follow the rules and regulation as specified in the Act and also has to follow the directivities issued by NRB from time to time. On the basis of the authority given by BAFIA, NRB has issued directive from time to time as follows:

#### **Capital Fund**

The A, B and C class financial institutions are required to maintain minimum capital fund at the ratio of 6 percent and 12 percent of their core capital and capital fund respectively. But as for the D class financial institutions they are required to maintain capital fund at the ratio of 4 percent and 8 percent of their core capital and capital fund respectively.

#### **Loan Classification**

The loan of the licensed financial institution has been classified into the following heading: pass, substandard, doubtful and loss. Those loans that are not passed due or have passed due for a period up to three months come under the pass category, more than three months up to six months come under substandard category, more than six months up to one year come under doubtful category and past due for a period more than one year come under loss category.

#### **Loan Loss Provisioning**

The loan loss provision for the non-insured loan has to be made by the licensed financial institution at the rate of 1 percent for the loans that fall under pass category, 25 percent for substandard category, 50 percent that fall under doubtful category and 100 percent for loss category.

#### **Credit Limit**

The loan limit or A, B and C class licensed financial institution for the single borrower or the group of related borrower is 25 percent of the core capital and 50 percent of the non-fund based core capital fund. As for the D class licensed financial institution loan to the deprived and low income people can be extended up to the maximum limit of Rs. 60 thousand per group member or individual and Rs. 1.5 million to micro enterprise based on collateral.

### **Maintenance of CRR**

The CRR to be maintained in NRB by the A class licensed financial institution is 5.5 percent. If the licensed financial institution fails to maintain the liquidity as to the directives then they have to pay penalty at the rate of existing bank rate for the first time, double the bank rate for the second time and for the third and successive times thereafter three times of the bank rate.

### **Branch Offices**

The A, B and C class licensed financial institutions are not allowed to open or close any of their branch offices without the prior approval of NRB. But in case of D class licensed financial institutions; the prior approval of NRB is not a prerequisite. The licensed institutions have to apply in NRB for opening a branch office and NRB will make the final approval only if the licensed institutions have fulfilled all the requirements for opening a branch.

### **Interest Rates**

The licensed financial institutions A, B and C class can fix their own interest rates on deposit as well as lending but the rates must be published in due time if there is change in the rates. In case of D class licensed financial institution, they can charge a fix rate of interest on loans and advances. But all the licensed financial institutions must inform all the changes to NRB within seven days of such changes. Further, the interest rate on loans and deposits of A, B and C class licensed financial institution must be published in the papers and as for the D class institutions, the rates may be published in the office board only.

## **2.4 Review of Relevant Studies**

### **2.4.1 Review of Research Papers and Articles**

This part of the study deals with the examination and reviewing of some related research papers, articles and journals published in different magazines, newspapers, World Bank discussion papers and economic journals and other related books and publications. There are not sufficient articles related to investment management published in Nepalese perspective. However, some personalities have given short glimpse of investment management. Some of them are as follows:

The financial sector has evolved as the biggest sector in the economy. There are altogether 128 financial institutions (excluding Nepal Rastra Bank, micro financial

institutions and cooperative registered with cooperative board) in the country and currently more than 20,000 people employed in this sector. This human resources is responsible for managing approximately NPR 221 bn worth of assets (primarily loans and advances) out of which 50% comprises of two large banks of Rastriya Banijya Bank and Nepal Bank Ltd. annual net profit of NPR 5.89 be generated by creating assets worth of NPR 221 be last year means a very low return on assets (mere 2.21 percent, which is even below the average savings deposit in the country. (The Boss, 2006: 75)

While doing root cause analysis for this scenario two very strong reasons have evolved. The first reason is the poor quality of loans, more particularly in government-owned banks and some private banks, due to non-compliance of basic credit principles while granting loans coupled with lack of credit-skills assessment. The second reason for lower return can be attributed to the fact that almost all the financial institutions are involved only in dealing with undifferentiated vanilla banking products.

In the journal *New Business Age*, Mr. Sharma (2006) on his article entitled, *Banking the Future on Competition* the commercial banks are establishing and operating mostly in urban areas. From his studies he found that:

- Commercial banks are establishing and providing their service in urban area only. They don't have interest to establish in rural areas. Only his branch of Nepal Bank Ltd and Rastriya Banijya Bank Ltd. are running in those sectors.
- They have maximum tax concession.
- They don't properly analyze the credit system.

He found that due to the lack of Investment avenues, banks are tempted to invest without proper credit appraisal and personal guarantee, whose negatives side effects would show colors only after four or five years.

While reviewing the articles and past studies, it is found that banks are not just the storehouse of the country's wealth but are 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.



#### **2.4.2 Review of Master's Degree Thesis**

Before this study, various students regarding various aspects of commercial banks and joint venture commercial banks such as investment policy, lending policy financial performance, interest rate structure etc., have conducted several thesis works. Some of them, as supposed to relevant for the study are presented below.

**Mr. Raja Ram Khadka (1998)** on his study, "A study on the investment policy of Nepal Arab Bank Ltd. (NBIL) compared NABIL with that of Nepal Grindlays Bank Ltd. (NGBL) and Nepal Indosuez Bank Ltd. (NIBL) the main objectives of the study were to evaluate the liquidity assets management efficiency and profitability positions in related to fund mobilization of NABIL in comparison to other joint venture banks (JVBS) with the objectives of:

- To evaluate the liquidity, assets management efficiency and profitability position in relation to fund mobilization of NABIL Bank Ltd. in the comparison of other joint venture banks.
- To discuss fund mobilization of NABIL Bank Ltd. in respect to its based off-balance sheet transactions and based on balance-sheet transactions in comparison of other joint venture banks (JVBS).
- To evaluate the growth ratio of loans and advances and total investment with respective growth rate of total deposit and net profit of NABIL Bank Ltd. in comparison to other JVBS.
- To find out the relationship between total deposit and total investment, total and total loan and advances, and net profit and outside assets of NABIL Bank in the comparison to other JVBS.

#### **The findings of the study are as follows:**

- The liquidity position of NABIL Bank Ltd. is comparatively worse than that of other JVBS. NABIL Bank has more portions of current assets as loans and advances but less portion of investment on government securities.
- NABIL Bank is comparatively less successful in on-balance-sheet operation as well as off-balance sheet operation than that of other JVBS.
- There is significant relationship between deposit and loan advances as well as outside assets and net profit but not between deposit and total investment in case of both NABIL Bank Ltd. and other JVBS.

- Profitability position of NABIL Bank Ltd. is not better than that of other JVBs.
- NABIL Bank is more successful in deposit mobilization but failure to maintain high growth rate of profit in comparison to other JVBs

**Manandhar, G.R. (2003)** has conducted a thesis research on, “A comparative study in investment policies of finance companies in the context of Nepal.” He has pointed out the following objectives:

- To evaluate the trends of deposit utilization and its projection for the next five years in case of these companies.
- To evaluate the liquidity, assets management efficiency and profitability position in relation to fund mobilization of above listed companies.
- To evaluate the growth ratio of loans and advance and total investment with respective growth rate of total deposits and net profits of the companies.
- To find out relationship between deposits and total investment, deposit and loans and advance and net profit and outside assets of the listed companies.
- To discuss the fund mobilization and investment policy of these companies in respect to its fee based off-balance sheet transactions and fund based on-balance sheet transactions.
- To suggest and recommend some measures on the banks of comparative fund mobilization and investment policy of these companies for the improvement of financial performance in future.

**The findings of the research were as follows:**

- The liquidity position of National Finance and NEFINSCO are comparatively better than of other companies. Nevertheless, that of Goodwill finance and Union finance seems to be quite weaker.
- Most of the finance companies are successful in on-balance sheet utilization as well as off-balance sheet operation. Among them, NEFINSCO and Goodwill comes ahead of all.
- Profitability position of most of the companies is comparatively not better.
- Most of the finance companies are able to maintain the growth ratios among them. Nepal share markets seem to be more successful to increase their source of funds and mobilization as well as net profit.

- There is significant relationship between deposits and loans advances of all finance companies. Similarly, there is no significant relationship between deposits and total investment of all companies except NEFINSCO and Goodwill Finance Co. Ltd. There is also no significant relationship between outside assets and net profit of all companies except Union Finance Co. and National Finance Co. Ltd. The trend value of total investment to total deposit ratio and loans and advances to total deposits ratio in increasing trend.

**Mr. Akur Acharaya (2007)** has conducted a study on "Investment policy analysis of commercial bank: a comparative study of NIBL with EBL and NABIL bank will the following objectives:

- To evaluate the liquidity, profitability, risk position and assets management of the sample banks.
- To evaluate and discuss the investment policy and fund mobilization of NIBL, EBL and NABIL.
- To show the relationship between deposit and investment trends of the bank.

**Conclusion from his study:**

- Liquidity position of NIBL is comparatively average than NABIL and EBL.
- Assets management ratios of NIBL occupy the average position in comparison with other two banks NABIL and EBL.
- NIBL is successful in utilization its overall working fund on profit generating activity than the NABIL and EBL. But return from loan and advances ratio is comparatively average, in this EBL has taken best position.
- From the study of capital risk ratio and credit risk ratio of all three banks comparatively NIBL is successful to attract the deposits and inter banks fund, and utilize its loan and advances form total assets in safest way by taking high risk, which helps to increase the level of profit and maximizing the value of the firm.

A Study done by **Tilak Kumar Raya (2008)**, entitled with ‘**Investment policy and Analysis of Commercial Banks in Nepal**’ made a comparative study of SCBL with NIBL and NB Bank. His main objectives were as follows:

- To discuss fund mobilization and Investment policy of SCBL in respect to its fee based off-balance sheet transaction and fund based on balance sheet transaction.

- To evaluate the quality, efficiency and profitability and risk position.
- To evaluate trend of deposit, Investment, loan and advances and projection for next years.

**His main findings were as follows:**

- Mean current ratio of SCBL is slightly higher than that of SCBL and Nepal Investment bank.
- Mean ratio of cash and bank balance to total deposit of SCBL is lower than NIBL and NBBL.
- Liquidity position of SCBL is comparatively better than NIBL and NBBL. It has the lowest cash and bank balance to total deposit and cash and bank balance to current ratio. SCBL has a good deposit collection. It has made enough Investment on government securities but it has maintained low Investment policy on loan and advances.
- SCBL is comparatively average successful in it's on balance sheet operation. But off balance sheet operation activities in compared to NIBL and NBBL has maintained the strong position.
- There is significant relationship between deposit of loan and advances and between asset and net profit of SCBL.

**General Conclusion**

By studying above four theses I found out the policies which were implied by major commercial banks in Nepal. Although Nepal's banking sectors are still in developing stages it has a great potential in investment sector. Most of the banks are properly utilizing their collected fund in productive sectors. They have maintained their liquidity position in satisfactory level even though they have huge investment portfolio. Their profitability ratios are also consistent. Among these major banks those banks who had established in the early stage of economic liberalization have efficient financial performance compared to the newly established banks. This is due to huge deposits amount in those banks. Government owned banks have high degree of non-performing loans. This is due to lack of proper credit or investment policies which they have followed in past years. Newly established banks are in growing stage. They maintain less liquidity than other established banks. This is because of huge deposits flow into investment.

## **2.5 Research Gap**

The purpose of this study is to draw some ideas concerning to maintain good investment policy and to see what new contribution can be made and to receive some ideas, knowledge and suggestion in relation to maintain good investment policies of sample banks.

The previous students cannot be ignored because they provide the foundation to the present study. In other words there has to be continuity research. This continuity research is ensured by linking the present study with the past research studies. It is clear that the reference of new research cannot be found on the exact topic that is "Investment Policy of Commercial banks in Nepal". Therefore to complete this research many book, journals, articles and various published and unpublished dissertation and field opinion are followed as guideline to make the research easier and smooth though the reference materials. The researcher can find out the gaping from the past research that has to be fulfilled by the present research work. In this regard, here the researcher is going to analyze the different policy in this topic.

It is expected to the uncovered areas of this research work will be studied. The gaping between old and new research work will be focused and filled up based on the given objectives and limitation in this research.

# **Chapter III**

## **Research Methodology**

### **3.1 Introduction**

In the last two chapters, general background of joint venture banks has been highlighted and review of literature with possible review of relevant books, articles, thesis, 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 to support my study in realistic terms with sound empirical analysis.

The research methodology is the process of arriving to the solution of the problem through planned and systematic dealing with the collection, analysis and interpretation of facts and figures. The research methodology adopted for the present study is mentioned in this chapter which deals with research design, population and sample, sources of data, presentation and analysis of data, methods for analyzing collection data.

The concise Oxford Dictionary defines research as "A systematic investigation into and study of materials source etc. in order to establish facts and reach new conclusion."

### **3.2 Research Design**

Research is a systematize effort to gain new knowledge. Research design is the conceptual structure within which research is conducted. It constitutes the blueprint for the collection, recording, interpretation, reporting and analysis of data. Descriptive and analytical research designs have been used to achieve the objective of this study.

**Research design basically involves the following:**

- Clarified data collection method.
- Defines the measurement approach.
- Defines the object to be measured.
- Clearly defines the way in which the data are to be analyzed.

In this way, research design is the plan, structure and strategies of investigations conceive to control variances. It is arrangement of conditions for collection and

analysis of data. It is also on outline of the scheme to be used to gather and analyze the data. To achieve objective of this study, descriptive and analytical research design has been used. Several financial and statistical tools have been applied to examine facts and descriptive, techniques have been adopted to evaluate investment practice of joint venture banks.

### **3.3 Population and Sample**

There are total 30 commercial banks operating in Nepal. Out of these banks only the joint venture banks Himalayan and Nepal SBI been selected for research and their data related to investment practice are comparatively studied and the period of the study is about 5 years.

### **3.4 Nature and Sources of Data**

The study is based on the secondary data relating to the study of investment analysis of HBL and Nepal SBI banks as they are available at HBL and Nepal SBI. Determining the sources of data is an important step in the collection of data. Basically this study is conduct on the basis of secondary and analyzed data. For analysis, the data are collected from Bank's Financial Statement & Annual Reports of these two banks and another related data are collected from many institutions and regulating authorities like NRB, Security Exchange board, Nepal Stock Exchange Ltd., Economic Survey, Ministry of Finance, Budget Speech of different fiscal years, T.U. Central Library, SDC library, various articles published in the newspaper, websites, magazines, journals, reports etc.

### **3.5 Method of Data Presentation and Analysis**

The data presentation and analysis are focal part of the study. Ranges of financial and statistical tools are used to analyze the collected data and to achieve the objectives of the study. The analysis of the data will be done according to pattern of data available. Because of limited time and resources, simple analytical statistical tools such as graph, percentage, coefficient of correlation, regression analysis and the technique of least square are adopted in this study. In the same way, some strong financial tools such as ratio analysis and trend analysis have also been used for financial analysis. The data extracted from annual report, financial statement and other available information are processed and tabulated in various tables and charts under different headings according to their nature.

### **3.6 Data Analysis Tools**

There are mainly two tools of data analysis were used. They are follows;

#### **3.6.1 Financial Tools:**

Financial analysis is act of identify the financial strength and weakness of the organization presenting the relationship between the items of balance sheet and the profit and loss account. For the purpose of this study ratio analysis has mainly been used and with the help of it, data have been analyzed.

Ratio analysis is a powerful tool of financial analysis. A ratio is defined as "the indicated quotient of two mathematical expressions" and as "the relationship between two or more things." In financial analysis, a ratio is used as an index or yardstick for evaluating the financial position and performance of a firm.

Several ratios, calculated from the accounting data, can be grouped into various classes according to the financial activity or function to be evaluated.

The following ratios have been calculated under this topic.

1. Liquidity Ratio
2. Profitability Ratio
3. Assets Management Ratio
4. Risk Ratio
5. Activity Ratios
6. Growth Ratio

##### **3.6.1.1 Liquidity Ratios:**

Liquidity means the ability of a firm to satisfy its short-term obligations as they come due. It measured by the speed with which bank assets can be converted into cash to meet deposit withdrawal and other current obligations. The following ratios are evaluated under liquidity ratio:

###### **a) Current ratio:**

The calculation of current ratio is based on a simple comparison between current liabilities and current assets. It measures short-term solvency, so it is often called liquidity solvency ratio and working capital ratio. Current assets include cash and bank balance, money at call or short notice, loans and advances for commercial banks, Investment in govt. securities and other receivables, overdraft, bills purchased and discounted and miscellaneous current assets. Current liabilities include deposits and



other short term loan, bill payable tax provision, staff bonus, dividend payables and miscellaneous current liabilities. Current ratio is calculated by applying following formula.

