

A STUDY ON LENDING POLICY AND ITS EFFECTIVENESS OF  
JOINT VENTURE BANKS IN NEPAL

**A Thesis**

**Submitted By:**

**SANTOSH CHAULAGAIN**

Shanker Dev Campus

Campus Roll No. : 630/064

T.U. Regd. No.: 7-2-39-38-2004

**Submitted To:**

Office of the Dean

Faculty of Management

Tribhuvan University

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

Putalisadak , Kathmandu

2068

# **RECOMMENDATION**

This is to certify that the thesis

*Submitted by:*

**SANTOSH CHAULAGAIN**

*Entitled:*

**A STUDY ON LENDING POLICY AND ITS EFFECTIVENESS OF  
JOINT VENTURE BANKS IN NEPAL**

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

.....  
**Ruchila Pandey Dhakal   Prof. Bisheshwor Man Shrestha   Prof Dr Kamal Deep**

**Thesis Supervisor   Head of the Research Department   Campus Chief**

# VIVA-VOCE SHEET

We have conducted the viva –voce of the thesis presented

By

**SANTOSH CHAULAGAIN**

Entitled:

**A STUDY ON LENDING POLICY AND ITS EFFECTIVENESS OF  
JOINT VENTURE BANKS IN NEPAL**

and found the thesis to be the original work of the student and written according to the prescribed format. We recommend the thesis to be accepted as partial fulfillment of the requirements for the degree of

**Master of Business Studies (MBS)**

## Viva-Voce Committee

Head, Research Department .....

Member (Thesis Supervisor) .....

Member (External Expert) .....

## **DECLARATION**

I hereby declare that the work reported in this thesis entitled “**A STUDY ON LENDING POLICY AND ITS EFFECTIVENESS OF JOINT VENTURE BANKS IN NEPAL**” submitted to Office of the Dean, Faculty of Management, Tribhuvan University, is my original work done in the form of partial fulfillment of the requirement for the degree of Master of Business Studies (MBS) under the supervision of **Ruchila Pandey** of Shanker dev Campus, T.U.

.....  
**SANTOSH CHAULAGAIN**  
**Shanker DevCampus**  
**Campus Roll No. : 630/064**  
**T.U. Regd. No.: 7-2-39-98-2004**

## **ACKNOWLEDGEMENTS**

This thesis is prepared and submitted to the faculty of management as a partial fulfillment of the requirements for the degree of Master in Business Studies (MBS).

Many helpful hands are involved to support me for preparing this thesis. I would like to express my deep gratitude towards my supervisor Mrs Ruchila pandey for inclusive and constant guidance, who immensely contributed her time and labor to guide me for the preparation of this thesis. Without her guidance and valuable suggestions, it would have been extremely difficult to bring it to fruition.

I also express my sincere thanks to all the staffs of Joint Venture Banks who are included in the research for providing the information and necessary data sincerely and timely and all the teachers and the staffs of Shanker Dev Campus whose kind cooperation have made it possible to complete the work

I am also indebted to my friends, family members as well as relatives for their kind cooperation and encouragement. Especially, I am very much appreciated to my friends Rajan kc, Deepak duwadi and Naniram kafle who helped me in each and every steps during preparation of this thesis.

**Santosh Chaulagain**  
Shanker Dev Campus

# TABLE OF CONTENTS

RECOMMENDATIONS	Page No.
VIVA-VOCE SHEET	
DECLARATION	
ACKNOWLEDGEMENTS	
TABLE OF CONTENTS	
LIST OF TABLES	
LIST OF FIGURES	
ABBREVIATIONS	
<b>CHAPTER – I INTRODUCTION</b>	<b>1-10</b>
1.1 Background of the Study	1
1.2 Profile of the Concerned Banks	4
1.3 Statement of the Problem	6
1.4 Objectives of the Study	8
1.5 Scope of the Study	8
1.6 Limitation of the Study	9
1.7 Organization of the Study	9
<b>CHAPTER – II REVIEW OF LITERATURE</b>	<b>11-31</b>
2.1 Conceptual Framework	11
2.1.1. Joint Venture Bank	11
2.1.2 Meaning of Some Banking Terminology	13
2.1.3 Features of a Sound Lending and Investment Policy	15
2.2 Review of Related Studies	17
2.2.1 NRB Directives Review	17
2.2.2 Review of Articles	21
2.2.3 Review of thesis	25
2.3 Research Gap	31

<b>CHAPTER – III RESEARCH METHODOLOGY</b>	<b>32-40</b>
3.1 Research Design	33
3.2 Population and Sample	33
3.3 Sources of Data	33
3.3.1 Sources of Secondary Data	33
3.4 Analytical Tools	34
3.4.1 Financial Tools	34
3.4.2 Analysis of Growth Ratio	36
3.4.3 Statistical Tools	37
<b>CHAPTER – IV PRESENTATION AND ANALYSIS OF DATA</b>	<b>41-92</b>
4.1 Measuring the Lending Strength	41
4.1.1 Measuring the Lending Strength in Relative Term	41
4.1.1.1 Total Assets to Total Liabilities Ratio	42
4.1.1.2 Non Interest Bearing Deposits to Total Deposits Ratio	43
4.1.1.3 Loans and Advances to Total Assets Ratio	45
4.1.1.4 Loans & Advances and Investment to Total Deposits	
4.1.1.5 Ratio	47
4.1.1.6 Loans and Advances to Shareholders Equity Ratio	48
4.1.2 Measuring the Lending Strength in Absolute Term	49
4.1.2.1 Loans and Advances	50
4.1.2.2 Interest Income from Loan and Advances	51
4.1.2.3 Provision for Debts Doubtful	52
4.1.2.4 Net Profit	53
4.2 Analyzing the Lending Efficiency and Its Contribution in Total Profitability	55
4.2.1 Loan Loss Provision to Total Loans and Advances Ratio	55
4.2.2 Interest Income to Total Income Ratio	68
4.2.3 Interest Expenses to Total Deposit Ratio	70
4.2.4 Interest Suspense to Interest Income from Loans and Advances	
4.2.5 Ratio	71
4.2.6 Interest Income to Interest Expenses Ratio	72

4.3	Analysis of Growth Rate	74
4.3.1	Growth Ratio of Total Deposit	74
4.3.2	Growth Ratio of Loan and Advances	75
4.3.3	Growth Ratio of Total Investment	77
4.3.4	Growth Ratio of Net Profit	78
4.4	Correlation Coefficient Analysis	79
4.4.1	Co-efficient of Correlation Between Deposits and Loan and Advances	79
4.4.2	Co-efficient of Correlation Between Investment and Loan and Advances	81
4.4.3	Co-efficient of Correlation Between Shareholders Equity and Loans and Advances	83
4.4.4	Co-efficient of Correlation Between Total Income and Loan and Advances	83
4.4.5	Co-efficient of Correlation Between Interest suspense and Interest Income	84
4.4.6	Co-efficient of Correlation Between Provision for Loan Loss and Advances	85
4.4.7	Co-efficient of Correlation Between Interest Income and Net Profit	86
4.5	Major Finding of the Study	88
<b>CHAPTER-V SUMMARY CONCLUSION AND RECOMMENDATIONS</b>		<b>92-97</b>
5.1	Summary	92
5.2	Conclusion	94
5.3	Recommendations	95

## **Bibliography**

## **Appendix**

## **LIST OF TABLES**

<b>Table No.</b>	<b>Title</b>	<b>Page No.</b>
4.1	Total Assets to Total Liabilities Ratio	42
4.2	Non Interest Bearing Deposit to Total Deposit Ratio	44
4.3	Loans and Advances to Total Assets Ratio	46
4.4	Loans and Advances and Investment to Total Deposit Ratio	47
4.5	Loan and Advances to Shareholders Equity Ratio	46
4.6	Loans and Advances	47
4.7	Interest Income from Loan and Advances	47
4.8	Provision for Doubtful Debts	48
4.9	Net Profit	49
4.10	Loan Loss Provision to Total Loans and Advances Ratio	50
4.11	Loan Classification and Provisioning in NABIL	52
4.12	Loan Classification and Provisioning in Everest	57
4.13	Loan Classification and Provisioning in SBI Bank	61
4.14	Non-Performing loans to Total Loans and Advances Ratio (%)	65
4.15	Interest Income to Total Income Ratio	66
4.16	Interest Expenses to Total Deposit Ratio	67
4.17	Interest Suspense to Income from Loans and Advances Ratio	68
4.18	Interest Income to Interest Expenses Ratio	69
4.19	Growth Ratio of Deposit	70
4.20	Growth Ratio of Loan and Advances	70
4.21	Growth Ratio of Total Investment	71
4.22	Growth Ratio of Net Profit	72
4.23	Correlation between Deposit and Loan and Advances	73
4.24	Correlation between Investment and Loan and Advances	75
4.25	Correlation between Shareholders Equity and Loans and Advances	76
4.26	Correlation between Total Income and Loan and Advances	77
4.27	Correlation between Interest Suspense and Interest Income	78
4.28	Correlation between Provision for Loan Loss and Loan and Advances	79
4.29	Correlation between Interest Income and Net Profit	80

## LIST OF FIGURES

<b>Figure No.</b>	<b>Title</b>	<b>Page No.</b>
4.1	Loan Classification of NABIL– 2064/65	55
4.2	Loan Classification of NABIL– 2065/66	56
4.3	Loan Classification of NABIL –2066/67	56
4.4	Loan Classification of Everest –2064/65	59
4.5	Loan Classification of Everest –2065/66	59
4.6	Loan Classification of Everest– 2066/67	60
4.7	Loan Classification of SBI –2064/65	62
4.8	Loan Classification of SBI – 2065/66	62
4.9	Loan Classification of SBI – 2066/67	63

## ABBREVIATIONS

ATM	:	Automatic Machine Teller
B.S.	:	Bikram Sambat
BOKL	:	Bank of Kathmandu Limited
C.V.	:	Co- Variance
CAR	:	Capital Adequacy Ratio
CD	:	Credit Deposit
CRR	:	Cash Reserve Ratio
DBL	:	Dubai Bank Limited
EBIL	:	Emirates Bank Limited
EBL	:	Everest Bank Limited
FDR	:	Fixed Deposit Receipt
GDP	:	Gross Domestic Product
HBL	:	Himalayan Bank Limited
JVB	:	Joint Venture Bank
KBL	:	Kumari Bank Limited
LLP	:	Loan Loss Provision
Ltd.	:	Limited
NABIL	:	NABIL Bank Limited
NBBL	:	Nepal Bangladesh Bank Limited
NBIL	:	National Bank Limited, Bangladesh
NCCB	:	Nepal Credit Commercial Bank
NG	:	Nepal Government
NGBL	:	Nepal Gridnlays Bank Limited
NIBL	:	Nepal Investment Bank Limited
NIDC	:	Nepal Industrial Development Corporation
NPA	:	Non Performing Assets
NPL	:	Non-Performing Loan
NRB	:	Nepal Rastra Bank
P.Er	:	Probable Error
PL	:	Performing Loan
PNB	:	Punjab National Bank
RBB	:	Rastriya Banijya Bank
Rs.	:	Rupees
S.D.	:	Standard Deviation
SBI	:	Nepal SBI Bank Limited
SCBNL	:	Standard Chartered Bank Nepal Limited
TL	:	Total Loan
WTO	:	World Trade Organization
NGBL	:	Nepal Grindlays Bank Ltd

# **CHAPTER - I**

## **INTRODUCTION**

### **1.1 Background of the Study**

Nepal is a developing country. Development and expansion of financial Institutions are essential for the economic growth of the country. The pace of development of depends on any country in this modern era largely the level of financial development. Financial Institutions provide capital to develop trade, industry and business. Banks Finance companies, co-operative societies, Insurance companies, stock exchange help in the economic development of the country.

