INVESTMENT POLICY ANALYSIS OF COMMERCIAL BANKS IN NEPAL

(A Case Study of Nepal Investment Bank, NABIL Bank and Himalayan Bank LTD)

A THESIS

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Roll No. : 706/062
Exam symbol no.: 251273/2066

T.U. Regd. No: 7-2-3-1671-2001

Submitted To:

Office of the Dean
Faculty of Management
Tribhuvan University

In partial fulfillment of the requirement for the degree of

Master in Business Studies (MBS)

New Bansehwor, Kathmandu

March 2013

RECOMMENDATION

This is to certify that the thesis:

Submitted by

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Entitled

INVESTMENT POLICY ANALYSIS OF COMMERCIAL BANKS IN NEPAL

(A Case Study of Nepal Investment Bank, NABIL Bank and Himalayan Bank LTD)

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

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Date: …….

VIVA-VOCE SHEET

We have conducted the viva-voce examination of the thesis

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And found the thesis to be original work of the student and written according to the prescribed format. We recommend the thesis to be accepted as partial fulfillment of the requirement for Master of Business Studies (MBS).

Viva-Voce Committee

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ACKNOWLEDGEMENTS

The present research study "**INVESTMENT POLICY ANALYSIS OF COMMERCIAL BANKS IN NEPAL (A Case Study of Nepal Investment Bank, NABIL Bank and Himalayan Bank LTD)**" is prepared for the partial fulfillment of the requirement for the Master's degree in Business studies (MBS).

I am highly obliged to Dr. Sushil Bhakta Mathema, Head of Research Department and Thesis Supervisor of Nepal Commerce Campus and express my warm gratitude for his valuable suggestion, supervision, direction, kind guidance and time given by him throughout the process of this dissertation.

I also express my deep graduate to lecturer Ramkrishna Dhakal, lecturer of Nepal Commerce Campus for his ingenious encouragement and academic support. I want to express my thanks to Mr. Rajan Lama for his kind support during submission of the thesis report.

It would be sheer injustice if I did not express my heartfelt gratitude to my all respected teachers of Nepal Commerce Campus who helped and guided me in various ways without any hesitations which this thesis would have been incomplete.

I would like to extend my words of thanks to my colleague Bidhya Malla and Dipak Lamsal for their help to prepare this thesis and to the respected persons Er. D Koirala, Er. PR Gautam, Mr. Bijaya Koirala and all my friends.

Babita Gautam

DECLARATION

I hereby declare that this thesis entitled **INVESTMENT POLICY ANALYSIS OF COMMERCIAL BANKS IN NEPAL (A Case Study of Nepal Investment Bank, NABIL Bank and Himalayan Bank LTD)** Submitted to Nepal Commerce Campus, New Baneshwor, is my original work done in the form of partial fulfillment of the requirement for the degree of Master's in Business Studies (M.B.S.), which is prepared under the guidance and Supervision of Dr. Sushil Bhakta Mathema, Nepal Commerce Campus, New Baneshwor, Kathmandu.

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Babita Gautam

(Researcher)

LIST OF TABLES

ABBREVIATIONS AND ACRONYMS

NABIL	:	NABIL Bank Limited
NIBL	:	Nepal Investment Bank Limited
HBL	:	Himalayan Bank Limited
NRB	:	Nepal Rastriya Bank
Ltd.	:	Limited
FY	:	Fiscal year
NPA	:	Non-performing asset
CB	:	Commercial bank
JVB	:	Joint Venture Bank
SCBN	:	Standard Chartered Bank Nepal
%.	:	Percentage
‘a’	:	Regression Coefficient
‘b’	:	Regression Coefficient
‘r’	:	Correlation of Coefficient
P. Er.	:	Probable Error
L&A	:	Loan and Advance
TOA	:	Total Asset Outside

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CHAPTER I

INTRODUCTION

1.1 BACKGROUND

Nepal being under developing country in the world with increasing tendency of the economic stipulation, most of the population is still living below poverty level with one of the lowest rate of per capita income.

As financial institutions, commercial banks are one of the essential supporting structures of every economic transaction because they deal in the process of channeling the available resources in the needed sector. They are the intermediary between the deficit and surplus of financial resources. All the economic activities are directly or indirectly channeled through the banks. People keep their surplus money as deposits in the banks and hence banks can provide such funds to finance the industrial activities in the form of loans and advances.

Financial institutions play a major role in the proper functioning of an economy. These institutions act as an intermediary between the individuals who lend and who borrow. These institutions accept deposits and in turn lend it to people who are in need of financial resources. These institutions make the flow of investment easier. So, we cannot deny the role a bank plays in developing an economy. It pools the funds scattered in the economy and mobilizes them to the productive sector but these institutions inherent a large amount of depositors' money at stake.

1.1.1 Evolution of Banking Industry

The evolution of banking industry had started a long time back. Some sort of banking activities had been carried out since the time immemorial. In fact, banking is nearly as old as civilization. Traditional forms of banking were traced during the civilization of Greek, Rome and Mesopotamia. According to Geoffrey Crowther, merchants, goldsmith and moneylenders are the ancestors of modern banking.

"The first banks were in the great centers of international trade in the Middle Ages. These centers were in Italy, on the western shores of the Mediterranean and in the coastal areas of northern and western Europe. General banking practice developed most rapidly in Italy" (World Book Encyclopedia: 64). As a public enterprise, banking made its first beginning in Italy as the Bank of Venice, founded in 1157 A.D., to finance the monarch in the wars. Following it were the establishments of Bank of Barcelona and the Bank of Genoa in 1401 A.D. and 1407 A.D. respectively. With the expansion of commercial activities in Northern Europe there sprang up a number of private banking houses in Europe and slowly it spread throughout the world.

The spread of banking through Europe was rapid from the late 1600s onwards. During that time, Bank of Amsterdam was founded in 1609, Bank of Hamburg was founded in 1619, and Bank of Nuremberg was founded in 1621. The first successful American bank was Bank of North America, which opened in Philadelphia in 1782.

Since the 1960s, banking has become much more international because of the increase in the number of multinational companies and the spread of their operations worldwide.

1.1.2 Development of Banking Industry in Nepal

In Nepal, the development of banking is relatively recent. As in other countries, goldsmiths and landlords were the ancient bankers of Nepal. The establishment of the

"Tejarath Adda" during the year 1933 B.S. was fully subscribed by the government of Kathmandu valley, which played a vital role n the banking system. The "Tejarath Adda" distributed credit facilities to the public especially on the collateral of gold and silver. Several branches were opened in different part of the country. Hence, the establishment of "Tejarath Adda" could be regarded as pioneer foundation of banking in Nepal.

Banking in true sense of term started with the inception of Nepal Bank Limited on 30th Kartik 1994 B.S., which was established as a joint venture of government and private individuals.

Nepal Rastra Bank, the central bank, was set up in 2013 B.S. to make the banking system more systematic and dynamic and to help the government formulate monetary policies and to develop the financial sector.

As Nepal adopted planned development program in the mid 50s, the nation felt dearth of financial resources. Existing banking with only one commercial bank was not sufficient to meet the growing needs of the country. Therefore, the need to establish another commercial bank was felt and Rastriya Banijya Bank was established. The progress in the banking system in Nepal was felt after the establishment of the Rastriya Banijya Bank a state-owned commercial bank was established in 2022 B.S. to play a major role not only in domestic banking services but also in the foreign trade. In 2024 B.S, Agricultural Development Bank was established to develop and support agricultural sector financially.

Despite all these efforts of the government, financial sector was found sluggish. Banking service to the satisfaction of customers was a fry cry. However, the inception of Nepal Arab Bank Ltd. (now known as NABIL Bank Ltd.) as a first joint venture bank proved to be a milestone in the history of banking.

Then, the policy towards financial liberalization was undertaken in the fiscal year 1987/1988 with the objective of expediting the process of economic development, which followed the establishment of two other joint venture banks. Nepal Indosuez Bank Ltd.. (now known as Nepal Investment Bank Ltd..) and Nepal Grindlays Bank Ltd.. (now known as Standard Chartered Bank Ltd..) were established in 2042 B.S. and 2043 B.S. respectively.

After restoration of democracy in 2046, Himalayan Bank Ltd. was established in 2049. Since then, a number of other commercial banks have been established. Today, there are 25 commercial banks existing in Nepal so far.

1.1.3 Brief Introduction of NABIL Bank Ltd., Nepal Investment Bank Ltd. and Himalayan Bank Ltd.

NABIL Bank Ltd. (previously known as Nepal Arab Bank Ltd.) is the first private commercial bank opened in the country. It was established in 2041 (1984) with a paid up equity of Rs. 30 million.

Nepal Investment Bank Ltd. (previously known as Nepal Indosuez Bank Ltd.) was established in 2042 (1986) as a joint venture between Nepalese and French partners. The French partner (holding 50% of the capital) was Credit Agricole Indosuez, a subsidiary of one of the largest banking group in world. On April 2002, with the decision of French partners to divest, the 50% holding has been acquired by a group of companies comprising of bankers, professionals, industrialists and businessmen and the same has been changed to Nepal Investment Bank Ltd. Of the total shares of the bank; 50% is held by the group of companies, 15% by Rastriya Banijya Bank, 15% by Rastriya Beema Sansthan and the remaining 20% is held by the general public. The bank's initial authorized capital stand at Rs. 59 million with the issued as well as paid up capital of Rs. 29.53 million.

Himalayan Bank Ltd., the first commercial bank of Nepal with maximum shareholding by the Nepalese private sector, was incorporated in 2049 (1992) by a few distinguished business personalities of Nepal in partnership with Employees Provident Fund and Habib Bank Ltd., one of the largest commercial bank of Pakistan. Besides commercial activities, the bank also offers industrial and merchant banking. The bank started its operation with the authorized capital of Rs. 100 million, issued capital of Rs. 65 million and paid up capital of Rs. 42.9 million.

1.1.4 Investment Policies of Commercial Banks

Investment is a renowned and most respected word in financial terminology. It is obvious that all people want to invest their money in the reputed firm for best return. But the return may turn up as both favorable and unfavorable way.

"Investment, in its broadest sense, means the sacrifice of the current dollars for future dollars. Two different attributes are generally involved: time and risk. The sacrifice takes places in the present and magnitude is generally uncertain" (Sharpe, Alexander & Bailey; 1988: 1). Hence, it can be said that investment operation of commercial banks is very risky one. A sound investment policy of a bank is such that its funds are distributed in different types of assets with good possibility on the one hand and provides maximum safety and security to the depositors and banks on the other hand. Moreover, risk in banking sector tends to be concentrated in the loan portfolio. The type of loan a bank makes, the amount of money invested as a loan, and the sectors where the bank provides loan are the most important factors that affect the investment policies of a bank.

The income and profit of the bank rely upon its lending procedure and investment of funds on different securities. The greater the credit created by a bank, the greater will be the profitability. A sound lending policy is not only prerequisite for a bank's profitability, but also crucially significant of the promotion of commercial saving of a backward country like Nepal.

Investment policy is one facet of the overall spectrum of policies that guide its investment operations. A sound and viable investment policy can be effective one for the economy to attain the economic objectives directed towards the acceleration of the pace of development. A good investment policy attracts both borrowers and lenders, which helps to increase the volume and quality of deposits, loan and investment. Sound investment policy can minimize interest rate spread and NPAs, which cause the bank failure. Good investment policy ensures maximum amount of investment to all sectors with proper utilization.

1.2 STATEMENT OF THE PROBLEM

At the present context, political and economic condition of the country is not stable and satisfactory. This is the biggest problem the banking sector is facing. The unstable political and economic condition has limited the investment opportunities and increased risk. At the same time, investors are always reluctant to risk. Due to which, there is ample amount of idle money in the country, which flow into banks as deposits. At the same time, there are very few profitable sectors where a bank can invest. Therefore, banks have a lot of deposits but very little investment opportunity. They are even discouraging people by offering very low interest rate and minimum threshold balance and they are encouraging people to take loan by offering very low interest rate, easy repayment schemes and simple procedures. This has become a reason for deceleration of the pace of economic development.

Another problem facing by the banking industry is the lack of sound investment policy of the commercial banks. The success and prosperity of a bank relies heavily upon the successful utilization of the collected resources, i.e. deposit. Successful formulation and

effective implementation of investment policy is the prime requisite for the successful performance of a commercial bank.

Actually, commercial banks are not properly utilizing their resources, that is making loan and advances and lending for profitable project. This is due to the lack of knowledge on financial risk, interest rate risk, business risk, liquidity risk etc. Granting loan against insufficient deposit, overvaluation of goods pledged, high percentage of non-performing loan, risk averting decision regarding loan recovery and negligence in recovery of overdue loan are some of the basic lapses and the result of unsound investment policy sighted in the banks. At the same time, there are unwanted political pressures to accept these types of loans. These types of condition will definitely lead the commercial banks to the position of liquidation. Government owned banks are the perfect examples for this. These reasons have created the perfect environment for mushrooming of private commercial banks. Still, only a handful of commercial banks have satisfactory investments that are good performing loans.

Mushrooming of commercial banks is also a problem for the banking sector. Due to the present political and economic condition, an introduction of a new bank is just sharing a cake rather than pumping new capital or new technology. Actually, Nepalese market is almost saturated. This has led the banks towards the intense competition. This has opened door for unfair competition, weak investment policies and above mentioned other problems.

The study problems are identified as below:

a. Are these banks mobilized their fund adequately?
b. What is the relationship of investment with total deposit and its impact to the firm profit earning?
c. How effective & efficiently does these banks follow the investment policy?
d. Review of NRB directives issued in regards to investment policy.
e. Effect of the investment decision to the total earning of the bank.

1.3 OBJECTIVES OF THE STUDY

The basic objective of this study is to know about the investment policy and activities of the commercial banks. The specific objectives are given below.

1. To analyze the investment activities and fund mobilization of NABIL, NIBL and HBL.
2. To explore the liquidity, asset management, profitability and risk position of three commercial banks under study.
3. To assess the deposit utilization trends and its projection for the future.
4. To evaluate the growth ratios of loan and advance and total investment and respective growth rate of total deposit and net profit.
5. To provide the suggestion on the basis of findings for further growth of the banks under study.

1.4 SCOPE OF THE STUDY

In the context of Nepal, there is less availability of research works, journals and articles in the field of investment policy and activities of commercial banks as well as other financial institutions. As it is a well known fat that the commercial banks can affect the economic condition of the whole country, the effort is made to highlight the investment policy of commercial banks expecting that the study can bridge gap between deposits and investment activities. On the other hand, the study would provide information to the management of the bank that would help them to take corrective action. This study can provide information to the shareholders and the public to give decisions while making investments on shares or various banks. Further, this study an also be used as reference material by the shareholders, investors, researchers, government organizations and non-government organizations.

1.5 LIMITATIONS OF THE STUDY

This study is simply a study for the partial fulfillment of MBS degree, which has to be finished within a short span of time. Some of the limitations are given below:

1. The study is mainly based on secondary data.
2. The study is based on the data of 5 years only.
3. Out of the numerous affecting factors only those factors related with investment activities are considered.
4. Out of 26 commercial banks, only three banks are taken into account to do the comparative study.

1. 6 ORGANIZATION OF THE STUDY

This study is divided into 5 chapters which are:

Chapter I: Introduction

This introductory chapter includes:

1. General Background
2. Statement of the Problem
3. Objectives of the Study
4. Scope of the Study
5. Limitations of the Study
6. Organization of the Study

Chapter II: Review of Literature

This chapter deals with review of literature. This includes:

1. Conceptual/Theoretical Review
2. Review of Reports
3. Review of Books
4. Review of Articles
5. Review of Thesis

Chapter III: Research Methodology

This chapter deals with the research methodology used in this study. This includes:

1. Introduction
2. Research Design
3. Data Collection Procedure
4. Tools for Analysis: This includes financial tools and statistical tools.

Chapter IV: Data Presentation and Analysis

This chapter deals with the presentation and analysis of data collected using different financial and statistical tools. This chapter includes:

1. Analysis of Financial Ratio
2. Analysis of Statistical Tools

Chapter V: Conclusions and Recommendations

This chapter sum ups the study deals with the outcome of the study. This chapter highlights the major findings of the study work and recommends some suggestions. This study includes:

Major findings of the study

Recommendations

CHAPTER II

REVIEW OF LITERATURE

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

Review of literature includes the following topics:

2.1. Conceptual/theoretical review
   2.1.1. Characteristics of sound lending and investment policy
   2.1.2. Some important terminology
2.2. Review of reports
2.3. Review of books
2.4. Review of articles
2.5. Review of thesis

2.1. CONCEPTUAL/THEORETICAL REVIEW

Commercial Bank Act 2031 has defined commercial bank as "Commercial bank means a bank which operates currency exchange transactions, accepts deposits, provide loan and performs dealing relating to commerce and other than those banks which have been specified for the cooperative, agriculture, and industry of likely any other specific objective. The commercial banks are established under the commercial Act 2031 in Nepal that has been amended regularly. It has been amended for six times till today. Now, commercial bank Act 2049 is active.

2.1.1. Characteristics of Sound Lending and Investment Policy:

The income and profit of the bank rely upon its lending procedure and investment of funds on different securities. The greater the credit created by a bank, the greater will be the profitability. A sound lending policy is not only prerequisite for banks profitability but also crucially significant for the promotion of commercial saving of a backward country like Nepal.

Some of the main characteristics of sound lending and investment policies are given below:

1. Liquidity:

People deposit money at bank in different account with confidence that the bank will repay their money when they are in need. To maintain such confidence of the 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.

2. Profitability:

Commercial banks invest on those sectors that derive the maximum income. Hence, the investment or granting of loan and advances by them are highly influenced by profit margin. Basically, the profit of commercial bank depends upon the interest rate of the bank, volume of loan provided, time period of loan and nature of investment on different securities. A good bank is one who invests most of its funds in different earning assets standing safely from the problem of liquidity i.e. keeping cash reserves to meet day-to-day requirements of the depositors.

3. Diversification:

Diversification of loans helps to sustain loss as if securities of some company deprived then there may be appreciation in the securities of other companies. Dispersion reduces the risk of recovery. In other words, “a bank should not lay all its eggs in the same

basket.” The bank should be cautious that while granting loan, it should never be always in one sector. A bank must diversify its investment in different sectors in order to maximize profit and minimize risk.

2.1.2. Some Important Terminology:

1. Deposits:

Deposits denote the amounts deposited in current, saving, or fixed account of a bank or financial institution. Deposit is the main resource of fund that a bank uses for the generation of profit. Hence, the competence of the bank depends on its ability to attract deposits. Deposit being the borrowed amount from the depositors or from general public, it constitutes the liability of bank. The deposits of the bank are influenced by the following factors:

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

In addition to the above, the existing economic conditions put forth a decisive influence on the amount of deposit the bank receives.

2. Loan & Advances:

Loan & advance is the primary basis of income and most profitable asset to a bank. A bank is comes one step ahead to lend as they constitute the larger part of revenue. At the same time, bank has to be more cautious in granting loans and advances as they may not be realized at a short period of time and they bear the chance of turning into bad debt. Hence a bank is more keen on lending money for a short time. Loan and advance is provided against the personal security of the burrower or against the security of the immovable and movable properties. Bank grants loans in various forms such as overdraft, cash credit, direct loans and discounting bills of exchange.

3. Investment on Government Securities, Shares, and Debentures:

Commercial banks invest on government securities, shares, and debentures and earns interest and dividend. This is the secondary source of income of the bank.

4. Investment on Other Company's Shares and Debentures:

Commercial banks invest their excess funds to the shares and debentures of other company. This is done usually when there is an excess of funds than required and there is lack of investment opportunities in the profitable sector. The commercial banks purchase share and debentures of regional development bank, NIDC, other development banks, etc.

5. Other Uses of Fund:

Commercial banks must maintain the bank balance with **Nepal Rastra Bank** as prescribed by the government. At the same time, they need to maintain cash balance in local currency in the vault of the bank and some part of the fund is used for the bank balance in foreign bank.

2.2. REVIEW OF REPORTS

Here, annual reports of concerned banks are reviewed in order to highlight the brief profile of the banks.

2. 2. 1. Reports Relating to NABIL:

Nabil Bank Limited started its operation on July 12th, 1984 as the first joint venture bank in Nepal. Dubai Bank Limited, Dubai (later acquired by Emirates Bank Limited, Dubai) was the first joint venture partner of Nabil. Currently, NB (International) Limited, Ireland is the foreign partner. The bank had the official name Nepal Bank Limited till.

Nabil is the pioneer in introducing many ground-breaking products and marketing concept in banking sector of Nepal with more than 15 branches and 2 counters in all

major cities. It is the only bank having its presence at Tribhuvan International Airport, only international airport of the nation. Also, the number of channels in the country is the highest among the joint venture and private banks operating in Nepal. Success of Nabil is the landmark in the banking history of Nepal as it floored the way for the establishment of many commercial banks and financial institutions.

The bank provides a full range of commercial banking services through its channels spread across the nation and reputed correspondent banks across the world. Furthermore, it has a good name in the market for its highly personalized services to its customers.

2. 2. 2. Reports Relating to Nepal Investment Bank Limited:

Nepal Investment Bank Limited (NIBL), previously known as Nepal Indosuez Bank Limited, was established in the year 1986 as a joint venture between Nepalese and French partners. The French partner (holding 50% of the capital of NIBL) was Credit Agricole Indosuez, a subsidiary of one of the largest banking group in the globe. With the decision of the Credit Agricole Indosuez, a group of companies consisting of bankers, professionals, industrialists and businessman has acquired the 50% shareholding of Credit Agricole Indosuez in Nepal Indosuez Bank Limited in April of 2002.

The bank got its new name of Nepal Investment Bank Limited upon the approval of bank's annual general meeting, Nepal Rastra Bank and company registar's office with the following shareholding structures: A group of companies holding 50% of the capital of the capital, Rastriya Banijya Bank holding 15% of the capital, Rastriya Beema Sansthan holding 15% and the remaining 20% being held by the General Public (which does mean NIBL is the company listed on the Nepal Stock Exchange).