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

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

**b) Cash and Bank Balance to Total Deposit Ratio:**

Cash and bank balance are the most Liquid current assets. This ratio measures the percentage of most liquid fund with the bank to take immediate payment to the depositor. Cash and bank balance includes cash on hand, foreign cash on hand cheques and other cash items, balance with domestic banks and balance held in foreign banks. The total deposit includes current, fixed, call, margin etc. It is computed as follows:

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

**c) Investment on Government Securities to Current Asset Ratio:**

This ratio shows that how much amount has been the part of the total current assets on investment on government securities which is risk free asset. Investment on government securities includes treasury bills and development bond. This ratio is calculated by dividing investment on govt. securities by current assets.

This can be presented as,

$$\text{Investment on Government Securities to Current Asset Ratio} = \frac{\text{Investment on Government Securities}}{\text{Current Asset}}$$

Here investment on government securities includes treasury bills and development bond etc.

**3.6.1.2 Profitability Ratios**

Profit is the difference between the revenues and the expenditure over a period. Profit is the main elements that make and organization to survive in long run. Measuring the profitability ratio is also significant in this study and shall reflect how much investment position has affected the profit situation. These ratios have been used in determining the efficiency of the lending.

Commercial banks provide short term loan and advances, cash credit local and foreign bill purchased and discounted. Commercial banks should not keep its all collected funds as cash and bank balance they should be invested as loan and advances to the customers and there must be favorable return. This ratio indicated how efficiently the bank has employed its resources in the form of loan and advances.

It is true indication of financial performance of any institutions. Higher the profit ratio, the higher will be the efficiency bank and vice versa. Profitability position can be evaluated through following different ways:

**a) Return on Loan and Advances**

This ratio indicates how efficiency the bank has employed its resources in the form of loan & advances. This ratio is computed by dividing net profit (loss) by loan and advances. This can be expressed as,

$$\text{Return on Loan and Advance} = \frac{\text{Net profit (loss)}}{\text{Loan and advances}}$$

**b) Return on Investment**

This ratio shows how well the funds have been utilized in investment sector, does the investment increment or decrease affects the earning of the firm. There must be favorable return from the investment. This ratio shows how efficiently the bank has employed its resources in the form of investment. This ratio is computed by dividing net profit (loss) by total investment. This can be shown as follows.

$$\text{Return on Investment} = \frac{\text{Net profit (loss)}}{\text{Total Investment}}$$

**c) Return on Total Assets**

A firm has to earn satisfactory return on total assets or total working fund for its survival. This ratio is calculated as follows,

$$\text{Return on Total Assets} = \frac{\text{Net profit (loss)}}{\text{Total Assets}}$$

**d) Return on Equity (ROE)**

Equity share holders are the main owner of the banks. There must be sufficient return to equity holder. Net worth refers to the owner's claim of a bank. The excess amount over current liabilities of total assets is known as net worth. Here equity capital

includes share holder's reserve including profit and loss account and share capital. This can be stated as,

$$\text{Return on equity} = \frac{\text{Net Profit (Loss)}}{\text{Total Equity Capital}}$$

**e) Interest Income to Total Operating Income**

Find out the ratio of interest income to total income this is calculated. It indicates how efficient is the bank in mobilization of its resources in interest bearing assets. This ratio can be calculated by dividing total interest income by total income. This can be stated as,

$$\text{Interest Income to Total Income} = \frac{\text{Total Interest Income}}{\text{Total Income}}$$

**f) Total Interest Earned to Total outside Asset**

This ratio shows how well the collected fund has been utilized in the form of investment and loan and advances. They both are the income generating assets so they should be properly utilized to not to let the bank go down by taking care of it. It shows the contribution of total outside assets to the total interest earned.

This ratio is helpful to know the total interest earned or income in terms of interest from outside assets is computed where total outside assets include only Loan and advances and total investment. So it can be computed as follows,

$$\text{Total Interest Earned to Total outside Asset Ratio} = \frac{\text{Total Interest earned}}{\text{Total outside Assets}}$$

**3.6.1.3 Assets Management Ratios**

Assets management ratio measures the proportion of various assets and liabilities in balance sheet. The proper management of assets and liability ensures its effective utilization. The banking business converts the liability into assets by way of its lending and investing functions. Assets and liability management ratio measures its efficiency in multiplying various liabilities in performing assets. These ratios show how efficiently the bank manages the resources at its command the following ratios are used to find out how well assets have been managed.

**a) Loan & Advances to Total Deposit Ratio**

This ratio shows how successfully the banks are utilizing its total deposits on loan & advances for generating profit. Higher ratio implies the better utilization of total deposits. Mathematically it is presented as,

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

**b) Total Investment to Total Deposit ratio**

This ratio implies the utilization of firms deposit on investment in government securities and share, debentures of other companies and bank. Mathematically it is presented as,

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

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

**c) Investment plus Loan and Advances to Total Deposit Ratio**

The greater ratio implies the better utilization of total deposits. Investment as well as loan and advances the both are done to generate income for the bank. This ratio can be obtained by dividing Investment plus loan and advances by total deposits, which can be states as,

$$\text{Investment plus Loan and Advances to Total Deposit ratio} = \frac{\text{Investment plus Loan and Advances}}{\text{Total Deposit}}$$

**d) Loan and Advance to Total Assets Ratio**

Loan & advance is the major component in total assets which indicates the ability of bank to canalize its deposits in the form of loan & advances to earn high return. This can be obtained by dividing loan & advances by total working fund. This ratio can be states as:

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

Here, the denominator includes all assets of on balance 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.

**e) Total investment to Total Assets Ratio**

Here total assets include all balance sheet assets but not off balance sheet items. This ratio shows how much is the investment part of the total assets of the bank. This ratio can be computed by dividing total of investment by total assets, which is expressed as follows,

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

**f) Investment on Government Securities to Total Assets Ratio**

This is the safety place to invest the fund. Most of the commercial banks invest on securities issued by the government. This ratio shows the banks investment on government securities in comparison to the total working fund. This is presented as,

$$\text{Investment on Government Securities to Total Assets Ratio} = \frac{\text{Investment on Government Securities}}{\text{Total Assets}}$$

**g) Investment on Shares and Debentures to Total Assets Ratio**

This ratio shows the banks investment in shares and debentures of the subsidiary and other companies. Commercial banks hold shares of the other companies also. This ratio can be derived by dividing investment on shares and debentures by total assets. It can be shown as follows,

$$\text{Investment on Shares and Debentures to Total Assets Ratio} = \frac{\text{Investment on Shares and Debentures}}{\text{Total Assets}}$$

Here the numerator indicates investment on debentures, bonds and shares of other companies.

**3.6.1.4 Risk Ratios**

There is a risk associated with investment, if one needs return one must take a risk. It increases effectiveness and profitability of the bank. The following ratios are calculated to measure the level of risk associated with the bank.

### **a) Liquidity Risk Ratio**

This ratio measures the level of risk associated with the liquid assets i.e. cash, bank balance that are kept in the bank for the purpose of satisfying the deposit demand for cash. This ratio is calculated by dividing total cash and bank balance by total deposits. It can be stated as,

$$\text{Liquidity Risk Ratio} = \frac{\text{Total cash and bank balance}}{\text{Total deposits}}$$

### **b) Credit Risk Ratio**

It measures the possibility that loan will not be repaid or that investment will deteriorate in quality or go into default with consequent loss to the bank. By definition, credit risk ratio is expressed as the percentage of non-performing loan to total loan & advances. Here, dividing total loan and advances by total assets derives this ratio. This can be stated as,

$$\text{Credit Risk Ratio} = \frac{\text{Total loan and advances}}{\text{Total assets}}$$

### **3.6.1.5 Activity Ratios**

Activity ratio measures the how well internal activity of the bank is maintained. It measures the performances efficiency of an organization from various angles of its operations. These ratios indicate the efficiency of activity and enterprise to utilize available funds, particularly short term funds. Here only two ratios are calculated.

#### **a) Loans Loss Provision to Total Loans and advances ratio**

Each and every bank has to maintain sufficient loan loss provision maintained by the NRB under its directives. It helps to not to let the bank go down by increasing bad debts. As there is increased in the Non performing loans the provision should be also increase. Cent percent provision is needed as per rules prescribed by the NRB central bank. This is calculated as follows.

$$\text{Loans Loss Provision to Total Loans and advances ratio} = \frac{\text{Provision for loan loss}}{\text{Total Loan and Advances}}$$

### **b) Total NPA to Total Loans and Advances ratio**

This ratio is very important from the point of view of investment because it shows how much the bank has been suffering from the Nonperforming Assets. It is compared with total loan and advances. Here NPA includes only the Non Performing Loan and advances. Nonperforming loan consists of substandard loan, doubtful and bad loan. This ratio can be expressed as follows,

$$\text{Total NPA to Total Loans and advances ratio} = \frac{\text{Non Performing Loan and advances}}{\text{Total loan and advances}}$$

### **3.6.1.6 Growth Ratios**

This ratio indicates how properly the banks are maintained their economic and financial condition. Growth ratios are related to fund mobilization and investment management of bank. Higher ratios represent the better performance of selected banks. Following growth ratios are calculated under this:

- a) Growth Ratio of Total Deposit
- b) Growth Ratio of Total Investment
- c) Growth Ratio of Net Profit
- d) Growth Ratio of Loan and Advance

The following equation is used to calculate the growth rate of the items;

$$D_1 = D_0(1 + g)^{n-1}$$

Where,

g = growth rate

n = No. of years

$D_1$  = Value at the end of the year

$D_0$  = Value of the beginning of year

### **3.6.2 Statistical Tools:**

Some important tools are used to achieve the objectives of this study. In this study statistical tool such as Arithmetic Mean, Standard Deviation, coefficient of Variation, co-efficient of Correlation, Trend Analysis, and Hypothesis Test is also used.

### 3.6.2.1 Arithmetic Mean

Arithmetic mean also called the mean or average. Arithmetic Mean is the most popular and widely used measure of central tendency. Arithmetic mean either is simple or weighted. Simple arithmetic mean is the ratio of the sum of all observations to the number of observations. The arithmetic mean is denoted by  $\bar{X}$  and it is computed as;

$$\text{Arithmetic Mean } (\bar{X}) = \frac{\sum X}{n}$$

Where  $\sum X$  means the summation of the value of the X and n is the number of observations.

### 3.6.2.2 Standard Deviation

Standard deviation is the most popular and most useful measure of dispersion and gives uniform, correct and stable result. The chief characteristic of standard deviation is that it is based on mean which gives uniform and dependable results. Furthermore standard deviation is always a positive number. Standard deviation is denoted by sigma ( $\sigma$ ). Standard deviation is calculated to measure dispersion, it is computed as

$$\sigma = \sqrt{\frac{\sum(X - \bar{X})^2}{n - 1}}$$

### 3.6.2.3 Coefficient of Variation

The percentage measure of coefficient of standard is called coefficient of variation (C.V.). Covariance is calculated to find variance from the mean. It is computed as

$$CV = \frac{\sigma}{\bar{X}}$$

### 3.6.2.4 Co-efficient of Correlation

This analysis interprets and identifies the relationship between two or more variables. In the case of highly correlated variable, the effect on none variable may effects another correlated variable. This study tries to find out relationship between the following variables.

- a) Co-efficient of correlation between deposit and loan and advances.
- b) Co- efficient of correlation between total deposit and total investment.
- c) Co-efficient of correlation between total investment and net profit.
- d) Co-efficient of correlation between loan and advances to net profit.



These tools analyze the relationship between these variables and help the bank to make appropriate policy regarding deposit collection, fund utilization and maximization profit.

### **3.6.2.5 Trend Analysis**

These analyses analyze the trend of deposit, loan and advances, investment and net profit of Himalayan Bank Limited and Nepal SBI Bank Limited and make the forecast for the next 5 years.

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

The trends of related variable can be calculated as,  $Y = a + bx$

### **3.6.2.6 Hypothesis Test**

Testing of hypothesis is one of the most important aspects of the theory of decision making. It consists of decision rules required for drawing probabilistic inferences about the population parameters.

Null hypothesis: A statistical hypothesis made about the population parameter to testing its validity for the purpose of possible acceptance is called null hypothesis. It is also called hypothesis of no difference. It is denoted by  $H_0$ .

Alternative hypothesis: A complementary to null hypothesis is called an alternative hypothesis. It is set up against the null hypothesis. It is hypothesis of difference. It is denoted by  $H_1$ .

Here sample is less than 30 so we should use t test to find out the null hypothesis made is acceptable or not. Confidence level is 95%.

# **Chapter IV**

## **Data Analysis and Interpretation**

### **4.1 Presentation and Analysis of Data**

This is analytical chapter where those major financial items are analyzed and evaluation which affect the investment management and fund mobilization of the joint venture banks in the comparison of each other.

### **4.2 Financial Analysis**

Under this topic various financial ratios related to the investment management and the fund mobilization are calculated to evaluate and analyze the performance of HBL and NSBI. Study of all types of ratios has not been done, only those ratios that are important from the point of view of the fund mobilization and investment are calculated. The important ratios are studied for the fulfillment of the study given below.

4.2.1 Liquidity ratios

4.2.2 Profitability ratios

4.2.3 Assets management ratios

4.2.4 Risk ratios

4.2.5 Activity Ratio

4.2.6 Growth rates

#### **4.2.1 Liquidity Ratios**

A commercial bank must maintain its satisfactory liquidity position to satisfy the credit needs of the community, to meet the demands for deposits withdrawal, pay maturity obligation in time and convert non cash into cash to satisfy immediate needs without loss to the bank and without consequent impact on long-run profitability of the bank. To measure the liquidity position of the bank, the following measures of liquidity ratio has been calculated and a brief analysis of the same has been done as below.

#### 4.2.1.1 Current ratio

Current ratios of HBL and NSBI bank from the fiscal year 2061/62 to 2065/66 are presented below in table no 4.1 (Detail in appendix 1)

Table No. 4.1  
Current ratios (Times)

Banks	Fiscal year							
	2061/062	2062/063	2063/064	2064/065	2065/066	Mean	S.D.	CV (%)
HBL	0.82	0.85	0.89	0.91	0.96	0.886	0.0486	5.49
NSBI	1.32	1.09	1.09	1.07	0.70	1.054	0.199	18.88

Source: appendix 1

The above table has revealed that HBL has been suffering from low current ratios than last year but the latest one has showed that it has improved than past year. NSBI current ratio is in decreasing trend. The current ratio shows the current assets of the bank are sufficient or not to meet short term obligations or current liabilities. Current assets include all the current assets which are cash and bank balance, money at call and short notice, investment on government securities bills purchase and discounted and loans and advances and other current assets. Both banks do not have sound current ratio but satisfactory. The mean of current ratio of HBL and NSBI were 0.886 and 1.054 respectively. Standard deviation which shows the risk of not being able to meet current obligations was 0.0486 and 0.1999 respectively. Coefficient of variance between the current ratio of HBL and NSBI is 5.49% and 18.88% respectively.

Though the optimal standard of current ratio should be 2:1, the conventional measure of liquidity is not applicable in banking business. Banking business holds big portion of deposits as a core deposits and this deposits remains all the time throughout the years. This core deposit forms the fixed liability of the bank though it is current in nature so the ratio maintained by the bank at the level of around 1:1 can be regarded as sound liquidity position.

#### 4.2.1.2 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 depositors. This ratio is calculated and presented in the Table No. 4.2 (Detail in

Appendix 2). These ratios of both higher and lower ratios are not desirable and satisfactory. If a bank maintains higher ratios of cash, it has to pay interest on deposits and some earning n\may be lost. If a bank maintains low ratio of cash, it may fail to make payment for the demands of the depositors. So, sufficient and appropriate cash reserve should be maintained properly.

Table No. 4.2  
Cash reserve ratios (%)

Banks	Fiscal year							
	2061/062	2062/063	2063/064	2064/065	2065/066	Mean	S.D.	CV (%)
HBL	8.12	6.48	5.85	4.55	8.79	6.758	1.533	22.68
NSBI	8.36	10.16	9.81	9.79	6.81	8.986	1.251	13.92

Source: appendix 2

From the above Table No. 4.2, reveals that the cash and bank balance to total deposit ratios of all two banks due fluctuating trend HBL highest ratio is 8.79 percent in FY 2065/66 and lowest ratio is 4.55 percent in FY 2064/65. Similarly in the case of NSBI, highest ratio is 10.16 percent in FY 2062/63 and lowest ratio is 6.81 percent in FY 2065/66.

In case of overage, it is found that cash and bank balance to total deposit of HBL has lowest than that of NSBI where, the means of HBL and NSBI are 6.758 percent and 8.986 percent respectively. On the basis of coefficient of variances, HBL is 22.68 percent, which is comparatively higher 13.92 percent of NSBI. It shows the cash reserve ratio of NSBI is more stable and consistent than HBL.

#### **4.2.1.3 Investment in Government Securities to Current Assets Ratio:**

This ratio examines that portion of commercial banks current assets, which is inverted on different government securities. More or less, each commercial bank is interested to invest their collected fund on different types of securities issued by government at different times to utilize their excess fund and have other purpose. Though, government securities are not so liquid a cash and bank balance of commercial bank, they can be easily sold in the market or converted into cash in other ways and they are risk free also.