As a financial institution, the commercial banks are one of the major media in the framework of every economic because they collect scattered saving and provide loans to the various sectors according to the need of the clients. When banks provide loans new businesses and industries are established which helps in the development of the country. In this way the whole infrastructure of national development, direction of economy at the rate of progress are strengthen by the banking system. The primary issue of development is to increase the investment in productive sector of the economy such as industrial and commercial production trade and commerce, international business, generation of individual income and expenditure government revenue etc.

Generally the word bank refers to a commercial bank. Therefore, the activities of a commercial bank are synonymous to banking. A commercial bank refers to such type of bank, which deals in money exchanges accepts deposits of advance loans. The pace of time has changed the portfolio of banking business from its primary function to other functions such as merchant banking, credit card, business documentary, credit traveler cheques, business home banking etc.

Lending is one of the most important functions of commercial bank. Credit is finance is the term used to denote transaction involving the transfer of money or other property on promise of repayment, usually at a fixed future date. The person who deposits money in the bank becomes creditor and the person who borrows money from the bank becomes debtor of the bank. The principal function of credit is, first to transfer property in the bank, which wants to take a loan. The transfer is temporary, made for a loan price and interest. In the present context, lending money becomes one of the main sources of revenue to the bank. It plays an intermediary role in channeling funds from lenders/savers to borrower's spenders. The quality of loan, quality of borrower and quality of securities determine the health of any banker. At the time of providing a loan, a bank should follow some principles and policies. No banker should give a loan, unless he has sufficient security in the borrower that will not be necessary to seek the help of court for recovery. Safety of funds, purpose of loan, security for loan, profitability, spread of loan portfolio and compliance with national interest are some of the principles that a banker should follow while granting a loan. Besides that, the character of the person receiving credit, the capacity of the borrower to utilize the fund, the percentage of the borrower's stake in his business are the basic elements which measure the quality of the borrower and ultimately the quality of the loan. "The classical economic functions of bank and other financial intermediaries all over the world have remained virtually unchanged in modern times. What has been changed are the institutional structure, the instruments and the techniques used in performing these functions" (Bhattacharya, 1998:15).

This way, a bank plays an important part in the development of trade, commerce and industries. Today, no banker can survive for the long run without a proper standing of the economy and no economy can pace ahead without a proper banking system built." Moreover, the ability of banks to gather and analyze financial information has given rise to another view of why banks exist in modern society. Most borrowers and depositors prefer to keep their financial records confidential, shielded especially from competitors. Banks are able to fulfill this need by offering high liquidity in the deposits they sell. More people believe

that banks play only a narrow role in the country –taking deposits and making loans the modern bank has had to adopt new roles in order to remain competitive and responsive to public needs. Hence apart from the above roles” (Vaidya, 2001:31).

Commercial banks are established on the basics of the commercial bank act. At present there are 31 commercial banks which are running in competitive environments. The established commercial banks were not only providing poor service and facilities to their customers but also lack of proper investment policies in different sectors and unnecessary rules and regulation harassed the customer. As a result in fiscal year 2039/40 new banking polices was introduced for the establishment of new banks by the joint investments of foreign nations which gave a new horizon to the Nepalese banking sectors. Result of which, several joint venture banks evolved in the last decade. These joint venture banks were established to invite foreign investment and modern technology to provide financial services to the target market.

Commercial banks are established on the basis of commercial banks which are running in competitive environment. Nepal Arab Bank (NABIL) was the first joint venture bank established in 1984 AD. These banks are such types of bank which accept and re-lend these deposit to the people for short-term in this study three commercial banks are considering namely. NABIL Bank limited, Nepal SBI Bank limited and Everest Bank limited was established as a joint venture banks in 1984 AD, 1993 AD and 1993 AD respectively.

## **1.2 Profile of the Concerned Banks**

### **A) NABIL Bank Limited**

NABIL Bank Limited” the first commercial bank was incorporated in 1984. Dubai bank ltd was the initial joint venture partners with 80% equity investments. The share owned by Dubai bank limited (DBL) where transferred to Emirates Bank international limited. (EBIL) Dubai. Later on EBIL sold its entire stock to national bank limited, Bangladesh (NBLB). National Bank ltd. Bangladesh is managing the bank in accordance with the technical services agreement sign between it (NABIL) and the bank on June 1995. It has introduced an Automatic Teller Machine (ATM) first time in Nepal in its three valley branches namely, Kathmandu valley namely in Kantipath ,New road, Lalitpur and a rural area branch in Jorpati and the corporate office in Kamaladi. It has a credit card counter in Thamel also. Besides, the bank has branches in Biratnagar, Itahari, Birjunj, Alau, Pokhara, Lakeside, Butwal, Bhairahawa and International Airport. Now, this counter is restricted in departure lounge and domestic terminal only. Currently the bank has 48 branches in operation. It was incorporated with the objective of extending international standard modern banking services to various sectors of the society

The present configuration consists of 50% share capital of National Bank ltd. Bangladesh. 10% of Nepal industrial development corporation (NIDC), 9.66% of Rastriya Bima Sansthan, 0.34% of Nepal stock exchange and 30% of Nepalese public. AT present 20 branches of the bank are operating in different parts of the country. Authority capital and paid up capital of NABIL Bank Limited are Rs.500 million and Rs. 491.6544 million.

The following activities and services are provides by NABIL including normal functions:

- **Tele banking**
- **Credit and facilities**
- **Deposit locker**
- **Western union money transfer**

- **ATM**
- **International trade and bank guarantee**

### **B) Nepal SBI Bank Limited**

Nepal SBI Bank limited was registers under the company act 1964 in 1993. This is the joint venture of state bank of India and Nepali promoters. State bank of India manages the bank under the joint ventures and technical services agreement signed between it and Nepali promoters. The state bank of India is holding its 50% equity share. This bank provides loan to agricultural, commerce and industrial sectors. The bank started its banking operation on 18<sup>th</sup> July 1993.

The present configuration consist of 50% of state bank of India , 30% of Nepalese public , 15%of employee provident fund and 5% agricultural development fund.

The following activities and services are provides by SBI are as follows:

- Conventional banking facilities
- Any branch banking
- International trade and bank guarantee
- Remittances

### **C) Everest Bank Limited (EBL)**

Everest bank limited was registration under the company act 1964 in 19<sup>th</sup> November and started banking transaction in 16<sup>th</sup> October 1994. This is the joint venture bank of India and Nepalese promoters. A term of professional deputed by Punjab national bank under a technical services agreement manager it, and managing director is the executive director deputed by PNB under this arrangement including main branch (i.e. head office) in Nepal. An authorized capital of the bank had been Rs.240 million , issued Rs. 240 million, issued Rs. 120 million and paid up capital Rs.117.5645 million in the beginning

in 2051/52. But a present, an authorized capital of the bank has Rs.400 million ,issued Rs.264 million and Nepal and paid up capital Rs. 399.3186 million. It was started with a view and objective of extending professionalized and efficient banking services to various segment of the society. It has 42 branches in operation.

The present configuration consist of 20% Punjab national bank (India), 50% of Nepalese promoters and 30% of general public.

The objectives of Everest bank limited are as follows:

- To play an important role in facilitating indo-Nepal trade this is growing with the support of large network of branches of Punjab national bank in India.
- To provide a whole range of international services to facilitate Nepal trade and tourism.
- To provide the full range of quality banking services to both the business community and common man
- To participate in the emerging industrial scenario in Nepal where Punjab's age-old expenses, banking experience and expertise would come in handy.

The bank has not paid any dividend in 2051 /52, has paid dividend of Rs. 15 per share in 2055/56 and has paid Rs 20 per share with bonus share for the year 2056/57. This bank is awarded by "bank of year 2063/64."

### **1.3 Statement of the Problem**

The present situation of Nepal is economically unstable. There is no peace and security in the country so the investors are discouraged to invest. Banking industries are facing the problem from the component of external environment such as political, legal, economics and social. The unstable politics is the main cause .which is hampering for the growth of banking sectors. The corruptions make by the top level management negligence, over staffing are the some reasons that are facing by the banks. The other common problems

both joint venture banks and state owned commercial banks and state owned commercial banks is the cut through completion. Most people of Nepal are illiterate and people are unaware about the banking system. Due to the lack of effective human resources and trained manpower, growing banks is the serious problem for the existing healthy competition.

The joint venture banks are not interested in granting loan to primary and deprived sector of the economy. Banks are active only in urban sector because they see great opportunities for the minimization of profit. Rural areas are being neglected. There are only few rural development banks active in Nepal while Nepal is full of rural areas.

However, subsequent development of commercial banks in quality has not been satisfying commercial banks in Nepal has been facing several problems.

- The joint venture banks are not interested in granting loan to the primary sector.
- Joint venture banks have concerned their operation only in urban areas.
- Lack of good lending opportunities banks are facing problem of over liquidity etc.

The research work intends to explore the following questions.

- 3 **What is the relationship of loan and advances, investment to total deposit and with loan loss provisioning?**
- 4 **Does commercial bank follow Nepal Rastra Bank (NRB) direction in terms of lending?**
- 5 **What is the proportion of non-performing loan in total lending?**

#### **1.4 Objectives of the Study**

In our concern of the study, to find out the negative factors related towards the loan management and to provide the suggestion to replace the negative factors with the positive factors and to make the loan management effective and efficient and the study mainly focused on the following points. The specific objectives of this study are:

- To study and analyze the lending strength and lending efficiency of the banks
- To analyze the lending contribution in total profitability of the study
- To compare the loan and advances, profitability, deposits positions of the joint venture banks
- To provide necessary suggestions on the basis of major findings of the study

### **1.5 Scope of the Study**

There are more than 29 Commercial banks functioning in our country at present. But there are only few researches in lending policy of joint venture commercial bank. Lending is one of the main functions of commercial bank where the whole banking business is rested upon. thus the study three joint venture commercial bank and especially in their lending policies carry a great significance to the banking professional, to the share holder of the banks and to the student who wants to know about lending policy of commercial bank. The proposed bank namely NABIL bank limited, Nepal SBI bank limited and Everest bank limited are significantly similar in many aspects of their volume and quality of operation.

### **1.6 Limitations of the Study**

This study is done for the partial fulfillment for MBS degree in management. So this study has certain limitation and constraints are as follows.

- The study is concentrated only on those factors that are related with credit policy.
- The study is based on primary and secondary data. But most of the data are of secondary nature.
- The study has taken only concerned bank, NABIL Bank ltd., Nepal SBI Bank ltd. and Everest bank ltd.
- Due to the time and resources factor only three joint venture banks are taken for the study are NABIL Bank ltd., Nepal SBI Bank ltd. and Everest Bank ltd.

- Due to limited time and resource constraint, these studies will neither be comprehensive nor extensive
- This study would only be concerned with fulfilling the partial requirement in Master of Business Studies (MBS)

## **1.7 Organization of the Study**

This study has been divided into five chapters and is organized as follows.

### **Chapter - I: Introduction**

The first chapter is the introduction chapter, which consists of background of the study, statement of problem, objectives of the study, importance of study, limitation of the study and organization of the study.

### **Chapter -II: Review of Literature**

The second chapter deals with the review of literature with concept of some terminologies of the lending. The second part of these chapters consists of review of books, journals, previous study, research paper and review of unpublished of various research students.

### **Chapter -III: Research Methodology**

The third chapter deals with the research methodology used in this study. It consists of introduction, research design, sources of data, population and sample, data gathering procedure and analysis of data.

### **Chapter - IV: Presentation and Analysis of Data**

Fourth chapter is the analytical presentation of the study. This chapter consists of analysis, interpretation and major findings of the study. This is a most important part of the study.

### **Chapter -V: Summary, Conclusion and Recommendations**

Fifth chapter deals with the summary, conclusion and recommendation of the study.