2. 2. 3. Reports Relating to Himalayan Bank Limited:

Himalayan Bank Limited was incorporated in 1992 by a 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, it also offers industrial and merchant banking services.

HBL has six branches in Kathmandu Valley at the following locations: Thamel, New Road, Teku, Maharajgunj, Pulchowk (Patan) and Suryavinayak (moved from Nagarkot). In addition, the bank also has eleven other branches outside Kathmandu Valley in Banepa, Tandi, Bharatpur, Birgunj, Hetauda, Bhairawa, Biratnagar, Butwal, Nepalgunj, Pokhara and Dharan. HBL will be aggressively opening new branches at different parts of the country to serve its customers better.

Himalayan Bank has always been committed to providing a quality service to its valued customers, with a personal touch. All customers are treated with utmost courtesy as valued clients. The bank, wherever possible, offers tailor made facilities to its clients, based on the unique needs and requirements of different clients. To further extend the reliable and efficient services to its valued customers, Himalayan Bank has adopted the latest banking technology. This has not only helped the bank to constantly improve its service level but has also prepared the bank for future adaptation to new technology. This bank has already offered unique services such as SMS Banking and Internet Banking to customers and will be introducing more services like these in the near future.

2.3. REVIEW OF BOOKS

Bank is a financial institution which deals with money and substitute for money (deposit, credit, credit instruments, etc.). Trembling and inconsistent flow of credit harms the economy and the profitability of the bank. So, the prime objective of a bank should be collection of fund and its utilization in good investments such as diverse and safe investment. Here, opinions of different authors from their books are summarized.

Emphasizing the importance of investment policy, **H.D. Crosse (1963)** has stated that lending is the essence of commercial banking and consequently, the formulation and implementation of sound policies are among the most important responsibilities of bank directors and management. Well conceived lending policies and careful lending practice are essential in a bank to perform its credit creating function effectively and minimize the risk inherent in any extension of credit. He further adds, the formulation of sound lending policies for all banks should have adequate and careful consideration over community needs, size of loan portfolio, character of loan, credit worthiness of borrower and asset pledged to security borrowing, interest rate policy.

S.P. Singh and Singh (1983) have concluded that investment (credit) policies of banks are conditioned to a great extent by the national policy framework. Every banker has to apply its own judgment for arriving at credit decision keeping of course its credit policy also in mind. As per them, government and central banks have to make a sound policy about the investment policies of commercial banks. They further state that the field of investment is more challenging as it offers relatively greater scope to banker for judgment and discretion in selecting their loan portfolio, but this higher degree of freedom in the field of credit management is also accompanied by greater risk. During the recent years, the credit function has become more complex.

James B. Bexley (1987) has concluded that investment policy fixes responsibilities for the investment of disposition of the banks' assets in terms of allocating funds for investment and loan and establishing responsibility for day to day management of those assets. It is assumed the management should be responsible for the investment decision of banks.

Bishowambhar Pyakuryal (1987) in his article "Workshop on Banking and National Development" writes the present changing context calls for a substantial revitalization of the resource. How much they have gained over the years depends chiefly on how far they

have been able to utilize their resources in an efficient manner. Therefore, the task of utilization of resources is as much crucial as the mobilization. The under utilization of resources not only results in loss of income but also goes further to discourage the collection of deposits. Thus in his paper, he has emphasized on proper utilization of mobilized resources and profitability increment.

William F. Sharpe, Alexander J. Gorden and Jeffery V. Bailey (1988) in their book they have presented with the objective to make an analysis of investment. They state that it is the sacrifice of certain present value for (possible uncertain) future value. Two different attributes are generally involved, time and risk. The sacrifice takes place in the present and is certain. The reward comes later, if at all and the magnitude is generally uncertain. In some cases, the element of time predominates such as government bond. In other cases, risk is the risk dominant attribute such as call option on common stock. So, they have presented their views in the books that bank should look for the safe and less risky investment.

John M. Cheney and Edward A. Moses (1988) have stated that investment objective is to increase systematically in the individual wealth and defined as asset minus liabilities. The higher the level of desired wealth the higher must be received. An investor seeking higher return must be willing to face higher level of risk..

Ramesh Lal Shrestha (1988) in his article "A Study on Deposits and Credits of CBs in Nepal" concluded the credit deposit ration would be 51.30%, other things remaining the same in 2004 A.D., which was the lowest under the period of reviews. So, he had strongly recommended that the CBs should try to give more credit entering new field as far as possible. Otherwise, they might not be able to absorb even its total expenses.

Bodhi B. Bajracharya (1990) has mentioned in his article "Monetary Policy and Deposit Mobilization in Nepal" the mobilization of domestic savings is one of the prime

objectives of the monetary policy in Nepal. For this purpose, CBs stood as the active and vital financial intermediary for generating resources in form of deposit of the private sector. So far, providing credit to the investors is a different aspect of the economy.

F. Morris (1990) in his discussion paper "Latin America's Banking System in the 1980s" has concluded that most of the banks concentrated on compliance with central bank rules on reserve requirement, credit allocation and interest rate. While analyzing loan portfolio quality, operating efficiency and soundness of bank investment management has largely been overlooked. The huge losses now found in the bank's portfolio in many developing countries are testimony to the poor quality of this oversight investment function.

He further adds that mismanagement in financial institutions has involved inadequate and overoptimistic loan appraisal, lax loan recovery, high risk diversification of lending and investments, high risk concentration, connected and insider lending, loan mismatching. This has led many banks of developing countries the failure of 1980s.

Gitman and Joehank (1990) in their book have expressed that investment is any vehicle in which funds can be placed with the expectation that will preserve or increase in value and generate positive returns. It means that investment is the instrument which is essential for the banks to increase profitability.

2.4. REVIEW OF ARTICLES

Bhagat Singh (1991) in his research paper "Nepalma Adhunik Banking Byabastha" has made an attempt to highlight some of important indicators which have contributed to the efficiency and performance of other CBs in the field of CBs. At the end of the paper, he has concluded that the establishment of CBs a decade ago, marks beginning of modern banking era in Nepal. The joint venture banks have brought many new banking

techniques such as computerization, hypothecation, consortium finance and modern fee base activities into the economy. There are indeed significant milestones in the financial development process to the economy.

Shekhar Bahadur Pradhan (1995) has presented short glimpses on investment in different sectors, its problem and prospects through his article "Deposit Mobilization, Its problem and Prospects. Mr. Pradhan has pointed out following problems of deposit mobilization in Nepalese context:

- Due to lack of education most of the Nepalese people do not go for saving in institutional manner. However, they are very much used of saving be it in a form of cash or ornaments. Their reluctance to deal with institutional system is governed by the lower level of understanding about financial organization, withdrawal system and availability of depositing facilities and so on.
- Due to lesser office hours of banking system, people prefer holding cash in personal possession.
- Unavailability of the institutional services in rural areas.
- No more mobilization and improvement of the employment of deposits in the loan sectors.

Mr. Pradhan has also suggested for the prosperity of deposit mobilization which are as follows:

- By cultivating the habit of using rural banking units.
- By adding service hour to bank.
- By providing sufficient institutional service to the rural areas.
- NRB could also organize training program to develop skilled manpower.
- By spreading cooperatives to the rural areas to develop mini banking service.

Dr. Sunity Shrestha (1997) in her article, "Lending operation of commercial banks of Nepal and its impact on GDP" has presented with the objectives to make an analysis of

contribution of commercial banks' lending to the Gross Domestic Product (GDP) of Nepal. She has set hypothesis that there has been positive impact of lending of commercial banks to the GDP. In research methodology, she has considered GDP as the dependent variable and various sectors of lending viz agriculture, industrial, commercial service and social sectors as independent variables. A multiple regression technique has been applied to analyze the contribution.

The multiple analyses have shown that all the variables except service sector lending has positive impact on GDP. Thus, in conclusion, she has accepted the hypothesis i.e. there has been positive impact on GDP by lending of CBs in various sectors of economy, except service sector investment.

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

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

Pravakar Ghimire (1999) has published his article in which he has mention the most of the CBs of Nepal are ready to pay penalty in spite of rural poverty sector, poverty stricken and deprived areas. In the directives of NRB, it is clearly mentioned that all CBs (under NRB) should invest 12% of its total investment to the priority sectors. Out of this 12%, they should invest 3% to the lower level class of countryman powers. These CBs are unable to meet the requirement of NRB.

Rewat Bahadur Karki (2000) has summarizes some of the challenges through his article "Nepalese Financial Sector: Challenges and Some Solution" which are as follows:
According to the article, the financial sector is facing the major challenges of high NPL of the banking sector which comes around 18% of the total loan but if the loan classification is made according to least international practice, it is assumed to exceed 30%. Credit demand is being met largely by non-institutional source i.e. private money lender, merchant, trader, individual and landlord at very high rate of interest which is two to three times higher than that of institutional source, this shows that the unorganized financial sector is playing a major role in the Nepalese economy. The liquidity position of the banking sector is rated as high as 24%, but the productive sector of the economy is starved by credit crunch. This has created a paradoxical situation in the banking sector.

He has given some suggestion to improve the Nepalese financial sector such as:
The financial institutions especially CBs have to identify new areas of investment to increase loan and advances in reducing the liquidity position.
With the rapid growth in the number of banks and financial institutions, deposit insurance scheme is a must. The principle reason for introducing such deposit insurance should be one of the social justice rather than economic justification in order to protect the interest of the small depositors. In this condition, this scheme should be expedited to implement.

2.5. REVIEW OF THESIS

Mr. Raja Ram Khadka (1997) has conducted his study entitled "A Study on Investment Policy of NABIL in Comparison to Other Joint Venture Banks." The main objectives of the study were to evaluate the liquidity, asset management, efficiency, profitability and risk position of NABIL in comparison to other JVBs and to study the fund mobilization and investment policy with respect to fee based off balance sheet transaction and fund based on balance sheet transaction.

The researcher has found that liquidity position of NABIL is worse than that of other JVBs. NABIL has more portions of current assets as loan and advances but less portion as investment on government securities. NABIL is comparatively less successful in on-balance sheet operations as well as off-balance sheet operations than that of other JVBs. Profitability position of NABIL is comparatively not better than that of other JVBs. NABIL is more successful in deposit mobilization but failure to maintain high growth rate of profit in compared to NGBL and NIBL.

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

He has compared investment policy of Nepal Arab Bank Ltd with Nepal Grindlays Bank Ltd and Nepal Indosuez Bank Ltd. His study is based on five-year period from 1992 to 1996. He has taken only two banks of Nepal. It would not be reasonable to quote investment policy of NABIL as good or bad by comparing it with only two banks. The study is silent about the investment opportunities in Nepalese market.

He has not explained his idea of liberal lending policy though he has recommended NABIL to adopt liberal lending policy. He has explained how to reduce cost as well.

Ms. Ruru Kusam Gautam (1999) has conducted her study entitled "Investment Analysis of the Financial Companies in Context of Nepal." She has found that the investment in government securities of the financial companies is decreasing. Major source of financial companies is utilized as loan and advances. Use of fund towards the hire purchase loan is decreasing in the financial companies and investment on housing loan is more.

She has recommended that the overall investment policy of the financial companies should be concentrated on productive sector such as business sand industry loan rather than consumer goods such as higher purchase and housing plan. This would contribute on the capital formulation for overall national development. She further has said that the credit monitoring wind should be made strong enough to ensure timely cash inflow from credit granted.

She has analyzed the investment of various financial companies of Nepal. She has only taken 20 financial companies. Currently, there are all together 49 financial companies in Nepal.

Mr. Dhakal (1999) in his thesis entitled "A Comparative Study on Financial Performance of Nepal SBI Bank Ltd and Nepal Indosuez Bank Ltd" has found the liquidity position of Nepal Indosuez Bank is comparatively higher than that of Nepal SBI Bank Ltd. It has adopted aggressive lending investment and borrowing policy to general profit than SBI. He has recommended acting according to the government plans and policies on mobilizing their deposit in the productive sectors. He has further suggested stabilizing the cash and bank balance to total deposit ration of both banks after proper diagnosis of the root of the cause.

His study is based on the overall financing performance of the banks. It is not particular on investment policy of the banks though the study has covered the deposit mobilization of these banks. In this study, the researcher has not used sufficient financial tools in concern with the deposit portion. He also failed to use the statistical tools like coefficient of correlation analysis and probability error.

U. Tuladhar (2000) in his study **"**A Study on Investment Policy of Nepal Grindlays Bank Limited in Comparison to other Joint Venture Banks of Nepal," has concluded that

joint venture banks are discouraging lower level depositors and interested in the higher level clients as paramount customers. He found the probability position of NGBL is higher than NABIL and NABIL and NGBL maintain successful liquidity position than others and also found that because of uncertain return depositors may withdraw high portion of deposits and may invest in newly opened organization. He has recommended to follow liberal lending policy so that more percentage of deposits can be invested into different profitable sectors as well as loan and advances.

As analysis showed that investment and loan and advances as significant factors which affect the profit of the bank, he further suggested investing the fund of the bank in the purchase of shares and debentures of other reputed organizations.

He compared NGBL with other joint venture and focused to invest more percentage of deposits, but it is sometimes harmful because they give much importance to the liquidity position in bank operations. When depositors demand money, bank must return them to maintain creditability. Bank needs to maximize its wealth and goodwill and expand branches to collect deposit and invest in the sectors which will give high return and is more potential for investment.

Mr. Nava Ratna Maharjan (2003) has conducted his study entitled **"**An Investment Policy of Nepal Investment Bank Ltd. in Comparison to Standard Chartered Bank Nepal Ltd. and Nepal Arab Bank Ltd." The main objective of the study was to analyze the relationship between total investment, deposit and loan and advance and net profit and outside asset and their comparative study in between the respective banks. Other objective includes studying the asset management system, profitability and risk position of the respective banks. He concluded that the investment policy of Nepal Investment Bank was not good with comparison to other CBs in every respect. He found that at times, bank focused much of its attention to one sector leaving other sectors untouched.

So, he recommended touching all the sectors and balancing it effectively so as to have the optimal performance of the bank.

He further found in the study that NIB's loan and advances to total deposit ratio is higher than that of SCBN and Nabil but its stability is not consistent than that of other two banks. To overcome this situation, NIB was strongly recommended to follow liberal lending policy and invest more and more percentage of total deposit in loan and advances and similarly maintain more stability on the investment policy.

Research Gap:

In this way, researchers have studied about the Investment policy of Banks from different angles. Obviously the conclusion that they present also varied according to focus, size of the sample and the methodology they fallowed, but none of the researchers have studied about the "Technical analysis of investment policy in Nepalese context. It is there fore pioneering study, Hense this study tries to fill that shortcoming by trying to give certain professional opinion in order to contribution in practical side of Investment policy and side by side carrying its academic purpose by revalidating the tools and techniques available in the field of analysis of Investment policy . Thus this study enables to view current condition of Investment policy.

CHAPTER III

RESEARCH METHODOLOGY

3.1 INTRODUCTION

Research methodology states the systematic procedure and process applied in entire study. It sequentially refers to the various steps to be taken into consideration by a researcher in studying a problem with a certain objective.

3.2 RESEARCH DESIGN

Research design is the plan, structure and strategy of investigations conceived so as to obtain answers to research questions and to control variances. The plan is to overall scheme or program of the research. It includes an outline of what the investigator will do from writing the hypotheses and their operational implications to the final analysis of data. The structure of the research is more specific. It is the outline, the scheme, and the paradigm of the operation of the variables. When we draw diagrams that outline the variables and their relation and juxtaposition, we build structural schemes for accomplishing operational research purposes. Strategy, as used here, is also more specific than plan. In other words, strategy implies how the research objectives will be reached and how the problem encountered n the research will be tackled.

To achieve the objective of this study, descriptive and analytical research design has been used. This study is the comparative study research of leading commercial banks of Nepal. HBL, NABIL and NIBL are selected for this study. Some financial and statistical tools have been applied to examine facts and descriptive techniques have been adopted to evaluate investment performance the above mentioned three commercial banks.

3.3 DATA COLLECTION PROCEDURE

3.3.1 Nature and Sources of Data

Mainly, the study is conducted on the basis of secondary data. The required data are extracted from balance sheets, P/L accounts and different financial schedules of concerned banks' annual reports. Other supplementary data are collected from a number of institutions and regulating authorities like Nepal Rastra Bank, Nepal Stock Exchange Ltd., Security Exchange Board, etc. and from different related websites. The study is based on the historical data of 5-year period.

3.3.2 The Population and Sample

There are more than 25 commercial banks functioning in Nepal, which is the size of the population. Out of them, 3 leading commercial banks, **Himalayan Bank Ltd., NABIL Bank Ltd.,** and **Nepal Investment Bank Ltd.,** are considered as samples to carry out this thesis since they are the earliest joint venture banks established here and they are the most competitive commercial banks of Nepal.

The total numbers of commercial banks existing in Nepal so far are:

1. Nepal Bank Ltd.
2. Rastriya Banijya Bank
3. Agricultural Development Bank
4. NABIL Bank Ltd. (earlier known as Nepal Arab Bank Ltd.)
5. Standard Chartered Bank Nepal (earlier known as Nepal Grindlays Bank Ltd.)
6. Nepal Investment Bank Ltd. (earlier known as Nepal Indosuez Bank Ltd.)
7. Nepal SBI Bank
8. Himalayan Bank Ltd.
9. Nepal Bangladesh Bank Ltd.
10. Everest Bank Ltd.

11. Bank of Kathmandu Ltd.
12. Nepal Credit and Commerce Bank Ltd. (earlier known as Nepal Bank of Ceylon Ltd.)
13. Lumbini Bank Ltd.
14. NIC Bank Ltd.
15. Machapuchre Bank Ltd.
16. Kumari Bank Ltd.
17. Laxmi Bank Ltd.
18. Siddartha Bank Ltd.
19. Global Bank Ltd.
20. Citizens International Bank Ltd.
21. Prime Bank Ltd.
22. Sunrise Bank Ltd.
23. Bank of Asia Ltd.
24. Development Credit Bank Ltd.
25. NMB Bank Ltd.
26. Kist Bank Ltd.

3.4 TOOLS FOR ANALYSIS

For the sole purpose of data analysis, various financial and statistical tools are used to achieve the objective of the study. The evaluation of data is carried out according to the pattern of data available.

The various tools applied in this study are presented below:

3.4.1 Financial Tools

Financial analysis is the process of identifying the financial strength and weakness of the form by properly establishing relationship between the items of the balance sheet. In this study ratio analysis are used as the financial tools for the data analysis.

Ratio Analysis

Ratio analysis is a technique of analyzing and interpreting financial statements to evaluate the performance of an organization by creating the ratios from the figures of different accounts consisting in balance sheet and income statement. The qualitative judgement concerning financial performance of a firm can be carried out with the help of ratio analysis. Even though there are many ratios, only those ratios have been covered in this study which is related to investment operation of the bank.

This study contains following ratios:

1. Liquidity Ratio

The capacity of a business to meet its obligation in the short term or short-run solvency is known as liquidity. Its validity shows the short-term financial strength of the business. It is also a process of measuring speed with which a bank asset can be converted into cash to meet deposit withdrawal and other current obligations.

The following ratios are evaluated under liquidity ratio:

a) Current Ratio

It is none other than the ratio of current assets and current liabilities. Current assets are those assets, which can be converted into cash within short span of time, usually no exceeding one year. Current liabilities are those obligations which are payable within a short period. The ratio is calculated as:

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

Current assets of a bank usually include cash balance, balance with banks, money at call and short notice, investments, loan and advance, bills purchased, interest receivable and other miscellaneous current assets. Similarly current liabilities include borrowings, deposit accounts, bills payable, short-term loans, tax provision, dividend payables and other miscellaneous current liabilities.

b) Cash and Bank Balance to Total Deposit Ratio

As it is obvious, cash and bank balance are the important liquid current assets. The ratio measures the percentage of most liquid fund with the bank to make instant payment to the depositors. The ratio is calculated as:

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

c) Cash and Bank Balance to Current Asset Ratio

This ratio measures the proportion of most liquid assets, i.e. cash and bank among the total current assets of the bank. Higher ratio shows the bank's ability to meet the demand for cash. The ratio is calculated as:

$$\text{Cash and Bank Balance to Current Asset Ratio} = \frac{\text{Cash and bank balance}}{\text{Current assets}}$$

d) Investment on Government Securities to Current Asset Ratio

This ratio is calculated to find out the percentage of current asset invested in government securities, i.e. treasury bills and government bonds like development bonds and national saving bonds. The ratio is calculated as:

$$\text{IGSCA Ratio*} = \frac{\text{Investment of government securities}}{\text{Current assets}}$$

* Investment on Government Securities to Current Assets Ratio

e) Loans and Advances to Current Asset Ratio

Loan and advance of a bank basically includes different type of loans lent by the bank to the customers in different sectors. The ratio is calculated as:

$$\text{Loans and Advances to Current Asset Ratio} = \frac{\text{Loan \& advance}}{}$$

2. Assets Management Ratio

Asset management ratio measures how meticulously a firm is managing its assets. These ratios are designed to answer this question: Does the total amount of each type of assets as regarded on the balance sheet seem reasonable, how high, too low, in view of current assets and operating levels? Either a company or a bank must borrow or obtain funds from other sources to acquire assets. If it has too many assets its interest expenses will be too high and hence its profits will be low; on the other hand, if assets are too low, profitability sales may be lost.