This ratio shows that out of total current assets, how much percentage of it has been occupied by the investment on government securities. The ratio is calculated by dividing investment on government securities by total current assets. The ratios are presented in the following table.

Table No. 4.3  
Investment on govt. securities to current assets ratio (%)

Banks	Fiscal year							
	2061/062	2062/063	2063/064	2064/065	2065/066	Mean	S.D.	CV (%)
HBL	25.80	22.34	23.53	25.37	12.46	21.90	4.88	22.28
NSBI	20.21	27.86	17.08	18.07	16.25	19.89	4.197	21.10

Source: appendix 3

The above Table has shown that mean ratios for the study period of HBL and NSBI were 21.90 and 19.89 and the CV between them was 22.28% and 21.10% respectively. On the basis of calculated CV, it is concluded that the ratios are more volatile and inconsistent.

According to the above data presented and analyzed banks invest their some portion of the collected fund on government securities which is also the part of current assets. This can help to meet current obligations of sample banks.

#### **4.2.2 Profitability Ratios**

The main objectives of commercial banks are 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, expand banking transactions in different places, finance government in need of development funds etc a commercial bank must have to earn sufficient profit.

Of course, profitability ratios are the best indicators of overall efficiency. These ratios are calculated to measure the operating efficiency and overall performance of the financial institution. Here, mainly those ratios represented and analyzed which are related with profit as well as fund mobilization. Through the fall ratios, effort has been made to measure the profit earning capacity of HBL in comparison to NSBI. The following ratios are calculated under this profitability ratio topic:

#### 4.2.2.1 Return on loans & advances ratio

This ratio measures the earning capacity of the commercial banks through its fund mobilization as loan and advances. A high ratio indicates greater success to mobilize fund as loan and advances and vice versa. This ratio calculated by dividing net profit by total amount of loan and advances. The following table shows the return on loan and advances ratio of HBL and NSBI of study period.

Table No. 4.4  
Return on loans & advances ratio (%)

Banks	Fiscal year							
	2061/062	2062/063	2063/064	2064/065	2065/066	Mean	S.D.	CV (%)
HBL	2.48	3.12	2.89	3.26	3.04	2.958	0.267	9.03
NSBI	0.92	1.53	2.69	2.05	2.09	1.856	0.595	32.058

Source: appendix 4

The above Table shows that how much return had generated through utilization of fund into loan and advances. The mean ratios for study period of HBL and NSBI were 2.958 and 1.856 respectively. It shows that HBL has generated more return through loan and advances than NSBI. But NSBI return has in increasing trend comparing to HBL. The CV shows the variations of ratios which were 9.03 of HBL and 32.058 of NSBI. It shows the return on loan and advances ratio of HBL is more stable and consistent than NSBI.

#### 4.2.2.2 Return on Investment ratio

Return in investment ratio are calculated from the fiscal year 2061/62 to 2065/66 study period, which has been presented in the Table No. 4.5

Table No. 4.5  
Return on investment ratio (%)

Banks	Fiscal year							
	2061/062	2062/063	2063/064	2064/065	2065/066	Mean	S.D.	CV (%)
HBL	2.64	4.20	4.16	4.77	8.64	4.882	2.007	41.11
NSBI	2.20	3.24	9.59	8.02	2.38	5.086	3.097	60.89

Source: appendix 5

From the above comparative table both banks ratio's are in fluctuating trend during the period under study. On the other hand, when mean ratios are observed, HBL seems to have earned lower amount of interest on their outside assets in comparison to NSBI i.e.  $4.882\% < 5.086\%$ . CV of the return of investment ratio of the sample banks for the five year of the study period were 41.11% and 60.89% respectively, which shows highly variation in the mean ratios of return on investment.

#### 4.2.2.3 Return on Total Assets ratio

Return on total assets ratio are calculated from the fiscal year 2061/62 to 2065/66 study period, which has been presented in the Table No. 4.6

Table No. 4.6  
Return on total assets ratio (%)

Banks	Fiscal year							
	2061/062	2062/063	2063/064	2064/065	2065/066	Mean	S.D.	CV (%)
HBL	1.11	1.56	1.47	1.76	1.91	1.562	0.273	17.48
NSBI	0.45	0.90	1.84	1.45	1.04	1.136	0.4753	41.84

Source: appendix 6

The total assets have represented the current, fixed, intangible factitious assets. The above table has shown the ratios of return on total assets.

Here, the mean ratio of HBL and NSBI were 1.562 and 1.136 and standard deviations were 0.273 and 0.4753 respectively which shows the risk of being deviation from the mean ratio. CV shows highly variation in the mean ratios of return on investment ratio. The ratios are fluctuated.

#### 4.2.2.4 Return on Total Shareholders Equity Ratio

Equity capital of any bank is its owned capital. The prime objectives of any bank is wealth maximization or in other words to earn high profit and thereby, maximizing return on its equity capital. ROE is the measuring the role of profitability of bank. It reflects the extent to which the bank has been successful to mobilize or utilize its equity capital. A high ratio indicates higher success to mobilize its owned capital (equity) and vice versa. This ratio is calculated by dividing net profit by total equity capital including paid up capital, P/L a/c, various reserves, general loan loss provision etc. This ratio has been shown in the following table.

Table No. 4.7  
Return on shareholders' equity ratio (%)

Banks	Fiscal year							
	2061/062	2062/063	2063/064	2064/065	2065/066	Mean	S.D.	CV (%)
HBL	16.38	20.22	19.48	17.56	18.97	18.52	1.379	7.45
NSBI	8.33	10.21	20.63	17.50	23.22	15.978	5.799	36.29

Source: appendix 7

Here, the mean ratio of HBL and NSBI were 18.52 and 15.978 and standard deviations were 1.379 and 5.799 respectively. In terms of the return on total equity there is variation. CV shows that 7.45% and 36.29% for HBL and NSBI were the variation occurred in the ratios calculated above.

#### 4.2.2.5 Interest Income to Total Operating Income Ratio

Interest income to total operating income ratios are calculated from the fiscal year 2061/62 to 2065/66 study period, which are presented in the table no. 4.8 below.

Table No. 4.8  
Interest income to total operating income ratio (%)

Banks	Fiscal year							
	2061/062	2062/063	2063/064	2064/065	2065/066	Mean	S.D.	CV (%)
HBL	82.28	79.64	82.17	81.10	80.13	81.064	1.058	1.30
NSBI	88.53	89.16	87.88	88.80	88.33	88.54	0.4317	0.49

Source: appendix 8



The above table shows the ratios of the interest income to total operating income of the bank in terms of percentage. The major earning of the bank is interest on loan and advances and return on investment on different components. The mean ratios for study period of HBL and NSBI were 81.064 and 88.54 respectively. The risks of deviation the calculated ratio from the mean ratio were 1.058 of HBL and 0.4317 of NSBI. Interest income have played vital role in the contribution to the value of operating income.

#### 4.2.2.6 Total Interest Earned to Total outside Assets Ratio

The outside assets have played a significant role in commercial banks as a main asset which includes loan and advances, investment on government securities, investment on share and debentures and all other types in investment. A high ratio indicates high earning on total outside assets and vice versa.

Total interest earned to total assets ratios are calculated from the fiscal year 2061/62 to 2065/66 study period, which are presented in the table no. 4.9 below.

Table No. 4.9

Total interest earned to total outside assets ratio (%)

Banks	Fiscal year							
	2061/062	2062/063	2063/064	2064/065	2065/066	Mean	S.D.	CV (%)
HBL	6.00	6.37	6.16	5.98	6.99	6.30	0.372	5.90
NSBI	6.56	6.31	6.86	6.38	5.14	6.25	0.587	9.39

Source: appendix 9

The above table has revealed that total interest earned to total outside assets ratios of HBL and NSBI have consistent. The mean ratios of HBL and NSBI were 6.30% and 6.25% respectively. CV of both bank were 5.90% and 9.39% respectively.

#### 4.2.3 Assets Management Ratios

The different assets management ratios are calculated and analyzed to know how well the assets are managed by the bank. The important items on the part of balance sheet are an assets and it includes cash and bank balance, money at call and short notice. Investment, loans and advances, fixed assets and other assets. Among them

investment and loans and advances are the vital assets which are to be managed properly.

#### 4.2.3.1 Investment to Total Deposit Ratio

A commercial bank may mobilize its deposit by investing its fund in different securities issued by government and other financial and non-financial companies. Now the effort has been made to measure the extent to which the banks are successful in mobilize the deposits on investment. In the process of portfolio management of banks 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.

Investment to total deposit ratios are calculated from the fiscal year 2061/62 to 2065/66 study period, which are presented in the table no. 4.10 below.

Table No. 4.10  
Investment to total deposit ratio (%)

Banks	Fiscal year							
	2061/062	2062/063	2063/064	2064/065	2065/066	Mean	S.D.	CV (%)
HBL	47.12	41.10	39.35	41.89	25.12	38.916	7.368	18.933
NSBI	30.13	32.82	23.24	22.52	47.53	31.248	9.045	28.95

Source: appendix 10

The above table shows that HBL and NSBI investment to total deposit ratio have fluctuating trend during the study period. The highest ratio of HBL and NSBI are 47.12% (F/Y 2061/60) and 47.53% (F/Y 2065/66) respectively. An average, the ratio of HBL is higher than that of NSBI (i.e. 38.916 > 31.248). It shows that HBL seems to be strong to mobilize its total deposit as investment in comparison to NSBI. On the basis of co-efficient of variation, we can say that HBL loan and advances is more consistent than that of NSBI.

#### 4.2.3.2 Loans and Advances to Total Deposit Ratio:

This ratio actually measures the bank's ability to utilize the depositors fund to earn profit by providing loan and advances. This ratio is computed by dividing loan and advances by total deposit. A high ratio of loan and advances indicates better

mobilization of collected deposits and vice-versa. But it should be noted that too high ratio might not be better from its liquidity point of view.

Loans and advances to total deposit ratios are calculated from the fiscal year 2061/62 to 2065/66 study period, which are presented in the table no. 4.11 below.

Table No. 4.11  
Loans and advances to total deposit ratio (%)

Banks	Fiscal year							
	2061/062	2062/063	2063/064	2064/065	2065/066	Mean	S.D.	CV (%)
HBL	50.07	55.27	56.57	51.23	71.49	58.326	7.243	12.418
NSBI	71.80	69.32	82.66	88.32	54.12	73.244	11.825	16.14

Source: appendix 11

Above table reveals that both bank's loans and advances to total deposit ratios are in fluctuating trend. HBL's has highest ratio in F/Y 2065/66 i.e. 71.49% and lowest ratio in F/Y 2061/62 i.e. 50.07%. NSBI's has highest ratio in F/Y 2064/65 i.e. 88.32% and 54.12% lowest ratio in F/Y 2065/66.

On the basis of mean ratios, it can be said HBL's capacity to mobilize its deposits on total investment is not as good as its mean ratio is lower than of NSBI. On the other hand, observing the C.V of ratios, we can say that HBL's loan and advances ratio is more consistent than NSBI.

#### 4.2.3.3 Investment plus Loans and Advances to Total Deposit Ratio:

Investment plus Loans and advances to total deposit ratios are calculated from the fiscal year 2061/62 to 2065/66 study period, which are presented in the table no. 4.12 below.

Table No. 4.12  
Investment plus Loans and advances to total deposit ratio (%)

Banks	Fiscal year							
	2061/062	2062/063	2063/064	2064/065	2065/066	Mean	S.D.	CV (%)
HBL	97.19	96.38	95.92	103.12	96.60	97.842	2.67	2.73
NSBI	101.93	102.14	105.89	110.84	101.66	104.49	3.53	3.38

Source: appendix 12

The table shows Investment plus Loan and Advance to Deposits ratio of HBL. From the FY 2061/62 to 2063/64 the investment plus Loan and Advance to deposit goes on decreasing trend. Highest ratio of HBL is in FY 2064/65 which is 103.12. The average ratio of investment plus Loan and Advance to total deposit is 97.842, standard deviation is 2.67 and co-efficient variation is 2.73 percent. From the FY 2061/62 to 2064/65 the investment plus Loan and Advance to deposit goes on increasing trend of NSBI. The average ratio of investment plus Loan and Advance to total deposit is 104.49, standard deviation is 3.53 and co-efficient variation is 3.38 percent.

**4.2.3.4 Total Investment to Total Assets Ratio:**

Total investment to Total Assets ratios are calculated from the fiscal year 2061/62 to 2065/66 study period, which are presented in the table no. 4.13 below.

Table No. 4.13  
Total Investment to total assets ratio (%)

Banks	Fiscal year							
	2061/062	2062/063	2063/064	2064/065	2065/066	Mean	S.D.	CV (%)
HBL	42.12	37.09	35.35	36.91	22.14	34.72	6.69	19.27
NSBI	20.23	27.83	19.18	18.06	43.65	27.79	9.56	37.07

Source: appendix 13

Above table shows the total investment to total assets ratios of both banks. From the FY 2061/62 to 2063/64 the investment to total assets goes on decreasing trend of both banks. Ratio of HBL increased in FY 2064/65 by 4.41%. Total investment to total assets ratio of NSBI is increased in current FY by 141.69%. In average HBI has invested higher percentage of total assets than NSBI. There is high variation in the calculated ratios of the investment to total assets ratio.

**4.2.3.5 Total Loans and Advances to Total Assets Ratio:**

Total Loans and advances to total assets ratios are calculated from the fiscal year 2061/62 to 2065/66 study period, which are presented in the table no. 4.14 below.

Table No. 4.14

Total Loans and advances to total assets ratio (%)

Banks	Fiscal year							
	2061/062	2062/063	2063/064	2064/065	2065/066	Mean	S.D.	CV (%)
HBL	44.76	49.88	50.83	53.95	63.02	52.49	6.039	11.51
NSBI	48.20	58.78	68.42	70.83	49.71	59.15	9.254	15.65

Source: appendix 14

Between the study periods, ratio of HBL is in increasing trend. Total loans and advances to total assets ratio of NSBI is also in increasing trend. But in FY 2065/66 it was decreased. Mean ratios is 52.49 and 59.15 of HBL and NSBI respectively. Standard deviation is 6.039 and 9.254 and CV is 11.51 and 15.65 for HBL and NSBI respectively. There is variation in the calculated ratios of the loan and advance to total assets ratio.

#### 4.2.3.6 Investment on Government Securities to Total Assets Ratio

This ratio measures the proportion of the bank's investment in risk free areas. Total assets contain assets included in the balance sheet maintained by the bank. Government securities have included NRB bonds, Treasury bills, and Development bonds issued by the NRB, which is safe for investment to the bank. Investment has included investment on risky areas and investment in risk free areas. Thus this ratio measures the proportion of investment in risk free area of the total assets of the bank. The ratios of the investment on government securities to total assets ratio is presented below in the table no 4.15

Table No. 4.15

Investment on govt. securities to total assets ratio (%)

Banks	Fiscal year							
	2061/062	2062/063	2063/064	2064/065	2065/066	Mean	S.D.	CV (%)
HBL	19.70	17.52	19.30	20.67	10.71	17.58	3.583	20.38
NSBI	20.08	27.68	16.92	17.75	10.86	18.658	5.442	29.167

Source: appendix 15

The above table has showed the ratios calculated by dividing investment on govt. securities by total assets. The mean ratios for study period of HBL and NSBI were 17.58 and 18.658 respectively. The risks of deviation the calculated ratio from the mean ratio were 3.583 of HBL and 5.442 of NSBI. There is variation in the calculated ratios of the investment on govt. securities to total assets ratio.

#### 4.2.3.7 Investment on shares and debentures to Total Assets Ratio

Investment on shares and debentures to total assets ratio reflects the extent to which banks are successful to mobilize their working fund in purchasing shares and debentures of other companies to generate income and utilize extra fund. The high ratio indicates the more portion of working fund investment on share and debenture and vice-versa. The ratios of the investment on shares and debentures to total assets ratio is presented below in the table no 4.16

Table No. 4.16  
Investment on shares and debentures to total assets ratio (%)

Banks	Fiscal year							
	2061/062	2062/063	2063/064	2064/065	2065/066	Mean	S.D.	CV (%)
HBL	0.14	0.13	0.22	0.25	0.24	0.196	0.0507	25.87
NSBI	0.15	0.15	0.23	0.19	0.11	0.166	0.0407	24.52

Source: appendix 16

Here the table has shows the proportion of total assets which were invested into shares and debentures. Both banks are not quite interested into investing their assets in shares and debenture of both banks because of its high risk nature. The value of share or debenture can be fluctuated by and reason. Hence both banks have been contributed less proportion of their total assets. For HBL throughout the study period it invested around 0.13 to 0.25 ranges while for NSBI it invested around 0.11 to 0.23ranges. On the basis of the CV it can be concluded that the ratios are more volatile and inconsistent.