The bibliography and appendices is also included in the chapter.

## **CHAPTER - II**

### **REVIEW OF LITERATURE**

Several research works have been done in various aspects of commercial banks especially financial performance, investment policy, resource mobilization, lending policy, compliance of NRB directive by banks etc. There are some books, journals, articles other studies done related with lending and investment aspect of banks. Some of the relevant studies, literatures on lending and investment have been reviewed below. This chapter is categorized into two different headings:

#### **2.1 Conceptual Framework**

The chapter focuses to discuss briefly about the theoretical concept of the loans of the loans and advance and its relation with other subject.

##### **2.1.1 Joint Venture Bank**

Banks are an essential part of the business activity that is established to safeguard people's money thereby using the money in making loans and investment. There are several commercial banks operating inside and outside the valley. Every bank invests lots of money in some profitable business. An investment is the commitment of money that is expected to generate additional money.

The term 'bank' particularly denotes commercial bank. In short, the organization, which deals with money and credit, is known as bank. Before 1936, in Nepal there were no banks at all. All the money transactions were carried out by a few moneylenders, truly speaking for the first time Goldsmiths were doing the banking activities, who received deposits and lend money to their clients. The primitive people were anxious for keeping their valuable ornaments and money in their houses. They kept these goldsmiths because

of safety motive. Thus, for the first time, people began to keep their valuable things in the hands of goldsmiths because they had safety vaults.

At the preliminary stage of development of banking system, there were Tankadharis, meaning money dealers, were the owners of the money transactions. Later on, during the period of Prime Minister Ranodeep Singh Tejarath Adda was established in Nepal by granting loan to civil servant. Tejarath Adda was governed financial institutions. Thus Tejarath was replaced by a commercial bank known as the Nepal Bank Ltd, during the period of Juddha Shamsheer.

In developing country like Nepal, the needs of the masses could not be fulfilled only by such institution. In the history of Nepal, to solve this problem, for the first time in 1994 B.S. Nepal Bank limited was established as one of the helping tools to overcome those obstacles as one semi government organization. It has done pioneering function in spreading the banking habit among the people but we were in need of a central bank, which came into existence in 2013 B.S. named Nepal Rastra bank. It fulfill the growing credit requirement in 2022 B.S. Rastriya Banijya Bank is another commercial bank was set up. The purpose of this bank is also to provide facilities for the economic welfare of the general public. The establishments of modern commercial bank (joint venture bank) in 2041 B.S. have been passed.

“A joint venture is the joining of forces two or more enterprises for the purpose of carrying out a specific operation investment, production or trade” (Grupt, 1984:15)

In order to operate business organization under joint venture basis, there should at least be two partners from two different countries. Joint venture banks are the commercial banks, formed by, joining two or more enterprises for the purpose of carrying out specific operation such as investment in trade, business and industry as well as in the form of negotiation, between various groups of industries or traders to achieve mutual exchange

of good and services for sharing competitive advantage by performing joint investment scheme between Nepalese investors and their parent banks each supplying 50% of total investment. The parent banks, which have experience in highly merchandised and efficient modern banking services in many part of the world, have come to Nepal with latest technology and advanced management skills. Joint venture banks are established by jointing forces and with ability to achieve a common goal with each of the partners. They are more efficient and efficient monetary institution in banks in Nepalese context.

The primary objectives of these joint venture banks are always to earn profit by investing or granting associated with trade, business, industry etc.

## **2.1.2 Meaning of Some Banking Terminology**

### **a) Deposits**

Commercial banks act 2031 B.S. (1974 A.D.) defines “deposit as the amounts deposited in a current, saving or fixed accounts of a bank or financial institution.” A bank takes various types of deposits from individual, business organization, general people and other different type of institutions. These deposits are the main source of capital for the commercial banks. Banks flow such amount as loan and invests in different sectors to earn profit. In Nepal, banks grant permission to their customers to open three types of accounts under various terms and condition, which are as follows:

- **Current Deposits / Demand Deposit**

The deposit in which an amount is immediately paid at the time of any account holder’s demand is called demand deposit or current deposit. The bank does not provide interest in this deposit.

- **Saving Deposit**

The bank can collect through the saving deposit. According to commercial bank Act 2031 (1974), saving account means “an account of amount deposited in a bank for saving purposes.” Generally in saving accounts there are certain restrictions like maximum

amount that can be deposited and on withdrawal of the account also. In this type of deposit, customers get some interest on the deposit.

- **Fixed Deposit**

According to the commercial bank act 2031 B.S. (1947 A.D.), 'Fixed Account' means an account of amounts deposited in a bank for certain period of time. The customers opening account deposit their money in this account, for a fixed period. It is also called time deposit because this amount is deposited for a certain period of time. The rate of interest is higher than the saving or current account as the banks use this amount for making investments and granting loan and advances.

- **Loan and Advances**

Earning from loans and advance are the major of income for bank. The commercial banks are interest rate that exact between deposits and improve its banking foundation. They must pay more attention to the flow of loan. Most of the bank failures in the world due to the shrinkage in the value of loans and advance. Loan is a risky of non-repayment of loan is known as credit risk or default risk. A proper loan management is necessary to gain profit. Various factors like policy of loan flow, loan administration, audit of loan, renewal of loan, the conditions of loan flow, documents of the loan flow, provision of the security, provision of the payment of the capital, its interest etc should be properly managed.

- **Investment on Government Securities, Shares and Debentures**

A commercial bank invests on government securities, shares and debentures as they can earn interest and dividend from these types of investments. A good investment portfolio is maintained in terms of liquidity these investments as these securities are highly marketable and in term of investing the excess funds out of funding in the loans and advances. Banks can also ensure the inflow of cash to meet the large loan demands and withdraws of its customers.

- **Bank invests on Other Company's Shares and Debentures**

To invest its excess funds also to meet the requirement of NRB directives of investment, the bank invests in development banks, NIDC's regional development banks as share capital.

- **Off Balance Sheet Activities**

Off balance sheet activities involve contracts for future purchase or sale of assets and all these activities are contingent obligations. These are not recognized as assets or liabilities on balance sheet. Some examples of these items are letter of credit, letter of guarantee, bills of collection etc. These activities are very important, as they are the good source of profit to bank though they have risk. Some economists and finance experts say that the bank highlights such activities to expand the modern transactions of a bank.

### **2.1.3 Features of a Sound Lending and Investment Policy**

The income and profit of a financial institution depends upon to its lending procedure, lending policy and investment of its fund in different securities. A sound lending and investment policy is not only pre-requisite for bank's profitability but also of almost significance for the promotion of commercial savings of an under developed and backward country like Nepal.

The factor that banks must consider for sound and lending and investment policies are explained as under.

- **Safety and Security**

The banks never invest its fund in those securities, which have too much depreciation and fluctuations because a little difference may cause a great loss. It must not invest funds into speculative to businessman who may be bankrupt at once and who may earn millions in a minute also. The bank should accept that types of securities, marketable and high market prices. In this case, "MAST" should be applied for the investment whereas:

M= Marketability

A= Asscertainability

S= Stability

T= Transferability

- **Liquidity**

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

- **Profitability**

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

- **Suitability**

A banker should always know that why a customer is in need of loans. If a borrower misuses the loan granted by the bank, he will never be able to repay the loan and bank will possess heavy bad debts. Therefore in order to avoid such circumstances advances should be allowed to select suitable borrowers and it should demand all the essential detailed information about the scheme of the project. Bank must keep in mind the overall development plans of the nation and the credit policy of the central bank.

- **Diversification**

Investment and credit concentrated on same geographical region, same sector of business and few customers increase the risk. Hence, the policy should fix a cap on all these aspects. As the saying goes “A bank should not put all its eggs in the same basket.” Therefore, in order to minimize the risk, a bank should diversify its investment in different securities. This diversification or portfolio investment helps to earn good return and at the same time minimize the risk and uncertainty.

- **Legality**

A commercial bank must follow the rules and regulations and statutory directives issued by Nepal Rastra bank, ministry of finance and others while issuing securities and mobilizing their funds. In Nepal, NRB restricts financial institution licensed by it to invest in securities of each other.

## **2.2 Review of Related Studies**

### **2.2.4 NRB Directives Review**

The central bank (NRB) has established legal framework by formulating various rules and regulations (prudential norms) to mobilize the funds in terms of investment, lending etc to different parts of the nation. While making strategic plan in terms of investment and lending decisions these directives should be considered as they have, direct impact with the banks. NRB has issued these directives in order to maintain healthy competition between these banks and for the development of the nation in the financial sector. NRB has formulated various rules and regulations related to the banking. Some of them are regarding investment, credit limit, priority and deprived sector loan, single borrower limit, cash reserve ratio (CRR) loan loss provision, capital adequacy ratio, interest spread, productive sector fund, paid up capital etc. Commercial bank act 2031 and Nepal Rastra foreign exchange regulation act 2019, along with the prevailing Nepalese law guides the activities of these banks.

### **Capital Fund**

For a new commercial bank minimum paid up capital is RS. 250 million to operate all over Nepal except Kathmandu valley. The paid up capital for establishing a national level new commercial bank shall be RS. 1 billion. By mid July 2066/67 (Ashad 2066), existing all banks require to raise capital fund to RS.1000 million through minimum 10% paid up capital increment each year.

### **Capital Adequacy Ratio (CAR)**

The capital adequacy ratio is the relationship between shareholder's funds (capital fund) to the total risk weighted assets of the bank. Capital adequacy ratio is calculated on a quarterly basis. The shortfall should be covered within next 6 months when there minimum core capital is not met. The higher the CAR the less levered the bank and safer from depositors point of view. Distribution of dividend, expansions of branches, distribution of loans, available of refinance from NRB etc. are not allowed until the fulfillment of shortfall of CAR.

On the basis of the risk-weighted assets, the banks shall maintain the prescribed proportion of minimum capital fund as per the following timetable.

### **Core Capital**

The total capital fund is the sum of core capital and supplementary capital. The core capital comprises of paid up capital, share premium, non-redeemable shares, and general reserve fund and Accumulated profit and loss account. However, the amount of goodwill should be deducted while calculating the core capital.

### **Supplementary Capital**

Supplementary capital comprises of general loan loss provision, redeemable preference share capital, asset revaluation fund, exchange fund and any other unspecified reserves.

For the purpose of calculation of capital fund, the amount under the following heads, subjected up to one hundred percent of the core capital should be included under the supplementary capital.

### **Cash Reserve Ratio**

Commercial banks required maintaining minimum cash reserve as per NRB's regulation 22 July 2002. It requires maintaining the cash at till 2% of total deposits, balance at NRB

7% of current and saving deposits and 4.5% of fixed deposit. Cash reserve is not mandatory for foreign currency deposit and for margin deposits.

### **General Loan Loss Provision**

Under this head, provision made against the pass loan should only be included. The amount should not exceed 1.25% of the total risk weighted assets. However, loan loss provisioning on sub standard and doubtful loans should be available to be included under the supplementary capital during the following time period.

### **Loan Classification and Loan Loss Provisioning**

CB's are required to classify their loan on the basis of overdue ageing schedule and provide on a quarterly basis as follows:

Classification of loan	loan loss provision
Pass	1%
Substandard	25%
Doubtful	50%
Loss	100%

Pass loans are also defined as performing loans. Loans and advances falling in the category of substandard, doubtful and loss are classified and define as non-performing loan.

Loans should be classified into four categories:

**Pass:** Loans and advances, whose principle amounts are past due and past due for period up to three months, should be included in this category. These are classified as performing loans.

**Sub-standard:** All loans and advances that are past due for a period of three months to six months should be included in this category.

**Doubtful:** All loans and advances that are due for a period of six month to one year should be included in this category.