The following ratios are used under this asset management ratio:

a) Loans and Advances to Total Deposit Ratio

Loans and advances is the major component in the total working fund (total assets) which indicates the activity of bank to channnelize its deposits in the form of loans and advances to earn high return. The ratio can be calculated as:

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

b) Total Investment to Total Deposit Ratio

Investment is one of the major credits created to earn income. This implies the utilization of the bank's deposit on investment in government securities and shares and debentures of other companies and banks. The ratio is calculated by dividing total investment by total deposit. The lower the ratio more utilization of funds and vice versa. This can be measured as:

Total Investment to Total Deposit Ratio = ~~*Total investment*~~

c) Loans and Advances to Total Working Fund Ratio

Loans and advances is the major component in the total working fund (total assets), which indicates the activity of a bank to channnelize its deposits in the form of loans and advances to earn high return. Higher the ratio, higher the utilization, higher the profit and, at the same time, higher the risk. The ratio can be calculated as:

Loans and Advances to Total Working Fund Ratio = ~~*Loans and advances*~~

d) Investment on Government Securities to Total Working Fund Ratio

This ratio shows the relationship between the banks investment on government securities in comparison to the total working funds. The ratio is computed as:

$$\text{IGSTWF Ratio*} = \frac{\text{Investment on government securities}}{\text{Total working fund}}$$

* Investment on Government Securities to Total Working Fund Ratio

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

This ratio shows the bank's investment in shares and debentures of subsidiary and other companies. This ratio can be computed as:

ISDTWF Ratio* = ~~**Investment on shares and debentures**~~

Total working fund

* Investment on Shares and Debentures to Total Working Fund Ratio

3. Profitability Ratio

Profitability ratios are calculated to measure the effectiveness and smooth operation of an organization in terms of profit. It is the device to indicate the financial performance of any institution. This proves that higher the profitability ratio, better the financial performance of bank or vice versa. Profitability ratio can be evaluated through following different ratios:

a) Return on Loans and Advances Ratio

This ratio shows how effectively the bank has utilized its resources in the form of loans and advances. The ratio can be calculated as:

$$\text{Return on Loans and Advances} = \frac{\text{Net profit (loss)}}{\textit{Loans \& advances}}$$

b) Return on Total Working Fund Ratio

It is also known as return on asset. The ratio measures the overall profitability of all working funds, i.e. total assets. A firm or a financial institution has to earn satisfactory return on assets or working fund for its survival. The ratio can be computed as:

$$\text{Return on Total Working Fund Ratio} = \frac{\text{Net profit (loss)}}{\text{Total working fund}}$$

c) Return on Equity Ratio

This ratio measures how efficiently the banks have used the funds of owners. The ratio can be computed as:

$$\text{Return on Equity Ratio} = \frac{\text{Net profit (loss)}}{\text{Total equity capital}}$$

d) Total Interest Earned to Total Working Fund Ratio

The ratio is calculated to find out the percentage of interest earned to total assets (working fund). The ratio is calculated as:

Total Interest Earned to Total Working Fund Ratio = _____

Total interest earned includes interest earning from different sector investments and loan whether it is long term or short term. This is the main earning of the bank. Even

though the ratio does not have any standard rate, the higher the ratio the better the result.

d) Total Interest Earned to Total Operating Income Ratio

This ratio is calculated to find out the proportion of interest income in total operating income of bank. It indicates how efficient is the bank in mobilization of its funds in interest bearing assets. The ratio is computed as:

Interest Earned to Total Operating Income Ratio = ~~*Total interest earned*~~

4. Risk Ratio

The possibility of risk makes a bank's investment a challenging risk. Bank has to take risk to get return on its investment. The risk taken is compensated by the increase in profit. So, a bank has to have idea of the level of risk that one has to bear while investing funds.

The following ratios are evaluated under this study:

a) Liquidity Risk Ratio

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

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

$$\text{Liquidity Risk Ratio} = \frac{\text{Cash \& bank balance}}{\text{Total deposit}}$$

b) Credit Risk Ratio

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

$$\text{Credit Risk Ratio} = \frac{\text{Total loans \& advances}}{\text{Total assets}}$$

c) Capital Risk Ratio

Capital risk ratio measures bank's ability to attract deposits and inter-bank funds. It also determines the level of profit a bank can earn. The capital risk is directly related to return on equity. Higher the ratio higher the capital risks. The ratio is computed by dividing capital (Paid up capital and Reserve) by risk-weighted assets as under BASLE committees' formula, which can be mentioned as:

$$\text{Capital Risk Ratio} = \frac{\text{Capital (Paid up + Reserve)}}{\textit{Risk weighted assets}}$$

5. Growth Ratio

Growth ratio represents how well the CBs are maintaining their economic and financial status. Higher the ratio, better the executing of the bank and vice versa. Under this title, four types of ratios are studied. They are directly related to the fund mobilization and investment of CB. These ratios are:

a) Growth Ratio of Total Deposit
b) Growth Ratio of Loans and Advances
c) Growth Ratio of Total Investment
d) Growth Ratio of Net Profit

3.4.2 Statistical Tools

Some important statistical tools are used to achieve the objective of this study. The statistical tools that are used for data analysis in this study are:

1. Trend Analysis

Trend analysis is an analysis of a firm's financial ratios over time. This measures the change of data over a period of time. This reveals whether the firm's ratios are improving or deteriorating over time. Under segment, current and projected trend values of loan & advance to total deposit ratio and investment to total deposit ratio are calculated.

Trend equation:

y=a+bx where, y = dependent variable

x = independent variables

$a = \sum y/n$ & $b = \sum \mathbf{xy} / \sum \mathbf{x^2}$

2. Karl Pearson's Coefficient of Correlation

Correlation is the measure of relationship between two or more characteristics of a population or sample. For the purpose of comparison and further analysis, "Karl Pearson's coefficient of correlation" is applied in this study. This measures the degree of association between the two variables say X and Y for a given set of N observations. The formula for calculation is:

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

where, $x = X - \bar{X}$, $y = Y - \bar{Y}$

The value of correlation coefficient 'r' always varies from –1 to +1. The degrees of reliability of computed correlation can be judged with the help of its probable error where,

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

If r < P.E., then the correlation coefficient is insignificant

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

3. Standard Deviation and Coefficient of Variation

The measurement of the scatterness of the mass of figures in a series about an average is known as dispersion. Standard deviation measures dispersion correct. The greater the amount of dispersion, greater the standard deviation. A small standard deviation means a high degree of uniformity of the observation as well as homogeneity of a series. In this study, standard deviations of different ratios are calculated.

The coefficient of variation is the relative measure of dispersion, comparable across distribution, which is defined as the ratio of the standard deviation to the mean expressed in percentage.

Standard Deviation = $\sqrt{\sum(X_1 - \overline{X_1})^2/n}$

Coefficient of Variation = (S.D./ Mean) x 100

4. Test of Hypothesis (F-test or One-way ANOVA)

To test the significance of the differences among more than two samples means, F-distribution is suitable technique, called the "Analysis of Variance". Using ANOVA technique it will be able to make inferences about whether our samples are drawn from populations having the same mean.

The assumptions made in ANOVA are:

a) The population for each sample must be normally distributed with same mean and variances.
b) All the samples must be randomly selected as independent.

CHAPTER IV

DATA PRESENTATION AND ANALYSIS

This is the most important chapter of the study since all the collected data are processed, presented and analyzed here. The outcome of the study solely depends upon this chapter. Financial and statistical tools mentioned in the previous chapter are used here for interpretation. For the sole purpose, interpretations are categorized into two headings:

1. Analysis of Financial Ratio
2. Analysis of Statistical Ratio

4.1 ANALYSIS OF FINANCIAL RATIO

Herein, appropriate ratios are calculated and proper interpretations are made. The analysis of the financial ratios verifies the performance of the concerned banks.

4.1.1 Liquidity Ratio

Liquidity ratio shows a bank's obligation in the short term or short-run solvency. It also measures the speed with which a bank asset can be converted into cash to meet deposit withdrawal and other current obligations. The following ratios are calculated under liquidity ratio:

1. Current Ratio

Current ratio shows the relationship between current assets and current liabilities. Current assets are those assets which can be converted into cash within the short period of time, normally not exceeding one year.

Current liabilities are those obligations which are payable within a short span of time.

$$\text{Current Ratio} = \frac{\textit{Current assets}}{}$$

Table 1
Current Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2006/07	2007/08	2008/09	2009/10	2010/11			
NABIL	1.07	0.97	1.00	1.07	1.06	1.03	.04	4.20
NIBL	1.04	1.06	1.08	1.08	1.08	1.07	0.02	1.06
HBL	1.01	1.63	0.7	1.06	1.08	1.10	0.30	27.48

(As per annexure A1 and schedule 1)

Here current ratios of commercial banks are analyzed. The above table indicates that the current assets of all three commercial banks have met the current liabilities during the five-year period.

In case of NIBL, it has increasing trend of current ratio. This proves the current ratio is improving. However, NABIL and HBL have the fluctuating trend of current ratios.

In average, HBL has maintained the higher current ratio than NIBL and NABIL. HBL has the highest coefficient of variation of 27.48% among three banks which proves its inconsistency.

2. Cash and Bank Balance to Total Deposit Ratio

This ratio measures the proportion of the most liquid assets i.e. cash and bank balance among the total asset of the bank. Higher ratio proves the bank's ability to meet the demand for cash.

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

Table 2
Cash and Bank Balance to Total Deposit Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2006/07	2007/08	2008/09	2009/10	2010/11			
NABIL	6.87	3.83	3.26	6.00	8.37	5.67	1.90	33.51
NIBL	10.65	9.40	12.34	9.97	10.90	10.65	0.99	9.34
HBL	9.09	8.12	6.48	5.85	4.55	6.82	1.62	23.72

(As per annexure A2 and schedule 1)

The same figure in the table shows the percentage of cash and bank balance to total deposit ratio position of three banks and they all have the fluctuating trend in this regard. During the five-year period, NIBL has maintained the highest ratio than NABIL and HBL. Hence, NIBL has the highest average too.

In average, NIBL has the highest cash and bank balance to total deposit ratio than NABIL and HBL. It proves the liquidity position of NIBL is better in this regard. On the other hand, NABIL has lowest mean ratio and its coefficient of variation is 33.51% which is higher comparatively than that of other two. Hence, it can be explained that NABIL has the poor maintenance of its liquidity which indicates the poor performance of the bank.

3. Cash and Bank Balance to Current Asset Ratio

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

Cash and Bank Balance to Current Asset Ratio = $\frac{\textit{Cash and bank balance}}{}$

Table 3
Cash and Bank Balance to Current Asset Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2006/07	2007/08	2008/09	2009/10	2010/11			
NABIL	5.91	3.32	3.08	5.19	7.31	4.96	1.59	32.09
NIBL	9.43	8.40	11.13	9.10	9.91	9.60	0.91	9.50
HBL	8.44	4.69	8.98	5.33	4.09	6.31	2.01	31.86

(As per annexure A3 and schedule 1)

Contents of the table show that cash and bank balance to current asset ratios are in fluctuating trend during the five-year period. NIBL has maintained a highest ratio of

11.13% in the FY 2008/09. Similarly, NABIL and HBL have maintained the highest ratio of 7.31% and 8.98% in the FY 2010/11 and 2008/09 respectively.

In average, NIBL has higher ratio than that of the other two banks and states NIBL is better in this regard. NABIL has lower average ratio and its coefficient of variation between ratios is 32.09%, which is comparatively higher than of NIBL and HBL. It shows that NABIL is unstable and inconsistent than the other two. Hence, it shows its inability to manage the withdrawal from the customers. Of note is that the better position does not mean that the bank has mobilized its fund in the profitable sector.

4. Investment on Government Securities to Current Asset Ratio

This ratio is calculated to find out the percentage current asset invested in government securities such as treasury bills and government bonds. The ratio is computed as:

$$\text{IGSCA ratio} = \frac{\text{Investment on government securities}}{\text{Current asset}}$$

Table 4
Investment on Government Securities to Current Asset Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2006/07	2007/08	2008/09	2009/10	2010/11			
NABIL	22.38	14.35	11.25	17.83	10.22	15.21	4.46	29.35
NIBL	15.39	12.21	12.02	12.14	8.32	12.02	2.24	18.63
HBL	18.50	25.77	26.91	19.59	21.08	22.37	3.36	15.02

(As per annexure A4 and schedule 1)

The above table reveals that almost all the banks have a fluctuating trend.

In average, HBL has the higher ratio than NABIL and NIBL, which means that HBL has invested as much of its current assets in government securities than the other two. HBL has invested its current assets in the government securities throughout the study period. HBL has the lowest coefficient of variation which indicates its stability.

At the same time, NIBL has the lowest ratio in the whole five years' period. It has ratio of only 8.32 in the FY 2010/11.

5. Loan and Advance to Current Asset Ratio

Loan and Advances include short and long term, overdraft, revolving overdraft, stand by credit, line of credit and other lending.

$$\text{Loan and Advance to Current Asset Ratio} = \frac{\text{Loan and advance}}{\text{Current ratio}}$$

Table 5
Loans and Advance to Current Asset Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2006/07	2007/08	2008/09	2009/10	2010/11			
NABIL	49.92	62.92	63.19	57.65	58.48	58.43	4.81	8.24
NIBL	54.82	63.47	60.88	64.43	71.23	62.97	5.32	8.44
HBL	64.43	58.53	76.58	51.59	55.02	61.23	8.77	14.33

(As per annexure A5 and schedule 1)

The table shows that loan and advance to current asset ratios of all three banks are in fluctuating trend but NIBL has increasing trend in the last three years. HBL has maintained the highest ratio of 76.58% in the FY 2008/09. Likewise, NABIL and NIBL have the highest ratio of 63.19% and 71.23% in the FY 2008/09 and 2010/11 respectively.

Comparing the mean ratios, NIBL has the highest ratio of 62.97% among the three banks whereas coefficient of variation is in middle that of other two indicating uniformity in comparison to NABIL and HBL.

4.1.2 Asset Management Ratio

Assets management ratio shows how a bank is managing its assets. It shows how successfully the bank is mobilizing its deposits. It also shows how and in which sectors the deposit is utilized or invested. These are shown with the help of following ratios:

1. Loan and Advance to Total Deposit Ratio

This ratio assists to find out how successfully the banks are utilizing their total deposits on loans and advances for profit generating purpose. Greater the ratio implies the better utilization of total deposits. The ratio is computed as:

Loan and Advance to Total Deposit Ratio = ~~*Loan and advance*~~

Table 6
Loan & Advance to Total Deposit Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2006/07	2007/08	2008/09	2009/10	2010/11			
NABIL	58.01	72.57	66.79	66.60	66.94	66.18	4.67	7.05
NIBL	61.87	71.04	67.50	70.59	78.36	69.87	5.36	7.67
HBL	54.30	50.07	55.27	56.57	61.23	55.49	3.60	3.50

(As per annexure A6 and schedule 1)

Looking at the all three banks' performance, loan and advance to total deposit ratios are in fluctuating trend. NIBL and HBL have the increasing trend in the last three years.

In average, NIBL has the higher ratio of 69.87% in comparison to 66.18% and 55.49% of NABIL and HBL. In this regard, NIBL is better indicating its strong position regarding the mobilization of total deposit on loan and advance and acquiring high profit in compared to the other two banks but higher ratio does not necessary mean it is better in terms of liquidity as loan and advance is not as liquid as cash and bank balance and NABIL and HBL may have utilized high portion of their deposit in various investment and cash and bank balance.

2. Total Investment to Total Deposit Ratio

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

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

Table 7
Total Investment to Total Deposit Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2006/07	2007/08	2008/09	2009/10	2010/11			
NABIL	41.33	29.31	31.93	38.32	31.14	34.41	4.61	13.38
NIBL	33.51	27.60	29.60	26.57	19.95	27.45	4.44	16.17
HBL	26.63	25.08	41.10	39.35	41.89	34.81	7.38	21.19

(As per annexure A7 and schedule 1)

It is clear from the above table that the total investment to total deposit ratios of all three banks are in fluctuation trend.

The mean value of HBL is higher than that of NABIL and NIBL; however, its coefficient of variation between the ratios is higher at 21.19% clearly indicating instability of investment policy of HBL than that of NABIL and NIBL.

3. Loan and Advance to Total Working Fund Ratio

Loan and advance is the major element in the total working fund (total asset) which indicates the ability of a bank to channelize its deposit in the form of loan and advance to earn the utmost return.

Loan and Advance to Total Working Fund = $\frac{\text{Loan and advance}}{\text{Total working fund}}$

Table 8
Loans and Advance to Total Working Fund Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2006/07	2007/08	2008/09	2009/10	2010/11			
NABIL	48.91	62.04	57.87	57.04	57.54	56.68	4.28	7.54
NIBL	53.79	62.22	59.90	62.65	69.45	61.60	5.04	8.18
HBL	48.16	44.62	49.70	50.71	53.90	49.42	3.05	6.17

(As per annexure A8 and schedule 1)

In the above table, loan and advance to total working fund ratios are computed as per Annexure A8 and mean, standard deviation and coefficient of variation as per schedule 1.

The table shows that loan and advance to total working fund ratios are in fluctuating trend during the five-year period. NIBL has the highest ratio of 69.45% in the FY 2010/11 and the lowest of 53.79% in the FY 2006/07. NABIL and HBL have maintained their highest ratio of 62.04% and 53.90% in 2007/08 and 2010/11 respectively. Similarly, their lowest ratios are 48.91% and 44.62% in the FY 2006/07 and 2007/08 respectively.

In average, NIBL has maintained higher loan and advance to total working fund ratio than that of NABIL and HBL indicating betterment in this regard. NIBL also has higher coefficient of variation suggesting of less uniformity and resulting higher risk.

4. Investment on Government Securities to Total Working Fund Ratio

This ratio indicates the relationship between the banks' investment on securities in comparison to total working fund and is calculated as:

$$\text{IGSTWF Ratio} = \frac{\text{Investment on government securities}}{\text{Total working fund}}$$

Table 9
Investment on Government Securities to Total Working Fund Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2006/07	2007/08	2008/09	2009/10	2010/11			
NABIL	21.93	14.15	10.31	17.64	10.06	14.82	4.52	30.49
NIBL	15.10	11.97	11.83	11.80	8.12	11.76	2.21	18.80
HBL	13.83	19.64	17.46	10.31	20.65	16.38	3.83	23.41

(As per annexure A9 and schedule 1)

The table proves the inconsistency of all three banks in terms of investment on government securities in comparison to total working fund i.e. the ratios are fluctuant. NABIL has

maintained the highest ratio of 21.93% in 2006/07 with the lowest of 10.06% in 2010/11. Similarly, NIBL has highest ratio of 15.10% in 2006/07 with lowest of 8.12% in FY 2010/11. HBL has maintained highest in FY 2010/11 of 20.65% and lowest in 2009/10 of 10.31%.

NIBL has the lower ratio considering the average value than the other two banks indicating its poor performance in this regard. The coefficient of variation of NABIL is higher indicating its variability than NIBL and HBL.

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

The ratio reflects the banks' investment in shares and debentures of subsidiary and other companies.

$$\text{ISDTWF} = \frac{\text{Investment on shares and debentures}}{\textit{Total working fund}}$$

Table 10
Investment on Shares and Debentures to Total Working Fund Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2006/07	2007/08	2008/09	2009/10	2010/11			
NABIL	0.13	2.60	0.47	1.05	0.87	1.02	0.85	82.91
NIBL	0.10	0.11	0.08	0.13	0.15	0.12	0.02	20.62
HBL	0.14	0.14	0.10	0.22	0.25	0.17	0.06	32.92

(As per annexure A10 and schedule 1)

Here, the proportion is fluctuating for NABIL during the five-year period whereas variable for NIBL and HBL.

NABIL has the highest ratio in terms of average than NIBL and HBL with 1.02% in comparison to 0.12% and 0.17% of the other two. Considering the coefficient of variation, NABIL is inconsistent and unstable in terms of investment on shares and debentures than NIBL and HBL.

4.1.3 Profitability Ratios

These ratios measure the efficiency of the banks' activities and its ability to generate profits. This is directly related to the income generated by the banks.

1. Return on Loan and Advance Ratio

This ratio specifies how efficiently the bank has used its resources in the form of Loan and Advance, and the ratio is computed as:

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

Table 11
Return on Loans and Advances Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2006/07	2007/08	2008/09	2009/10	2010/11			
NABIL	5.56	4.92	4.92	4.34	3.49	4.64	0.69	14.93
NIBL	2.14	2.29	2.74	2.90	2.58	2.53	0.28	11.14
HBL	2.20	2.48	3.12	2.89	3.26	2.79	0.40	14.21

(As per annexure A11 and schedule 1)

The table illustrates that NIBL and HBL have the fluctuating trend and NABIL has diminishing trend in the last five years. NABIL has the highest return of 5.56% in the FY 2006/07.

In average, NABIL has the higher return ratio than that of NIBL and HBL with 4.64% in comparison to 2.53% and 2.79% of the other two. The coefficient of variation of NABIL is higher than of HBL and NIBL. So, it can be concluded that NABIL is in highest position in earnings from loans and advances in relation to the other two banks.

2. Return on Total Working Fund Ratio

This is also known as return on assets and this ratio assists in calculating the overall profitability of total working funds which should be satisfactory for its survival.

$$\text{Return on Total Working Fund Ratio} = \frac{\text{Net profit (loss)}}{\textit{Total working fund}}$$

Table 12
Return on Total Working Fund Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2006/07	2007/08	2008/09	2009/10	2010/11			
NABIL	2.72	3.05	2.84	2.47	2.01	2.62	0.36	13.63
NIBL	1.15	1.43	1.64	1.82	1.79	1.57	0.25	16.01
HBL	1.06	1.11	1.55	1.47	1.76	1.39	0.27	19.23

(As per annexure A12 and schedule 1)

It is clear from the above table that all the three banks are inconsistent in earning the net profit. NABIL has earned the highest of 3.05% in 2007/08 whereas NIBL's highest return ratio is 1.82% and HBL's is 1.76% 2009/10 and 2010/11 respectively.

Considering the mean ratios, NABIL has the higher of 2.62% than of NIBL's 1.57% and HBL's 1.39%. HBL's coefficient of variation is higher than that of NIBL and NABIL which concludes its inconsistency. From the prospect of analysis, the conclusion would be NABIL is more efficient in terms of profitability with respect to its financial resources.