#### 4.2.4 Risk Ratios

The possibility of risk makes bank's investment a challenging task. Bank has to take risk to get return on investment. The risk taken is satisfied by the increase in profit. A bank has to take high risk if the expects high return on its investment. So, the banks

operating for high profit have to accept the risk and manage it efficiently. Here two ratios are computed regarding liquidity risk and credit risk.

#### 4.2.4.1 Liquidity Risk Ratio:

The liquidity risk of the bank defines its liquidity need for deposit. The ratio of cash and bank balance to total deposit is the indicator of bank liquidity needed. The cash and bank balance are the most liquid assets and they are considered as banks liquidity sources and deposits as the liquidity needed. A higher liquidity indicates less risk and less profitable bank and vice versa.

The bank should be able to pay the demanded cash by their customers so the bank should maintain its liquidity position. If the bank couldn't be able to pay the deposited money to the depositors on demand on time the bank has to face serious problem. So this risk is a prime risk that bank should consider. The liquidity risk ratios is presented below in the table no 4.17

Table No. 4.17  
Liquidity Risk Ratio (%)

Banks	Fiscal year							
	2061/062	2062/063	2063/064	2064/065	2065/066	Mean	S.D.	CV (%)
HBL	8.12	6.48	5.85	4.55	8.79	6.758	1.534	22.70
NSBI	8.36	10.16	9.81	9.79	6.81	8.986	1.251	13.92

Source: appendix 17

The above mentioned comparative table shows that the mean cash and bank balance to total deposit ratio of HBL and NSBI are 6.758 percent and 8.986 percent respectively. HBL has the lowest liquidity ratio i.e. 6.758 percent than NSBI, which indicates that HBL operates with higher risk for higher profit. On the other NSBI has the lowest C.V. i.e.  $13.92 < 22.70$  percent than HBL. This indicates that NSBI is more consistent with reference to liquidity risk ratio than HBL.

#### 4.2.4.2 Credit Risk Ratio:

Bank utilizes its collected funds in 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. Credit risk ratio shows the proportion of non-performing assets (NPAs) in the total loan and advances of a bank. But due to

unavailability of the relevant data, here we presented the credit risk as the ratio of total loan and advances to total assets. The following table shows the credit risk ratio of HBL and NSBI in comparison.

Table No. 4.18  
Credit Risk Ratio (%)

Banks	Fiscal year							
	2061/062	2062/063	2063/064	2064/065	2065/066	Mean	S.D.	CV (%)
HBL	44.76	49.88	50.83	53.95	63.02	52.488	6.0386	11.50
NSBI	48.20	58.78	68.24	70.83	49.71	59.152	9.254	15.64

Source: appendix 18

It is calculated by dividing all total loan and advances by total assets. The highest ratio is 63.02 of HBL and 70.83 of NSBI and lowest one is 44.76 of HBL and 48.20 of NSBI. The mean ratio of credit risk ratio of HBL is 52.488 and 59.152 for NSBI. Coefficient of variation is 11.50% and 15.64% of HBI and NSBI respectively shows that the ratios are variable. Standard deviation of the ratio is 6.0386 and 9.254 of HBL and NSBI respectively.

#### **4.2.5 Activity ratios**

These ratio measures the performance efficiency of an organization from various angles of its operations. These ratios indicate the efficiency of activity of an organization to utilize funds, particularly short term funds. Here only two indicators of the situation of the bank in terms of loan loss provision to total loans and advances and NPA to total loans and advances is calculated and presented below.

##### **4.2.5.1 Loan Loss Provision to Total Loans and Advances Ratio**

The ratios of the Loan Loss Provision to Total Loans and Advances ratio is presented below in the table no 4.19



Table No. 4.19

## Loan Loss Provision to Total Loans and Advances Ratio (%)

Banks	Fiscal year							
	2061/062	2062/063	2063/064	2064/065	2065/066	Mean	S.D.	CV (%)
HBL	8.26	7.64	4.68	3.50	2.93	5.402	2.164	40.06
NSBI	8.46	8.06	6.39	5.22	3.17	6.26	1.935	30.19

Source: appendix 19

In above table shows that how much provision was kept against the total loan and advances in case of loss situation. The calculation shows that during study period, it has been decreasing because of decreased amount of Nonperforming loan. The mean ratios for study period of HBL and NSBI were 5.402 and 6.26 respectively. The risks of deviation the calculated ratio from the mean ratio were 2.164 of HBL and 1.935 of NSBI. There is variation in the calculated ratios of the Loan Loss Provision to Total Loans and Advances Ratio.

As there is decreasing in provision for loans and advances; there is decreased in the nonperforming loan. Performing loan doesn't have to keep higher provision and just 1% is required. Here the calculated ratios are not higher than 10% during study period, this has proved that there is higher performing loan, due to which provision for loan and advances is in decreasing trend.

**4.2.5.2 Nonperforming Loans to Total Loans and Advances Ratio**

The ratios of the Nonperforming Loan to Total Loans and Advances ratio is presented below in the table no 4.20

Table No. 4.20

## Nonperforming Loan to Total Loans and Advances Ratio (%)

Banks	Fiscal year							
	2061/062	2062/063	2063/064	2064/065	2065/066	Mean	S.D.	CV (%)
HBL	8.06	7.11	3.77	2.45	2.22	4.722	2.415	51.14
NSBI	7.10	6.63	4.85	4.03	2.09	4.94	1.815	36.74

Source: appendix 20

The above table no 4.20 has showed the ratios of the activity of the bank in terms of the nonperforming loan to loan and advances ratio. Nonperforming loan consists of substandard loan, doubtful and bad loan. The bank has to maintain high provision for the above mentioned loans by 25%, 50%, and 100% respectively. While performing loan has to maintain only 1% of the pass loan or the performing loan and advances.

Here the ratios of both banks show that during study period were in decreasing trend. The decreased ratios of nonperforming loan to loans and advances (including bills purchased and discounted) are good sign for the bank. If the decreased situation will continue in the future period that will be the good health for the bank. Here the mean ratio of the nonperforming loan to loan and advances were 4.722% and 4.94% of HBL and NSBI respectively. Standard deviation or the risks of deviation from the mean ratio were 2.415 and 1.815 of HBL and NSBI respectively. Coefficient of variation was 51.14 and 36.74 respectively for HBL and NSBI. There is variation in the calculated ratios.

#### 4.2.5 Growth Rates

The growth rates are calculated by using the five year of the study period. Growth rate of each item is calculated by considering the current year's as future value and first study period value as present value. The calculated values are presented in the tabular form as below in table no 4.21

Table No. 4.21  
Growth rates of different items

Particular	Growth rates (%)	
	HBL	NSBI
Total Deposit	8.73	34.06
Total Investment	-7.10	50.25
Net Profit	18.85	24.92
Loan and Advances	25	53.23

Source: appendix 21 to 22

Here total deposit of the bank has been increasing by 8.73% for HBL and 34.06% for NSBI. Under the competitive situation of the banking sector this rate is satisfactory growth rate. Similarly growth rate of total investment during the five years of the study period has been around -7.10% for HBL and 34.06% for NSBI. There is negative growth of investment for HBL which – 7.10 % it shows that the bank is

investing less than previous year. Loan and advances as a part of total investment has shown positive increase in the growth rate which is around 25% and 53.23% for HBL and NSBI respectively. Here growth rate of net profit has also shown the positive growth rate of 18.85% for HBL and 24.92% for NSBI. So it is also a satisfactory one.

### 4.3 Statistical Analysis

Under this topic, some statistical tools such as co-efficient of correlation analysis between different variables, trend analysis of deposits, loan and advances, investment and net profit as well as hypothesis test (t - test) are used and done to achieve the objectives of the study. They are as follows.

#### 4.3.1 Coefficient of Correlation Analysis:

Under this topic, Karl's person coefficient of correlation is used to find out the relationship between deposit and loan and advances, total deposit and total investment, Investment and net profit, loan and advances and net profit.

##### 4.3.1.1 Co-efficient of correlation between Investment and Net profits

The correlation between Investment and net profit describe the degree of relationship between these two items. How a unit increased in investment impact in the volume of net profit is measured by this correlation. Here, Investment is the independent variable and the net profit is the dependent variable.

Table no. 4.22

Correlation between Investment and net profit

Bank	Correlation Coefficient (r)	P.Er.	6*P.Er.	Remarks
HBL	-0.38	0.257	1.524	$r < 6*P.E. (r)$ not significant
NSBI	0.61	0.189	1.134	$r < 6*P.E. (r)$ less significant

Source: appendix 23

The above table has showed that the correlation coefficient (r) between total investment and net profit of the HBL is -0.38 and Probable error multiplied by six is found to be 1.524. Since  $r < 6*P.E. (r)$ , r is negative and insignificant one (Details in Appendix). It can be inferred that there is low degree of negative correlation between

investment and net profit of the bank during the study period. For NSBI the correlation coefficient (r) between investment and net profit of the bank is 0.61 and Probable error multiplied by six is found to be 1.134. Since  $r < 6*P.E. (r)$ , r is positive and insignificant one (Details in Appendix). It can be inferred that there is moderate degree of positive correlation between investment and net profit of the bank during the study period.

#### 4.3.1.2 Co-efficient of correlation between loan and advances and net profit

The correlation between loans and advances and net profit describe the degree of relationship between these two items. How a unit increased in loan and advances impact in the volume of net profit is measured by this correlation. Here, loans and advances is the independent variable and the net profit is the dependent variable.

Table no. 4.23

Correlation between loan and advances and net profit

Bank	Correlation Coefficient (r)	P.Er.	6*P.Er.	Remarks
HBL	0.98	0.012	0.072	$r > 6*P.E.(r)$ significant
NSBI	0.92	0.046	0.276	$r > 6*P.E.(r)$ significant

Source: appendix 23

The above table has showed that the correlation coefficient (r) between loan and advances and net profit of the HBL and NSBI were 0.98 and 0.92 and Probable error multiplied by six is found to be 0.072 and 0.276 respectively. Since  $r > 6*P.E. (r)$ , r is positive and nearby 1. It can be inferred that there is high degree of positive correlation loan and advances and net profit of the bank during the study period.

#### 4.3.1.3 Co-efficient of correlation between deposit and loan and advances

The correlation between total deposits and loans and advances describe the degree of relationship between these two items. How a unit increased in deposits impact in the volume of loans and advances is measured by this correlation. Here, deposit is the independent variable and the loans and advances is the dependent variable.

Table no. 4.24

## Correlation between deposits and loans and advances

Bank	Correlation Coefficient (r)	P.Er.	6*P.Er.	Remarks
HBL	0.98	0.012	0.072	$r > 6*P.E.(r)$ significant
NSBI	0.90	0.057	0.342	$r > 6*P.E.(r)$ significant

Source: appendix 23

The above table has showed that the correlation coefficient (r) between deposits and loans and advances of the HBL and NSBI were 0.98 and 0.90 and Probable error multiplied by six is found to be 0.072 and 0.342 respectively. Since  $r > 6*P.E. (r)$ , r is positive and nearby 1. It can be inferred that there is high degree of positive correlation deposits and loans and advances of the bank during the study period.

**4.3.1.4 Co-efficient of correlation between deposit and Total investment**

The correlation between total deposits and total investment describe the degree of relationship between these two items. How a unit increased in deposits impact in the volume of total investment is measured by this correlation. Here, deposit is the independent variable and the total investment is the dependent variable.

Table no. 4.25

## Correlation between deposits and total investment

Bank	Correlation Coefficient (r)	P.Er.	6*P.Er.	Remarks
HBL	-0.33	0.268	1.608	$r < 6*P.E.(r)$ less significant
NSBI	0.98	0.012	0.072	$r > 6*P.E.(r)$ significant

Source: appendix 23

The above table has showed that the correlation coefficient (r) between deposits and investment of the HBL is -0.33 and Probable error multiplied by six is found to be 1.608. Since  $r < 6*P.E. (r)$ , r is negative and insignificant one (Details in Appendix). It can be inferred that there is low degree of negative correlation deposits and

investment of the bank during the study period. For NSBI the correlation coefficient (r) between deposits and investment of the bank is 0.98 and Probable error multiplied by six is found to be 0.072. Since  $r > 6*P.E. (r)$ , r is positive and significant one (Details in Appendix). It can be inferred that there is high degree of positive correlation between deposits and investment of the bank during the study period.

### 4.3.2 Trend Analysis:

The objective of this topic is to analysis trend of deposit collection, its utilization, net profit of HBL and NSBI. Under this topic trend value of deposits, loan and advances, investment, net profit are forecasted for the next five years more than the study period. Trend values of different important terms are calculated usinf following equation.

$$Y = a + bx$$

The projections are based on the following assumption

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

#### 4.3.2.1 Trend value of total deposits:

Trend values of total deposits are calculated on the basic of the five years of the study period. Trend values have been forecasted for the fiscal year 2066/67 to 2070/71 (Details in Appendix 24)

Table no. 4.26  
Trend values of total deposit

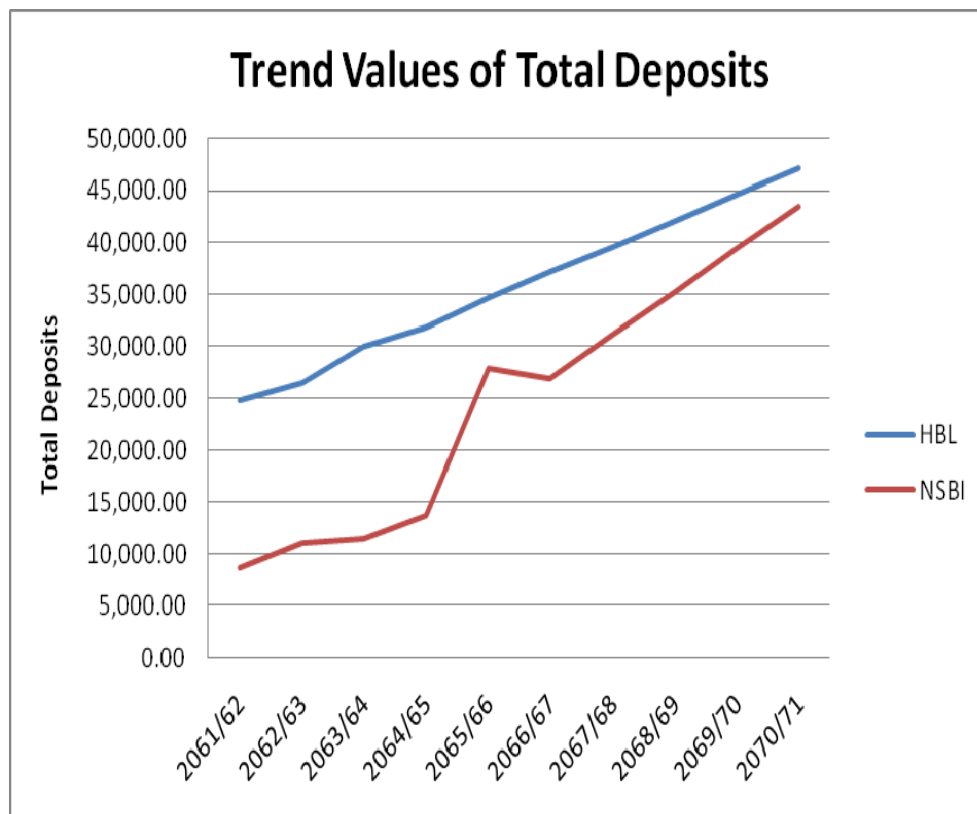
Fiscal year	Trend value (Rs. In million)	
	HBL	NSBI
2061/62	24,814.01	8,654.77
2062/63	26,490.85	11,002.04
2063/64	30,048.42	11,445.29
2064/65	31,842.79	13,715.40
2065/66	34,681.35	27,957.22

2066/67	37,101.47	26,950.42
2067/68	39,610.12	31,082.26
2068/69	42,118.79	35,214.09
2069/70	44,627.46	39,345.92
2070/71	47,136.12	43,477.75

Under this topic, an effort has been made to calculate the trend values of deposits of HBL and NSBI for five years on the basis of the available trend values from the 2061 to 2065 and trend values are forecasted for five years from 2066 to 2070. The above table has shown the trend values of deposits for ten years.

Figure No. 4.1

Trend values of total deposits of HBL and NSBI



The above presented figure has shown the increasing trend of the total deposit of the HBL and NSBI, which is a good sign for the bank to grow.

#### 4.3.2.2 Trend value of Loans and Advances

Trend values of Loans and Advances are calculated on the basis of the five years of the study period. Trend values have been forecasted for the fiscal year 2066/67 to 2070/71 (Details in Appendix 24)

Table no. 4.27  
Trend values of Loans and advances

Fiscal year	Trend value (Rs. In million)	
	HBL	NSBI
2061/62	12,424.52	6,213.88
2062/63	14,642.56	7,626.74
2063/64	16,998.00	9,460.45
2064/65	19,497.52	12,113.70
2065/66	24,793.16	15,131.75
2066/67	26,548.82	16,806.11
2067/68	29,508.03	19,038.38
2068/69	32,426.27	21,270.65
2069/70	35,426.50	23,502.92
2070/71	38,385.72	25,735.19

Under this topic, an effort has been made to calculate the trend values of Loans and Advances of HBL and NSBI for five years on the basis of the available trend values from the 2061 to 2065 and trend values are forecasted for five years from 2066 to 2070. The above table has shown the trend values of Loans and Advances for ten years.