**Loss:** Loan and advances, which are due for a period of more than one year as well as advance & which have least possibility of even partial recovery in future should be included in this category.

### **2.2.2 Review of Articles**

Under this lending, efforts have been made to examine and review some of the related articles published in different economic journals, bulletin of world bank, dissertation papers, magazines, newspapers and other related books understanding and foundation knowledge base, which is prerequisite to make this study.

Khadka (2000) conducted a study entitled *A Study on Investment Policy of NABIL in Comparison to Other Joint Venture Banks of Nepal* the main objective of the study was to evaluate the liquidity, assets 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 and fund based on-balance sheet transaction.

The researcher found that liquidity position of NABIL is worse than that of Nepal Grind lays Bank ltd and Nepal I Indosuez Bank ltd. 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 operation as well as off-balance sheet operation than that of other joint venture Banks. NABIL is more successful in deposit mobilization but failure to maintain high growth rate of NGBL and NIBL.

The researcher has suggested the joint venture banks to be careful in increasing profit in real sense to maintain the confidence of shareholders, depositors and customers. The

researchers has strongly recommended NABIL to utilize its risky assets and shareholders fund to gain highest profit margin and reduces its expenses and collect cheaper fund for more profitability. The researchers has recommended investing its fund in different sectors of investment and administering various deposit scheme, price bond scheme, gift cheque scheme, house building deposit scheme etc. the researchers has recommended following liberal lending policy and investment more percentage of total deposit as loan and advances.

This study is based on five years period 1992 to 1996. He has taken only two banks to compare the investment policy of NABIL with NGBL and NIBL among thirteen commercial banks of Nepal. It would not be quote investment policy of NABIL as good or bad only five years data.

Ghimire (2005) explore in his research *Non Performing Assets of Commercial Bank Cause and Effect* and found that Nepalese banking sectors in recent days are facing several problems with increasing number of problems. With the level of increasing NPA profitability performance of the bank has been badly affected. To find out the cause of non performing assets increment with commercial banks basis of loan floating procedure follow up practice carried out by the bank for recovery of overdue loan outstanding, internal responsible factor causing NPA growth have been tried to sort out.

Analysis shows that relationships of borrowers with top management as the most adopted basis for floating of loan in Nepalese commercial banks. Similarly respondent identified portfolio management consideration the second basis for floating loan in certain sectors. Monitoring and control, security offered and financial strength were average emphasis. It was found that commercial banks are giving least weight on personal integrity of the borrower while giving loan.

In regarding to the internal responsible factor that contributes turning good loan into bad loan. It was found that bad intension, week monitoring and miss management are the

most responsible factor for non performing assets. Similarly weak legal provision and credit concentration are found as the least preferred factor in turning good loan into bad. Some factors such as lack of portfolio analysis not having effective credit policy and shortfall on security were identified as having average effect on non performing assets growth. In connection to the external factors , it has been found that recession political and legal issues more relevant factors in turning good loan into bad, likewise, legal provision for recovery as reason for increment in non performing loan in Nepalese banks was found the factor having least impact. It is therefore can be generalized that economic and industrial recession and not having strong legal provision for the loan recovery are the major external factors that have major contribution for the increasing level of NPA. Gurung (2006) explored in his research *Lending Policy and Recovery Management of Standard Chartered Bank Nepal Ltd (SCBNL) and NABIL Bank Ltd* has found out the following results.

The deposit collection by the banks shows that increasing but in a fluctuating trend. The trend analysis of deposit collection the increase in deposit collection in the forthcoming years will continue. Out of different types of deposit collection account, higher account has been collected in saving deposit account. Out of the total deposit collection, SCBNL has disbursed 36% of average as a loan and NABIL has disbursed 52% of its deposit collection as a loan disbursement to deposit collection ratio of commercial banks, it is around 60%. This ratio is quite low incasing of sample bank especially of SCBNL. It is further proved by the calculation of correlation coefficient, which is 0.75 and 0.23 of SCBNL and NABIL respectively.

In order to analyze the recovery management of these banks, their loan loss provision and NPL were analyzed. While looking at the loan loss provision of SCBNL it is decreasing trend from 2002. The correlation coefficient of loan loss provision and loan disbursement of SCBNL is 0.36. While looking at the future trend of loan loss provision its shows the increasing trend in case of SCBNL and the trend of loan loss provision is decreasing

every year in case of NABIL, which is provided by the trend analysis. The correlation of loan loss provision and loan disbursement of NABIL is negative.

The main statement of his problem is there many banks are mushrooming although banks are not interested to expand their branch in remote rural area. There are difficulty and length formality of procedure for long term and medium term as well as short term loan,. Low deposit habit of Nepalese people and lack of strong recovery act of lending and bad debt. The main objectives of the dissertation are loan and advance providing procedure of bank, lending and investment sector of bank, recovery condition of both SCBNL and NABIL.

Gupta (2007) conducted a research study entitled *Comparative Analysis of Financial Performance of Commercial Banks in Nepal*. The researcher had taken Everest Bank Limited, Bank of Katmandu Ltd, and Standard Chartered Bank Nepal Ltd as sample. The major objective of the study was to evaluate Liquidity Ratio, Profitability Ratio and other market related ratios of these sample banks. The researcher had used descriptive and analytical research design in writing the research study. The research had also used F-test in testing hypothesis.

The researcher study concluded that among three sample bank BOK maintain the highest liquidity position during the research period in comparison to other banks. The study further added that SCBNL had excellent assets utilization in order to achieve the goal of maximizing the shareholders wealth. In the same way SCBNL generated the highest net profit and paid the highest dividend per share to shareholders.

The study further stated that there is no significance difference among the commercial banks in terms of profit of total assets ratio, and dividend payout ratio. The review of above relevant thesis has not doubt enhanced the fundamental study meaningful and purposive.

### 2.2.3 Review of Thesis

Tuladhar

Upendra (2005) entitled with *A Study of Investment Policy of Nepal, Standard Chartered Bank Ltd. (SCBL) in Comparison with Other JVB's in Nepal* has following objectives, major findings and recommendations.

The objectives of the research were as follows:

- To Study of the fund mobilization and investment policy with respect to fee based off balance sheet transaction and fund based on balance sheet activities
- To evaluate the growth ratios of loan and advance and total investment with respective growth rate of total deposit and net profit,
- To analysis the liquidity, efficiency, assets management and profitability position,
- To study the trend of deposit utilization towards total investment and loan and advance

The major findings and recommendations of the research were:

Nepal Gridnlays Bank Limited (NGBL) has maintained adequate liquidity than JVB's .It is in a better position to meet current obligation, NGBL has successfully maintained and managed its assets towards different income generating activities, the profitability position of NGBL is higher than other JVB's,. NGBL has invested higher portion of total working fund in government securities than other JVB's. NGBL's loans and advances to total deposit ratio is less than other JVB's. NGBL has the largest profit margin in comparison with JVB's.

Pandit, Deepak (2006) entitled with *Investment Policy Analysis of Joint Venture Bank (with special reference to NABIL and EBL)*” has following objectives, major findings and recommendations.

The objectives of the research were as follows:

- To evaluate the liquidity management, assets management efficiency,

- To analysis the profitability position, risk portion and investment practices of NABIL, BOK & EBL,
- To find out the relationship between deposit and investment, deposit and loan and advance, net profit and outside asset.

The major findings and recommendations of the research were:

NABIL has better liquidity position. It is in a good position to meets its daily cash requirement and current obligation. Liquidity obligation of EBL & BOKL has not been satisfactory; NABIL's loan and advances total deposit ratio is lower than EBL & BOKL. It doesn't seem to follow any definite policy regarding the management of its assets; the profitability position of all the banks is not satisfactory. The banks have not adopted sound investment policy in utilizing their surplus funds, BOKL & EBL are exposed to high credit risk and capital risk, and NABIL & BOKL have not been successful to increase their sources of funds. EBL has been successful in maintaining its higher growth rate of total deposit and there is significant relationship between deposits and total investment of BOKL & EBL but the same is not significant in case of NSBL.

Joshi Rabindra (2007) entitled with *A Comparative Study of Investment Policy of SCBNL & EBL* has following objectives, major findings and recommendations.

The objectives of the research were as follows:

- To Compare the investment policy of concerned banks and discusses the fund mobilization of the sample banks,
- To find out the empirical relationship between total investment, deposits and loan & advances and net profit and outside assets and compare them,
- To analyze the deposit utilization & projection for next five years of SCBNL and EBL,

- To evaluate comparatively the profitability & risk position liquidity asset management efficiency of SCBNL & EBL
- To Provide a package of possible guidelines to improve investment policy, its problems
- To solve some problems and provide suggestions and recommendation on the basis of the study.

The major findings and recommendations of the research were:

Both the banks have good deposit collection EBL has higher but fluctuating liquidity position. It is in a good position to meet daily cash requirement and current obligation, SCBNL has successfully maintained and managed its assets towards different income generating activities SCBNL has invested high portion of total working fund in government securities and share and debentures of other companies, the profitability position of SCBNL is comparatively better than EBL, the liquidity risk ratio, credit risk ratio of SCBNL is lower than that of EBL, SCBNL has not been successful to increase its sources of funds and its mobilization i.e., loans and advances and total investment.

Raya Kumar Tanka (2008) entitled with *Investment Policy and Analysis of Commercial Banks in Nepal (A comparative study of SCBNL with NIBL & NBBL)* has following objectives, major findings and recommendations.

The objectives of the research were as follows:

- To Discuss fund mobilization and investment policy of SCBNL in respect to its fee based of balance sheet transaction with NIBL & NBBL,
- To evaluate the liquidity, efficiency profitability and risk position of the sample banks,
- To evaluate the growth ratios of loan and advances, total investment with other financial variables,

- To find out whether there is significant difference between the various important ratios of SCBNL with the ratios of NIBL and NBBL.

The major findings and recommendations of the research were:

SCBNL has good deposit collection, has made enough investment in government securities, but has provided less advances and loans to total deposit ratio, SCBNL has been successful in its on balance sheet operations but NIBL and NBBL been more successful in off balance sheet operations, the profitability position of SCBNL is higher than the other JVB's in the sample, credit risk ratio, capital risk ratio of SCBNL is lower than NIBL & NBBL, and SCBNL has maintained higher growth in investment and net profit and moderate growth in class and advances and deposits.

Shahi Roshan (2008) entitled with *Lending Operation and Practices of Joint Venture Banks in Nepal, A case of study NABIL, Standard Chartered Bank and Himalayan Bank Limited* has following objectives, major findings and recommendations.

The main objectives were:

- To determine the liquidity position, the impact of deposit in liquidity and its effect on lending practices, measure the banks lending strength. (the lending strength shall be measured in obsolete measures)
- To analysis the volume of contribution made by each bank in lending), the analysis of the portfolio behavior of lending and measuring the ratio and volume of loans and advances made in agriculture, priority and productive sector,
- To evaluate the lending performance in quality, efficiency and its contribution in total income,
- To measure the growth rate and prosperity of growth based on trend analysis.