3. Return on Equity Ratio

This ratio measures how efficiently the banks have used the funds of owners. It is calculated as:

$$\text{Return on Equity Ratio} = \frac{\text{Net profit (loss)}}{\textit{Total equity capital}}$$

Table 13
Return on Equity Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2006/07	2007/08	2008/09	2009/10	2010/11			
NABIL	30.73	31.29	33.88	32.60	30.63	31.83	1.25	3.91
NIBL	20.88	19.67	24.77	26.70	25.93	23.59	2.80	11.87
HBL	19.87	20.00	25.90	22.91	25.30	22.80	2.55	11.16

(As per annexure A13 and schedule 1)

All the three banks have maintained the fluctuating tendency in the five-year period of study. NABIL has maintained the lowest ratio of 30.63% in FY 2010/11 and similarly, NIBL and HBL have maintained their lowest ratio of 19.67% and 19.87% in FY 2007/08 and 2006/07 respectively.

From the prospect of mean, NABIL has the higher ratio of 31.83% than of NIBL and HBL. It does specify NABIL has used the funds more efficiently than the other two during the study period. The coefficient of variation of NABIL is also the lowest at 3.91% which does reflect NABIL's consistency.

4. Total Interest Earned to Total Working Fund Ratio

This ratio is computed to proportion of total interest earned to total working fund or total asset and is computed as:

$$\text{Total Interest Earned to Total Working Fund Ratio} = \frac{\text{Total interest earned}}{\text{Total working fund}}$$

Table 15
Total Interest Earned to Total Working Fund Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2006/07	2007/08	2008/09	2009/10	2010/11			
NABIL	5.98	6.26	5.87	5.83	5.33	5.85	0.30	5.19
NIBL	5.52	5.54	5.50	5.74	5.64	5.57	0.11	1.94
HBL	5.02	5.19	5.52	5.30	5.43	5.29	0.18	3.32

(As per annexure A14 and schedule 1)

The table clearly shows a fluctuating trend of ratios of all three banks. NABIL has the highest ratio of 6.26% and similarly, NIBL and HBL have highest of 5.74% and 5.52% respectively. In average, NABIL has the highest mean ratio of 5.85% compared to 5.57% and 5.29% of NIBL and HBL. However, NABIL has the highest coefficient of variation than the other two specifying inconsistency. In conclusion, NABIL is more successful towards the goal of earning interest income with higher earning power whereas HBL is slightly poor in this regard.

5. Total Interest Earned to Total Operating Income Ratio

This ratio indicates how efficiently the bank is mobilizing its funds in interest bearing assets and is worked out as:

$$\text{Total Interest Earned to Total Operating Income Ratio} = \frac{\text{Total interest earned}}{\text{Total operating income}}$$

Table 16
Total Interest Earned to Total Operating Income Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2006/07	2007/08	2008/09	2009/10	2010/11			
NABIL	75.10	89.44	96.36	107.26	118.45	97.32	14.85	15.25
NIBL	124.90	113.01	122.24	127.20	133.02	124.07	6.58	5.30
HBL	121.58	120.95	116.72	127.43	122.92	121.92	3.45	2.83

(As per annexure A15 and schedule 1)

NIBL and HBL have a fluctuating tendency and NABIL has increasing trend with regards to proportion of interest income in total operating income. NABIL has maintained its highest ratio of 118.45% in 2010/11 while NIBL and HBL have maintained their highest ratio of 133.02% and 127.43% in the FY, i.e. 2010/11 and 2009/10 respectively.

In average, NIBL has the higher ratio than NABIL and HBL, i.e. 124.07% versus 97.32% and 121.92%. If we consider the coefficient of variation, HBL is more consistent than the other two banks with the least value among the three banks. Hence, NIBL is in better position regarding the mobilization of interest bearing assets such as loan and advance and investment. A note is to be made that such activities have more risk.

4.1.4 Risk Ratio

1. Credit Risk Ratio:

This ratio is computed as:

$$\text{Credit Risk Ratio} = \frac{\text{Total Loan \& Advance}}{\text{Total Asset}}$$

Table 17
Credit Risk Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2006/07	2007/08	2008/09	2009/10	2010/11			
NABIL	48.91	62.04	57.87	57.04	57.54	56.68	4.28	7.54
NIBL	53.79	62.22	59.90	62.65	69.45	61.60	5.04	8.81
HBL	48.16	44.62	49.70	50.71	53.90	49.42	3.05	6.17

(As per annexure A16 and schedule 1)

During the five-year period of study, all the three banks' credit risk ratios are in fluctuating trend. NIBL has the highest ratio of 69.45% in the FY 2010/11 with the lowest being 53.79% in the FY 2006/07. Similarly, NABIL and HBL have the highest credit risk ratio of 62.04% and 53.90% in the FY 2007/08 and 2010/11 respectively.

The above table clearly depicts NIBL has the higher average ratio than that of NABIL and HBL which does mean NIBL has higher credit when compared to other two. However, the coefficient of variation is higher than that of HBL and NABIL.

2. Liquidity Risk Ratio:

This ratio is worked out as:

$$\text{Liquidity Risk Ratio} = \frac{\text{Cash and bank balance}}{\text{Total Deposit}}$$

Table 18
Liquidity Risk Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2006/07	2007/08	2008/09	2009/10	2010/11			
NABIL	6.87	3.83	3.26	6.00	8.37	5.67	1.90	33.51
NIBL	10.65	9.40	12.34	9.97	10.90	10.65	0.99	9.34
HBL	9.09	8.12	6.48	11.16	4.55	7.88	2.25	28.57

(As per annexure A17 and schedule 1)

The table evidently shows the fluctuating trend of liquidity risk ratios of the three banks during the five years of study. NIBL has maintained the highest ratio of 10.90% in the

FY 2010/11 while NABIL and HBL have maintained their highest ratio of 8.37% and 11.16% in FY 2010/11 and 2009/10 respectively.

In average, NABIL has the lowest liquidity risk ratio of 5.67% comparatively than the other two banks. At the same time, NABIL also has the highest coefficient of variation of 33.51% in comparison to 9.34% and 28.57% of NIBL and HBL respectively indicating liquidity risk of NABIL is high.

3. Capital Risk Ratio:

Capital Risk Ratio is worked out as:

$$\text{Capital Risk Ratio} = \frac{\text{Capital (Paid up + Reserve)}}{\text{Risk Weighted Asset}}$$

Table 19
Capital Risk Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2006/07	2007/08	2008/09	2009/10	2010/11			
NABIL	2.19	2.21	1.74	1.48	1.52	1.83	0.32	17.41
NIBL	1.76	2.85	2.12	2.20	2.43	2.27	0.36	15.92
HBL	0.86	1.76	2.08	1.97	2.73	1.88	0.61	32.20

(As per annexure A18 and schedule 1)

The variability in the capital risk ratios during the five-year study all three banks are in fluctuating trend. NABIL has the highest ratio of 2.21% in FY 2007/08 with the lowest being 1.52% in 2010/11. Likewise, NIBL and HBL have the highest capital risk ratio of 2.85% and 2.73% in 2007/08 and 2010/11 respectively with the lowest being 1.76% and 0.86% in the FY 2006/07.

In average, NIBL has the highest capital risk ratio of 2.27% in comparison to the other two. In addition, the coefficient of variation of NIBL is also lower than that of HBL and NABIL which indicates its consistency in this regard.

4.1.5 Growth Ratio

Under this section, growth ratio of Total Deposit, Total Investment, Loan and Advance and Net Profit are calculated.

1. Growth Ratio of Total Deposit:

Table 20
Growth Ratio of Total Deposit

Banks	Fiscal Years					Growth Ratio (%)
	2006/07	2007/08	2008/09	2009/10	2010/11	
NABIL	14,119.03	17312.75	21228.89	26030.87	31915.05	22.62%
NIBL	11,524.67	15153.79	19925.72	26200.32	34451.73	31.49%
HBL	22,010.34	24138.74	26472.96	29032.89	31842.79	9.67%

(As per schedule 2)

The above table shows the comparative growth rate of total deposit of three banks. The growth ratio of NIBL is much higher with 31.49% than that of NABIL and HBL (i.e. 22.62% and 9.67%). This concludes that NIBL's performance in collection of deposit is better year-by-year in comparison to NABIL and HBL.

2. Growth Ratio of Loan and Advance:

Table 21

Growth Ratio of Loan and Advance

Banks	Fiscal Years					Growth Ratio (%)
	2006/07	2007/08	2008/09	2009/10	2010/11	
NABIL	8,189.99	10408.66	13228.36	16811.93	21365.05	27.09%
NIBL	7,130.13	9945.81	13873.42	19352.04	26996.65	39.44%
HBL	11,951.87	13506.81	15264.04	17249.91	19497.52	13.01%

(As per schedule 2)

The above comparative table depicts the growth rate of loan and advance during the five-year period of three banks. It is clear from the table that growth ratio of NIBL is much better than that of NABIL and HBL. This does conclude that NIBL has performed better in terms of granting loan and advance in compared to other banks during these five years.

3. Growth Ratio of Total Investment:

Table 22
Growth Ratio of Total Investment

Banks	Fiscal Years					Growth Ratio (%)
	2006/07	2007/08	2008/09	2009/10	2010/11	
NABIL	5835.95	6667.11	7616.37	8700.94	9939.77	14.24%
NIBL	3862.48	4461.16	5152.64	5951.31	6874.02	15.50%
HBL	5860.38	7197.84	8841.10	10859.53	13340.18	22.83%

(As per schedule 2)

The above table reflects the growth rate of investment of each bank year-by-year. Comparatively, the growth ratio of HBL (22.83%) is higher than that of NABIL (14.24%) and NIBL (15.50%) and this signifies that investment of HBL is enhanced than of the other two.

4. Growth Ratio of Net Profit:

Table 23
Growth Ratio of Net Profit

Banks	Fiscal Years					Growth Ratio (%)
	2006/07	2007/08	2008/09	2009/10	2010/11	
NABIL	455.32	515.23	583.03	659.76	746.47	13.16%
NIBL	152.67	237.32	347.11	507.68	742.53	46.26%
HBL	263.05	328.11	408.98	509.96	365.87	24.69%

(As per schedule 2)

The above table shows the comparative table of growth rate of net profit of all three banks. NIBL has higher growth ratio of 46.26% than that of NABIL and HBL (13.16% and 24.69%). This indicates NIBL has maintained better net profit during these five years when compared to the other two banks.

From the above analysis, it is concluded that NIBL's operation with regards to collection of deposit, granting of loan and advance and net profit is comparatively better and in terms of investment, HBL is better. NABIL's performance with regards to collection of deposit, granting of loan and advance and investment is poor during these five years of study.

4.2 ANALYSIS OF STATISTICAL TOOLS

In order to achieve the objective of this study, some essential statistical tools are used such as Trend Analysis, Coefficient of Correlation Analysis, Test of Hypothesis, Standard Deviation, and Coefficient of Variation.

4.2.1 Trend Analysis:

Under this segment, current and projected trend values of loan & advance to total deposit ratio and total investment to total deposit ratio of NABIL, NIBL, and HBL are calculated from FY 2006/07 to 2015/16 as per schedule 3, 4, 5, 6, 7, and 8.

Table 24

Current and Projected Trend Values of Loan and Advance to Total Deposit

Years	Banks		
	NABIL	NIBL	HBL
2006/07	63.802	63.364	51.418
2007/08	64.991	66.618	53.454
2008/09	66.18	69.872	55.49
2009/10	67.369	73.126	57.526
2010/11	68.558	76.38	59.562
2011/12	69.747	76.634	61.598
2012/13	70.936	82.888	63.634
2013/14	72.125	86.142	65.67
2014/15	73.314	89.396	67.706
2015/16	74.503	92.65	69.742

(As per schedule 3, 5, & 7)

The above table depicts that projected trend values of NABIL, NIBL and HBL are all in increasing trend. This trend of ratio does signify that NABIL, NIBL and HBL may use more than 70%, 90% and 60% of their total deposit in providing loan and advance up until FY 2015/16. Other things remaining the same, the ratio of loan and advance to total deposit of NABIL, NIBL and HBL will be 74.503, 92.65 and 69.742 respectively for the FY 2012/13.

Table 25

Current and Projected values of Total Investment to Total Deposit

Years	Banks		
	NABIL	NIBL	HBL
2006/07	36.68	33.08	25.848
2007/08	35.543	30.264	30.329
2008/09	34.406	27.448	34.81
2009/10	33.269	24.632	39.291
2010/11	32.132	21.816	43.772
2011/12	30.995	19	48.253
2012/13	29.858	16.184	52.734
2013/14	28.721	13.368	57.215
2014/15	27.584	10.552	61.696
2015/16	26.447	7.736	66.177

(As per schedule 4, 6, & 8)

The above table shows that the present and projected trend values are in decreasing trend for NABIL and NIBL and in increasing trend for HBL. The ratio of NABIL and NIBL on total investment to total deposit will be 26.447 and 7.736 for the FY 2015/16. It does mean that they may not use their deposit in investment in the upcoming years as per trend. HBL may use more than 60% of their deposit in investment in various sectors. Thus, it can be concluded that NABIL and NIBL's investment policies are predicted to be decreased.

4.2.2 Coefficient of Correlation Analysis:

Under this analysis, Karl Pearson coefficient of correlation is used to uncover the relationship between total deposit and loan and advance, total deposit and total investment and outside asset and net profit.

1. Coefficient of correlation between Total Deposit and Loan & Advance:

Coefficient of correlation (r) between Deposit and Loan & Advance measures the degree of relationship between these two variables. The main objective of correlation analysis between deposit and loan & advance is to find out whether deposit is significantly used as loan & advance or not.

Table 26

Coefficient of Correlation between Total Deposit and Loan and Advance

Evaluation Criteria	Banks		
	NABIL	NIBL	HBL
r	0.9894	0.9964	0.9734
r^2	0.9789	0.9928	0.9476
P.E. r	0.0064	0.0022	0.0158
6 P.E. r	0.0382	0.0130	0.0949

(As per schedule 9, 12, & 15)

Here, deposit is the independent variable (x) and loan & advance is dependent variable (y). The main objective of computing 'r' between these two variables is to justify whether deposit is significantly used as loan & advance or not. The above table shows the value of 'r', P.E. r, and 6 P.E. r between deposit and loan & advance of NABIL with comparison to NIBL and HBL during the study period 2006/07 to 2010/11. From the above table in respect to NABIL, it is found that coefficient of correlation between deposit and loan & advance is 0.9894. It shows the positive relationship between these two variables. Furthermore, when we consider the value of coefficient of determination (r^2), it is 0.9789 which does mean only 97% of the variation in the dependent variable is explained by the independent variable. At the same time, considering the value of 'r' and comparing it with '6 P.E. r', we find that 'r' is much less than value of '6 P.E. r' which does mean that the value of 'r' is insignificant. Hence, there is no significant relationship between deposit and loan & advance of NABIL. This indicates that NABIL is unsuccessful to mobilize its deposit appropriately.

On the other hand, NIBL and HBL have the positive relationship between deposit and loan & advance. The relationship is significant as their value of 'r' is higher than '6 P.E. r' and the value of r^2 shows high percent in the dependent variable which has been explained by the independent variable. This indicates that NIBL and HBL are successful in mobilizing their deposit properly.

2. Coefficient of Correlation between Total Deposit and Total Investment:

Coefficient of correlation (r) between Deposit and Total Investment measures the degree of relationship between these two variables. The main objective of correlation analysis between deposit and total investment is to find out whether deposit is significantly used as investment or not.

Table 27
Coefficient of Correlation between Total Deposit and Total Investment

Evaluation Criteria	Banks		
	NABIL	NIBL	HBL
r	0.9260	0.9279	0.3530
r^2	0.8576	0.8609	0.1246
P.E. r	0.0430	0.0419	0.2641
6 P.E. r	0.2578	0.2517	1.5843

(As per schedule10, 13, & 16)

Here, deposit is the independent variable (x) and total investment is dependent variable (y). The main objective of computing 'r' between these two variables is to justify whether deposit is significantly used as total investment or not. The above table shows the value of 'r', P.E. r, and 6 P.E. r between deposit and total investment of NABIL with comparison to NIBL and HBL during the study period 2007/08 to 2010/11. From the above table in respect to NABIL, it is found that coefficient of correlation between deposit and total investment is 0.9260. It shows the positive relationship between these two variables. Furthermore, when we consider the value of coefficient of determination (r^2), it is 0.8576 which does mean 85.76% of the variation in the dependent variable is explained by the independent variable. At the same time, considering the value of 'r' and comparing it with '6 P.E. r', we find that 'r' is higher than value of '6 P.E. r' which does mean that NABIL is capable in investment mobilizing its deposit.

Likewise, NIBL and HBL have the positive relationship between deposit and total investment but since their values of 'r' are less than values of '6 P.E. r', the relationship is not significant and the value of r^2 shows less percent in the dependent variable which has been explained by the independent variable. This indicates that NIBL and HBL are not successful in maximizing the investment of their deposit.

4.2.3 Test of Hypothesis:

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

1) Formulating hypothesis
    i) Null hypothesis
    ii) Alternate hypothesis
2) Computing the test statistic
3) Fixing the level of significance
4) Finding critical region
5) Deciding two tailed or one tailed test
6) Making decision

Here, some the main hypothesis tests are calculated and decisions are made.

1. Test of hypothesis on Loan & Advance to Total Deposit ratios of NABIL, NIBL and HBL:

Let, Loan & Advance to Total Deposit ratios of NABIL, NIBL and HBL be x, y and z respectively.

Table 28

Computation of Variations

FY	x	x^2	Y	y^2	z	z^2
2006/07	58.01	3365.16	54.30	2948.49	51.42	2644.02
2007/08	72.57	5266.40	50.07	2507.00	47.87	2291.54
2008/09	66.79	4460.90	55.27	3054.77	47.61	2266.71
2009/10	66.6	4435.56	56.57	3200.16	54.30	2948.49
2010/11	66.94	4480.96	61.23	3749.11	50.07	2507.00
Total	**330.91**	**22008.99**	277.45	**15459.55**	**251.27**	**12657.76**

Hence,

Null hypothesis (H_0): $\mu x = \mu y = \mu z$ i.e. there is no significant difference between mean ratios of Loan & Advance to Total Deposit of NABIL, NIBL and HBL.

Alternate hypothesis ((H_1): $\mu x \neq \mu y \neq \mu z$ (two-tailed test) i.e. there is significant difference between mean ratios of Loan & Advance to Total Deposit of NABIL, NIBL and HBL.

Under H_0, the test-statistic is:

F = MSC/MSE

Sum of individual values (T):

$T = \sum x + \sum y + \sum z$

= 330.91 + 277.45 + 251.27 = 859.63

Correction factor (c.f.):

$c.f. = T^2/N = \frac{(859.63)^2}{15} = 49264.24$

Sum of squares (SST):

$SST = \sum x^2 + \sum y^2 + \sum z^2 - c.f.$

= 22008.99+15459.55 +12657.76 -49264.24 = 862.06

Sum of squares due to column (SSC):

$SSC = \frac{(\sum x)^2}{n_1} + \frac{(\sum y)^2}{n_2} + \frac{(\sum z)^2}{n_3} - c.f.$

$= \frac{(330.91)^2}{5} + \frac{(277.45)^2}{5} + \frac{(251.27)^2}{5} - 49264.24 = 659.07$

Sum of squares due to error (SSE):

SSE = SST - SSC

= 862.06- 659.07= 202.99

One-way ANOVA Table

Source of Variation	Sum of Sq.	d.f.	Mean Sum of Sq.	F-Ratio
Due to column	SSC = 659.07	3-1 = 2	MSC= 329.54	F = MSC/MSE
Due to error	SSE = 202.99	15-3 = 12	MSE = 16.92	= 19.48
Total	**862.06**	**14**		

Table value of F at 5% level of significance with $\upsilon_1 = 2$ and $\upsilon_2 = 12$ is 3.89.

Decision:

Since $F_{cal} > F_{tab}$, H_1 is accepted, i.e. there is significant difference between mean ratios of Loan & Advance to Total Deposit of NABIL, NIBL and HBL.

2. Test of hypothesis on Total Investment to Total Deposit ratios of NABIL, NIBL and HBL:

Let, Total Investment to Total Deposit ratios of NABIL, NIBL and HBL be x, y and z respectively.

Table 29
Computation of Variations

FY	x	x^2	y	y^2	z	z^2
2006/07	41.33	1708.17	33.51	1122.92	26.63	709.16
2007/08	29.31	859.08	27.60	761.76	25.08	629.01
2008/09	31.93	1019.52	29.60	876.16	41.10	1689.21
2009/10	38.32	1468.42	26.57	705.96	39.35	1548.42
2010/11	31.14	969.70	19.95	398.00	41.89	1754.77
Total	**172.03**	**6024.89**	**137.24**	**3864.81**	**174.05**	**6330.57**

Hence,

Null hypothesis (H_0): $\mu x = \mu y = \mu z$ i.e. there is no significant difference between mean ratios of Total Investment to Total Deposit of NABIL, NIBL and HBL.

Alternate hypothesis ((H_1): $\mu x \neq \mu y \neq \mu z$ (two-tailed test) i.e. there is significant difference between mean ratios of Total Investment to Total Deposit of NABIL, NIBL and HBL.

Under H_0, the test-statistic is:

F = MSC/MSE

Sum of individual values (T):

$T = \sum x + \sum y + \sum z$

$= 172.03 + 137.24 + 174.05 = 483.32$

Correction factor (c.f.):

$$c.f. = T^2/N = \frac{(483.32)^2}{15} = 15573.21$$

Sum of squares (SST):

$SST = \sum x^2 + \sum y^2 + \sum z^2 - c.f.$

$= 6024.89 + 3864.18 + 6330.57 - 15573.21 = 646.43$

Sum of squares due to column (SSC):

$$SSC = \frac{(\sum x)^2}{n_1} + \frac{(\sum y)^2}{n_2} + \frac{(\sum z)^2}{n_3} - c.f.$$

$$= \frac{(172.03)^2}{5} + \frac{(137.24)^2}{5} + \frac{(174.05)^2}{5} - 15573.21 = 171.30$$

Sum of squares due to error (SSE):

$SSE = SST - SSC$

$= 646.43 - 171.30 = 475.13$

One-way ANOVA Table

Source of Variation	Sum of Sq.	d.f.	Mean Sum of Sq.	F-Ratio
Due to column	SSC = 171.30	3-1 = 2	MSC= 85.65	F = MSC/MSE = 2.16
Due to error	SSE = 475.13	15-3 = 12	MSE = 39.59	
Total	**646.43**	**14**		

Table value of F at 5% level of significance with $\upsilon_1 = 2$ and $\upsilon_2 = 12$ is 3.89.