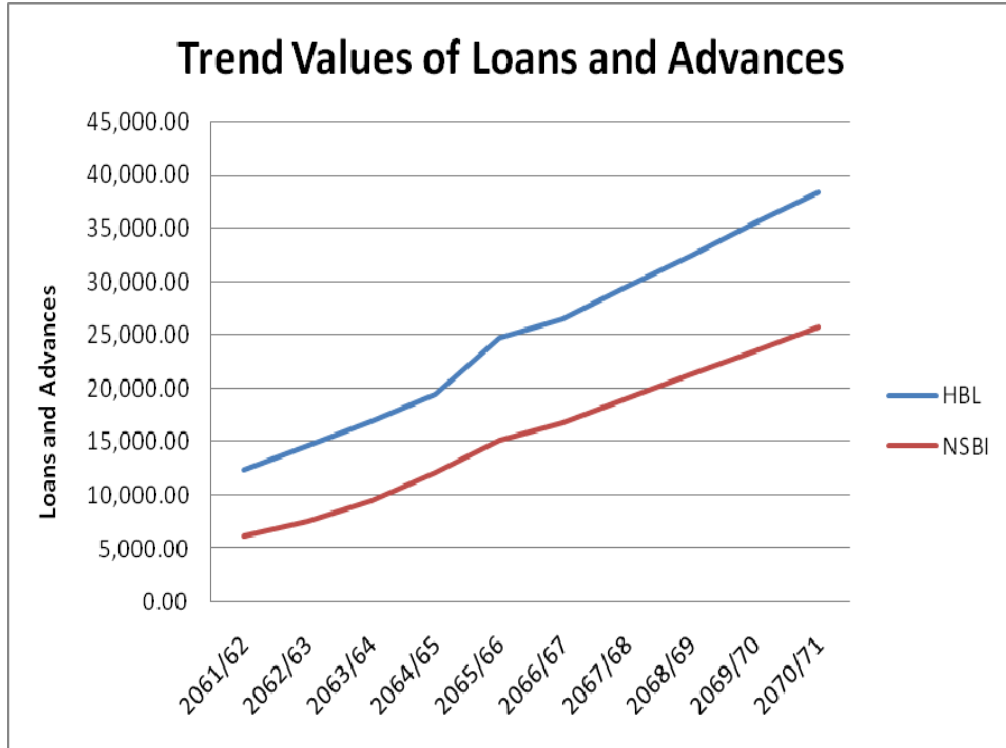


Figure No. 4.2

Trend values of loan and advances of HBL and NSBI

The above presented figure has shown the increasing trend of loan and advances of the HBL and NSBI, which is a good sign for the bank to grow.

#### 4.3.2.3 Trend values of the total investment

Trend values of total investment are calculated on the basis of the five years of the study period. Trend values have been forecasted for the fiscal year 2066/67 to 2070/71 (Details in Appendix 24)

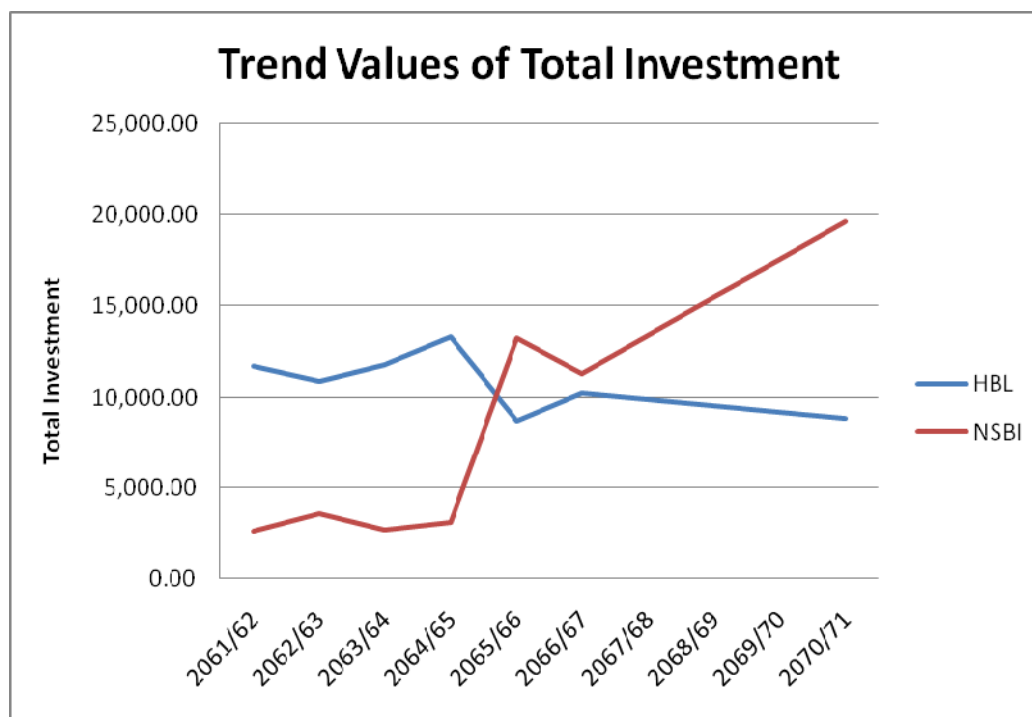
Table no. 4.28  
Trend values of total investment

Fiscal year	Trend value (Rs. In million)	
	HBL	NSBI
2061/62	11,692.34	2,607.68
2062/63	10,889.03	3,610.78
2063/64	11,822.99	2,659.45
2064/65	13,340.18	3,088.89
2065/66	8,710.69	13,289.18
2066/67	10,237.40	11,303.53
2067/68	9,886.19	13,387.64
2068/69	9,534.97	15,471.75
2069/70	9,183.76	17,555.86
2070/71	8,832.54	19,639.97

Under this topic, an effort has been made to calculate the trend values of total investment of HBL and NSBI for five years on the basis of the available trend values from the 2061 to 2065 and trend values are forecasted for five years from 2066 to 2070. The above table has shown the trend values of total investment for ten years.

Figure No. 4.3

Trend values of total investment of HBL and NSBI



The above graph has shown the trend values plus forecasted value using least square method. It has shown the fluctuating figure during the study period. Forecasted value of HBL is in decreasing trend but forecasted value of NSBI is in increasing trend.

#### 4.3.2.4 Trend values of net profit

Trend values of net profit are calculated on the basic of the five years of the study period. Trend values have been forecasted for the fiscal year 2066/67 to 2070/71 (Details in Appendix 24)

Table no. 4.29

Trend values of net profit

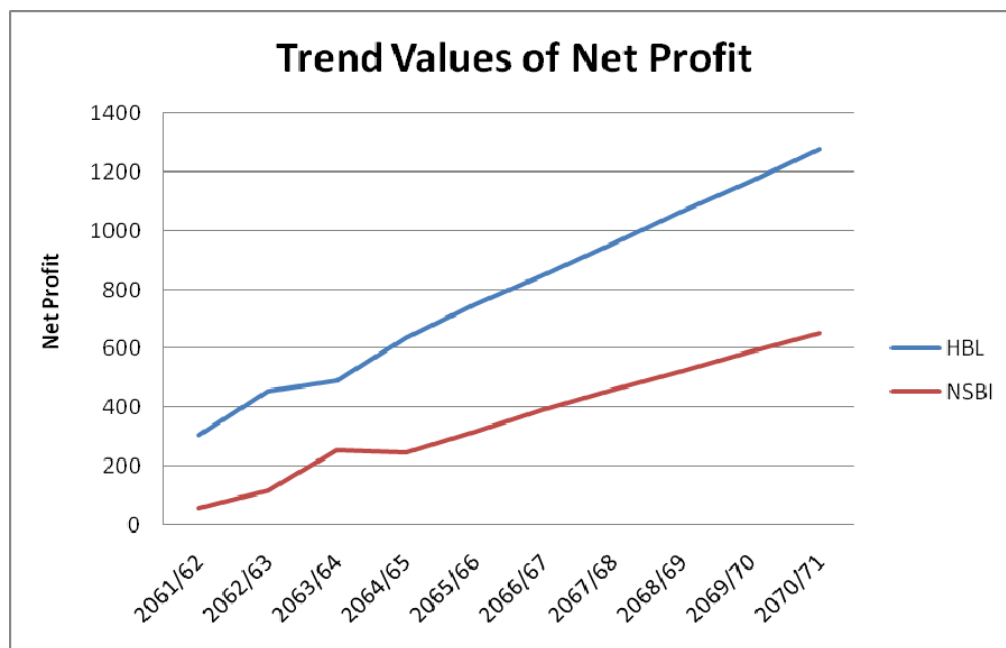
Fiscal year	Trend value (Rs. In million)	
	HBL	NSBI
2061/62	308.27	57.39
2062/63	457.45	117.00
2063/64	491.82	254.91

2064/65	635.87	247.77
2065/66	752.83	316.37
2066/67	849.51	393.31
2067/68	956.26	458.18
2068/69	1,063.02	523.05
2069/70	1,167.77	587.93
2070/71	1,276.53	652.80

Under this topic, an effort has been made to calculate the trend values of net profit of HBL and NSBI for five years on the basis of the available trend values from the 2061 to 2065 and trend values are forecasted for five years from 2066 to 2070. The above table has shown the trend values of net profit for ten years.

Figure No. 4.4

Trend values of net profit of HBL and NSBI



The above figure has shown the value of net profit of the HBL and NSBI. The above presented figure has shown the increasing trend of net profit of the HBL and NSBI,

### 4.3.3 Test of Hypothesis (t - test)

Null Hypothesis H<sub>0</sub>: Investment and net profits are not correlated

Alternative Hypothesis H<sub>1</sub>: Investment and net profit are correlated

Null Hypothesis H<sub>0</sub>: Loan and advances and net profit are not correlated

Alternative Hypothesis H<sub>1</sub>: Loan and advances and net profit are correlated

Null Hypothesis H<sub>0</sub>: Deposit and Loan and advances are not correlated

Alternative Hypothesis H<sub>1</sub>: Deposit and Loan and advances are correlated

Null Hypothesis H<sub>0</sub>: Deposit and Total investment are not correlated

Alternative Hypothesis H<sub>1</sub>: Deposit and Total investment are correlated

We can use the following formula to test the hypothesis made earlier:

Here in the study sample number is of five years and t test is done to find out the null hypothesis made is acceptable or not. Confidence level is 95%. Here, sample is less than 30 so we should use t test.

Where

$$t = \frac{r \times \sqrt{n-2}}{\sqrt{1-r^2}}$$

Where

r = calculated correlation coefficient

n = number of observations

The hypothesis has been tested with at 95% level of confidence.

#### 4.3.3.1 Hypothesis Test of Investment and Profit Correlation

We have,

Null Hypothesis H<sub>0</sub>: Investment and profit of HBL and NSBI are not correlated.

Alternative Hypothesis H<sub>1</sub>: Investment and profit of HBL and NSBI are correlated.

The hypothesis test of null hypothesis made investment and profitability of HBL and NSBI are not correlated is done using t formula due to small number of observations i.e. only 5. The result has been presented in below table no. (Details in Appendix 25)

Table no. 4.30

Hypothesis test of Investment and Profit correlation of HBL and NSBI

Bank	$t_{cal}$	$t_{tab}$	Result
HBL	-0.7113	3.18	$t_{cal} < t_{tab}$
NSBI	1.334	3.18	$t_{cal} < t_{tab}$

From the above table it has shown that the investment and net profit are not correlated. Calculated value of t is -0.7113 and 1.334 of HBL and NSBI respectively while the tabulated value of the t is 3.18 at the 95% level of confidence. So, calculated value of t is less than the tabulated value. Null hypothesis is accepted which shows that investment and profit are not correlated.

**4.3.3.2 Hypothesis Test of Loan and advances and Net Profit Correlation**

We have,

Null Hypothesis  $H_0$ : Loan and advances and net profit of HBL and NSBI are not correlated.

Alternative Hypothesis  $H_1$ : Loan and advances and net profit of HBL and NSBI are correlated.

The hypothesis test of null hypothesis made loan and advances and net profit are not correlated is done by using t formula due to small number of observations i.e. only 5. The result of the hypothesis test is presented in the below table no. (Details in Appendix 25)

Table no.4.31

Hypothesis test of Loan and advances and Net Profit correlation of HBL and NSBI

Bank	$t_{cal}$	$t_{tab}$	Result
HBL	8.528	3.18	$t_{cal} > t_{tab}$
NSBI	4.064	3.18	$t_{cal} > t_{tab}$

From the above table it has shown that the loan and advances and net profit are correlated. Calculated value of t is 8.528 and 4.064 of HBL and NSBI respectively and the tabulated value of t is 3.18 at the 95% level of confidence. So, tabulated value

of  $t$  is less than calculated value of  $t$ . So, Null hypothesis is rejected, which has shown that loan and advances and net profit are correlated.

#### 4.3.3.3 Hypothesis Test of Deposit and Loan and advances Correlation

We have,

Null Hypothesis  $H_0$ : Deposit and Loan and advances of HBL and NSBI are not correlated.

Alternative Hypothesis  $H_1$ : Deposit and Loan and advances of HBL and NSBI are correlated.

The hypothesis test of null hypothesis made deposit and loan and advances are not correlated is done by using  $t$  formula due to small number of observations i.e. only 5. The result of the hypothesis test is presented in the below table no. (Details in Appendix 25)

Table no. 4.32

Hypothesis test of Deposit and Loan and advances correlation of HBL and NSBI

Bank	$t_{cal}$	$t_{tab}$	Result
HBL	8.528	3.18	$t_{cal} > t_{tab}$
NSBI	3.576	3.18	$t_{cal} > t_{tab}$

From the above table it has shown that the deposit and loan and advances are correlated. Calculated value of  $t$  is 8.528 and 3.576 of HBL and NSBI respectively and the tabulated value of  $t$  is 3.18 at the 95% level of confidence. So, tabulated value of  $t$  is less than calculated value of  $t$ . So, Null hypothesis is rejected, which has shown that deposit and loan and advances are correlated.

#### 4.3.3.4 Hypothesis Test of Deposit and total investment Correlation

We have,

Null Hypothesis  $H_0$ : Deposit and total investment of HBL and NSBI are not correlated.

Alternative Hypothesis  $H_1$ : Deposit and total investment of HBL and NSBI are correlated.

The hypothesis test of null hypothesis made deposit and total investment are not correlated is done by using t formula due to small number of observations i.e. only 5. The result of the hypothesis test is presented in the below table no. (Details in Appendix 25)

Table no. 4.33

Hypothesis test of Deposit and total investment correlation of HBL and NSBI

Bank	$t_{cal}$	$t_{tab}$	Result
HBL	-0.605	3.18	$t_{cal} < t_{tab}$
NSBI	8.528	3.18	$t_{cal} > t_{tab}$

From the above table it has shown that the deposit and total investment of HBL are not correlated. Calculated value of t is -0.605 and the tabulated value of the t is 3.18 at the 95% level of confidence. So, calculated value of t is less than the tabulated value of t. So, null hypothesis is accepted, which proved that deposits and total investment are not correlated. For NSBI above table has shown that the deposit and total investment of NSBI are correlated. Calculated value of t is 8.528 and the tabulated value of the t is 3.18 at the 95% level of confidence. So, calculated value of t is greater than the tabulated value of t. So, null hypothesis is rejected, which proved that deposits and total investment are correlated.

#### 4.4 Major Finding of the Study

The major finding of the study of the investment policy of the HBL and NSBI are derived on the basis of financial and statistical data of both banks, which are presented below.



#### **4.4.1 Liquidity ratios**

- The mean current ratios of both banks were lower than the standard current ratio of 2:1 but from the banking point of view it is satisfactory. Ratios are not homogenous.
- The mean ratio of cash and bank balance of total deposits ratio of both banks were lower than 10%. Bank has maintained its cash reserve ratio in satisfactory liquidity position.
- The mean ratio of investment on government securities to current assets ratio is 21.90 and 19.89 of HBL and NSBI, which were satisfactory. The ratios are more variable and inconsistent.

#### **4.4.2 Profitability ratios**

The profitability ratio of HBL and NSBI explains the following findings which are considered as major from the viewpoint of the investment policy followed by the bank.