The main findings of the study were:

Measurement of the liquidity has revealed that liquid fund to total deposit ratio of three banks are not widely varied. All the banks are capable of allocate liquid fund in total

deposit. Though the mean ratio lies between “0.4099 to 0.4621” the liquidity position of banks satisfactory. Cash and bank balance to interest sensitive liability has measured the liquidity risk arising from fluctuation of interest rate in market, the mean ratio has ranged from 0.076 to 0.2560. The combined mean of NABIL is higher among them, which shows that high volume to interest sensitive liability (deposit) in deposit mix of NABIL. Due to the high deviation of ratios among the banks the combined mean has also deviated far from NABIL & SCBNL. The high degree of core deposits in the composition of liability of commercial banks requires them to maintain low liquidity ratio as compare to other industries. The amount of deposits in the balance sheet, to the high extent, represents the average deposit maintain by the commercial banks. The management of lending strength in relative term has revealed that the total asset to total liability of SCBNL has the highest ratio. However, the performance of other two banks has not deviated for from the mean ratio of SCBNL and the combined mean. The high ratio is the result of high volume of shareholder’s equity inheritability mix. The ratios of all the banks have not significantly deviated from the combined mean. The ratio of non-interest bearing deposit to total deposit ratio of HBL has significantly deviated from the combined mean. Therefore high volume of saving and fixed deposit can be concluded loan and advances to total assets ratio have also been deviated highly between the mean ratios has ranged from 0.3194 to 0.4631. SCBNL tendency to investment in government securities has resulted with the lowest ratio of loan and advances through out the years has resulted NABIL and HBL as highest.

Maskey Lalima (2009) entitled with *A Comparative Study of Lending Performance of Nepal Arab Bank Limited and Nepal Investment Bank Limited* has following objectives, major findings and recommendations.

The main objectives were:

- To Measure the banks lending strength and lending efficiency,

- To analyze the lending contribution of total profitability, study the loan and advances, profitability, deposits position of the commercial banks under study,
- To analysis the relationship among different financial indicators relating to loan and advance, total investment, profitability, deposit and non-performing loan in commercial banks under the study, and
- To measures on the basics of findings of the study to the concerned bank to improve on lending performance.

Major finding and recommendation of the study were:

The total asset to total liability of NIBL has the highest ratio. The mean ratio is not highly deviated in comparison between the banks. NABIL has the least ratio however it is closer to the combined mean ratio of the banks. The high ratio is due to high volume of shareholders equity in the liability mix. The increasing ratio of loan and advances of NIBL has resulted in highest mean ratio of loan and advances to total assets ratio. The NABIL follows steadier ratio and has resulted its ratio to reach more than the combined mean ratio. The ratio of loan and advances to shareholders equity has gained the significant importance in measuring the capital fund and contribution in loan and advances. The combined mean is highly deviated from the mean ratio of the banks, which indicates that there is significant difference in the performance of the banks. The ratio of interest income from loan and advances to total income shows that there is a large contribution of interest income in the total income. NIBL has highest mean ratio and SCBNL has the lowest, NBIL's mean ratio is higher than the combined mean. The low cost of deposit as shown by interest expense to total deposit ratio has resulted this ratio of SCBNL to be the lowest. The growth ratio of total deposit and loan & advances by analysis of five years of study period found out that NIBL has highest growth ratio and it has improved exceptionally well in collecting deposits and extending loan and advances. The growth ratio of investment of NIBL is exceptionally well. It has remarkably increased its investment and hence the growth rate is 101.86% .In case of NABIL and SCBNL it has moderate growth in comparison with NIBL. The growth ratio of net profit

is highest and that of SCBNL is lowest. It indicates that the performance of NIBL is good with respect to increase in profit. Correlation coefficient between total deposit and loan & advance of all the banks shows relationship between these two variables.

## **2.2 Research Gap**

All the research studies mentioned herein are concerned with the study of lending strength and contribution. Most of them have indicated the lending contribution.

In this research some statistical and financial tools are used for calculation of lending policy of joint venture banks. Besides it, below mentioned factors have been studied analytically and intensively by this research.

**Measuring the lending strength and efficiency analyzing the lending contribution in total profitability and study of the loan and advances, profitability, Deposits position of the joint venture banks. The previous researchers could to submit the present fact. The researcher will deliver the answer to the recent questions and it will also give the latest information about the current practices of concerned commercial banks.**

## **CHAPTER - III**

### **RESEARCH METHODOLOGY**

In this chapter, an attempt has been made to describe the methods and process applied in the entire subject of the related study.

More specifically, this chapter discusses the process of systematic and in-depth study of the selected topic backed by the collection, compilation, presentation and interpretation of relevant matter, which is an endeavor to discover or find out valuable facts, which will be useful for further application or utilization (Joshi, 2001:107).

The topic of the problem has been selected as Effectiveness on lending policy of selected joint venture Bank. A comparative study of NABIL Bank Ltd, Everest Bank Ltd. and SBI Bank Ltd.

The survey of literature has been conducted from various library and references and these have been maintained in chapter three. The problem of the study has been specified in the topic “Statement of the problem” in chapter one. The three joint venture banks had been chosen for study. The review of literature has been specified in the chapter two. The data has been collected from various sources as been processed and presented in chapter four. The major findings of the analysis have been mentioned in chapter five. The conclusions and recommendations have been put in the same chapter.

### **3.1 Research Design**

In order to achieve thesis research objectives appropriate research design has been selected. The keeping in mind the nature of the research analytical & descriptive research design has been selected.

“Research Design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure” (Kothari, 1990). It is a framework or plan for a study that guides the collection and analysis of the data. And to fulfill the objective of the study secondary data is used and study design will be descriptive as well as analytical.

### **3.2 Population and Sample**

All the joint venture banks in Nepal are the population of the study from the population three banks i.e. NABIL Bank Limited, Everest Bank Limited and SBI Bank Limited have been selected as sample of the present study. The selection of sample is based on judgment sampling method. In other words, they have been selected on the basis of equality in performance and prestige. The population refers to the industries of same nature, services and product in general. So among the various joint venture banks under the banking industry NABIL Bank Limited, Everest Bank Limited and SBI Bank Limited are selected for the study.

### **3.3 Sources of Data**

- **Sources of Secondary Data**

Secondary data refer to those already gathered by others. The sources of secondary data can be divided into two groups: internal and external. Internal secondary data are found within the company, collected from published documents of the company. Mainly data sources depend upon annual reports, publications as well as the website of the concerned organization. External secondary data are collected from sources outside the company. Such sources are books, periodicals, published reports, data services and computer data banks etc.

This study is based on the secondary data. The secondary data includes annual reports, quarterly bulletins, economic reports, various article and publication dealing in the subject matter of the study, websites etc.

Annual reports are the main sources of the data for this study. However in some areas annual reports, bulletins and publications from NRB are used for the analysis.

- **Analytical Tools**

Various financial tools are used to analyze the data presented in the study which are as follows:

- **Financial Tools**

The financial tools are used to find the financial strength and weakness of a firm. In this study following financial tools are calculated.

- **Ratio Analysis**

Ratio refers to the numerical or quantitative relationship between two items/variables. A ratio is calculated by dividing one item of relationship with the other. Ratio is a tools of financial management which can be expressed in percentage, fraction or in a stated comparison between numbers. “The technique of ratio analysis is a part of the whole process of analysis of financial statements of any business of industrial concern especially to take output and credit decisions. Through this technique, a comparative study can be made between different statistics concerning varied facts of a business unit. Just as the blood pressure, pulse and temperatures are the measures of health of an individual, so does ratio analysis measure the economic of financial health of a business concern. Thus the technique of ratio analysis is a considerable significance in studying the financial stability, liquidity, profitability and the quality of the management of the business and industrial concern” (Kothari, 1994: 487).

Relationship between two accounting figures, expressed mathematically, is known as financial ratio. In financial analysis, a ratio is used an index for evaluating the financial

position and performance of a firm. The absolute accounting figures reported in the financial statements do not provide a meaningful understanding of the performance and financial position of firm. An accounting figure conveys meaning when it is related to make qualitative judgment about the firm's financial performance (Pandey, 1993: 98).

There are various ratios in this study only the ratios relevant to the study are calculated and analyzed.

- **Assets/Liability Management Ratio**

Assets management ratio measure the proportion of various assets and liabilities in balance sheet. Commercial bank should manage its assets and liabilities properly to earn profit. Assets management ratio measures its efficiency in multiplying various liabilities in performing assets. Following are the various assets management ratio which measure the lending strength and effective use of assets.

- Total assets to total liability ratio.
- Loans and advances to total asset ratio.
- Loans and advances and investment to total deposit ratio.
- Loans and advances to shareholders equity ratio.
- Total investment to total deposit ratio.

- **Activity Ratio**

This ratio measures have efficiently the bank has been able to manage its resources particularly in terms of short-term funds. This ratio determines how the loans and advances contribute in terms of efficiency, quality and contribution to total profitability.

The following ratios are calculated under activity ratio.

- Loans loss provision to total loans and advances ratio.
- Non-performing loans to total loans and advances ratio.
- Interest income to total income ratio.
- Interest expenses to total deposits ratio.
- Interest suspense to total interest from loans and advances ratio.

- Interest income to interest expenses ratio.

- **Analysis of Growth Ratio**

Growth ratios are directly related to fund mobilization, investment and loan and advances management of commercial banks. It represents how well the bank is maintaining its economic position.

To examine and analyze following growth ratios are calculated under this study.

- **Growth ratio of total deposits.**
- **Growth ratio of total investment.**
- **Growth ratio of loan and advances.**
- **Growth ratio of net profit.**

To evaluate the growth ratio of total deposit as well as total credit growth ratio is examined. For this calculation, following formula is used.

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

Where,

$D_n$  = Total amount in  $n^{th}$  year

$d_o$  = Total amount in initial year

$g$  = growth rate

- **Statistical Tools**

Some important statistical tools like standard deviation, correlation co-efficient analysis, co-efficient of variance, time series have been used in this study.

- **Standard Deviation**

It is defined as the positive square root of the mean of the square of the deviation taken from the arithmetic mean. It is denoted by  $\sigma$ .

If  $(\bar{X})$  be the values and  $(\bar{X})$ , their arithmetic mean, then the said  $(\sigma)$  is given by

$$\sigma = \sqrt{\frac{\sum(X-\bar{X})^2}{n}} = \sqrt{\frac{\sum X^2}{2} - \left[\frac{\sum X}{n}\right]^2}$$

Where

n = No. of observations

In short cut method, S.D. is computed by the formula

$$\sigma = \sqrt{\frac{\sum X^2}{2} - \left[\frac{\sum X}{n}\right]^2}$$

Where,

d = x-a and

a = assumed mean

- **Co-efficient of Variation**

Standard deviation is the absolute measure of dispersion. The relative measure of dispersion based on standard deviation is known as the co-efficient standard deviation.

$$\text{Co-efficient of S.D.} = \frac{\sigma}{\bar{X}} \times 100$$

The co-efficient of standard deviation multiplied by 100 is known as the co-efficient of variation (C.V). Where  $\bar{x}$  be the arithmetic mean and  $\sigma$  be the standard deviation of the distribution, then the C.V is defined by.

$$\text{C.V.} = \frac{\sigma}{\bar{X}} \times 100$$

It is independent of unit, so two distributing can be compared with help of C.V. For their variability, Less the C.V. More will be the uniformly consistency and more the C.V. loss will be the uniformly, consistency etc.

- **Correlation Co-efficient**

Correlation is an analysis of the covariance between two or more variables and it deals to determine the degree of relationship between the variables. Correlation just says the

degree of relationship between two or more variables. If between two variable increase or decrease in one cause increase or decrease in another then such variables are correlated variables. Thus, it measures the mathematical relationship between two variables.

Among the various method of studying correlation Karl Pearson's correlation co-efficient is widely used mathematical method in calculating correlation known as Pearson's correlation co-efficient, which is denoted by  $\gamma^{x,y}$  or simply ( $\gamma$ ) and defined by.

$$\gamma = \frac{\text{Cov}(X,Y)}{\sqrt{\text{Var}(x)}\sqrt{\text{Var}(y)}}$$

Where,

$$\text{Cov}(x,y) = \frac{1}{n} \sum (X - \bar{X})(Y - \bar{Y})$$

x,y being the arithmetic averages of x series and y series respectively. Average formula (i) can be put in the following firms.