Decision:

Since $F_{cal} < F_{tab}$, H_0 is accepted, i.e. there is no significant difference between mean ratios of Total Investment to Total Deposit of NABIL, NIBL and HBL.

3. Test of hypothesis on Government Securities to Current Asset ratios of NABIL, NIBL and HBL:

Let,

Government Securities to Current Asset ratios of NABIL, NIBL and HBL be x, y and z respectively.

Table 31

Computation of Variations

FY	x	x^2	y	y^2	z	z^2
2006/07	22.38	500.86	15.39	236.85	18.50	342.25
2007/08	14.35	205.92	12.21	149.08	25.77	664.09
2008/09	11.25	126.56	12.02	144.48	26.91	724.15
2009/10	17.83	317.91	12.14	147.38	19.59	383.77
2010/11	10.22	104.45	8.32	69.22	21.08	444.37
Total	**76.03**	**1255.71**	**60.08**	**747.02**	**111.85**	**2558.63**

Hence,

Null hypothesis (H_0): $\mu x = \mu y = \mu z$ i.e. there is no significant difference between mean ratios of Government Securities to Current Asset of NABIL, NIBL and HBL.

Alternate hypothesis ((H_1): $\mu x \neq \mu y \neq \mu z$ (two-tailed test) i.e. there is significant difference between mean ratios of Government Securities to Current Asset of NABIL, NIBL and HBL.

Under H_0, the test-statistic is:

F = MSC/MSE

Sum of individual values (T):

$T = \sum x + \sum y + \sum z$

$= 76.03 + 60.08 + 111.85 = 247.96$

Correction factor (c.f.):

$$c.f. = T^2/N = \left(\frac{247.96}{15}\right)^2 = 4098.94$$

Sum of squares (SST):

$SST = \sum x^2 + \sum y^2 + \sum z^2 - c.f.$

$= 1255.71 + 747.02 + 2558.63 – 4098.94 = 462.42$

Sum of squares due to column (SSC):

$$SSC = \frac{(\sum x)^2}{n_1} + \frac{(\sum y)^2}{n_2} + \frac{(\sum z)^2}{n_3} - c.f.$$

$$= \frac{(76.03)^2}{5} + \frac{(60.08)^2}{5} + \frac{(111.85)^2}{5} - 4098.94 = 281.18$$

Sum of squares due to error (SSE):

SSE = SST - SSC

= 462.42- 281.18= 181.24

One-way ANOVA Table

Source of Variation	Sum of Sq.	d.f.	Mean Sum of Sq.	F-Ratio
Due to column	SSC = 281.18	3-1 = 2	MSC = 140.59	F = MSC/MSE
Due to error	SSE = 181.24	15-3 = 12	MSE = 15.68	= 8.97
Total	**462.42**	**14**		

Table value of F at 5% level of significance with $\upsilon_1 = 2$ and $\upsilon_2 = 12$ is 3.89.

Decision:

Since $F_{cal} > F_{tab}$, H_1 is accepted, i.e. there is significant difference between mean ratios of Government Securities to Current Asset of NABIL, NIBL and HBL.

4. Test of hypothesis on Loan & Advance to Current Asset ratios of NABIL, NIBL and HBL:

Let, Loan & Advance to Current Asset ratios of NABIL, NIBL and HBL be x, y and z respectively.

Table 32
Computation of Variations

FY	x	x^2	y	y^2	z	z^2
2006/07	49.92	2492.01	54.82	3005.23	64.43	4151.22
2007/08	62.92	3958.93	63.47	4028.44	58.53	3425.76
2008/09	63.19	3992.98	60.88	3706.37	76.58	5864.50
2009/10	57.65	3323.52	64.43	4151.22	51.59	2661.53
2010/11	58.48	3419.91	71.23	5073.71	55.02	3027.20
Total	**292.16**	**17187.34**	**314.83**	**19964.99**	**306.15**	**19130.21**

Hence,

Null hypothesis (H_0): $\mu x = \mu y = \mu z$ i.e. there is no significant difference between mean ratios of Loan & Advance to Current Asset of NABIL, NIBL and HBL.

Alternate hypothesis ((H_1): $\mu x \neq \mu y \neq \mu z$ (two-tailed test) i.e. there is significant difference between mean ratios of Loan & Advance to Current Asset of NABIL, NIBL and HBL.

Under H_0, the test-statistic is:

F = MSC/MSE

Sum of individual values (T):

$T = \sum x + \sum y + \sum z$

$= 292.16 + 314.83 + 306.15 = 913.14$

Correction factor (c.f.):

$$c.f. = T^2/N = \left(\frac{913.14}{15}\right)^2 = 55588.31$$

Sum of squares (SST):

$SST = \sum x^2 + \sum y^2 + \sum z^2 - c.f.$

$= 17187.34 + 19964.99 + 19130.21 - 55588.31 = 694.23$

Sum of squares due to column (SSC):

$$SSC = \frac{(\sum x)^2}{n_1} + \frac{(\sum y)^2}{n_2} + \frac{(\sum z)^2}{n_3} - c.f.$$

$$= \frac{(292.16)^2}{5} + \frac{(314.83)^2}{5} + \frac{(306.15)^2}{5} - 55588.31 = 52.33$$

Sum of squares due to error (SSE):

SSE = SST - SSC

$= 694.23 - 52.33 = 641.90$

One-way ANOVA Table

Source of Variation	Sum of Sq.	d.f.	Mean Sum of Sq.	F-Ratio
Due to column	SSC = 52.33	3-1 = 2	MSC = 26.17	F = MSC/MSE
Due to error	SSE = 641.90	15-3 = 12	MSE = 53.49	= 0.49
Total	**694.23**	**14**		

Table value of F at 5% level of significance with $\upsilon_1 = 2$ and $\upsilon_2 = 12$ is 3.89.

Decision:

Since $F_{cal} > F_{tab}$, H_0 is accepted, i.e. there is no significant difference between mean ratios of Loan & Advance to Current Asset of NABIL, NIBL and HBL.

5. Test of hypothesis on Return on Loan & Advance ratios of NABIL, NIBL and HBL:

Let, Return on Loan & Advance ratios of NABIL, NIBL and HBL be x, y and z respectively.

Table 33
Computation of Variations

FY	x	x^2	y	y^2	z	z^2
2006/07	5.56	30.91	2.14	4.58	3.11	9.67
2007/08	4.92	24.21	2.29	5.24	2.64	6.97
2008/09	4.92	24.21	2.74	7.51	2.12	4.49
2009/10	4.34	18.84	2.90	8.41	2.2	4.84
2010/11	3.49	12.18	2.58	6.66	2.48	6.15
Total	**23.23**	**110.34**	**12.65**	**32.40**	**12.55**	**32.13**

Hence,

Null hypothesis (H_0): $\mu x = \mu y = \mu z$ i.e. there is no significant difference between mean ratios of Return on Loan & Advance of NABIL, NIBL and HBL.

Alternate hypothesis ((H_1): $\mu x \neq \mu y \neq \mu z$ (two-tailed test) i.e. there is significant difference between mean ratios of Return on Loan & Advance of NABIL, NIBL and HBL.

Under H_0, the test-statistic is:

F = MSC/MSE

Sum of individual values (T):

$T = \sum x + \sum y + \sum z$

$= 23.23 + 12.65 + 12.55 = 48.43$

Correction factor (c.f.):

$c.f. = T^2/N = \frac{(48.43)^2}{15} = 156.36$

Sum of squares (SST):

$SST = \sum x^2 + \sum y^2 + \sum z^2 - c.f.$

$= 110.34 + 32.40 + 32.13 – 156.36 = 18.51$

Sum of squares due to column (SSC):

$SSC = \frac{(\sum x)^2}{n_1} + \frac{(\sum y)^2}{n_2} + \frac{(\sum z)^2}{n_3} - c.f.$

$= \frac{(23.23)^2}{5} + \frac{(12.65)^2}{5} + \frac{(12.55)^2}{5} – 156.36 = 15.07$

Sum of squares due to error (SSE):

$SSE = SST - SSC$

$= 18.51 – 15.07 = 3.44$

One-way ANOVA Table

Source of Variation	Sum of Sq.	d.f.	Mean Sum of Sq.	F-Ratio
Due to column	SSC = 15.07	3-1 = 2	MSC = 7.54	F = MSC/MSE = 26
Due to error	SSE = 3.44	15-3 = 12	MSE = 0.29	
Total	**18.51**	**14**		

Table value of F at 5% level of significance with $\upsilon_1 = 2$ and $\upsilon_2 = 12$ is 3.89.

Decision:

Since $F_{cal} > F_{tab}$, H_1 is accepted, i.e. there is significant difference between mean ratios of Return on Loan & Advance of NABIL, NIBL and HBL.

CHAPTER V

CONCLUSION AND RECOMMMENDATIONS

The facts and matters needed for various parts of the study have been discussed in the previous chapters. Obviously, analytical part is the core of the study that formulates the comparative analysis of various aspects of the investment of the commercial banks with the assistance of some important financial as well as statistical tools.

After completion of the basic analysis needed for the study, the final and most important task of the researcher is to procure finding issues and gaps of the study and recommend for further development which would be significant to the top management of the bank to initiate action and achieve the desired result. The purpose of the researcher is not only to draw attention to errors but also to rectify them and show directions for further progression and enhancement.

5. 1 MAJOR FINDINGS OF THE STUDY

The main findings of the secondary data are derived on the basic analysis of financial data of NABIL, NIBL and HBL which are given below.

5.1.1 Liquidity Ratios

The liquidity ratios of NABIL, NIBL and HBL reveal that:

A. In average, the current ratio of HBL is higher than that of NIBL and NABIL. At the same time, HBL's ratios also seem to be more variable than that of the other two banks.

B. In average, NIBL has the highest cash and bank balance to total deposit ratio than NABIL and HBL. NABIL has the poor maintenance of its liquidity which indicates the poor performance of the bank than other two.

C. The mean ratio of cash and bank balance to current asset of NIBL is higher ratio than that of the other two banks and its ratios are more consistent than that of HBL and NABIL.

D. In average, HBL has the higher ratio of government securities to current asset than NABIL and NIBL, which means that HBL has invested as much of its current assets than the other two. It also has the lowest coefficient of variation which indicates its stability.

E. NIBL has the highest loan and advance to current asset ratio and its coefficient of variation is in the middle of NABIL and HBL indicating uniformity in comparison to NABIL and HBL.

5.1.2 Asset Management Ratios

The asset management ratios of NABIL, NIBL and HBL reveal that:

A. In average, NIBL has the higher ratio of loan and advance to total deposit in comparison to NABIL and HBL indicating its strong position regarding the mobilization of total deposit on loan and advance.

B. The mean ratio of total investment to total deposit of HBL is higher than that of NABIL and NIBL. It also has good variability of ratios in this case.

C. In average, NIBL has maintained higher loan and advance to total working fund ratio than that of NABIL and HBL. NIBL also has higher coefficient of variation suggesting of less uniformity and resulting higher risk.

D. NIBL has the lowest mean ratio of investment on government securities to total working fund than the other two banks indicating its poor performance whereas HBL has the highest mean ratio. NABIL has the highest coefficient of variation also indicating more variability than NIBL and HBL.

E. NABIL has the highest mean ratio of investment on shares and debentures to total working fund than NIBL and HBL whereas it is inconsistent and unstable in terms of investment on shares and debentures than NIBL and HBL.

5.1.3 Profitability Ratios

The profitability ratios of NABIL, NIBL and HBL reveal that:

A. In average, NABIL has the higher ratio of return on loan and advance than that of NIBL and HBL and at the same time its return on loan and advance has been found in diminishing trend.

B. The mean ratio of return on total working fund of NABIL is higher than of NIBL and HBL. NABIL's return on working fund is more efficient than that of NIBL and HBL.

C. The mean ratio of return on equity of NABIL is higher than of HBL and NIBL and its coefficient of variation is the lowest too which does signify its consistency.

D. In average, NABIL has higher ratio of total interest earned to total outside asset than that of NIBL and HBL but its ratios are more variable in comparison with other two.

E. In average, NABIL has the highest total interest earned to total working fund ratio in compared to NIBL and HBL. Hence, NABIL is more successful towards the goal of earning interest income with higher earning power.

F. In average, NIBL has the higher ratio of total interest earned to total operating income than NABIL and HBL. NIBL is in better position regarding the mobilization of interest bearing assets such as loan and advance and investment.

5.1.4 Risk Ratios

The risk ratios of NABIL, NIBL and HBL reveal that:

A. NIBL has the higher average credit risk ratio than that of NABIL and HBL. HBL has the lowest credit risk ratio among the three banks with the lowest coefficient of variation also.

B. In average, NABIL has the lowest liquidity risk ratio comparatively than the other two banks. Similarly, its ratios are more homogeneous than that of NIBL and

HBL. At the same time, NABIL also has the highest coefficient of variation in comparison to NIBL and HBL indicating liquidity risk of NABIL is high.

C. In average, NIBL has the highest capital risk ratio in comparison to the other two. At the same time, its variability of ratios is also higher than the other two. The coefficient of variation of NIBL is also lower than that of HBL and NABIL which indicates its consistency in this regard.

5.1.5 Growth Ratios

The growth ratios of NABIL, NIBL and HBL reveal that:

A. The growth ratio of total deposits of NIBL is higher at 31.49% than that of NABIL at 22.62% and HBL at 9.67% concluding NIBL's better performance in collection of deposit every year.

B. The growth ratio of loan and advance of NIBL is extremely better with 39.44% than that of NABIL and HBL with 27.09% and 13.01% respectively.

C. The growth ratio of total investment of HBL (22.83%) is higher than that of NABIL (14.24%) and NIBL (15.50%).

D. NIBL has higher growth ratio of net profit of 46.26% than that of NABIL and HBL (i.e. 13.16% and 24.69%).

From the above analysis, it can be concluded that NIBL's operation with regards to collection of deposit, granting of loan and advance and net profit is comparatively better and in terms of total investment, HBL is better. NABIL's performance with regards to collection of deposit, granting of loan and advance and investment is poor and it has not made any significant strategy to win the confidence of its shareholders and customers.

5.1.6 Co-efficient of Correlation Analysis

Coefficient of correlation analysis between different variables of NABIL, NIBL and HBL reveals that:

A. Coefficient of correlation between deposit and loan & advance of NABIL is found to be lower than that of NIBL and HBL. This indicates poor position of NIBL in mobilizing deposit as loan & advances and it also has insignificant relationship between deposit and loan & advance. In case of NIBL and HBL, there is significant relationship between deposit and loan & advance.

B. Coefficient of correlation between deposit and total investment of NIBL is found to be higher than the other two banks. This indicates NIBL is more successful in mobilizing deposit as total investment. On the other hand, NABIL and HBL are not so successful in maximizing the investment of their deposit.

5.1.7 Trend Analysis

Trend analysis of the study period and its projection for the next five years for loan and advance to total deposit and total investment to total deposit of NABIL, NIBL and HBL reveals that:

A. Trend values of loan and advance to total deposit of all three banks, i.e. NABIL, NIBL and HBL are increasing which does mean they are using large portion of their deposits toward providing secured loans and advance. NABIL and NIBL may utilize more than 70% and 90% respectively of their deposit in loan and advance whereas HBL may use more than 60%.

B. Trend values of total investment to total deposit of NABIL and NIBL are decreasing which does indicate negative investment policy of the banks. Comparatively, HBL is ahead in investing more portion of its deposit in the potential sectors.

5.1.8 Test of Hypothesis

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

A. There is significant difference between mean ratios of Loan & Advance to Total Deposit of NABIL, NIBL and HBL.

B. There is no significant difference between mean ratios of Total Investment to Total Deposit of NABIL, NIBL and HBL.

C. There is significant difference between mean ratios of Government Securities to Current Asset of NABIL, NIBL and HBL.

D. There is no significant difference between mean ratios of Loan & Advance to Current Asset of NABIL, NIBL and HBL.

E. There is significant difference between mean ratios of Return on Loan & Advance of NABIL, NIBL and HBL.

5.2 RECOMMENDATIONS

After going over the analysis and findings, following recommendations are made in order to overcome the weakness and inefficiency and make better policy on fund utilization and investment.

5.2.1 Liquidity Position

- The liquidity position of a bank can be affected by external as well as internal factors which include interest rates, investment situation, supply and demand position of deposits and loans, central bank's instruction, the lending policies, capability of management, strategic planning, and funds flow situation. As NABIL has maintained the ratio of cash and bank balance to total deposit lower than that of NIBL and HBL, it is recommended to increase cash and bank balance to meet current obligations and loan demand.

- Government securities such as treasury bills, bonds, saving certificates, etc. are safest medium of investment as they are risk-free and highly liquid in nature. The study reveals that NIBL has not invested more funds in government securities and so is recommended to invest more funds in this sector and not making them idle.

5.2.2 Asset Management Position

- To achieve success in competitive banking environment, deposit must be utilized as loan and advances. Laxity in utilizing this asset could be one of the main reasons of failure. It is found that HBL's loan and advance to total deposit is lower than NABIL and NIBL which indicates it has not properly used its fund as loan and advance. Hence, HBL is recommended to follow liberal policy.
- Commercial bank needs to mobilize its funds in different sectors such as purchasing share and debentures of other financial and non-financial companies. This is required in order to achieve success and also to promote financial and

economic development of the country through industrialization and commercialization. Out of total working fund, NIBL has invested more of its funds as total investment. NABIL and HBL are recommended to invest their more portions in different kinds of companies in different sectors.

- Loan default in commercial bank is a result of various factors such as political influences, lack of the necessary skills of project appraisal, improper collateral evaluation, irregular supervision and lack of entrepreneurship attitude. Political and administrative elements are highly prevailing in each and every sectors of Nepalese investment. Commercial banks always keep a distance from these influences.

- Banks can gain more net profit if it can reduce its non-performing asset (NPA). They experience many difficulties in recovering loans and their large amount of loan is being blocked as NPA. Therefore, there is an urgent need to work out a suitable mechanism through which the default loans can be recovered. So, the three banks are suggested to implement a sound collection policy including procedure which ensures rapid identification of delinquent loans, immediate contact with burrower, continued follow-up until loan is recovered and legal procedure if required.

- Regarding NPA, the bank must focus on credit risk management. The thorough analysis of the project and feasibility studies before granting credit facility can reduce the default. In addition to this, corporate morals and strong corporate culture with high degree of awareness of credit risk should be present. Hence, adequate policies and procedures need to be established.

5.2.3 Profitability Position

- NABIL, NIBL and HBL being the banks of private sector, they cannot keep away their eyes from the profit motive. They should be more careful in increasing profit in a real sense to maintain the confidence of shareholder, depositors, and customers. Hence they need to form a committee to identify the reasons behind the sharp decline in profit over the years and adopt various measures to improve its profitability. All the three banks have the fluctuating total income and so they have not been able to gain the optimum profit. So, they are recommended to decrease the expenses by controlling the operating expenses as well as by collecting the interest free deposits.

5.2.4 Risk Position

- Portfolio management of bank assets basically means allocation of funds into different components of banking assets having different degrees of risk and varying rate of return in such a way that the conflicting goal of maximum yield and minimum risk can be achieved. So, portfolio condition should be examined from time to time and attention should be given to maintain equilibrium in the portfolio condition as far as possible. The bank should make continuous efforts to explore new, competitive and high yielding investment opportunities to optimize its investment portfolio.

- In the present scenario when there is high liquidity in the market and most of the commercial banks are flooding towards the retail banking, these three banks should also come up with innovative and competitive rates to grab the market position. The most effective weapon for achieving this target would be to apply very simple procedure and prompt decision on the credit request.

- NABIL, NIBL and HBL need to adopt innovative approach for marketing in the light of growing competition in the banking sector. The business of the bank should be customer oriented. They should strengthen and activate their marketing

function as it is an effective tool to attract and retain the customers. For this purpose, 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.

BIBLIOGRAPHY

Text Books:

Bexley, James B. (1987); **"Banking Management,"** New Delhi: Sujeet Publication

Cheney, John M. and Moses, Edward A. (1988); **"Fundamentals of Investment,"** St. Paul: West Publishing Company

Crosse, H.D., (1963); **"Management Policies of Commercial Banks,"** Englewood Cliffs: Prentice Hall Inc. N.J. 2nd Edition

Gitman, L. J. and Joehank (1990); **"Fundamentals of Investment,"** Harper and Row Publishers: NY

Gupta, S.C. (1990); **"Fundamental of Statistics,"** Bombay: Himalaya Publishing House

Kothari, C.R. (1978); **"Research Methodology, Method and Technology,"** New Delhi: Willey Eastern Limited

Sharpe, William F., Gordon, J. Alexander and Bailey, Jeffery V. (2000); **"Investment,"** Fifth Edition, New Delhi: Prentice Hall of India Pvt. Ltd.

Shrestha, K.N. & Manandhar, K.D. (1994); **"Statistics and Quantitative Techniques for Management,"** Kathmandu: Kathmandu Valley Publishers

Singh and Singh, S.P. (1983); **"Financial Analysis for Credit Management in Banks,"** New Delhi: Vikas Publishing House Ltd.

World Book International**; "The World Book Encyclopedia,"** Vol 10

F.J. Clark, (1963), "**Management of Investment"**, 3rd Edition, Mc Graw Hill Series, Amireca.

Silwal, Udaya Bahadur, (1984) "**Lending Policy of Commercial Banks in Nepal"**, Unpublished Master's Thesis, Central Department of Management, Tribhuvan University, Kirtipur, Kathmandu.