- The mean ratio of return on loan and advances of HBL is around 2.958 and for NSBI is 1.856. There is slight variability occurred in the ratio calculated of HBL than the ratio calculated of NSBI.
- The mean ratio of return on investment ratio of HBL and NSBI were 4.882 and 5.086 respectively. The ratios are highly variable and inconsistent.
- The mean ratio of return on total assets of the HBL is 1.562 and 1.136 of NSBI. The ratios calculated above are highly variable. The range of ratio calculated lies between 0.45 to 1.91%.
- The mean ratio of return on shareholders' equity ratio is 18.52% and 15.978% for HBL and NSBI respectively. CV were 7.45% and 36.29% for HBL and NSBI respectively. The ratio of HBL was so variable in comparison to the ratio of NSBI.
- The mean ratio of interest income to total operating income of the HBL is 81.064% and 88.54 of NSBI. The interest income is the major portion of the banks earning. The CV of HBL is 1.30% and 0.49% of NSBI, which shows the ratios are not variable.
- The mean ratio of total interest earned to total outside assets is 6.30 and 6.25 of HBL and NSBI respectively. The calculated ratios are less variable.

#### **4.4.3 Assets management ratios**

The assets management ratios of both banks reveal the following major finding from the calculated ratios, which show how well assets are managed.

- The mean ratio of investment to total deposit ratio of the HBL is 38.916% and 31.248% of NSBI. There is variation in the calculated ratios.
- The mean ratio of loan and advances to total deposit ratio of the bank HBL is 58.326 and 73.244. The ratios are less uniform and less consistent.
- The mean ratios of investment plus loan and advances to total deposit ratio of the HBL and NSBI were 97.842 and 104.49. The ratios are uniform and consistent.
- The mean ratio of the total investment to total assets ratio of HBL and NSBI were 34.72 and 27.79 respectively. The calculated ratios are highly variable and inconsistent.
- The mean ratio of total loan and advances to total assets were 52.49 and 59.15 respectively. There is variation in the calculated ratios.
- The mean ratios of investment on govt. securities to total assets were 17.58 and 18.658 respectively. There is variation in the calculated ratios.
- The mean ratios of investment on shares and debentures were 0.196 and 0.166 of HBL and NSBI respectively. On the basis of the CV it can be concluded that the ratios are more volatile and inconsistent.

#### **4.4.4 Risk ratios**

The major risk ratio is calculated and found the major finding of the study which are as follows.

- By considering risk ratio, we can be found that the liquidity risk ratios of both banks are around 10%. The mean liquidity ratio of HBL and NSBI were 6.758 and 8.986 respectively. The calculated ratios are less variable.
- The mean ratio of credit risk ratio of the bank HBL and NSBI were measured by dividing total loan and advances to total assets. The mean ratio of the HBL and NSBI were 52.488 and 59.152 respectively.

#### **4.4.5 Activity Ratio**

The major activity ratio is calculated and found the major finding of the study which are as follow.

- The calculation shows that during study period, loan loss provision to total loan and advances ratio has been decreasing because of decreased amount of Nonperforming loan. The mean ratios for study period of HBL and NSBI were 5.402 and 6.26 respectively. The risks of deviation the calculated ratio from the mean ratio were 2.164 of HBL and 1.935 of NSBI.
- The mean ratio of the nonperforming loan to loan and advances were 4.722% and 4.94% of HBL and NSBI respectively. Standard deviation or the risks of deviation from the mean ratio were 2.415 and 1.815 of HBL and NSBI respectively.

#### **4.4.6 Growth rates**

The growth rates of different components of the HBL and NSBI which are important from the viewpoint of investment policy is calculated and from that calculation following result had been found out.

- The Growth rate of the total deposit from the first year of the study period to the current year of the study period is 8.73% and 34.06% of HBL and NSBI respectively. The average growth rate of deposit of NSBI is highest than HBL. It indicates that NSBI seems better in collecting deposits in the comparison of HBL.
- The Growth rate of total investment from the first year of the study period to the current year of the study period is -7.10% and 50.25% of HBL and NSBI respectively.
- The Growth rate of the net profit from the first year of the study period to the current year of the study period is 18.85% and 24.92% of HBL and NSBI respectively.
- The Growth rate of the loan and advances from the first year of the study period to the current year of the study period is 25% and 53.23% of HBL and NSBI respectively. The average growth rate of loan and advances of NSBI is the highest than HBL. It indicates that NSBI has provided more funds in loan and advance in the comparison of HBL.

#### **4.4.7 Coefficient of Correlation Analysis**

Coefficient of correlation analysis between different variables of HBL and NSBI reveals that.

- Coefficient of correlation between investment and net profit has negative value of HBL which was -0.38 and positive value of NSBI which was 0.61. The correlation coefficient is not significant. It has been found that there is negative degree of correlation between investment and net profit of HBL and low degree of correlation of NSBI. The increase and decrease of total investment of the bank does not affect the volume of net profit of HBL but less affects the volume of net profit of NSBI..
- Coefficient of correlation between loan and advances and net profit has positive values which were 0.98 and 0.92 of HBL and NSBI respectively. The value of 'r' of NSBI is slightly lower than that of HBL. Therefore it has found that there is high degree of positive correlation between the loan and advances and net profit of the bank. The increase and decrease of total loan and advances of the bank strong affects the volume of net profit.
- Co-efficient of correlation between deposit and loan and advances of both banks has positive value and near to 1. The value of 'r' of NSBI is slightly lower than that of HBL. In case of both banks it has been found that there is significant relationship between deposit and loan and advances. The increase and decrease of total deposit of the bank strong affects the volume of loan and advances.
- Coefficient of correlation between deposits and total investment has negative value of HBL which was -0.33 and positive value of NSBI which was 0.98. Therefore it has found that there is negative degree of correlation between deposits and total investment of HBL. The increase and decrease deposit of HBL does not affect the volume of total investment. And it has found that there is high degree of positive correlation between deposits and total investment of NSBI. The increase and decrease deposits of NSBI strong affect the volume of total investment.

#### **4.4.8 Trend value Analysis**

Trend analysis of deposits, loans and advances, total investment, net profit and projection for next five years of HBL and NSBI shows that;

- Trend values of total deposit of the HBL and NSBI were found to be in increasing trend. The trend values of total deposits in case of HBL and NSBI will be 47,136.12 and 43,477.75 million at the end of forecasted year.
- Trend values of loan and advances of the HBL and NSBI were found to be in increasing trend. The trend values of loan and advances in case of HBL and NSBI will be 38,385.72 and 25,735.19 million at the end of forecasted year.
- Trend values of total investment of the HBL is found to be in decreasing trend but for NSBI it is going to be increasing trend for study periods as well as forecasted years. The trend values of total investment in case of HBL and NSBI will be 8,832.54 and 19,639.97 million at the end of forecasted year.
- Trend values of net profit of the HBL and NSBI were found to be in increasing trend. For NSBI there decreased in net profit in FY 2064/65 after its going to be increased in forecasted years. The trend values of net profit in case of HBL and NSBI will be 1,276.53 and 652.80 million at the end of forecasted year.

#### **4.4.9 Test of Hypothesis**

From the test of hypothesis made, by using t – test the following major finding have been deducted.

- Investment and profit of HBL and NSBI are not correlated.
- Loan and advances and net profit of HBL and NSBI are correlated.
- Deposit and Loan and advances of HBL and NSBI are correlated.
- Deposit and total investment of HBL is not correlated but deposits and total investment of NSBI is correlated.

## **Chapter V**

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

This chapter highlights some selected actionable conclusions and recommendations on the basis of the main findings, which are derived from the analysis of HBL and NSBI. In order to carry out this study, data have been basically obtained by the secondary sources. The analysis is performed with the help of financial tools and statistical tools. The analysis is associated with comparison and interpretation. Under financial analysis, various financial ratios related to the investment function of commercial banks. They are liquidity ratio, profitability ratio, asset management ratio, risk ratio and growth ratios. Under statistical analysis, some relevant statistical tools are used. They are coefficient of correlation, trend analysis and test of hypothesis.

#### **5.1 Summary:**

The development of any country largely depends upon its economic development. Economic development demands transformation of saving or resources into the actual investment. Capital formation is the prerequisite in setting the overall pace of the economic development of a country. It is the financial institution that transfers funds from surplus spending units to deficit units.

Among other banking operations, investment operation of commercial banks is very risky one. It is the most important factor from the view point of depositors, shareholders and banks management. For this, commercial banks have to pay due consideration while formulating investment policy. A healthy development of any commercial bank depends upon its investment policy. A rational investment policy attracts both borrowers and lenders, which helps to increase the volume and quality of deposits, loans and investment.

The major source of income of a bank is interest income from loans and investments and fee based income. As loan and advances dominate the assets side of the balance sheet of any bank; similarly earning from such loan and advances occupy a major space in income statement of the bank. However, it is very important to be reminded that most of the banks' failures in the world are due to the shrinkage in the value of loans and advances. Hence, loan is known as risky asset and investment operation of

commercial banks is very risk one. Risk of non repayment of loan is known as credit risk or default risk. Performing loans have multiple benefits to the society by helping for the growth of economy while non performing loans erode even existing capital. Considering the importance of lending to the individual banks and also to the society it serves, it is imperative that the bank meticulously plans its credit operations.

Many of commercial banks have been established in our country within a short period of time. Commercial banks must follow the rule and regulations as well as different directions issued by central bank and ministry of finance while mobilization the funds or the commercial banks should invest its funds only those securities which are legal. The main objective of this study is to examine & evaluate the investment policy of HBL and NSBI banks and suggest improving the investment policy of the bank. The study has been constrained by various common limitations.

In this study, the financial tools - ratio analysis viz. liquidity ratio, asset management ratios, profitability ratios, risk ratios, growth ratios and statistical tools like percentage, mean, standard deviation, co-efficient of variation, co-efficient of correlation and trend analysis have been used for the analysis and interpretation of the data. The data, which are employed in this research, are secondary in nature. They are obtained from annual reports of the concerned banks. Likewise, the financial statements of five years (from 2061/62 to 2065/66) were selected for the purpose evaluation.

## **5.2 Conclusions:**

Economic liberalization policy of the government has encouraged the establishment and growth of commercial banks in the country with in short span of time. In a situation when the existing financial institutions, especially government's commercial banks were unable to supply credit timely and carry capital market activities, private joint venture commercial banks have contributed a lot. In Nepal, up to now, there are 6 joint venture commercial banks and other 21 domestic commercial banks. Thus, total number of commercial banks in Nepal is 27 of commercial banks all over the Nepal.

The overall performance of joint venture commercial banks is satisfactory and Nepal Rastra Bank has to play more active role to enhance the operation. The analyses of liquidity position of sample joint venture commercial banks, HBL and NSBI have satisfactory. The investment activity of NSBI has lower position than that of HBL.

The lending activity of HBL is lower position than that NSBI. The profitability position was satisfactory of the sample banks.

The risk ratios have shown the risk position of the bank in terms of liquidity risk and credit risk ratio. For HBL liquidity risk ratio of both banks are around 10%. Credit risk ratios for the both banks are satisfactory. The bank has to consider the non performing loan while increasing its credit policy. To decrease the ratio of credit risk the bank should try to increase their deposit collection.

Loan loss provision to total loan and advances ratio has been decreasing because of decreased amount of Nonperforming loan. Nonperforming loan to loans and advances ratios of both banks shows that during study period were in decreasing trend. The decreased ratios of nonperforming loan to loans and advances are good sign for the bank. If the decreased situation will continue in the future period that will be the good health for the bank.

From this study we can be concluded that HBL and NSBI, there is positive relationship between loan and advances and net profit. The both banks are successful to mobilize their deposit in proper way as loan and advance. The coefficient of correlation of deposit and investment, investment and net profit NSBI has better position than HBL

From the study it can be concluded that the trend analysis of total investment of HBL is in decreasing trend whereas the NSBI is in increasing trend. But the deposit, loan and advances and net profit of both banks are in increasing trend.

The hypothesis test on loan and advances and net profit, deposits and loan and advances of both banks are correlated. Investment and net profit of both banks are not correlated. Deposits and total investment of HBL is not correlated but for NSBI is correlated.

Strengthening and the institutionalization of the commercial banks are very important to have a meaningful relationship between commercial banks and national development through shift of credit to the productive industrial sectors. At the same time the series of reforms such as consolidation of commercial banks, directing attention to venture capital financing, appropriate risk return trade of by linking credit to timely repayment schedules, avoiding imperfections, allowing flexibility in



lending, one window service from NRB, need of strong supervision and monitoring from NRB, diversity scope of activities for commercial banks, professional culture within commercial banks, etc. All these are necessary to ensure better future performance of commercial banks that have already been established and growing in Nepal.

The commercial banks have to prove that they can really contribute to the national economy, are efficient and viable agencies for mobilization of saving and its canalization into productive sectors, are professionally managed and competent enough to ensure adequate rate of return on investment and are strategically well planned to be competitive with other agencies and are trust worthy.

### **5.3 Recommendations:**

On the basis of analysis and finding of the study, following recommendations have been made to overcome the weakness and in-effectiveness in the existing investment policies of Himalayan Bank Limited and Nepal SBI Bank Limited.

#### **Increase deposits ratio**

The commercial bank's main source of fund is collecting deposit from public, who don't need that fund recently. Without enough deposit collection, banks cannot operate effectively. The growth rate of the deposits of NSBI's is higher than that of HBL, so it is suggested to attract depositors through variety of deposits schemes & facilities like cumulative deposit scheme, prize bonds schemes, gift cheque scheme, recurring deposit scheme (life insurance), monthly and daily interest scheme etc.

#### **Increase loan & advances**

From the above study, HBL has not properly used their existing funds as loan and advances comparison to NSBI. The largest item of the bank in the asset side is loan and advances. If it is neglected, than it could be the main cause of liquidity crisis in the bank and one of the main reasons for a bank's failure. So HBL is strongly recommended to improve the efficiency in utilizing the deposits in loan and advances for generating the profit.

#### **Increase investment in shares & debentures of the other company**

It is good to investment more on share and debenture as it encourage financial and non –financial companies. So, it can get either dividend from the existing shares &

capital gain after selling those shares & debentures in capital market after holding for some time.

### **Liberal Lending policy and sound credit collection policy**

Loan & advances are the main source of income and also utilization resources of commercial banks. Negligence in administrating these assets could be the cause of liquidity crisis in the bank and one of the main reasons of bank failure. When the bank grants loan & advances, it must be collected after a certain period. But now days there are many difficulties in recovery loan and advances and large amount of loan is blocked as non performing assets and which sometime reduce income. So it is essential to exercise a suitable mechanism through which the overdue loan can be recovered within time. To fulfill this purpose both banks are suggested the special "Loan Recovery Act" should be enacted. Therefore both banks follow liberal policy when sanctioning loan & advances with sufficient guarantee and implement a sound collection policy including procedure which rapid identification of bad debtor loans, immediate contact with borrower, continual follow up and a legal procedure if required.

### **Increase investment in government securities**

Investment on those securities issued by government i.e. treasury bills, development bonds, saving certificates are free of risk and highly liquid in nature and have very lower yield than other companies' securities. This also helps to maintain the sound portfolio of the bank. It is better in regard to safety than other means of investment. So both banks are strongly recommended to invest more funds in govt. securities.

### **Increase profit**

Profitability is the main indicator of the financial performance of every business organization & is essential for the survival and growth of banks. But over the study period, NSBI and HBL are seen unable to earn a satisfactory level of profit. So, both banks are recommended more to earn profit and adopt various measures to improve its profitability.

### **Finding New Investment Opportunities**

The bank is also recommended to increase the investments which help to utilize the fund into income generation as well as minimize risk and also helps to maintain optimum level of liquidity. There is increasing trend of loan and advances for all

commercial banks, the sample banks must participate in these booming investment opportunities. The bank is also required to explore the new market areas; hydro power is one of potential investment areas in Nepal. There are lots of housing businesses also, where banks can utilize its funds. Most of the home buyers took loan from banks and the housing companies were also financed by the banks. For these purpose, the bank is recommended to form a strong marketing department in its central level, which deals with these investment opportunities.

### **Improve Competency**

The bank is recommended to adopt innovative approach to marketing as the country has become a member of WTO, by 2010 AD; the foreign commercial banks will enter in Nepal with huge capital. It will increase high competition in the banking sector, and also bring challenges to the existing bank for their survival. To stay in this kind of competition the business of the bank should be customer oriented. The bank should formulate new strategies of serving customers in a more convenient and satisfactory way by optimally utilizing the modern technology and offering new facilities to the customers at competitive prices. All the specialized facilities should be provided from one counter, providing education loan, credit transfer for aboard studying students, traveling loan, interior and exterior loan, festival and special social occasion like marriage loan, targeting specific depositor's.

### **Follow up the Scientific Project Appraisal Approach**

The bank management is recommended to give due consideration towards the recovery of the loan. For this, bank has to form the loan monitoring and recovery committee in its central level which keeps the updated database of total loan and advances and its repayment trend. Bank is recommended to adopt the aggressive loan recovery and follow up policy. In recent years country's oldest bank Nepal Bank Ltd. and Rastriya Banijya Bank have been publishing the loan defaulters in national daily newspapers and those defaulters were black listed by the concerned banks and NRB for future investment securities purpose. It helps to the bank to recover their invested loan and advances because due to their prestige and social status the loan defaulter will somehow repay the loan or re-structure it. Similarly, the improper project appraisal also increases the chances of default of the loan and advances. so, the sample banks are recommended to follow up the scientific project appraisal approach and train the employees at the loan section accordingly.