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

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

$$\gamma = \frac{\sum xy}{\delta x \times \delta y}$$

$\sum X$  and  $\sum Y$  are S.D. of x and y series respectively, the value of (r) lies between (-1) to (+1), where  $\gamma = 1$  there is perfectly positive correlation and where  $\gamma = -1$ , there is perfectly negative correlation. This kind of correlation is some what impossible to find.

For our convenience, we can say be nearer the value of r to =1, closer will be the relationship between the two variables and nearer the value of  $\gamma$  to -1, lesser will be the relationship.

The following co-efficient of correlation is calculated of following variables:

- Co-efficient of correlation between deposit and loan and advance
- Co-efficient of correlation between investment and loan and advances.
- Co-efficient of correlation between shareholders equity and loan and advances.
- Co-efficient of correlation between total income and loan and advances.
- Co-efficient of correlation between interest suspense and total income.
- Co-efficient of correlation between provision for loan loss and loan and advances.
- Co-efficient of correlation between interest income and net profit.

#### **iv) Probable Error**

Probable error of the correlation co-efficient developed by P.E. is the measure of testing of reliability of the calculated value of r. If  $\hat{r}$  is the calculated value of (r) from a sample of (n) pair of observations then P.E. is defined by.

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

It is used in interpretation whether calculated value of (r) is significant or not.

- If  $\hat{r} < P.E.$ , it is significant. So perhaps there is no evidence of correlation.
- If  $\hat{r} > P.E.$ , it is not significant.

In other causes, nothing can be concluded. The probable error of correlation co-efficient may be used to determine the limits which the population correlation co-efficient lies limit for population correlation coefficient are  $r \pm P.E.$

## **CHAPTER - IV**

### **PRESENTATION AND ANALYSIS OF DATA**

This chapter deals with the presentation and analysis of the data collected from various sources. The main objective of this chapter is to evaluate and analyze the main financial performance, which are mainly related to lending performance of the bank.

#### **4.3 Measuring the Lending Strength**

Lending is one of the important functions of a commercial bank. Lending position of the bank should be continuously monitored to avoid any critical situation. Whether the bank is lending in accordance with the deposits collected and investments made by the shareholders should be analyzed periodically. An idle deposit is loss to the company so proper utilization of the funds in investment and lending aspects are extremely necessary for a bank to survive and grow.

The bank never invests its funds in those securities, which too much depreciated and fluctuated because a little difference may cause a great loss. It must not invest funds into speculative business that may be result in bankruptcy at once or may earn millions in a minute also. The bank should accept that type of securities, which are marketable and with high market price. Under this topic, an attempt has been made to analyze the lending strength of commercial bank under study in relative terms as well as absolute terms.

#### **4.1.1 Measuring the Lending Strength in Relative Term**

The lending strength of commercial banks under the study is measured and analyzed. In relative term, the relationship between various assets and liabilities of the balance sheet has been established to measure the lending strength in relative term.

##### **4.1.1.1 Total Assets to Total Liabilities Ratio**

Banks creates credit through loans and advances and multiples their assets much more times than their liability permits. This ratio measures the ability of a bank to multiply its

liability into assets. The higher ratio of total assets to total liability ratio is favorable as it increases overall credit capacity of the organization.

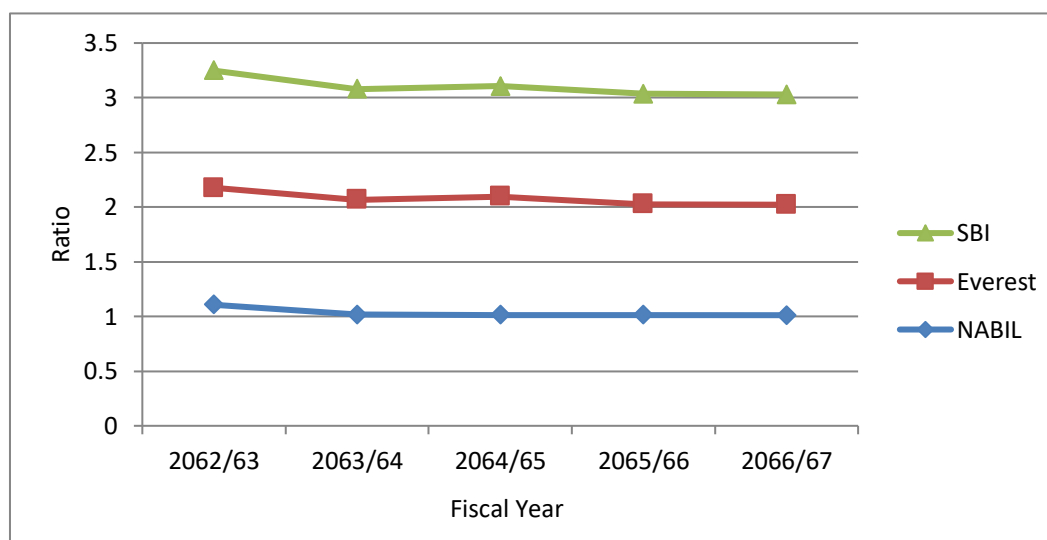
**Table 4.1**  
**Total Assets to Total Liabilities Ratio**

(Rs. In Million)

Banks	Fiscal year					Mean
	2062/63	2063/64	2064/65	2065/66	2066/67	
NABIL	1.1067	1.0169	1.0140	1.0127	1.0116	1.0324
Everest	1.0698	1.0502	1.0825	1.0141	1.0104	1.0454
SBI	1.0713	1.0122	1.0099	1.0083	1.0075	1.0219
<b>Combined Mean</b>						<b>1.0332</b>

Source: AppendixA-1(Annual report of NABIL,EBL,SBI)

**Figure 4.1**  
**Total Assets to Total Liabilities Ratio**



The table and figure 4.1 shows the ratio of total asset to total liability of three banks and also explains how properly and efficiently the bank has been able to utilize its fund to the extent as much its liability permits it to. Surprisingly the total assets and liability ratio of all the three banks are more or less same i.e. equal to 1. Similarly the ratios of all the three banks have remained almost constant in study period. In all the banks, total assets

have always been higher than this total liability over the study period. This is a good performance but the ratio being almost equal to 1 indicates the inability of the funds to utilize its available liabilities to generate more assets.

#### **4.1.1.2 Non Interest Bearing Deposits to Total Deposits Ratio**

This ratio measures the volume of non-interest bearing deposits to total deposits. The volume of interest expenses in total expenses represents a large portion of the total expenses. However, efficiently the deposits are managed affects the total volume of expenses.

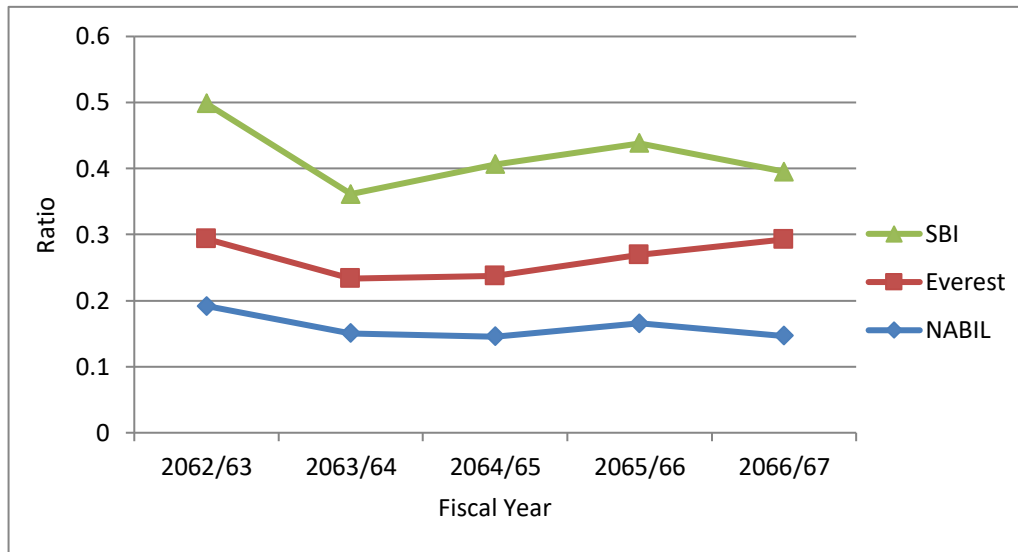
The cost of deposits is the major expenses of the bank and it has to costly deposit costs. The banks need to manage the portfolio of the deposits i.e. it has to maintain certain proportion between interest bearing deposits and non-interest bearing deposits by administrating the interest rate structure. The higher ratio is favorable but in practices interest-bearing deposits always plays a significant role in the mix of deposit liability.

**Table 4.2**  
**Non Interest Bearing Deposit to Total Deposit Ratio**  
(Rs. in Million)

<b>Banks</b>	<b>Fiscal year</b>					<b>Mean</b>
	<b>2062/63</b>	<b>2063/64</b>	<b>2064/65</b>	<b>2065/66</b>	<b>2066/67</b>	
NABIL	0.1919	0.1504	0.1454	0.1655	0.1467	0.1591
Everest	0.1015	0.0830	0.0920	0.1039	0.1458	0.1052
SBI	0.2049	0.1280	0.1687	0.1687	0.1025	0.1601
Combined mean						0.1415

*Source: Appendix-A-2(Annual report of NABIL, EBL, SBI)*

**Figure 4.2**  
**Non Interest Bearing Deposit to Total Deposit Ratio**



*Source: Appendix A-2*

While observing the table and figure 4.2 ratio of all the three banks, the lowest ratio of non-interest bearing deposit to total deposit ratio of Everest bank while this ratio of both NABIL and SBI are 0.1591 and 0.1601. All over the ratio of combined mean is 0.1415. Taking the combined mean as standard ratio, the deposit mixture of SBI carries more costly deposits than other two banks. The deposit mixture of Everest carries the lowest label of interest bearing deposits in its deposit mixture. This indicates that Everest is most successful in collecting cheapest fund. The major portion of non-interest bearing deposit consists of current deposit and this deposit is particularly maintained by business enterprises.

#### **4.1.1.3 Loans and Advances to Total Assets Ratio**

Loans and advances consists a major part of total assets of a bank. This indicates the volume of loans and advances out of the total assets. A high degree of the ratio indicates that the bank has been able mobilize its funds through lending functions. However lending always carries a certain risk of default therefore a high ratio is represents low

liquidity also a low ratio represents low productivity with high degree for safety in terms of liquidity.