Articles, Reports & Relevant Study:

Annual Reports, Nabil Bank Ltd. from 2003/04 to 2007/08

Annual Reports, Nepal Investment Bank Ltd. from 2003/04 to 2007/08

Annual Reports, Himalayan Bank Ltd. from 2003/04 to 2007/08

Bajracharya, Bodhi B. (1990); "**Monetary Policy and Deposit Mobilization in Nepal,**" Kathmandu: Rajat Jayanti Smarika, Rastriya Banijya Bank

Ghimire, Pravakar (1999, November 21); **"Banijya Bank Haru Prathamikta Chettra Ma Lagani Garna Bhanda Harjana Tirna Tayar,"** Nepal: Nepal Samachar Patra

Karki, Rewat Bahadur (2000); **"Nepalese Financial Sector: Challenges and Some Solution,**" Kathmandu: NRB Samachar

Morris, F. (1990); **"Latin Americas Banking System in the 1989s,"** Washington DC: World Bank Discussion Paper

Pradhan, K. (1999); **"Nepal Ma Banijya Bank: Upalabdhi Tatha Chunauti,"** Kathmandu: Nepal Bank Patrika

Pradhan**,** Shekhar Bahadur (1995); **"Deposit Mobilization, Its problem and Prospects,"** Kathmandu: Nepal Rastra Bank, Baisakh Masanta

Pyakuryal, Bishowambhar (1987); **"Workshop on Banking and National Development,"** Nepal: Paper presented, Nepal Bank Ltd.

Shrestha, Dr. Sunity (1997); **"Lending Operations of Commercial Banks of Nepal and its impact on GDP,"** T.U. Kirtipur: The Business Voice of Nepal

Shrestha, Ramesh Lal (1988); **"A Study in Deposit and Credit of Commercial Banks of Nepal,"** Kathmandu**:** Nepal Rastra Bank Samachar

Singh, Bhagat (1991); **"Nepal Ma Aadhunik Banijya Byabastha,"** Lalitpur: Indu Chhapakhana

Master's Degree Thesis:

Dhakal, N. Tek (1999) **"A Comparative Study on Financial Performance of Nepal SBI Bank Ltd and Nepal Indosuez Bank Ltd,"** Unpublished Master Thesis, Shanker Dev Campus, Tribhuvan University

Gautam, Ruru Kusam (1999); "**Investment Analysis of the Financial Companies in Context of Nepal,"** Unpublished Master Thesis, Shanker Dev Campus, Tribhuvan University

Khadka, Raja Ram, (1998), "**A Study on the Investment Policy of NABIL Bank Ltd. in comparison to other Joint venture banks of Nepal"**, Unpublished Master's Thesis, Shanker Dev Campus, Pulatisadak, Kathmandu.

Maharjan, Nava Ratna (2003); **"An Investment Policy of Nepal Investment Bank Ltd. in Comparison to Standard Chartered Bank Nepal Ltd. and Nepal Arab Bank Ltd.,"** Unpublished Master Thesis, Shanker Dev College, Tribhuvan University

Bajracharya, Prabin, (2057), "**Investment of Commercial Banks in Priority Sector"**, Unpublished Master's Thesis, Central Department of Management, Tribhuvan University, Kirtipur.

Web-sites:

http//www.nepalstock.com.np
http//www.himalayanbank.com
http//www.nabilbank.com
http//www.nibl.com.np

APPENDICES

LIQUIDITY RATIOS

Current Ratio
Annexure A1

NABIL Bank Limited

	Fiscal Year	Current Ratio	Current Assets	Current Liabilities
	2006/07	1.07	16407.37	15263.81
	2007/08	0.97	16825.09	17406.69
	2008/09	1.00	20449.88	20,454.98
	2009/10	1.07	26966.49	25196.33
	2010/11	1.06	36,534.72	34,416.78
	Mean	1.03		
	Standard Deviation	0.04		
	Coefficient of Variation	4.20		

Nepal Investment Bank Limited

Fiscal Year	Current Ratio	Current Assets	Current Liabilities
2006/07	1.04	13005.7	12526.45
2007/08	1.06	15953.48	15,093.89
2008/09	1.08	20986.69	19,364.71
2009/10	1.08	26831.38	24,912.72
2010/11	1.08	37,902.46	35,112.44
Mean	1.07		
Standard Deviation	0.02		
Coefficient of Variation	1.60		

Himalayan Bank Limited

Fiscal Year	Current Ratio	Current Assets	Current Liabilities
2006/07	1.01	23704.43	23493.2
2007/08	1.63	42948.87	26302.93
2008/09	0.70	19119.43	27334.21
2009/10	1.06	32945.19	31012.65
2010/11	1.08	35439.16	32783.41
Mean	1.10		
Standard Deviation	0.30		
Coefficient of Variation	27.48		

Cash and Bank Balance to Total Deposit Ratio
Annexure A2
NABIL Bank Limited

Fiscal Year	Ratio (%)	Cash & Bank Balance	Total Deposit
2006/07	6.87	970.49	14,119.03
2007/08	3.83	559.37	14,586.61
2008/09	3.26	630.27	19,347.40
2009/10	6.00	1399.83	23,342.29
2010/11	8.37	2671.14	31,915.05
Mean	5.67		
Standard Deviation	1.90		
Coefficient of Variation	33.51		

Nepal Investment Bank Limited

Fiscal Year	Ratio (%)	Cash & Bank Balance	Total Deposit
2006/07	10.65	1,226.92	11,524.67
2007/08	9.40	1,340.48	14,254.58
2008/09	12.34	2,336.52	18,927.31
2009/10	9.97	2,441.51	24,488.86
2010/11	10.90	3,754.94	34,451.73
Mean	10.65		
Standard Deviation	0.99		
Coefficient of Variation	9.34		

Himalayan Bank Limited

Fiscal Year	Ratio (%)	Cash & Bank Balance	Total Deposit
2006/07	9.09	2,001.18	22,010.34
2007/08	8.12	2,014.47	24,814.01
2008/09	6.48	1,716.35	26,490.85
2009/10	5.85	1,757.34	30,048.42
2010/11	4.55	1,448.14	31,842.79
Mean	6.82		
Standard Deviation	1.62		
Coefficient of Variation	23.72		

Cash and Bank Balance to Current Asset Ratio
Annexure A3

NABIL Bank Limited

Fiscal Year	Ratio (%)	Cash & Bank Balance	Current Asset
2006/07	5.91	970.49	16407.37
2007/08	3.32	559.37	16825.09
2008/09	3.08	630.27	20449.88
2009/10	5.19	1399.83	26966.49
2010/11	7.31	2671.14	36,534.72
Mean	4.96		
Standard Deviation	1.59		
Coefficient of Variation	32.09		

Nepal Investment Bank Limited

Fiscal Year	Ratio (%)	Cash & Bank Balance	Current Asset
2006/07	9.43	1,226.92	13005.7
2007/08	8.40	1,340.48	15953.48
2008/09	11.13	2,336.52	20986.69
2009/10	9.10	2,441.51	26831.38
2010/11	9.91	3,754.94	37,902.46
Mean	9.60		
Standard Deviation	0.91		
Coefficient of Variation	9.50		

Himalayan Bank Limited

Fiscal Year	Ratio (%)	Cash & Bank Balance	Current Asset
2006/07	8.44	2,001.18	23704.43
2007/08	4.69	2,014.47	42948.87
2008/09	8.98	1,716.35	19119.43
2009/10	5.33	1,757.34	32945.19
2010/11	4.09	1,448.14	**35439.16**
Mean	6.31		
Standard Deviation	2.01		
Coefficient of Variation	31.86		

Investment on Government Securities to Current Asset Ratio
Annexure A4

NABIL Bank Limited

Fiscal Year	Ratio (%)	Government Securities	Current Asset
2006/07	22.38	3,672.63	16407.37
2007/08	14.35	2,413.94	16825.09
2008/09	11.25	2,301.46	20449.88
2009/10	17.83	4,808.35	26966.49
2010/11	10.22	3,734.47	36,534.72
Mean	15.21		
Standard Deviation	4.46		
Coefficient of Variation	29.35		

Nepal Investment Bank Limited

Fiscal Year	Ratio (%)	Government Securities	Current Asset
2006/07	15.39	2,001.10	13005.7
2007/08	12.21	1,948.50	15953.48
2008/09	12.02	2,522.30	20986.69
2009/10	12.14	3,256.40	26831.38
2010/11	8.32	3,155.00	37,902.46
Mean	12.02		
Standard Deviation	2.24		
Coefficient of Variation	18.63		

Himalayan Bank Limited

Fiscal Year	Ratio (%)	Government Securities	Current Asset
2006/07	18.50	3,431.73	18,551.19
2007/08	25.77	5,469.73	21,228.89
2008/09	26.91	5,144.31	19,119.43
2009/10	19.59	6,454.87	32,945.19
2010/11	21.08	7,471.67	35439.16
Mean	22.37		
Standard Deviation	3.36		
Coefficient of Variation	15.02		

Loans and Advance to Current Asset Ratio
Annexure A5

NABIL Bank Limited

Fiscal Year	Ratio (%)	Loans & Advance	Current Asset
2006/07	49.92	8,189.99	16407.37
2007/08	62.92	10,586.17	16825.09
2008/09	63.19	12,922.54	20449.88
2009/10	57.65	15,545.78	26966.49
2010/11	58.48	21,365.05	36,534.72
Mean	58.43		
Standard Deviation	4.81		
Coefficient of Variation	8.24		

Nepal Investment Bank Limited

Fiscal Year	Ratio (%)	Loans & Advance	Current Asset
2006/07	54.82	7,130.13	13005.7
2007/08	63.47	10,126.05	15953.48
2008/09	60.88	12,776.21	20986.69
2009/10	64.43	17,286.43	26831.38
2010/11	71.23	26,996.65	37,902.46
Mean	62.97		
Standard Deviation	5.32		
Coefficient of Variation	8.44		

Himalayan Bank Limited

Fiscal Year	Ratio (%)	Loans & Advance	Current Asset
2006/07	64.43	11,951.87	18,551.19
2007/08	58.53	12,424.52	21,228.89
2008/09	76.58	14,642.56	19,119.43
2009/10	51.59	16,998.00	32,945.19
2010/11	55.02	19,497.52	35439.16
Mean	61.23		
Standard Deviation	8.77		
Coefficient of Variation	14.33		

Loan and Advance to Total Deposit Ratio
Annexure A6

NABIL Bank Limited

Fiscal Year	Ratio (%)	Loans & Advance	Total Deposit
2006/07	58.01	8,189.99	14,119.03
2007/08	72.57	10,586.17	14,586.61
2008/09	66.79	12,922.54	19,347.40
2009/10	66.60	15,545.78	23,342.29
2010/11	66.94	21,365.05	31,915.05
Mean	66.18		
Standard Deviation	4.67		
Coefficient of Variation	7.05		

Nepal Investment Bank Limited

Fiscal Year	Ratio (%)	Loans & Advance	Total Deposit
2006/07	61.87	7,130.13	11,524.67
2007/08	71.04	10,126.05	14,254.58
2008/09	67.50	12,776.21	18,927.31
2009/10	70.59	17,286.43	24,488.86
2010/11	78.36	26,996.65	34,451.73
Mean	69.87		
Standard Deviation	5.36		
Coefficient of Variation	7.67		

Himalayan Bank Limited

Fiscal Year	Ratio (%)	Loans & Advance	Total Deposit
2006/07	54.30	11,951.87	22,010.34
2007/08	50.07	12,424.52	24,814.01
2008/09	55.27	14,642.56	26,490.85
2009/10	56.57	16,998.00	30,048.42
2010/11	61.23	19,497.52	31,842.79
Mean	55.49		
Standard Deviation	3.60		
Coefficient of Variation	6.50		

Total Investment to Total Deposit Ratio
Annexure A7

NABIL Bank Limited

Fiscal Year	Ratio (%)	Total Investment	Total Deposit
2006/07	41.33	5,835.95	14,119.03
2007/08	29.31	4,275.53	14,586.61
2008/09	31.93	6,178.53	19,347.40
2009/10	38.32	8,945.31	23,342.29
2010/11	31.14	9,939.77	31,915.05
Mean	34.41		
Standard Deviation	4.61		
Coefficient of Variation	13.38		

Nepal Investment Bank Limited

Fiscal Year	Ratio (%)	Total Investment	Total Deposit
2006/07	33.51	3,862.48	11,524.67
2007/08	27.60	3,934.19	14,254.58
2008/09	29.60	5,602.87	18,927.31
2009/10	26.57	6,505.87	24,488.86
2010/11	19.95	6,874.02	34,451.73
Mean	27.45		
Standard Deviation	4.44		
Coefficient of Variation	16.17		

Himalayan Bank Limited

Fiscal Year	Ratio (%)	Total Investment	Total Deposit
2006/07	26.63	5,860.38	22,010.34
2007/08	25.08	6,222.61	24,814.01
2008/09	41.10	10,889.03	26,490.85
2009/10	39.35	11,822.98	30,048.42
2010/11	41.89	13,340.18	31,842.79
Mean	34.81		
Standard Deviation	7.38		
Coefficient of Variation	21.19		

Loans and Advance to Total Working Fund Ratio
Annexure A8

NABIL Bank Limited

Fiscal Year	Ratio (%)	Loans & Advance	Total Working Fund
2006/07	48.91	8,189.99	16,745.61
2007/08	62.04	10,586.17	17,064.08
2008/09	57.87	12,922.54	22,329.97
2009/10	57.04	15,545.78	27,253.39
2010/11	57.54	21,365.05	37,132.76
Mean	56.68		
Standard Deviation	4.28		
Coefficient of Variation	7.54		

Nepal Investment Bank Limited

Fiscal Year	Ratio (%)	Loans & Advance	Total Working Fund
2006/07	53.79	7,130.13	13,255.49
2007/08	62.22	10,126.05	16274.06
2008/09	59.90	12,776.21	21330
2009/10	62.65	17,286.43	27590.84
2010/11	69.45	26,996.65	38873.31
Mean	61.60		
Standard Deviation	5.04		
Coefficient of Variation	8.18		

Himalayan Bank Limited

Fiscal Year	Ratio (%)	Loans & Advance	Total Working Fund
2006/07	48.16	11,951.87	24,817.37
2007/08	44.62	12,424.52	27,844.69
2008/09	49.70	14,642.56	29,460.39
2009/10	50.71	16,998.00	33,519.14
2010/11	53.90	19,497.52	36,175.53
Mean	49.42		
Standard Deviation	3.05		
Coefficient of Variation	6.17		

Investment on Government Securities to Total Working Fund Ratio
Annexure A9

NABIL Bank Limited

Fiscal Year	Ratio (%)	Government Securities	Total Working Fund
2006/07	21.93	3,672.63	16,745.61
2007/08	14.15	2,413.94	17,064.08
2008/09	10.31	2,301.46	22,329.97
2009/10	17.64	4,808.35	27,253.39
2010/11	10.06	3,734.47	37,132.76
Mean	14.82		
Standard Deviation	4.52		
Coefficient of Variation	30.49		

Nepal Investment Bank Limited

Fiscal Year	Ratio (%)	Government Securities	Total Working Fund
2006/07	15.10	2,001.10	13,255.49
2007/08	11.97	1,948.50	16274.06
2008/09	11.83	2,522.30	21330
2009/10	11.80	3,256.40	27590.84
2010/11	8.12	3,155.00	38873.31
Mean	11.76		
Standard Deviation	2.21		
Coefficient of Variation	18.80		

Himalayan Bank Limited

Fiscal Year	Ratio (%)	Government Securities	Total Working Fund
2006/07	13.83	3,431.73	24,817.37
2007/08	19.64	5,469.73	27,844.69
2008/09	17.46	5,144.31	29,460.39
2009/10	10.31	3,454.87	33,519.14
2010/11	20.65	7,471.67	36,175.53
Mean	16.38		
Standard Deviation	3.83		
Coefficient of Variation	23.41		

Investment on Shares and Debentures to Total Working Fund Ratio
Annexure A10

NABIL Bank Limited

Fiscal Year	Ratio (%)	Shares & Debentures	Total Working Fund
2006/07	0.13	22.22	16,745.61
2007/08	2.60	443.09	17,064.08
2008/09	0.47	104.19	22,329.97
2009/10	1.05	286.96	27,253.39
2010/11	0.87	323.24	37,132.76
Mean	1.02		
Standard Deviation	0.85		
Coefficient of Variation	82.91		

Nepal Investment Bank Limited

Fiscal Year	Ratio (%)	Shares & Debentures	Total Working Fund
2006/07	0.10	13.89	13,255.49
2007/08	0.11	17.74	16274.06
2008/09	0.08	17.74	21330.00
2009/10	0.13	35.25	27590.84
2010/11	0.15	59.95	38873.31
Mean	0.12		
Standard Deviation	0.02		
Coefficient of Variation	20.62		

Himalayan Bank Limited

Fiscal Year	Ratio (%)	Shares & Debentures	Total Working Fund
2006/07	0.14	34.27	24,817.37
2007/08	0.14	39.91	27,844.69
2008/09	0.10	28.57	29,460.39
2009/10	0.22	73.42	33,519.14
2010/11	0.25	89.56	36,175.53
Mean	0.17		
Standard Deviation	0.06		
Coefficient of Variation	32.92		

Return on Loans and Advances Ratio
Annexure A11

NABIL Bank Limited

Fiscal Year	Ratio (%)	Net profit	Loans & Advance
2006/07	5.56	455.31	8,189.99
2007/08	4.92	520.64	10,586.17
2008/09	4.92	635.26	12,922.54
2009/10	4.34	673.95	15,545.78
2010/11	3.49	746.47	21,365.05
Mean	4.64		
Standard Deviation	0.69		
Coefficient of Variation	14.93		

Nepal Investment Bank Limited

Fiscal Year	Ratio (%)	Net profit	Loans & Advance
2006/07	2.14	152.26	7,130.13
2007/08	2.29	232.15	10,126.05
2008/09	2.74	350.53	12,776.21
2009/10	2.90	501.41	17,286.43
2010/11	2.58	696.73	26,996.65
Mean	2.53		
Standard Deviation	0.28		
Coefficient of Variation	11.14		

Himalayan Bank Limited

Fiscal Year	Ratio (%)	Net profit	Loans & Advance
2006/07	2.20	263.05	11,951.87
2007/08	2.48	308.28	12,424.52
2008/09	3.12	457.48	14,642.56
2009/10	2.89	491.82	16,998.00
2010/11	3.26	635.87	19,497.52
Mean	2.79		
Standard Deviation	0.40		
Coefficient of Variation	14.21		

Return on Total Working Fund Ratio
Annexure A12

NABIL Bank Limited

Fiscal Year	Ratio (%)	Net profit	Total Working Fund
2006/07	2.72	455.31	16,745.61
2007/08	3.05	520.11	17,064.08
2008/09	2.84	635.26	22,329.97
2009/10	2.47	673.96	27,253.39
2010/11	2.01	746.47	37,132.76
Mean	2.62		
Standard Deviation	0.36		
Coefficient of Variation	13.63		

Nepal Investment Bank Limited

Fiscal Year	Ratio (%)	Net profit	Total Working Fund
2006/07	1.15	152.26	13,255.49
2007/08	1.43	232.15	16274.06
2008/09	1.64	350.53	21330
2009/10	1.82	501.41	27590.84
2010/11	1.79	696.73	38873.31
Mean	1.57		
Standard Deviation	0.25		
Coefficient of Variation	16.01		

Himalayan Bank Limited

Fiscal Year	Ratio (%)	Net profit	Total Working Fund
2006/07	1.06	263.05	24,817.37
2007/08	1.11	308.28	27,844.69
2008/09	1.55	457.48	29,460.39
2009/10	1.47	491.82	33,519.14
2010/11	1.76	635.87	36,175.53
Mean	1.39		
Standard Deviation	0.27		
Coefficient of Variation	19.23		

Return on Equity Ratio
Annexure A13

NABIL Bank Limited

Fiscal Year	Ratio (%)	Net profit	Total Equity Capital
2006/07	30.73	455.31	1,481.68
2007/08	31.29	518.64	1,657.63
2008/09	33.88	635.26	1,874.99
2009/10	32.60	673.96	2,067.05
2010/11	30.63	746.47	2,437.20
Mean	31.83		
Standard Deviation	1.25		
Coefficient of Variation	3.91		

Nepal Investment Bank Limited

Fiscal Year	Ratio (%)	Net profit	Total Equity Capital
2006/07	20.88	152.26	729.04
2007/08	19.67	232.15	1180.17
2008/09	24.77	350.53	1415.39
2009/10	26.70	501.41	1878.04
2010/11	25.93	696.73	2686.78
Mean	23.59		
Standard Deviation	2.80		
Coefficient of Variation	11.87		

Himalayan Bank Limited

Fiscal Year	Ratio (%)	Net profit	Total Equity Capital
2006/07	19.87	263.05	1324.17
2007/08	20.00	308.28	1,541.74
2008/09	25.90	457.48	1,766.12
2009/10	22.91	491.82	2,146.50
2010/11	25.30	635.87	2,513.00
Mean	22.80		
Standard Deviation	2.55		
Coefficient of Variation	11.16		

Total Interest Earned to Total Working Fund Ratio
Annexure A14

NABIL Bank Limited

Fiscal Year	Ratio (%)	Total Interest Earned	Total Working Fund
2006/07	5.98	1,001.62	16,745.61
2007/08	6.26	1,068.74	17,064.08
2008/09	5.87	1,310.00	22,329.97
2009/10	5.83	1,587.56	27,253.39
2010/11	5.33	1,978.70	37,132.76
Mean	5.85		
Standard Deviation	0.30		
Coefficient of Variation	5.19		

Nepal Investment Bank Limited

Fiscal Year	Ratio (%)	Total Interest Earned	Total Working Fund
2006/07	5.52	731.4	13,255.49
2007/08	5.45	886.8	16274.06
2008/09	5.50	1172.74	21330
2009/10	5.74	1584.99	27590.84
2010/11	5.64	2194.26	38873.31
Mean	5.57		
Standard Deviation	0.11		
Coefficient of Variation	1.94		