### **Extend branches over the country**

Both HBL and NSBI do not have branches in the rural area of the country. Its branches are limited only to the urban areas only. Therefore, both banks recommended to open branches in rural areas to help in economic development of the country. Nepal government has also encouraged the joint venture banks to expand banking service in rural areas and communities without making unfavorable impact in their profit.

### **Following the Prevailing Rules and Regulations of NRB**

The sample banks should follow the directives of NRB, the bank is recommended to follow NRB directions regarding the lending practices to different sectors. NRB has also formulated policies for loan loss provision which should be followed by the banks, it helps to maintain its credibility and protect from solvency. NRB said that the bank must made loan loss provision for pass loan 1% for Sub-standard loan 25%, for Doubtful loan 50% and for loan loss 100%. Likewise, there are other directives, for example, auditing, different financial schedules, capital structure, about opening new branches these all directives and regulations must be considered before doing any financial activities by the bank.

Both NSBI and HBL banks are taken as the one of the most leading joint venture bank in Nepal. It is the one of the most successful bank in Nepal. Today is the world of the competition is growing day by day in the banking sector. It must mobilize its deposits and other fund to profitable, secured and marketable sector so that it can earn a handsome profit as well as it should be secured and can convert into cash whenever needed.

In other to collection much funds, both banks are not to be surrounded and limited only big clients i.e. multinational companies, large industries, manufacturing companies, NGOs and INGOs etc. It should also cater the lower and middle level people too.

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## Appendices

### Liquidity ratios:

#### Appendix – 1

##### Current ratio (HBL)

Rs. In million

Fiscal Year	Current Assets	Current Liabilities	Current Ratio
061/62	21,200.10	25,876.41	0.82
062/63	23,031.58	27,094.55	0.85
063/65	27,428.52	30,918.80	0.89
064/65	29,454.90	32,518.66	0.91
065/66	33,799.10	35,375.45	0.96
Mean			0.886
SD			0.0486
CV			5.49

Source: Annual Report

##### Current ratio (Nepal SBI)

Rs. In million

Fiscal Year	Current Assets	Current Liabilities	Current Ratio
061/62	12,805.86	9,703.30	1.32
062/63	12,890.26	11,830.49	1.09
063/65	13,733.96	12,627.59	1.09
064/65	16,796.23	15,687.70	1.07
065/66	20,342.23	29,079.43	0.70
Mean			1.054
SD			0.199
CV			18.88

Source: Annual Report

**Liquidity ratios:****Appendix – 2****Cash Reserve Ratio (HBL)**

Rs. In million

Fiscal Year	Cash & Bank balance	Total Deposits	Ratio (%)
061/62	2,014.47	24,814.01	8.12
062/63	1,717.35	26,490.85	6.48
063/65	1,757.34	30,048.42	5.85
064/65	1,448.14	31,842.79	4.55
065/66	3,048.53	34,681.35	8.79
Mean			6.758
SD			1.533
CV			22.68

Source: Annual Report

**Cash Reserve Ratio (Nepal SBI)**

Rs. In million

Fiscal Year	Cash & Bank balance	Total Deposits	Ratio
061/62	723.75	8,654.77	8.36
062/63	1,118.15	1,002.04	10.16
063/65	1,122.69	11,445.29	9.81
064/65	1,342.96	13,715.40	9.79
065/66	1,903.91	27,957.22	6.81
Mean			8.986
SD			1.251
CV			13.92

Source: Annual Report



**Liquidity ratios:****Appendix – 3**

## Investment on govt. securities to current assets ratio (HBL)

Rs. In million

Fiscal Year	Investment on govt. securities	Current Assets	Ratio (%)
061/62	5,469.73	21,200.10	25.80
062/63	5,144.31	23,031.58	22.34
063/65	6,454.87	27,428.52	23.53
064/65	7,471.67	29,454.90	25.37
065/66	4,212.30	33,799.10	12.46
Mean			21.90
SD			4.88
CV			22.28

Source: Annual Report

## Investment on govt. securities to current assets ratio (Nepal SBI)

Rs. In million

Fiscal Year	Investment on govt. securities	Current Assets	Ratio (%)
061/62	2,588.14	12,805.86	20.21
062/63	3,591.77	12,890.26	27.86
063/65	2,345.58	13,733.96	17.08
064/65	3,035.55	16,796.23	18.07
065/66	3,306.57	20,342.23	16.25
Mean			19.89
SD			4.197
CV			21.10

Source: Annual Report

**Profitability ratios:****Appendix – 4**

## Return on loans &amp; advances ratio (HBL)

Rs. In million

Fiscal Year	Net Profit	Loan and advances	Ratio (%)
061/62	308.27	12,424.52	2.48
062/63	457.45	14,642.56	3.12
063/65	491.82	16,998.00	2.89
064/65	635.87	19,497.52	3.26
065/66	752.83	24,793.16	3.04
Mean			2.958
SD			0.267
CV			9.03

Source: Annual Report

## Return on loans &amp; advances ratio (Nepal SBI)

Rs. In million

Fiscal Year	Net Profit	Loan and advances	Ratio (%)
061/62	57.39	6,213.88	0.92
062/63	117.00	7,626.74	1.53
063/65	254.91	9,460.45	2.69
064/65	247.77	12,113.70	2.05
065/66	316.37	15,131.75	2.09
Mean			1.856
SD			0.595
CV			32.058

Source: Annual Report

**Profitability ratios:****Appendix – 5**

## Return on Investment ratio (HBL)

Rs. In million

Fiscal Year	Net Profit	Total Investment	Ratio (%)
061/62	308.27	11,692.34	2.64
062/63	457.45	10,889.03	4.20
063/65	491.82	11,822.99	4.16
064/65	635.87	13,340.18	4.77
065/66	752.83	8,710.69	8.64
Mean			4.882
SD			2.007
CV			41.11

Source: Annual Report

## Return on Investment ratio (Nepal SBI)

Rs. In million

Fiscal Year	Net Profit	Total Investment	Ratio (%)
061/62	57.39	2,607.68	2.20
062/63	117.00	3,610.78	3.24
063/65	254.91	2,659.45	9.59
064/65	247.77	3,088.89	8.02
065/66	316.37	13,289.18	2.38
Mean			5.086
SD			3.097
CV			60.89

Source: Annual Report

**Profitability ratios:****Appendix – 6**

## Return on total assets ratio (HBL)

Rs. In million

Fiscal Year	Net Profit	Total Assets	Ratio (%)
061/62	308.27	27,758.45	1.11
062/63	457.45	29,357.03	1.56
063/65	491.82	33,444.11	1.47
064/65	635.87	36,139.04	1.76
065/66	752.83	39,343.57	1.91
Mean			1.562
SD			0.273
CV			17.48

Source: Annual Report

## Return on total assets ratio (Nepal SBI)

Rs. In million

Fiscal Year	Net Profit	Total Assets	Ratio (%)
061/62	57.39	12,891.85	0.45
062/63	117.00	12,975.97	0.90
063/65	254.91	13,863.12	1.84
064/65	247.77	17,103.14	1.45
065/66	316.37	30,442.06	1.04
Mean			1.136
SD			0.4753
CV			41.84

Source: Annual Report

**Profitability ratios:****Appendix – 7**

## Return on total shareholders' equity ratio (HBL)

Rs. In million

Fiscal Year	Net Profit	Total equity	Ratio (%)
061/62	308.27	1,882.04	16.38
062/63	457.45	2,262.48	20.22
063/65	491.82	2,525.31	19.48
064/65	635.87	3,620.37	17.56
065/66	752.83	3,968.12	18.97
Mean			18.52
SD			1.379
CV			7.45

Source: Annual Report

## Return on total shareholders' equity ratio (Nepal SBI)

Rs. In million

Fiscal Year	Net Profit	Total equity	Ratio (%)
061/62	57.39	689.01	8.33
062/63	117.00	1,145.48	10.21
063/65	254.91	1,235.53	20.63
064/65	247.77	1,415.44	17.50
065/66	316.37	1,362.63	23.22
Mean			15.978
SD			5.799
CV			36.29

Source: Annual Report

**Profitability ratios:****Appendix – 8**

## Interest income to total operating income ratio (HBL)

Rs. In million

Fiscal Year	Interest income	Total operating income	Ratio (%)
061/62	1,446.47	1,757.88	82.28
062/63	1,626.47	2,042.38	79.64
063/65	1,775.58	2,160.77	82.17
064/65	1,963.65	2,421.24	81.10
065/66	2,342.20	2,922.83	80.13
Mean			81.064
SD			1.058
CV			1.30

Source: Annual Report

## Interest income to total operating income ratio (Nepal SBI)

Rs. In million

Fiscal Year	Interest income	Total operating income	Ratio (%)
061/62	578.37	653.30	88.53
062/63	708.72	794.92	89.16
063/65	831.12	945.77	87.88
064/65	970.51	1092.98	88.80
065/66	1,460.45	1653.37	88.33
Mean			88.54
SD			0.4317
CV			0.49

Source: Annual Report

**Profitability ratios:****Appendix – 9**

## Total interest earned to Total outside assets ratio (HBL)

Rs. In million

Fiscal Year	Total interest earned	Total outside assets	Ratio (%)
061/62	1,446.47	24,116.86	6.00
062/63	1,626.47	25,531.59	6.37
063/65	1,775.58	28,820.99	6.16
064/65	1,963.65	32,837.70	5.98
065/66	2,342.20	33,503.85	6.99
Mean			6.30
SD			0.372
CV			5.90

Source: Annual Report

## Total interest earned to Total outside assets ratio (Nepal SBI)

Rs. In million

Fiscal Year	Total interest earned	Total outside assets	Ratio (%)
061/62	578.37	8,821.56	6.56
062/63	708.72	11,237.52	6.31
063/65	831.12	12,119.90	6.86
064/65	970.51	15,202.59	6.38
065/66	1,460.45	28,420.93	5.14
Mean			6.25
SD			0.587
CV			9.39

Source: Annual Report

**Assets Management ratios:****Appendix – 10**

## Investment to total deposit ratio (HBL)

Rs. In million

Fiscal Year	Investment	Total deposits	Ratio (%)
061/62	11,692.34	24,814.01	47.12
062/63	10,889.03	26,490.85	41.10
063/65	11,822.99	30,048.42	39.35
064/65	13,340.18	31,842.79	41.89
065/66	8,710.69	34,681.35	25.12
Mean			38.916
SD			7.368
CV			18.933

Source: Annual Report

## Investment to total deposit ratio (Nepal SBI)

Rs. In million

Fiscal Year	Investment	Total deposits	Ratio (%)
061/62	2,607.68	8,654.77	30.13
062/63	3,610.78	1,002.04	32.82
063/65	2,659.45	11,445.29	23.24
064/65	3,088.89	13,715.40	22.52
065/66	13,289.18	27,957.22	47.53
Mean			31.248
SD			9.045
CV			28.95

Source: Annual Report



**Assets Management ratios:****Appendix – 11**

## Loan and advances to total deposit ratio (HBL)

Rs. In million

Fiscal Year	Loan and advances	Total deposits	Ratio (%)
061/62	12,424.52	24,814.01	50.07
062/63	14,642.56	26,490.85	55.27
063/65	16,998.00	30,048.42	56.57
064/65	19,497.52	31,842.79	61.23
065/66	24,793.16	34,681.35	71.49
Mean			58.326
SD			7.243
CV			12.418

Source: Annual Report

## Loan and advances to total deposit ratio (Nepal SBI)

Rs. In million

Fiscal Year	Loan and advances	Total deposits	Ratio (%)
061/62	6,213.88	8,654.77	71.80
062/63	7,626.74	1,002.04	69.32
063/65	9,460.45	11,445.29	82.66
064/65	12,113.70	13,715.40	88.32
065/66	15,131.75	27,957.22	54.12
Mean			73.244
SD			11.825
CV			16.14

Source: Annual Report

**Assets Management ratios:****Appendix – 12**

## Investment plus Loan and advances to total deposit ratio (HBL)

Rs. In million

Fiscal Year	Investment plus Loan and advances	Total deposits	Ratio (%)
061/62	24,116.86	24,814.01	97.19
062/63	25,531.59	26,490.85	96.38
063/65	28,820.99	30,048.42	95.92
064/65	32,837.70	31,842.79	103.12
065/66	33,503.85	34,681.35	96.60
Mean			97.842
SD			2.67
CV			2.73

Source: Annual Report

## Investment plus Loan and advances to total deposit ratio (Nepal SBI)

Rs. In million

Fiscal Year	Investment plus Loan and advances	Total deposits	Ratio (%)
061/62	8,821.56	8,654.77	101.93
062/63	11,237.52	1,002.04	102.14
063/65	12,119.90	11,445.29	105.89
064/65	15,202.59	13,715.40	110.84
065/66	28,420.93	27,957.22	101.66
Mean			104.49
SD			3.53
CV			3.38

Source: Annual Report

**Assets Management ratios:****Appendix – 13**

## Total Investment to total assets ratio (HBL)

Rs. In million

Fiscal Year	Total investment	Total assets	Ratio (%)
061/62	11,692.34	27,758.45	42.12
062/63	10,889.03	29,357.03	37.09
063/65	11,822.99	33,444.11	35.35
064/65	13,340.18	36,139.04	36.91
065/66	8,710.69	39,343.57	22.14
Mean			34.72
SD			6.69
CV			19.27

Source: Annual Report

## Total Investment to total assets ratio (Nepal SBI)

Rs. In million

Fiscal Year	Total investment	Total assets	Ratio (%)
061/62	2,607.68	12,891.85	20.23
062/63	3,610.78	12,975.97	27.83
063/65	2,659.45	13,863.12	19.18
064/65	3,088.89	17,103.14	18.06
065/66	13,289.18	30,442.06	43.65
Mean			25.79
SD			9.56
CV			37.07

Source: Annual Report

**Assets Management ratios:****Appendix – 14**

## Total loan and advances to total assets ratio (HBL)

Rs. In million

Fiscal Year	Loan and advances	Total assets	Ratio (%)
061/62	12,424.52	27,758.45	44.76
062/63	14,642.56	29,357.03	49.88
063/65	16,998.00	33,444.11	50.83
064/65	19,497.52	36,139.04	53.95
065/66	24,793.16	39,343.57	63.02
Mean			52.49
SD			6.039
CV			11.51

Source: Annual Report

## Total loan and advances to total assets ratio (Nepal SBI)

Rs. In million

Fiscal Year	Loan and advances	Total assets	Ratio (%)
061/62	6,213.88	12,891.85	48.20
062/63	7,626.74	12,975.97	58.78
063/65	9,460.45	13,863.12	68.24
064/65	12,113.70	17,103.14	70.83
065/66	15,131.75	30,442.06	49.71
Mean			59.15
SD			9.254
CV			15.65

Source: Annual Report

**Assets Management ratios:****Appendix – 15**

## Investment to govt. securities to total assets ratio (HBL)

Rs. In million

Fiscal Year	Investment to govt. securities	Total assets	Ratio (%)
061/62	5,469.73	27,758.45	19.70
062/63	5,144.31	29,357.03	17.52
063/65	6,454.87	33,444.11	19.30
064/65	7,471.67	36,139.04	20.67
065/66	4,212.30	39,343.57	10.71
Mean			17.58
SD			3.583
CV			20.38

Source: Annual Report

## Investment to govt. securities to total assets (Nepal SBI)

Rs. In million

Fiscal Year	Investment to govt. securities	Total assets	Ratio (%)
061/62	2,588.14	12,891.85	20.08
062/63	3,591.77	12,975.97	27.68
063/65	2,345.58	13,863.12	16.92
064/65	3,035.55	17,103.14	17.75
065/66	3,306.57	30,442.06	10.86
Mean			18.658
SD			5.442
CV			29.167

Source: Annual Report

**Assets Management ratios:****Appendix – 16**

## Investment on shares &amp; debentures to total assets ratio (HBL)

Rs. In million

Fiscal Year	Investment on shares & debentures	Total assets	Ratio (%)
061/62	39.91	27,758.45	0.14
062/63	38.57	29,357.03	0.13
063/65	73.42	33,444.11	0.22
064/65	89.56	36,139.04	0.25
065/66	93.88	39,343.57	0.24
Mean			0.196
SD			0.0507
CV			25.87

Source: Annual Report

## Investment on shares &amp; debentures to total assets ratio (Nepal SBI)

Rs. In million

Fiscal Year	Investment on shares & debentures	Total assets	Ratio (%)
061/62	19.54	12,891.85	0.15
062/63	19.54	12,975.97	0.15
063/65	31.94	13,863.12	0.23
064/65	32.82	17,103.14	0.19
065/66	32.95	30,442.06	0.11
Mean			0.166
SD			0.0407
CV			24.52