**Table 4.3**  
**Loans and Advances to Total Assets Ratio**

(Rs. In Million)

Banks	Fiscal Year					Mean
	2062/63	2063/64	2064/65	2065/66	2066/67	
NABIL	0.6160	0.5787	0.5704	0.5753	0.6289	0.5939
Everest	0.6461	0.6144	0.6375	0.6754	0.6469	0.6441
SBI	0.6006	0.5861	0.6807	0.7047	0.4894	0.6123
Combined mean						0.6168

Source: Appendix A-3/A-1(Annual report of NABIL, EBL, SBI)

**Figure 4.3**  
**Loans and Advances to Total Assets Ratio**

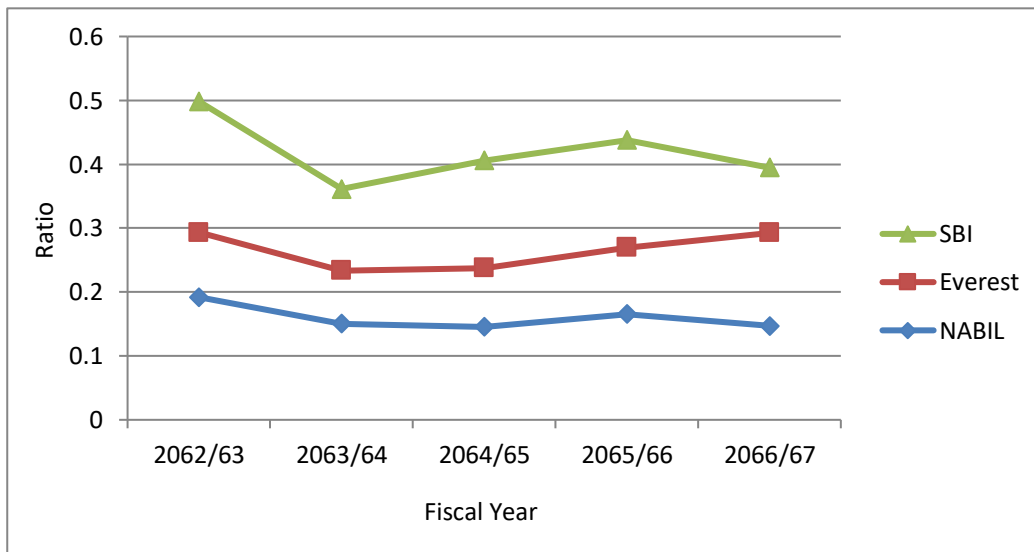


Table and figure 4.3 explains the loans and advances to total assets ratio. Everest has highest among all the banks. Everest's mean ratio i.e. 0.6441 higher than the combined mean also. It shows that Everest has higher lending performance. The second higher ratio

is of SBI is 0.6123, which is lower than the combined mean. NABIL has lowest mean ratio of 0.5939 and lower than of combined mean of 0.6168. The lower ratio of SBI and NABIL indicate that they have need diverting its lending function for more fee-based activities. All the three banks have maintained only satisfactory level of ratio.

#### **4.1.1.4 Loans & Advances and Investment to Total Deposits Ratio**

The main sources of banks lending and investment is the deposits. The collected funds are mobilized in the form of loans and advances and investment. Loans and advances have more risk and higher return whereas investment has low risk as well as lower return. Loans and advances and investments measure the firm's gross fund mobilizing capacity. This ratio measures how well the deposits are being mobilized and a banks ability to generate income from banks deposits liability. As an idle deposit means loss to the bank the higher ratio indicated that what portion of deposit are mobilized to generate income for the bank to pay interest to the deposits and also to gain profit from it.

**Table 4.4**

#### **Loans and Advances and Investment to Total Deposit Ratio**

(Rs. In Million)

<b>Banks</b>	<b>Fiscal year</b>					<b>Mean</b>
	<b>2062/63</b>	<b>2063/64</b>	<b>2064/65</b>	<b>2065/66</b>	<b>2066/67</b>	
NABIL	0.7257	0.6679	0.6660	0.6694	0.7387	0.6935
Everest	0.7545	0.7101	0.7513	0.7648	0.7395	0.7395
SBI	0.7180	0.6932	0.8265	0.8832	0.7324	0.7324
Combined Mean						0.7218

*Sources: Appendix A-3/ A-4/A-2(Annual report of NABIL,EBL,SBI)*

**Figure 4.4**

**Loans and Advances and Investment to Total Deposit Ratio**

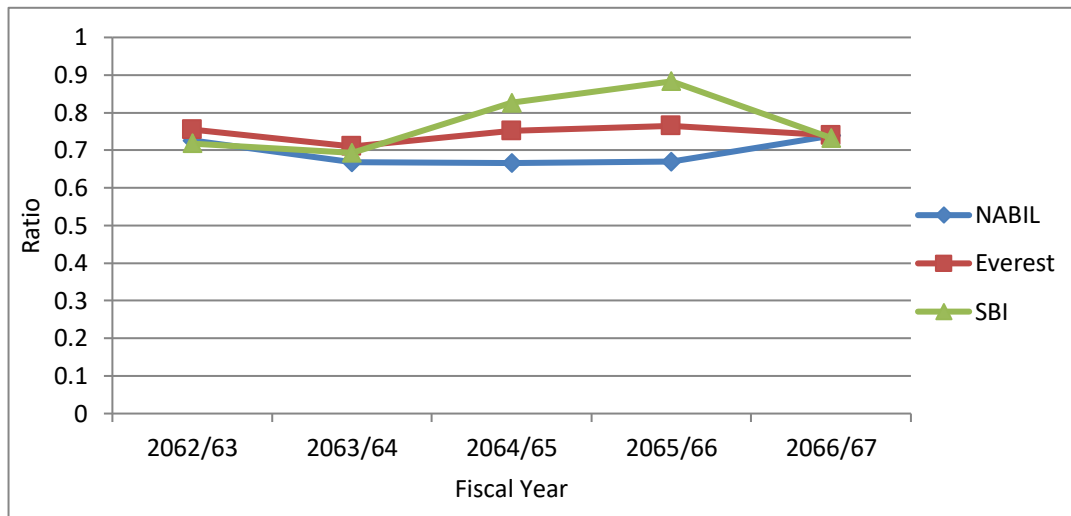


Table and figure 4.4 it shows that SBI has the highest ratio 0.7395, NABIL has the lowest ratio i.e. 0.7395. The combined mean ratio i.e. 0.7218. So NABIL has not been able to mobilize the deposit as SBI. However, SBI has best performed in term is mobilizing the total deposits. The ratios of all banks are below one in the total study period, which refers that none of the deposit are not ideal and there are not maximum utilization of the funds.

**4.1.1.5 Loans and Advances to Shareholders Equity Ratio**

Shareholders equity consists of share capital, share premium, reserves and retained earnings. It is the investment made by shareholders in the company and loans and advances means mobilization of investment funds in profit earning sector. This ratio shows how well the investment made by the investors (shareholders) is generating assets to multiply its wealth. It also measures the success of converting liability into assets and measures size of the business.

**Table 4.5**

**Loan and Advances to Shareholders Equity Ratio**

(Rs. In Million)

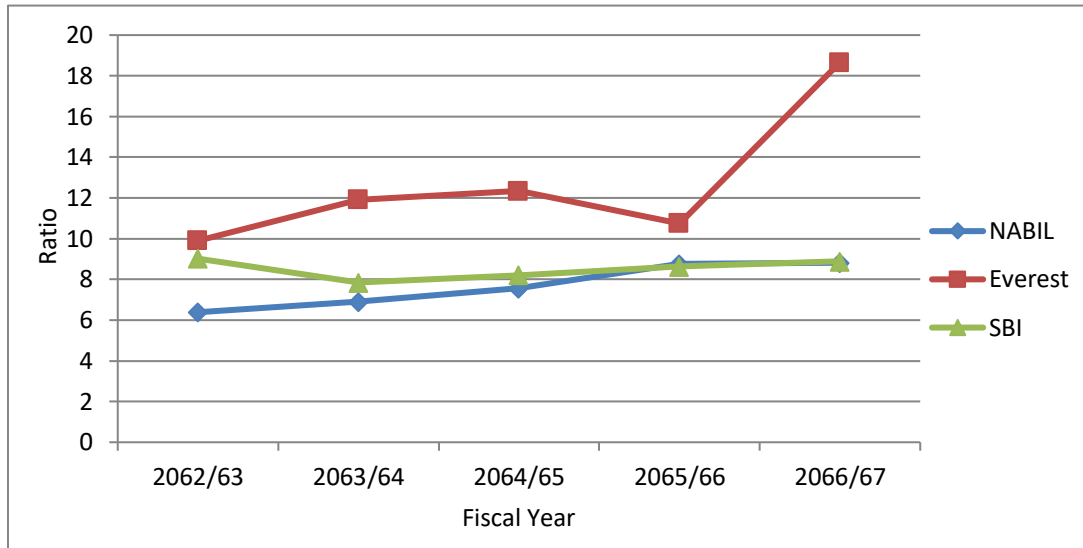
Banks	Fiscal Year					Mean
	2062/63	2063/64	2064/65	2065/66	2066/67	
NABIL	6.3863	6.8986	7.5644	8.7568	8.8179	7.6847

Everest	9.8993	11.9121	12.3478	10.7564	18.6608	12.7153
SBI	9.0186	7.8486	8.2028	8.6266	8.8878	8.5169
Combined mean						9.6390

Sources: Appendix A-3/A-5(Annual report of NABIL,EBL,SBI)

**Figure 4.5**

**Loan and Advances to Shareholders Equity Ratio**



In table and figure 4.5 the ratio of loan and advances to shareholders equity of three banks is not consistency entire period of study. Among three banks, Everest’s ratio highest as compared to the rest bank. The performance of NABIL is highest in end of the year 2066/67 which is 8.8179. Similarly, performance of Everest is highest in year 2066/67 which is 18.6608 and SBI in year 2062/63 which is 9.0186. NABIL has increasing trend in all the year up to 2066/67 which I studied. Everest and SBI have slightly fluctuating in the study period. The combined mean of three banks are 9.6390. The NABIL and SBI bank has lower ratio than the combined mean and Everest has highest ratio than the combined mean and it has been successful in generating high volume of loan and advances than other two banks.

#### 4.1.2 Measuring the Lending Strength in Absolute Term

In this section, the various variables are measured in absolute terms. Absolute term means the different variables that are measured individually which enables to show the gross contribution of the variables with the respective banks in those aspect. Some of the important variables of lending are measured in absolute terms of mean, standard deviation and coefficient of variation.

##### 4.1.2.1 Loans and Advances

The main function of a commercial bank is to create credit from its collected funds. The high volume of loan and advances indicates good performance of lending for a bank. The survival of bank depends upon its credit and the percentage of good performing loans measures the banks profitability and survival.

**Table 4.6**  
**Loans and Advances**

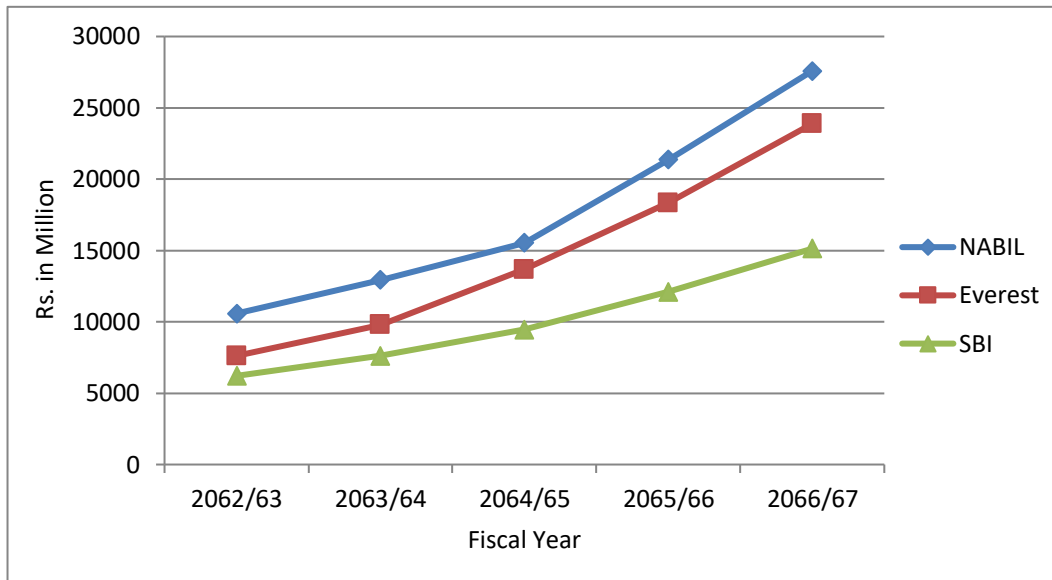
(Rs. in million)

<b>Banks</b>	<b>2062/63</b>	<b>2063/64</b>	<b>2064/65</b>	<b>2065/66</b>	<b>2066/67</b>	<b>Mean</b>	<b>S.D.</b>	<b>C.V</b>
NABIL	10586.17	12922.54	15545.77	21365.05	27589.93	17601.89	6152.51	34.95
Everest	7618.67	9801.30	13664.08	18339.08	23884.76	14661.56	5878.93	40.09
SBI	6213.88	7626.73	9460.45	12113.69	15131.75	10109.30	3193.78	31.59

*Sources: Appendix A-3(Annual report of NABI,EBL,SBI)*

**Figure 4.6**

**Loans and Advance**



The table and figure 4.6 shows that the loans and advances of NABIL are highest of all the three banks. Loans and advances have been increasing trend over the study period. The highest ratio of NABIL i.e. 17601.89 and SBI has the lowest ratio i.e. 10109.30. CV has also lowest of SBI i.e. 31.59. Therefore, the performance of SBI is more consistent and Everest is least consistent.