Himalayan Bank Limited

Fiscal Year	Ratio (%)	Total Interest Earned	Total Working Fund
2006/07	5.02	1,245.89	24,817.37
2007/08	5.19	1,446.47	27,844.69
2008/09	5.52	1,626.47	29,460.39
2009/10	5.30	1,775.58	33,519.14
2010/11	5.43	1,963.65	36,175.53
Mean	5.29		
Standard Deviation	0.18		
Coefficient of Variation	3.32		

Total Interest Earned to Total Operating Income Ratio
Annexure A15

NABIL Bank Limited

Fiscal Year	Ratio (%)	Total Interest Earned	Total Operating Income
2006/07	75.10	1,001.62	1,333.65
2007/08	89.44	1,068.74	1,194.90
2008/09	96.36	1,310.00	1,359.51
2009/10	107.26	1,587.56	1,480.16
2010/11	118.45	1,978.70	1,670.43
Mean	97.32		
Standard Deviation	14.85		
Coefficient of Variation	15.25		

Nepal Investment Bank Limited

Fiscal Year	Ratio (%)	Total Interest Earned	Total Operating Income
2006/07	124.90	731.4	585.6
2007/08	113.01	886.8	784.70
2008/09	122.24	1172.74	959.39
2009/10	127.20	1584.99	1,246.03
2010/11	133.02	2194.26	1,649.62
Mean	124.07		
Standard Deviation	6.58		
Coefficient of Variation	5.30		

Himalayan Bank Limited

Fiscal Year	Ratio (%)	Total Interest Earned	Total Operating Income
2006/07	121.58	1,245.89	1,024.78
2007/08	120.95	1,446.47	1,195.92
2008/09	116.72	1,626.47	1,393.53
2009/10	127.43	1,775.58	1,393.36
2010/11	122.92	1,963.65	1,597.50
Mean	121.92		
Standard Deviation	3.45		
Coefficient of Variation	2.83		

Credit Risk Ratio
Annexure A16

NABIL Bank Limited

Fiscal Year	Ratio (%)	Loans & Advance	Total Asset
2006/07	48.91	8,189.99	16,745.61
2007/08	62.04	10,586.17	17,064.08
2008/09	57.87	12,922.54	22,329.97
2009/10	57.04	15,545.78	27,253.39
2010/11	57.54	21,365.05	37,132.76
Mean	56.68		
Standard Deviation	4.28		
Coefficient of Variation	7.54		

Nepal Investment Bank Limited

Fiscal Year	Ratio (%)	Loans & Advance	Total Asset
2006/07	53.79	7,130.13	13,255.49
2007/08	62.22	10,126.05	16274.06
2008/09	59.90	12,776.21	21330
2009/10	62.65	17,286.43	27590.84
2010/11	69.45	26,996.65	38873.31
Mean	61.60		
Standard Deviation	5.04		
Coefficient of Variation	8.18		

Himalayan Bank Limited

Fiscal Year	Ratio (%)	Loans & Advance	Total Asset
2006/07	48.16	11,951.87	24,817.37
2007/08	44.62	12,424.52	27,844.69
2008/09	49.70	14,642.56	29,460.39
2009/10	50.71	16,998.00	33,519.14
2010/11	53.90	19,497.52	36,175.53
Mean	49.42		
Standard Deviation	3.05		
Coefficient of Variation	6.17		

Liquidity Risk Ratio
Annexure A17

NABIL Bank Limited

Fiscal Year	Ratio (%)	Cash & Bank Balance	Total Deposit
2006/07	6.87	970.49	14,119.03
2007/08	3.83	559.37	14,586.61
2008/09	3.26	630.27	19,347.40
2009/10	6.00	1399.83	23,342.29
2010/11	8.37	2671.14	31,915.05
Mean	5.67		
Standard Deviation	1.90		
Coefficient of Variation	33.51		

Nepal Investment Bank Limited

Fiscal Year	Ratio (%)	Cash & Bank Balance	Total Deposit
2006/07	10.65	1,226.92	11,524.67
2007/08	9.40	1,340.48	14,254.58
2008/09	12.34	2,336.52	18,927.31
2009/10	9.97	2,441.51	24,488.86
2010/11	10.90	3,754.94	34,451.73
Mean	10.65		
Standard Deviation	0.99		
Coefficient of Variation	9.34		

Himalayan Bank Limited

Fiscal Year	Ratio (%)	Cash & Bank Balance	Total Deposit
2006/07	9.09	2,001.18	22,010.34
2007/08	8.12	2,014.47	24,814.01
2008/09	6.48	1,716.35	26,490.85
2009/10	11.16	3,352.52	30,048.42
2010/11	4.55	1,448.14	31,842.79
Mean	7.88		
Standard Deviation	2.25		
Coefficient of Variation	28.57		

Capital Risk Ratio
Annexure A18

NABIL Bank Limited

Fiscal Year	Ratio (%)	Capital	Risk Weighted Asset
2006/07	2.19	491.65	22,402.01
2007/08	2.21	491.65	22,240.86
2008/09	1.74	491.65	28,187.28
2009/10	1.48	491.65	33,315.89
2010/11	1.52	689.22	45,345.34
Mean	1.83		
Standard Deviation	0.32		
Coefficient of Variation	17.41		

Nepal Investment Bank Limited

Fiscal Year	Ratio (%)	Capital	Risk Weighted Asset
2006/07	1.76	295.29	16,799.38
2007/08	2.85	587.74	20,596.85
2008/09	2.12	590.59	27,809.52
2009/10	2.20	801.35	36,439.38
2010/11	2.43	1,203.92	49,550.90
Mean	2.27		
Standard Deviation	0.36		
Coefficient of Variation	15.92		

Himalayan Bank Limited

Fiscal Year	Ratio (%)	Share Capital	Risk Weighted Asset
2006/07	0.86	274.23	31,959.69
2007/08	1.76	643.50	36,590.09
2008/09	2.08	772.20	37,103.82
2009/10	1.97	810.81	41,124.74
2010/11	2.73	1,013.51	37,103.82
Mean	1.88		
Standard Deviation	0.61		
Coefficient of Variation	32.20		

Schedule 1
Calculation of Mean, Standard Deviation and Coefficient of Variation

	Fiscal Year	Ratio (X_1)	$(X_1 - X_1)^2$
	2006/07	1.07	0.001296
	2007/08	0.97	0.004096
	2008/09	1.00	0.001156
	2009/10	1.07	0.001296
	2010/11	1.06	0.000676
	Total	**5.17**	0.00852
	Mean	**1.03**	

1. Mean ($\mathbf{X_1}$) = $\sum X_1/N$
   = 5.17/5
   = 1.03

2. Standard Deviation = $\sqrt{\sum(X_1 - \overline{X_1})^2/n}$
   = $\sqrt{0.00852/5}$
   = $\sqrt{.001704}$
   = 0.04128

3. Coefficient of Variation = (S.D./ Mean) x 100
   = (0.04128/1.03) x 100
   = 4.20

Schedule 2
CALCULATION OF GROWTH RATIO

Let,
D_n = Data in the n^{th} year
D_o = Data in the initial year
g = Growth rate
n = Number of years of study = 5

Then we have,
$D_n = D_o (1+ g)^{n-1}$

Growth Ratio of Total Deposit of NABIL:

Here,
D_n = Total Deposit in 2010/11 = 31915.05
D_o = Total Deposit in 2006/07 = 14119.03
(Amount in million)

Then we have,
$D_n = D_o(1+g)^{n-1}$
or, $31915.05= 14119.03(1+g)^{5-1}$
or, $(1+g)^4 = 2.2604$
or, $(1+g) = (2.2604)^{1/4}$
or, $g = 1.2262-1$
or, $g = 22.62\%$

Similarly, Growth Ratio of Total Deposit of NIBL and HBL are calculated.

Growth Ratio of Loans and Advances of NABIL:

Here,
D_n = Loan and Advance in 2010/11 = 21365.05
D_o = Loan and Advance in 2006/07 = 8189.99
(Amount in Million)

Then we have,

$D_n = D_o(1+g)^{n-1}$
or, $21365.05 = 8189.99(1+g)^{5-1}$
or, $(1+g)^4 = 2.6087$
or, $(1+g) = (2.6087)^{1/4}$
or, $g = 1.2709-1$
or, $g = 27.09\%$

Similarly, Growth Ratio of Loans and Advances of NIBL and HBL are calculated.

Growth Ratio of Total Investment of NABIL:

Here,
D_n = Total Investment in 2010/11 = 9939.77
D_o = Total Investment in 2006/07 = 5835.95
(Amount in Million)

Then we have,

$D_n = D_o(1+g)^{n-1}$
or, $9939.77= 5835.95\ (1+g)^{5-1}$
or, $(1+g)^4 = 1.7032$
or, $(1+g) = (1.7032)^{1/4}$
or, $g = 1.1424-1$
or, $g = 14.24\%$

Similarly, Growth Ratio of Total Investment of NIB and NBL are calculated.

Growth Ratio of Net Profit of NABIL:

Here,
D_n = Net Profit in 2010/11 = 746.47
D_o = Net Profit in 2006/07 = 455.31
(Amount in Million)

Then we have,

$D_n = D_o(1+g)^{n-1}$
or, $746.47= 455.31\ (1+g)^{5-1}$
or, $(1+g)^4 = 1.6395$
or, $(1+g) = (1.6395)^{1/4}$
or, $g = 1.1316-1$
or, $g = 13.16\%$

Similarly, Growth Ratio of Net Profit of NIBL and HBL are calculated.

TREND ANALYSIS

Schedule 3
Trend Analysis of Loan & Advance to Total Deposit of NABIL

Fiscal Year	Ratio (y)	x = t-2008/09	x^2	xy	Yc = a+bx
2006/07	58.01	-2	4	-116.02	63.802
2007/08	72.57	-1	1	-72.57	64.991
2008/09	66.79	0	0	0	66.18
2009/10	66.6	1	1	66.6	67.369
2010/11	66.94	2	4	133.88	68.558
Total	**330.91**		**10.00**	**11.89**	

a = $\sum$**Y/N** = 66.118
b = $\sum$**xy/**$\sum$**x**^{2} = 1.189

Projected Trend values for the Next Five Years

Fiscal Year	x = t-2002/03	Y_c = a+bx
2011/12	3.00	69.747
2012/13	4.00	70.936
2013/14	5.00	72.125
2014/15	6.00	73.314
2015/16	7.00	74.503

Schedule 4

Trend Analysis of Total Investment to Total Deposit of NABIL

Fiscal Year	Ratio (y)	x = t-2008/09	x^2	xy	Y_c = a+bx
2006/07	41.33	(2.00)	4.00	-82.66	36.68
2007/08	29.31	(1.00)	1.00	-29.31	35.543
2008/09	31.93	0.00	0.00	0	34.406
2009/10	38.32	1.00	1.00	38.32	33.269
2010/11	31.14	2.00	4.00	62.28	32.132
Total	**172.03**		**10.00**	**-11.37**	

a = $\sum$**Y/N** = 34.406
b = $\sum$**xy/**$\sum$**x**^{2} = -1.137

Projected Trend values for the Next Five Years

Fiscal Year	x = t-2008/09	Y_c = a+bx
2011/12	3.00	30.995
2012/13	4.00	29.858
2013/14	5.00	28.721
2014/15	6.00	27.584
2015/16	7.00	26.447

Schedule 5

Trend Analysis of Loan & Advance to Total Deposit of NIB

Fiscal Year	Ratio (y)	x = t-2008/09	x^2	xy	$Y_c = a+bx$
2006/07	61.87	(2.00)	4.00	-123.74	63.364
2007/08	71.04	(1.00)	1.00	-71.04	66.618
2008/09	67.50	0.00	0.00	0.00	69.872
2009/10	70.59	1.00	1.00	70.59	73.126
2010/11	78.36	2.00	4.00	156.72	76.38
Total	**349.36**		**10.00**	**32.54**	

a = $\sum$**Y/N** = 69.874
b = $\sum$**xy**/$\sum$**x**^{2} = 3.254

Projected Trend values for the Next Five Years

Fiscal Year	x = t-2008/09	$Y_c = a+bx$
2011/12	3.00	79.634
2012/13	4.00	82.888
2013/14	5.00	86.142
2014/15	6.00	89.396
2015/16	7.00	92.65

Schedule 6
Trend Analysis of Total Investment to Total Deposit of NIB

Fiscal Year	Ratio (y)	x = t-2008/09	x^2	xy	$Y_c = a+bx$
2006/07	33.51	(2.00)	4.00	-67.03	33.08
2007/08	27.60	(1.00)	1.00	-27.60	30.264
2008/09	29.60	0.00	0.00	0.00	27.448
2009/10	26.57	1.00	1.00	26.57	24.632
2010/11	19.95	2.00	4.00	39.91	21.816
Total	**137.24**		**10.00**	**-28.16**	

a = $\sum$**Y/N** = 27.448
b = $\sum$**xy**/$\sum$**x**^{2} = -2.816

Projected Trend values for the Next Five Years

Fiscal Year	x = t-2008/09	$Y_c = a+bx$
2011/12	3.00	19
2012/13	4.00	16.184
2013/14	5.00	13.368
2014/15	6.00	10.552
2015/16	7.00	7.736

Schedule 7

Trend Analysis of Loan & Advance to Total Deposit of HBL

Fiscal Year	Ratio (y)	x = t-2002/03	x^2	xy	$Y_c = a+bx$
2006/07	54.30	(2.00)	4.00	-108.60	51.418
2007/08	50.07	(1.00)	1.00	-50.07	53.454
2008/09	55.27	0.00	0.00	0.00	55.49
2009/10	56.57	1.00	1.00	56.57	57.526
2010/11	61.23	2.00	4.00	122.46	59.562
Total	**277.45**		**10.00**	**20.36**	

a = $\sum$**Y/N** = 55.49
b = $\sum$**xy**/$\sum$**x**^{2} = 2.036

Projected Trend values for the Next Five Years

Fiscal Year	x = t-2008/09	$Y_c = a+bx$
2011/12	3.00	61.598
2012/13	4.00	63.634
2013/14	5.00	65.67
2014/15	6.00	67.706
2015/16	7.00	69.742

Schedule 8
Trend Analysis of Total Investment to Total Deposit of HBL

Fiscal Year	Ratio (y)	x = t-2008/09	x^2	xy	$Y_c = a+bx$
2006/07	26.63	(2.00)	4.00	-53.25	25.848
2007/08	25.08	(1.00)	1.00	-25.08	30.329
2008/09	41.10	0.00	0.00	0.00	34.81
2009/10	39.35	1.00	1.00	39.35	39.291
2010/11	41.89	2.00	4.00	83.79	43.772
Total	**174.05**		**10.00**	**44.81**	

a = $\sum$**Y/N** = 34.81
b = $\sum$**xy**/$\sum$**x**^{2} = 4.481

Projected Trend values for the Next Five Years

Fiscal Year	x = t-2008/09	$Y_c = a+bx$
2011/12	3.00	48.253
2012/13	4.00	52.734
2013/14	5.00	57.215
2014/15	6.00	61.696
2015/16	7.00	66.177

COEFFICIENT OF CORRELATION ANALYSIS

Schedule 9
Coefficient of Correlation Between Deposit and Loan & Advance of NABIL

Fiscal Year	Deposit (X)	Loan & Adv. (Y)	x=X - X	x^2	y = Y - Y	y^2	xy
2006/07	14,119.03	8,189.99	-6,543.05	42,811,450.96	-5,531.92	30,602,094.63	36,195,580.86
2007/08	14,586.61	10,586.17	-6,075.47	36,911,287.12	-3,135.74	9,832,840.26	19,051,057.45
2008/09	19,347.40	12,922.54	-1,314.68	1,728,372.98	-799.37	638,986.00	1,050,907.30
2009/10	23,342.29	15,545.78	2,680.21	7,183,547.09	1,823.87	3,326,516.37	4,888,372.63
2010/11	31,915.05	21,365.05	11,252.97	126,629,423.84	7,643.14	58,417,650.20	86,008,100.71
Total	**103,310.38**	**68,609.53**	**0**	**215,264,081.99**	**0**	**102,818,087.47**	**147,194,018.94**
Mean	**20,662.08**	**13,721.91**					

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

$$\text{Coefficient of Correlation (r)} = \frac{\mathbf{147,194,018.94}}{\mathbf{\sqrt{215,264,081.99}\ \sqrt{102,818,087.47}}}$$

Coefficient of Correlation (r) = .9894

r^2 = 0.9789

Probable Error (P.E. r) = $\frac{(1-r^2)}{\sqrt{N}} \times 0.6745$ = 0.0064

6 P.E. r = 0.0382

*Since r=0.9894>6*P.E.(r), r is highly significant. Hence, the conclusion is correct*

Schedule 10

Coefficient of Correlation Between Deposit and Total Investment of NABIL

Fiscal Year	Deposit (X)	Total Invest (Y)	x=X - X	x^2	y = Y - Y	y^2	xy
2006/07	14,119.03	5,835.95	-6,543.05	42,811,450.96	-1,199.07	1,437,764.07	7,845,557.08
2007/08	14,586.61	4,275.53	-6,075.47	36,911,287.12	-2,759.49	7,614,774.02	16,765,175.52
2008/09	19,347.40	6,178.53	-1,314.68	1,728,372.98	-856.49	733,571.69	1,126,004.22
2009/10	23,342.29	8,945.31	2,680.21	7,183,547.09	1,910.29	3,649,215.53	5,119,991.36
2010/11	31,915.05	9,939.77	11,252.97	126,629,423.84	2,904.75	8,437,584.18	32,687,098.73
Total	**103,310.38**	**35,175.09**	**0**	**215,264,081.99**	**0**	**21,872,909.49**	**63,543,826.92**
Mean	**20,662.08**	**7,035.02**					

Coefficient of Correlation (r) = 0.9260

r2 = 0.8576

Probable Error (P.E. r) = $\frac{(1-r2)}{\sqrt{N}} \times 0.6745$ = 0.0430

6 P.E. r = 0.2578

Schedule 12

Coefficient of Correlation between Deposit and Loan & Advance of NIBL

Fiscal Year	Deposit (X)	Loan & Adv. (Y)	x=X - X	x^2	y = Y - Y	y^2	xy
2006/07	11,524.67	7,130.13	-9,204.76	84,727,606.66	-7,732.96	59,798,732.23	71,180,077.71
2007/08	14,254.58	10,126.05	-6,474.85	41,923,682.52	-4,737.04	22,439,585.86	30,671,649.34
2008/09	18,927.31	12,776.21	-1,802.12	3,247,636.49	-2,086.88	4,355,084.83	3,760,815.39
2009/10	24,488.86	17,286.43	3,759.43	14,133,313.92	2,423.34	5,872,557.37	9,110,362.06
2010/11	34,451.73	26,996.65	13,722.30	188,301,517.29	12,133.56	147,223,181.21	166,500,295.50
Total	**103,647.15**	**74,315.47**	**0**	**332,333,756.89**	**0**	**239,689,141.49**	**281,223,200.00**
Mean	**20,729.43**	**14,863.09**					

Coefficient of Correlation (r) = 0.9964

r2 = 0.9928

Probable Error (P.E. r) = $\frac{(1-r2)}{\sqrt{N}} \times 0.6745$ = 0.0022

6 P.E. r = 0.0130

Schedule 13

Coefficient of Correlation between Deposit and Total Investment of NIBL

Fiscal Year	Deposit (X)	Total Invest (Y)	x=X - X	x^2	y = Y - Y	y^2	xy
2006/07	11,524.67	3,862.48	-9,204.76	84,727,606.66	-1,493.41	2,230,261.48	13,746,443.81
2007/08	14,254.58	3,934.19	-6,474.85	41,923,682.52	-1,421.70	2,021,219.52	9,205,268.35
2008/09	18,927.31	5,602.87	-1,802.12	3,247,636.49	246.98	61,001.10	-445,094.81
2009/10	24,488.86	6,505.87	3,759.43	14,133,313.92	1,149.98	1,322,463.20	4,323,284.35
2010/11	34,451.73	6,874.02	13,722.30	188,301,517.29	1,518.13	2,304,730.84	20,832,290.19
Total	**103,647.15**	**26,779.43**	**0**	**332,333,756.89**	**0**	**7,939,676.14**	**47,662,191.89**
Mean	**20,729.43**	**5,355.89**					

Coefficient of Correlation (r) = 0.9279

r^2 = 0.8609

Probable Error (P.E. r) = $\frac{(1-r^2)}{\sqrt{N}} \times 0.6745$ = 0.0419

6 P.E. r = 0.2517

Schedule 15

Coefficient of Correlation Between Deposit and Loan & Advance of HBL

Fiscal Year	Deposit (X)	Loan & Adv. (Y)	x=X - X	x^2	y = Y - Y	y^2	xy
2006/07	22,010.34	11,951.87	-5,030.94	25,310,377.41	-3,151.02	9,928,952.25	15,852,618.98
2007/08	24,814.01	12,424.52	-2,227.27	4,960,740.56	-2,678.37	7,173,687.28	5,965,467.42
2008/09	26,490.85	14,642.56	-550.43	302,975.39	-460.33	211,907.39	253,382.56
2009/10	30,048.42	16,998.00	3,007.14	9,042,878.95	1,895.11	3,591,426.75	5,698,845.27
2010/11	31,842.79	19,497.52	4,801.51	23,054,479.07	4,394.63	19,312,737.68	21,100,831.90
Total	**135,206.41**	**75,514.47**	**0**	**62,671,451.38**	**0**	**40,218,711.36**	**48,871,146.13**
Mean	**27,041.28**	**15,102.89**					

Coefficient of Correlation (r) = 0.9734

r^2 = 0.9476

Probable Error (P.E. r) = $\frac{(1-r^2)}{\sqrt{N}} \times 0.6745$ = 0.0158

6 P.E. r = 0.0949

Schedule 16

Coefficient of Correlation Between Deposit and Total Investment of HBL

Fiscal Year	Deposit (X)	Total Invest (Y)	x=X - X	x^2	y = Y - Y	y^2	xy
2006/07	22,010.34	5,860.38	-5,030.94	25,310,377.41	-3,766.66	14,187,697.42	18,949,827.87
2007/08	24,814.01	6,222.61	-2,227.27	4,960,740.56	-3,404.43	11,590,116.39	7,582,582.71
2008/09	26,490.85	10,889.03	-550.43	302,975.39	1,261.99	1,592,628.86	-694,641.88
2009/10	30,048.42	11,822.98	3,007.14	9,042,878.95	2,195.94	4,822,170.05	6,603,506.65
2010/11	31,842.79	13,340.18	4,801.51	23,054,479.07	3,713.14	13,787,438.36	17,828,690.62
Total	**135,206.41**	**48,135.18**	**0**	**62,671,451.38**	**0**	**45,980,051.08**	**50,269,965.96**
Mean	**27,041.28**	**9,627.04**					