Source: Annual Report

**Risk ratios:****Appendix – 17**

## Liquidity Risk ratio (HBL)

Rs. In million

Fiscal Year	Cash and Bank balance	Total Deposits	Ratio (%)
061/62	2,014.47	24,814.01	8.12
062/63	1,717.35	26,490.85	6.48
063/65	1,757.34	30,048.42	5.85
064/65	1,448.14	31,842.79	4.55
065/66	3,048.53	34,681.35	8.79
Mean			6.758
SD			1.534
CV			22.70

Source: Annual Report

## Liquidity Risk ratio (Nepal SBI)

Rs. In million

Fiscal Year	Cash and Bank balance	Total Deposits	Ratio (%)
061/62	723.75	8,654.77	8.36
062/63	1,118.15	1,002.04	10.16
063/65	1,122.69	11,445.29	9.81
064/65	1,342.96	13,715.40	9.79
065/66	1,903.91	27,957.22	6.81
Mean			8.986
SD			1.251
CV			13.92

Source: Annual Report

**Risk ratios:****Appendix – 18**

## Credit Risk ratio (HBL)

Rs. In million

Fiscal Year	Loan and advances	Total Assets	Ratio (%)
061/62	12,424.52	27,758.45	44.76
062/63	14,642.56	29,357.03	49.88
063/65	16,998.00	33,444.11	50.83
064/65	19,497.52	36,139.04	53.95
065/66	24,793.16	39,343.57	63.02
Mean			52.488
SD			6.0386
CV			11.50

Source: Annual Report

## Credit Risk ratio (Nepal SBI)

Rs. In million

Fiscal Year	Loan and advances	Total Assets	Ratio (%)
061/62	6,213.88	12,891.85	48.20
062/63	7,626.74	12,975.97	58.78
063/65	9,460.45	13,863.12	68.24
064/65	12,113.70	17,103.14	70.83
065/66	15,131.75	30,442.06	49.71
Mean			59.152
SD			9.254
CV			15.64

Source: Annual Report



**Activity ratios:****Appendix – 19**

Loan loss provision to total loan & advances including bills purchased and discounted ratio (HBL)

Rs. In million

Fiscal Year	Provision for loan loss	Loan & advances	Ratio (%)
061/62	1,026.65	12,424.52	8.26
062/63	1,119.42	14,642.56	7.64
063/65	795.73	16,998.00	4.68
064/65	682.09	19,497.52	3.50
065/66	726.66	24,793.16	2.93
Mean			5.402
SD			2.164
CV			40.06

Source: Annual Report

Loan loss provision to total loan & advances including bills purchased and discounted ratio (Nepal SBI)

Rs. In million

Fiscal Year	Provision for loan loss	Loan & advances	Ratio (%)
061/62	525.47	6,213.88	8.46
062/63	614.72	7,626.74	8.06
063/65	604.60	9,460.45	6.39
064/65	632.52	12,113.70	5.22
065/66	480.30	15,131.75	3.17
Mean			6.26
SD			1.935
CV			30.91

Source: Annual Report

**Activity ratios:****Appendix – 20**

## Nonperforming loans to loan &amp; advances ratio (HBL)

Rs. In million

Fiscal Year	Nonperforming loans	Loan & advances	Ratio (%)
061/62	1,001.35	12,424.52	8.06
062/63	1,040.76	14,642.56	7.11
063/65	641.62	16,998.00	3.77
064/65	477.23	19,497.52	2.45
065/66	551.31	24,793.16	2.22
Mean			4.722
SD			2.415
CV			51.14

Source: Annual Report

## Nonperforming loans to loan &amp; advances ratio (Nepal SBI)

Rs. In million

Fiscal Year	Nonperforming loans	Loan & advances	Ratio (%)
061/62	441.02	6,213.88	7.10
062/63	505.34	7,626.74	6.63
063/65	458.76	9,460.45	4.85
064/65	488.41	12,113.70	4.03
065/66	315.95	15,131.75	2.09
Mean			4.94
SD			1.815
CV			36.74

Source: Annual Report

## Growth rates:

### Appendix –21

#### Growth Rates (HBL)

Procedures of calculation of Growth rates:

$$D_1 = D_0 (1 + g)^{n-1}$$

Where,  $g$  = growth rate

$n$  = no. of years

$D_1$  = value at the end of the year

$D_0$  = value at the beginning of year

Here, Total Deposits at the end of the year 2065/66

$$D_5 = 34,681.35$$

$$D_0 = 24,814.01$$

$$n = 5 \text{ years}$$

$$g = ?$$

$$34,681.35 = 24,814.01(1 + g)^{5-1}$$

$$g = 8.73\%$$

Other growth rates are calculated as above mentioned procedures.

#### Growth Rates (NSBI)

Procedures of calculation of Growth rates:

$$D_1 = D_0 (1 + g)^{n-1}$$

Where,  $g$  = growth rate

$n$  = no. of years

$D_1$  = value at the end of the year

$D_0$  = value at the beginning of year

Here,

Total Deposits at the end of the year 2065/66

$$D_5 = 27,957.22$$

$$D_0 = 8,654.77$$

$$n = 5 \text{ years}$$

$$g = ?$$

$$27,957.22 = 8,654.77 (1 + g)^{5-1}$$

$$g = 34.06\%$$

Other growth rates are calculated as above mentioned procedures.

**Growth rates:****Appendix – 22**

## Growth rates of different items (HBL)

Rs. In million

No of year	Fiscal year	Total Deposits	Total investment	Loan and advances	Net profit
1	061/62	24,814.01	11,692.34	12,424.52	308.27
2	062/63	26,490.85	10,889.03	14,642.56	457.45
3	063/65	30,048.42	11,822.99	16,998.00	491.82
4	064/65	31,842.79	13,340.18	19,497.52	635.87
5	065/66	34,681.35	8,710.69	24,793.16	752.83
N = 5 years	Growth rates (%)	8.73	-7.10	18.85	25

Source: Annual Report

## Growth rates of different items (NSBI)

Rs. In million

No of year	Fiscal year	Total Deposits	Total investment	Loan and advances	Net profit
1	061/62	8,654.77	2,607.68	6,213.88	57.39
2	062/63	1,002.04	3,610.78	7,626.74	117.00
3	063/65	11,445.29	2,659.45	9,460.45	254.91
4	064/65	13,715.40	3,088.89	12,113.70	247.77
5	065/66	27,957.22	13,289.18	15,131.75	316.37
N = 5 years	Growth rates (%)	34.06	50.25	24.92	53.23

Source: Annual Report

## Calculation of correlation coefficients

### Appendix – 23

Correlation between total deposits and loan and advances of HBL

Rs. In million

Fiscal year	Deposits (X)	Loan & Advances (Y)	x = X -	y = Y - Y	x <sup>2</sup>	y <sup>2</sup>	xy
061/62	24,814.01	12,424.52	-4,761.47	-5,246.63	22,671,634.65	27,527,147.34	24,981,701.86
062/63	26,490.85	14,642.56	-3,084.63	-3,028.59	9,514,966.91	9,172,369.50	9,342,097.86
063/65	30,048.42	16,998.00	472.94	-673.15	223,668.46	453,133.62	-318,357.81
064/65	31,842.79	19,497.52	2,267.31	1,826.37	5,140,676.50	3,335,620.07	4,140,935.12
065/66	34,681.35	24,793.16	5,105.87	7,122.01	26,069,867.61	50,722,997.95	36,364,018.50
N = 5	∑X = 147,877.42	∑Y = 88,355.76			∑x <sup>2</sup> = 63,620,814.13	∑y <sup>2</sup> = 91,211,268.48	∑xy = 74,510,395.52

Source: Annual Report

$$\begin{aligned} X &= \sum X / N \\ &= 147,877.42 / 5 \\ &= 29,575.48 \end{aligned}$$

$$\begin{aligned} Y &= \sum Y / N \\ &= 88,355.76 / 5 \\ &= 17,671.15 \end{aligned}$$

We have,

$$\begin{aligned} N &= 5 \\ \sum x^2 &= 63,620,814.13 \\ \sum y^2 &= 91,211,268.48 \\ \sum xy &= 74,510,395.52 \end{aligned}$$

Correlation coefficient can be calculated by using the following short cut formula

$$\text{Correlation coefficient (r)} = \frac{\sum xy}{\sqrt{\sum X^2} \sqrt{\sum Y^2}}$$

$$\text{Correlation coefficient (r)} = \frac{74,510,395.52}{\sqrt{63,620,814.13} \sqrt{91,211,268.48}}$$

$$r = 0.98$$

$$r^2 = 0.96$$

Probable error is calculated to find out the reliability of the calculated correlation coefficient. It is denoted by P.E. if r be the calculated value of r from a sample of N pair of observation, then P.E. is define by

$$\begin{aligned} \text{P.E.} &= 0.6745 * \frac{1-r^2}{\sqrt{n}} \\ &= 0.6745 * \frac{1-0.96}{\sqrt{5}} \\ &= 0.012 \\ 6\text{P.E.} &= 0.072 \end{aligned}$$

Here six times of probable error is less than calculated correlation coefficient which explains that the value calculated is significant one.

**In this way other values of correlation coefficient, probable error, and significant test is done respectively.**

#### Correlation between total deposits and loan and advances of NSBI

Rs. In million

Fiscal year	Deposits (X)	Loan & Advances (Y)	x = X -	y = Y -	x <sup>2</sup>	y <sup>2</sup>	xy
061/62	8,654.77	6,213.88	-5,900.17	- 3,895.42	34,812,053.23	15,174,328.14	22,983,679.40
062/63	1,002.04	7,626.74	-3,552.90	- 2,482.56	12,623,126.83	6,163,124.01	8,820,311.57
063/65	11,445.29	9,460.45	-3,109.65	-648.85	9,669,948.00	421,011.51	2,017,711.44
064/65	13,715.40	12,113.70	-839.54	2,004.54	704,834.13	4,017,603.32	-1,682,778.64
065/66	27,957.22	15,131.75	13,402.28	5,022.45	179,621,001.98	25,224,963.82	67,312,207.49
N = 5	ΣX = 72,774.72	ΣY = 50,546.52			Σx <sup>2</sup> = 237,430,964.17	Σy <sup>2</sup> = 51,001,030.81	Σxy = 99,451,131.26

Source: Annual Report

$$\begin{aligned} X &= \frac{\sum X}{N} \\ &= \frac{72,774.72}{5} \\ &= 14,554.94 \end{aligned}$$

$$Y = \frac{\sum Y}{N}$$

$$= 50,546.52 / 5$$

$$= 10,109.30$$

We have,

$$N = 5$$

$$\sum x^2 = 237,430,964.17$$

$$\sum y^2 = 51,001,030.81$$

$$\sum xy = 99,451,131.26$$

Correlation coefficient can be calculated by using the following short cut formula

$$\text{Correlation coefficient (r)} = \frac{\sum xy}{\sqrt{\sum X^2} \sqrt{\sum Y^2}}$$

$$\text{Correlation coefficient (r)} = \frac{99,451,131.26}{\sqrt{237,430,964.17} \sqrt{51,001,030.81}}$$

$$r = 0.92$$

$$r^2 = 0.846$$

Probable error is calculated to find out the reliability of the calculated correlation coefficient. It is denoted by P.E. if r be the calculated value of r from a sample of N pair of observation, then P.E. is define by

$$\text{P.E.} = 0.6745 * \frac{1-r^2}{\sqrt{n}}$$

$$= 0.6745 * \frac{1-0.846}{\sqrt{5}}$$

$$= 0.046$$

$$6\text{P.E.} = 0.276$$

Here six times of probable error is less than calculated correlation coefficient which explains that the value calculated is significant one.

**In this way other values of correlation coefficient, probable error, and significant test is done respectively.**

## Trend Values Calculation

### Appendix – 24 (1)

Trend value of total deposits (HBL)

Rs. In million

Year (X)	x = (X-assumend mean year 2064)	X <sup>2</sup>	Deposits (y)	xy
2062	-2	4	24,814.01	-49,628.02
2063	-1	1	26,490.85	-26,490.85
2064	0	0	30,048.42	0
2065	1	1	31,842.79	31,842.79
2066	2	4	34,681.35	69,362.70
N = 5		$\sum X^2 = 10$	$\sum y = 147,877.42$	$\sum xy = 25,086.62$

We have to use the formula of  $y = a + bx$  to calculated the trend values

Where y = Trend value

$$a = \sum y / N$$

$$b = \sum xy / \sum x^2$$

$$\begin{aligned} \text{Here, } a &= 147,877.42 / 5 \\ &= 29575.484 \text{ million} \end{aligned}$$

$$\begin{aligned} b &= 25,086.62 / 10 \\ &= 2,508.66 \text{ million} \end{aligned}$$

Hence, the formula becomes as follows

$$y = 29575.484 + 2,508.66 x$$

Rs. In million

Forecasting year (X)	x = X - 2064	Trend values $y = 29575.484 + 2,508.66 x$
2067	3	37,101.46
2068	4	39,610.12
2069	5	42,118.78
2070	6	44,627.44
2071	7	47,136.10

Similarly other values are calculated respectively



## Trend Values Calculation

### Appendix – 24 (2)

Trend value of total deposits (NSBI)

Rs. In million

Year (X)	x = (X-assumend mean year 2064)	X <sup>2</sup>	Deposits (y)	xy
2062	-2	4	8,654.77	-17,309.54
2063	-1	1	1,002.04	-11,002.04
2064	0	0	11,445.29	0
2065	1	1	13,715.40	13,715.40
2066	2	4	27,957.22	55,914.44
N = 5		$\sum X^2 = 10$	$\sum y = 72,774.72$	$\sum xy = 41,318.26$

We have to use the formula of  $y = a + bx$  to calculated the trend values

Where y = Trend value

$$a = \sum y / N$$

$$b = \sum xy / \sum x^2$$

$$\begin{aligned} \text{Here, } a &= 72,774.72 / 5 \\ &= 14,554.94 \text{ million} \end{aligned}$$

$$\begin{aligned} b &= 41,318.26 / 10 \\ &= 4,131.83 \text{ million} \end{aligned}$$

Hence, the formula becomes as follows

$$y = 29575.484 + 2,508.66 x$$

Rs. In million

Forecasting year (X)	x = X - 2064	Trend values $y = 14,554.94 + 4,131.83 x$
2067	3	26,950.43
2068	4	31,082.26
2069	5	35,214.09
2070	6	39,345.92
2071	7	43,477.75

Similarly other values are calculated respectively

## Test Hypothesis

### Appendix – 25 (1)

#### Hypothesis Test of HBL

For Investment and Net Profit of HBL,

We have

Null Hypothesis  $H_0$ : Investment and profit of HBL are not correlated.

Alternative Hypothesis  $H_1$ : Investment and profit of HBL are correlated.

Number of observations (n) = 5

Correlation coefficient (r) = - 0.38

Level of significant ( $\alpha$ ) = 5% = 0.05

Test statistic under null hypothesis is

Since no of observation is only 5. So t is used to test the hypothesis.

Where,

$$t = \frac{r * \sqrt{n-2}}{\sqrt{1-r^2}}$$

$$t = \frac{-0.38 * \sqrt{5-2}}{\sqrt{1-(-0.38)^2}}$$

$$t = -0.658 / 0.925$$

$$t = -0.7113$$

Degree of freedom (d.f.) = n-2 = 5-2 = 3

Tabulated value at 5% level of significance and at degree of freedom at 3

$$t_{0.05} = 3.18$$

$$t_{cal} < t_{tab}$$

Since calculated t is less than the table value of t. Hence  $H_0$  is accepted. Thus, it is concluded that investment and net profit are not correlated or related.

**Other hypotheses are tested as above accordingly**

## Test Hypothesis

### Appendix – 25 (2)

#### Hypothesis Test of NSBI

For Investment and Net Profit of HBL,

We have

Null Hypothesis  $H_0$ : Investment and profit of NSBI are not correlated.

Alternative Hypothesis  $H_1$ : Investment and profit of NSBI are correlated.

Number of observations (n) = 5

Correlation coefficient (r) = 0.61

Level of significant ( $\alpha$ ) = 5% = 0.05

Test statistic under null hypothesis is

Since no of observation is only 5. So t is used to test the hypothesis.

Where,

$$t = \frac{r * \sqrt{n-2}}{\sqrt{1-r^2}}$$

$$t = \frac{0.61 * \sqrt{5-2}}{\sqrt{1-0.61^2}}$$

$$t = 1.0565 / 0.792$$

$$t = 1.334$$

Degree of freedom (d.f.) = n-2 = 5-2 = 3

Tabulated value at 5% level of significance and at degree of freedom at 3

$$t_{0.05} = 3.18$$

$$t_{cal} < t_{tab}$$

Since calculated t is less than the table value of t. Hence  $H_0$  is accepted. Thus, it is concluded that investment and net profit are not correlated or related.

**Other hypotheses are tested as above accordingly**