Coefficient of Correlation (r) = $\frac{N\sum XY - \sum X \sum Y}{\sqrt{N\sum X^2 - \sum X} \cdot \sqrt{N\sum Y^2 - \sum Y}}$

Coefficient of Correlation (r) = 0.3530

r^2 = 0.1246

Probable Error (P.E. r) = $\frac{(1-r^2)}{\sqrt{N}} \times 0.6745$ = 0.2641

6 P.E. r = 1.5843

Nabil Bank Ltd., Kantipath, Kathmandu

Comparative Balance Sheet (Rs. in Million)

	7/15/2001	7/15/2002	7/15/2003	7/15/2004	7/15/2005
TOTAL ASSETS (Working Funds)	**18367.15**	**17629.25**	**16562.61**	**16745.61**	**17064.08**
A. CURRENT ASSETS	**13161.68**	**13313.4**	**13868.3**	**14244.04**	**14845.74**
1. Cash & Bank Balance	812.9	1051.82	1144.77	970.49	559.37
2. Money at Call & Short Notice	522.55	31.37	670.2	918.73	868.43
3. Loans & Adv. for comm. Banks	8324.44	7437.9	7755.95	8189.99	10586.17
i. Loans, Cash Cr. & Overdrafts	7993.28	7135.54	7454.26	7953.76	10465.27
ii. Bill Discounted & Purchase	331.16	302.36	301.69	236.23	120.9
4. Investment	2733.96	4121.29	3588.77	3672.63	2418.43
i. Govt. Securities	2732.96	4120.29	3588.77	3672.63	2418.43
ii. Other	1	1	0	0	0
5. Interest Receivable	372.35	171.09	177.6	174.49	168.86
6. Misc. Current Assets	395.48	499.93	531.01	317.71	244.48
B. FIXED ASSET (NET)	**235.12**	**237.63**	**251.91**	**338.13**	**361.24**
7. Gross Block	364.13	395.66	433.12	550.17	611.28
8. Less Depreciation	129.01	158.03	181.21	212.04	250.04
C. 9. LOANS for Dev. Banks	**0**	**0**	**0**	**0**	**0**
D.10. INVESTMENTS	**4970.35**	**4078.22**	**2442.4**	**2163.44**	**1857.1**
i. Shares	18.82	22.22	22.22	22.22	27.36
ii. Debentures	0	0	0	0	0
iii. Other	4951.53	4056	2420.18	2141.22	1829.74
E.11. MISC. ASSETS	**0**	**0**	**0**	**0**	**0**
TOTAL LIABILITIES	**17304.31**	**16482.83**	**15248.43**	**15263.91**	**15406.45**
F. CURRENT LIABILITIES	**17226.21**	**16384.73**	**15135.42**	**15153.13**	**15298.57**
12. Deposit & Other A/C'S	15839.01	15506.44	13447.65	14119.03	14586.61
i. Saving	4917.14	4972.06	5229.72	5994.12	7026.33
ii. Fixed	7667.54	2446.85	2252.54	2310.57	2078.54
iii. Current	2850.97	2703.82	3034	2688.97	2799.18
iv. Call & Short Deposit	0	4944.96	2540.7	2801.41	2341.33
v. Other	403.36	438.75	390.69	323.96	341.23
13. Short Term Loan	0	417.3	961.46	229.66	17.06
14. Bills Payable	69.7	67.75	108.94	173.5	85.42
15. Tax Provision	0	0	0	0	0
16. Staff Bonus	52.6	44.12	66.36	71.94	84.2
17. Dividend Payables	143.52	11.8	94.14	36.88	361.22
18. Misc. Cur. Liabilities	1121.38	337.32	456.87	522.12	164.06
G.19. DEFERRED LIABILITIES	**78.1**	**98.1**	**113.01**	**110.78**	**107.88**
i. Long Term Loan	0	0	0	0	0
ii. Other Differed Liabilities	78.1	98.1	113.01	110.78	107.88
NET WORTH	**1062.83**	**1146.42**	**1314.18**	**1481.68**	**1657.63**
H. SHARE CAPITAL	**491.65**	**491.65**	**491.65**	**491.65**	**491.65**
20. Ordinary Share	50	50	50	50	50
21. Bonus Share	441.65	441.65	441.65	441.65	441.65
22. Preference Share	0	0	0	0	0
I. SHAREHOLDERS' RESERVES	**571.18**	**654.77**	**822.53**	**990.03**	**1165.98**
23. General Reserve	514.5	568.83	652.08	743.2	847
24. Capital Reserve	0.07	49.24	103.32	162.88	0.07
25. Exchange Fluctuation Reserve	25.11	28.26	30.01	33.9	37.8
26. Other Reserve	5.33	6.33	7.33	20.26	251.13
27. Accumulated Profit (Loss)	26.17	2.11	29.79	29.79	29.98
Bills for Collection (contra)	51.83	0	0	0	0
Acceptances etc. (contra)	389.91	0	0	0	0

Balance Sheet Total	18808.88	17629.25	16562.61	16745.59	17064.08

Nabil Bank Ltd, Kantipath, Kathmandu
Comparative Profit & Loss Statement, (Rs. in Million)

For the Period Ending	7/15/2001	7/15/2002	7/15/2003	7/15/2004	7/15/2005
A. Operating Income	**1573.31**	**1639.11**	**1340.51**	**1333.65**	**1438.45**
1. Interest (Earned)	1266.7	1120.18	1017.87	1001.62	1068.75
2. Commission & Discount	146.84	114.34	144.41	135.96	128.38
3. Exchange Income	159.51	154.22	144.08	157.32	184.88
4. Dividend	0.26	0	0	0	0
5. Other	0	250.37	34.15	38.75	56.44
B. Cost Of Service	**724.22**	**606.96**	**527.93**	**463.78**	**443.06**
6. Interest Paid	578.36	462.08	317.35	282.94	243.54
i. On Borrowings	13.57	5.31	9.85	17.47	15.64
ii. On Deposit	564.79	456.77	307.5	265.47	227.9
7. Salaries, Allowances & P.F.	145.86	144.88	210.58	180.84	199.52
C. 8. Provision for Bonus	52.6	44.12	66.36	71.94	84.2
D. 9. Other General Expenses	298.5	538.7	182.73	187.36	140.25
E.10. Gross Profit	**497.99**	**449.33**	**563.49**	**610.57**	**770.94**
F.11. Depreciation	26.27	39.75	35.04	46.27	58.71
G.12. Operating Profit	**471.72**	**409.58**	**528.45**	**564.3**	**712.23**
H.13. Income from Other Sources	1.64	0	86.95	92.78	45.55
I.14. Pre-tax Profit	**473.36**	**409.58**	**615.4**	**657.08**	**757.78**
J.15. Provision For Taxes	181.99	137.95	199.15	201.76	237.67
K.16. Net Profit	**291.37**	**271.63**	**416.25**	**455.32**	**520.11**
L.17. Transfer From Prev Year	108.45	26.17	2.11	61.55	29.79
M.18. Profit Distributed (% to Net Profit)	212.59	168.06	248.48	319.58	344.16
%	53.17	56.43	59.39	61.83	62.59
i. Equity Dividend	196.66	147.5	245.83	319.58	344.16
%	49.19	49.53	58.76	61.83	62.59
ii. Preference Dividend	0	0	0	0	0
%	0	0	0	0	0
iii. Other	15.93	20.56	2.65	0	0
%	3.98	6.9	0.63	0	0
N.19. Profit Retained	**187.23**	**129.75**	**169.87**	**197.28**	**205.74**
%	46.83	43.57	40.6	38.17	37.41

Nepal Investment Bank Ltd.
Durbar Marg, Kathmandu
Comparative Balance Sheet (Rs. in Million)

Year Ended	7/15/2001	7/15/2002	7/15/2003	7/15/2004	7/15/2005
TOTAL ASSETS (Working Funds)	**5127.36**	**4973.9**	**9014.24**	**13255.5**	**16274.06**
A. CURRENT ASSETS	**3423.11**	**3340.25**	**7517.89**	**11144.33**	**13967.78**
1. Cash & Bank Balance	522.86	338.92	926.53	1226.92	1340.48
2. Money at Call & Short Notice	0	0	40	310	140
3. Loans & Adv. for comm. Banks	2429.03	2564.43	5772.14	7130.13	10126.05
i. Loans, Cash Cr. & Overdrafts	2318.91	2518.06	5648.03	6917.8	9933.08
ii. Bill Discounted & Purchase	110.12	46.37	124.11	212.33	192.97
4. Investment	300	224.4	400	2001.1	1948.5
i. Govt. Securities	300	224.4	400	2001.1	1948.5
ii. Other	0	0	0	0	0
5. Interest Receivable	103.5	55.64	83.47	77.01	31.58
6. Misc. Current Assets	67.72	156.86	295.75	399.17	381.17
B. FIXED ASSET (NET)	**33.98**	**35.89**	**191.11**	**249.79**	**320.59**
7. Gross Block	83.94	84.56	245.55	326.88	427.14
8. Less Depreciation	49.96	48.67	54.44	77.09	106.55
C. 9. LOANS for Dev. Banks	**0**	**0**	**0**	**0**	**0**
D.10. INVESTMENTS	**1670.27**	**1597.76**	**1305.24**	**1861.38**	**1985.69**
i. Shares	12.69	13.89	13.89	13.89	17.74
ii. Debentures	0	0	0	0	0
iii. Other	1657.58	1583.87	1291.35	1847.49	1967.95
E.11. MISC. ASSETS	**0**	**0**	**0**	**0**	**0**
TOTAL LIABILITIES	**4658.27**	**4450.43**	**8375.71**	**12526.44**	**15093.89**
F. CURRENT LIABILITIES	**4629.02**	**4410.21**	**8359.46**	**12506.94**	**15078.84**
12. Deposit & Other A/C'S	4256.21	4174.76	7922.75	11524.67	14254.58
i. Saving	1259.57	1278.79	2434.05	4886.1	6703.51
ii. Fixed	1658.66	945.93	1672.82	2294.68	3212.27
iii. Current	769.01	785.4	979.01	1500.1	1583.03
iv. Call & Short Deposit	502.51	1051.89	2610.41	2556.81	2469.74
v. Other	66.46	112.75	226.46	286.98	286.03
13. Short Term Loan	120	98.5	6.83	361.5	350
14. Bills Payable	5.18	6.82	31.63	57.84	15.01
15. Tax Provision	0	0	0	0	0
16. Staff Bonus	10.43	8.68	18.91	25.72	37.08
17. Dividend Payables	5.38	1.81	1.69	5.25	5.89
18. Misc. Cur. Liabilities	231.82	119.64	377.65	531.96	416.28
G.19. DEFERRED LIABILITIES	**29.25**	**40.22**	**16.25**	**19.5**	**15.05**
i. Long Term Loan	0	0	0	0	0
ii. Other Differed Liabilities	29.25	40.22	16.25	19.5	15.05
NET WORTH	**469.08**	**523.46**	**638.53**	**729.04**	**1180.17**
H. SHARE CAPITAL	**169.98**	**169.98**	**295.29**	**295.29**	**587.74**
20. Ordinary Share	60	60	116.66	116.66	409.11
21. Bonus Share	109.98	109.98	178.63	178.63	178.63
22. Preference Share	0	0	0	0	0
I. SHAREHOLDERS' RESERVES	**299.1**	**353.48**	**343.24**	**433.75**	**592.43**
23. General Reserve	233.78	245.2	268.7	299.24	345.67
24. Capital Reserve	0	67.99	29.53	59.06	117.83
25. Exchange Fluctuation Reserve	15.4	16.61	16.58	17.91	18.26
26. Other Reserve	0.03	0.03	0.03	42.88	85.75
27. Accumulated Profit (Loss)	49.89	23.65	28.4	14.66	24.92
Bills for Collection (contra)	31.16	0	0	0	0

Acceptances etc. (contra)	0	0	0	0	0
Balance Sheet Total	**5158.51**	**4973.89**	**9014.24**	**13255.48**	**16274.06**

Nepal Investment Bank Ltd.
Durbar Marg, Kathmandu
Comparative Profit & Loss Statement

(Rs. in Million)

For the Period Ending	**7/15/2001**	**7/15/2002**	**7/15/2003**	**7/15/2004**	**7/15/2005**
A. Operating Income	**421.58**	**415.68**	**577.44**	**911.95**	**1139.44**
1. Interest (Earned)	349.75	326.22	459.51	731.4	886.8
2. Commission & Discount	16.2	16.2	40.81	55.75	93.55
3. Exchange Income	49.83	42.86	50.83	87.98	102.52
4. Dividend	0	0	0	0	0
5. Other	5.8	30.4	26.29	36.82	56.57
B. Cost Of Service	**194.25**	**172.16**	**250.5**	**415.96**	**451.55**
6. Interest Paid	163.15	130.44	189.2	326.21	354.55
i. On Borrowings	2.05	2.12	5.91	16.18	26.23
ii. On Deposit	161.1	128.32	183.3	310.03	328.32
7. Salaries, Allowances & P.F.	31.1	41.72	61.29	89.75	97
C. 8. Provision for Bonus	10.43	8.68	18.91	25.72	37.08
D. 9. Other General Expenses	114.25	151.25	126.5	217.17	290.55
E.10. Gross Profit	**102.65**	**83.59**	**181.53**	**253.1**	**360.26**
F.11. Depreciation	8.82	8.59	11.87	23.4	32.79
G.12. Operating Profit	**93.83**	**75**	**169.66**	**229.7**	**327.47**
H.13. Income from Other Sources	0	3.1	0.49	1.77	6.19
I.14. Pre-tax Profit	**93.83**	**78.1**	**170.15**	**231.47**	**333.68**
J.15. Provision For Taxes	37.44	21.01	53.33	78.8	101.53
K.16. Net Profit	**56.39**	**57.09**	**116.82**	**152.67**	**232.15**
L.17. Transfer From Prev Year	5.01	49.89	23.65	28.4	14.66
M.18. Profit Distributed (% to Net Profit)	0.2	0	59.06	62.16	73.47
%	0.33	0	42.04	34.33	29.77
i. Equity Dividend	0	0	59.06	44.29	73.47
%	0	0	42.04	24.46	29.77
ii. Preference Dividend	0	0	0	0	0
%	0	0	0	0	0
iii. Other	0.2	0	0	17.87	0
%	0.33	0	0	9.87	0
N.19. Profit Retained	**61.22**	**107**	**81.41**	**118.91**	**173.34**
%	99.71	100.02	57.96	65.67	70.23

Himalayan Bank Ltd.
Thamel, Kathmandu
Comparative Balance Sheet (Rs. in Million)

	7/15/2001	7/15/2002	7/15/2003	7/15/2004	7/15/2005
TOTAL ASSETS (Working Funds)	**19500.58**	**20672.45**	**23355.23**	**24817.37**	**27844.69**
A. CURRENT ASSETS	**17359.42**	**14165.33**	**16881.45**	**18551.19**	**21228.89**
1. Cash & Bank Balance	1435.18	1264.67	1979.21	2001.18	2014.47
2. Money at Call & Short Notice	4057.65	352.35	150.1	368.9	441.08
3. Loans & Adv. for comm. Banks	9015.35	8913.73	10001.85	11951.87	12424.52
i. Loans, Cash Cr. & Overdrafts	8651.74	8653.57	9700.66	11635.31	12088.71
ii. Bill Discounted & Purchase	363.61	260.16	301.19	316.56	335.81
4. Investment	2224.3	3047.75	3998.87	3431.73	5469.73
i. Govt. Securities	2224.3	3047.75	3998.87	3431.73	5469.73
ii. Other	0	0	0	0	0
5. Interest Receivable	335.75	330.38	418.46	526.65	511.18
6. Misc. Current Assets	291.19	256.45	332.96	270.86	367.91
B. FIXED ASSET (NET)	**201.68**	**318.85**	**229.87**	**299.64**	**295.82**
7. Gross Block	280.52	418.11	348.55	448.35	480.96
8. Less Depreciation	78.84	99.26	118.68	148.71	185.14
C. 9. LOANS for Dev. Banks	**0**	**0**	**0**	**0**	**0**
D.10. INVESTMENTS	**1858.86**	**6109.36**	**6176.57**	**5860.38**	**6222.61**
i. Shares	10.69	34.27	34.27	34.27	39.91
ii. Debentures	0	0	0	0	0
iii. Other	1848.17	6075.09	6142.3	5826.11	6182.7
E.11. MISC. ASSETS	**80.62**	**78.91**	**67.34**	**106.16**	**97.37**
TOTAL LIABILITIES	**18779.98**	**19814.32**	**22292.09**	**23437.87**	**26302.95**
F. CURRENT LIABILITIES	**18747.46**	**19433.25**	**21899.93**	**23030.89**	**25942.94**
12. Deposit & Other A/C'S	17532.4	18619.37	21007.37	22010.34	24814.01
i. Saving	9144.47	9163.95	10870.54	11759.6	12852.41
ii. Fixed	4927.37	5480.84	3205.37	4710.18	6107.43
iii. Current	2252.13	2634.37	3503.14	4145.45	5045.16
iv. Call & Short Deposit	740.72	883.6	3041.49	970.09	222.96
v. Other	467.71	456.61	386.83	425.02	586.05
13. Short Term Loan	79.53	174.01	285.84	299.01	146.05
14. Bills Payable	22.9	55.58	46.73	64.38	68.4
15. Tax Provision	154.46	0	0	0	3.25
16. Staff Bonus	48.34	38.78	40	46.73	58.06
17. Dividend Payables	14.72	6.44	7.86	6.32	5.61
18. Misc. Cur. Liabilities	895.11	539.07	512.13	659.46	847.57
G.19. DEFERRED LIABILITIES	**32.52**	**381.07**	**392.16**	**406.98**	**360**
i. Long Term Loan	0	360	360	360	360
ii. Other Differed Liabilities	32.52	21.07	32.16	46.98	0
NET WORTH	**720.59**	**858.11**	**1063.13**	**1324.17**	**1541.74**
H. SHARE CAPITAL	**300**	**390**	**429**	**536.25**	**643.5**
20. Ordinary Share	120	120	120	120	120
21. Bonus Share	180	270	309	416.25	523.5
22. Preference Share	0	0	0	0	0
I. SHAREHOLDERS' RESERVES	**420.59**	**468.11**	**634.13**	**787.92**	**898.24**
23. General Reserve	239.75	286.75	329.18	381.79	443.44
24. Capital Reserve	90	39	107.25	107.25	128.71
25. Exchange Fluctuation Reserve	21.16	22.06	23.78	26.05	13.64
26. Other Reserve	0.77	0.77	51.43	102.86	154.28
27. Accumulated Profit (Loss)	68.91	119.53	122.49	169.97	158.17

Bills for Collection (contra)	43.77	0	0	0	0
Acceptances etc. (contra)	0	0	0	0	0
Balance Sheet Total	**19544.34**	**20672.43**	**23355.22**	**24762.04**	**27844.69**

Himalayan Bank Ltd.
Thamel, Kathmandu
Comparative Profit & Loss Statement

(Rs. in Million)

For the Period Ending	**7/15/2001**	**7/15/2002**	**7/15/2003**	**7/15/2004**	**7/15/2005**
A. Operating Income	**1572.92**	**1387.34**	**1443.54**	**1516.32**	**1757.88**
1. Interest (Earned)	1326.38	1149	1201.23	1245.89	1446.47
2. Commission & Discount	125.97	101.7	102.56	123.93	132.81
3. Exchange Income	114.22	104.6	109.6	112.42	137.3
4. Dividend	0	0	0	0	0
5. Other	6.35	32.04	30.15	34.08	41.3
B. Cost Of Service	**809.59**	**679.67**	**674.28**	**644.05**	**740.55**
6. Interest Paid	732.69	578.13	554.13	491.54	561.96
i. On Borrowings	10.89	6.49	36.14	35.67	36.22
ii. On Deposit	721.8	571.64	517.99	455.87	525.74
7. Salaries, Allowances & P.F.	76.9	101.54	120.15	152.51	178.59
C. 8. Provision for Bonus	48.34	38.78	40	46.73	58.06
D. 9. Other General Expenses	259.6	298.56	356.72	373.54	402.11
E.10. Gross Profit	**455.39**	**370.33**	**372.54**	**452**	**557.16**
F.11. Depreciation	22.7	23.74	23.28	34.73	37.41
G.12. Operating Profit	**432.69**	**346.59**	**349.26**	**417.27**	**519.75**
H.13. Income from Other Sources	2.32	2.45	10.76	3.3	2.79
I.14. Pre-tax Profit	**435.01**	**349.04**	**360.02**	**420.57**	**522.54**
J.15. Provision For Taxes	154.32	114.02	147.9	157.52	214.27
K.16. Net Profit	**280.69**	**235.02**	**212.12**	**263.05**	**308.27**
L.17. Transfer From Prev Year	25.45	68.91	120.3	122.49	169.97
M.18. Profit Distributed (% to Net Profit)	86.16	97.5	7.11	2.02	78.28
%	28.14	32.08	2.14	0.52	16.37
i. Equity Dividend	82.5	97.5	5.64	0	74.51
%	26.95	32.08	1.7	0	15.58
ii. Preference Dividend	0	0	0	0	0
%	0	0	0	0	0
iii. Other	3.66	0	1.47	2.02	3.77
%	1.2	0	0.44	0.52	0.79
N.19. Profit Retained	**223.65**	**206.44**	**325.32**	**383.53**	**399.96**
%	73.05	67.92	97.86	99.48	83.63