**4.1.2.2 Interest Income from Loan and Advances**

Interest income from loan and advances is one of the major sources of income for a commercial bank. The high volume of interest income is indicator of good performance of lending activities.

**Table 4.7**

**Interest Income from Loan and Advances**

(Rs. in million)

Banks	2062/63	2063/64	2064/65	2065/66	2066/67	Mean	S.D.	C.V.
NABIL	1068.75	1309.99	1587.75	1978.69	2798.49	1748.73	705.91	34.65
Everest	719.30	903.41	1144.40	1548.65	2186.81	1300.51	522.87	40.20
SBI	578.37	708.71	831.11	970.51	1460.45	909.83	304.43	33.46

Source: Appendix-A-6(Annual report of NABIL, EBL, SBI)

**Figure 4.7**

**Interest Income from Loan and Advances**

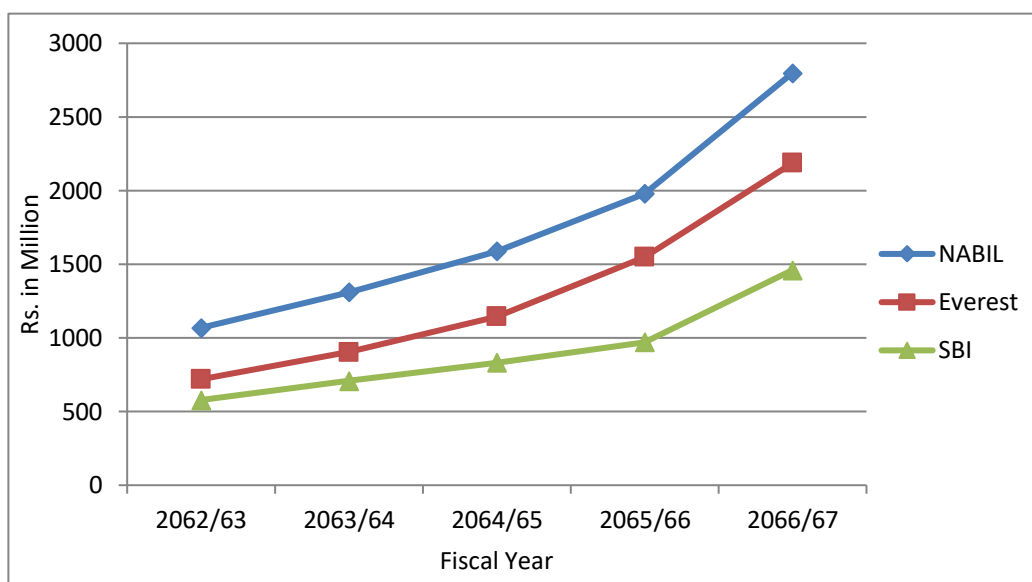


Table and Figure 4.7 shows that the highest interest income from loan and advances was earned by NABIL in year 2066/67 i.e. 2798.49 and lowest interest income from loan and advances was 2062/63 i.e. 1068.75. Everest and SBI have been increasing over the study period. NABIL is the highest performance in interest income as it has highest mean ratio among the three banks.

#### **4.1.2.3 Provision for Debts Doubtful**

Provision for Doubtful Debts show the figure that is summation of provision made against pass and substandard loan in the balance sheet as per NRB Directives. The NRB directive directs to make provisioning of 1%, 25%, and 100% for pass, substandard, doubtful and loss loans classification respectively. The loan loss provision occupies a larger share in total provision presented at profit and loss account. The higher provision indicates more the total loan and bad loans too. According to NRB, 1% provision has to be made for pass loans (loans not past due and past due up to 3 months) so it acquires a larger portion of the total loan loss provision. Therefore detail of the loan loss provision

should be studied to find out about the exact amount of performing and non-performing loans.

**Table 4.8**  
**Provision for Doubtful Debts**

(Rs. in millions)

Banks	2062/63	2063/64	2064/65	2065/66	2066/67	Mean	S.D.	C.V.
NABIL	358.66	360.56	356.23	357.24	394.41	365.42	14.57	3.99
Everest	211.72	281.41	334.94	418.60	497.35	348.80	100.46	28.80
SBI	388.17	525.46	614.72	604.60	632.52	553.09	90.25	16.32

Source: Appendix A-10(Annual report of NABIL, EBL, SBI)

**Figure 4.8**  
**Provision for Doubtful Debts**

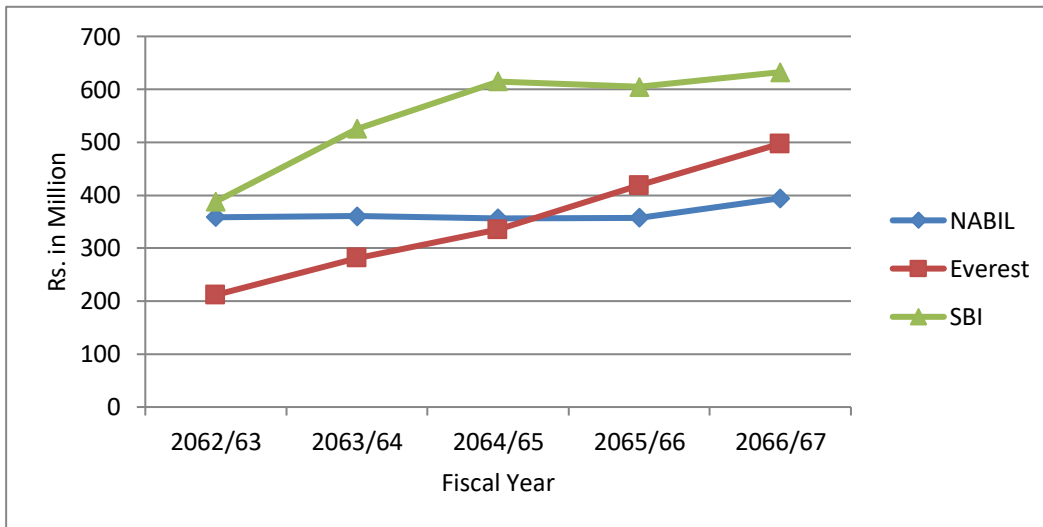


Table and figure 4.8 shows the provision for doubtful debt of the three banks. The above table shows that SBI has highest provision of the study period whereas Everest has the lowest for the study period. SBI has highest provision of 632.52 in the end of the study period. The SBI has highest mean ratio of 553.09, which represents that it has allocated

highest amount in provision for loan loss. Similarly, Everest has the lowest mean ratio of 348.80.

#### 4.1.2.4 Net Profit

Net profit, the net earning of the firm after all deductions like taxes, bonuses and provisions are used in this analysis. The volume of net profit measures the firm's success and is the most important aspects.

**Table 4.9**  
**Net Profit**

(Rs. in millions)

Banks	2062/63	2063/64	2064/65	2065/66	2066/67	Mean	S.D.	C.V.
NABIL	518.63	635.26	673.95	746.46	1031.05	721.07	171.62	23.80
Everest	170.81	237.29	296.40	451.20	638.73	358.89	167.87	46.77
SBI	57.39	117.00	254.90	247.77	316.37	198.69	95.97	48.30

Source: Appendix A-12(Annual report of NABIL,SBI,EBL)

**Figure 4.9**  
**Net Profit**

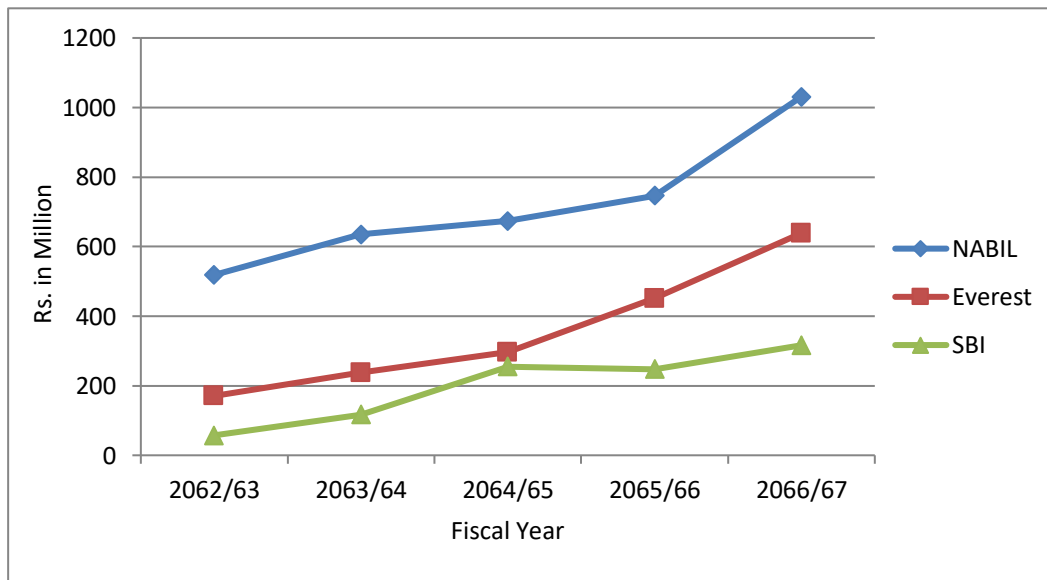


Table and figure 4.9 shows that the net profits of NABIL and Everest have been increasing over the study period and SBI has been fluctuating in the study period. NABIL has net profit of Rs. 518.63 million in year 2062/63 and Rs. 1031.05 million in end of the year. Everest has net profit of Rs. 170.81 million in year 2062/63 and 638.73 million in end of the year 2066/67. Similarly, SBI has net profit of Rs 57.39 million in 2062/63 and Rs 316.37 in end of the year 2066/67.

NABIL has recorded the highest mean ratio i.e. 721.07 whereas SBI has recorded the lowest mean ratio i.e. 198.69. NABIL has the lowest C.V indicates that the ratio has varied minimum. Similarly SBI's C.V. ratio is the highest than indicate highest variability.

## **4.2 Analyzing the Lending Efficiency and Its Contribution in Total Profitability**

In this section lending efficiency is measured in terms of quality and its turnover. A relationship between different variables related to lending efficiency is taken from balance sheet and profit and loss account.

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

The ratio of loan loss provision to total loans and advances describes the quality of asset in form of loan is bank holding. NRB has directed all the commercial banks to classify its loans and advances into category and make provision according to these loans classified. The loans are classified as pass, substandard, doubtful and loss and provision are to be made on 1%,25% 50% and 100 % respectively. NRB has classified the pass and substandard loan as performing loan and doubtful and loss as non-performing loan is called specific loan loss provision. The amount of loan loss provision in balance sheet refers to the general loan loss provision. The provision for loan loss reflects the increasing possibility of non-performing loans in the total volume of loans and advances. The provision also provides as a cushion against future contingency made by default of the borrowers. The low ratio indicates the good quality of assets (loans) in the total

volume of loans and advances whereas high ratio indicates more risky assets (loans having chance of default) in the loans and advances.

**Table 4.10**

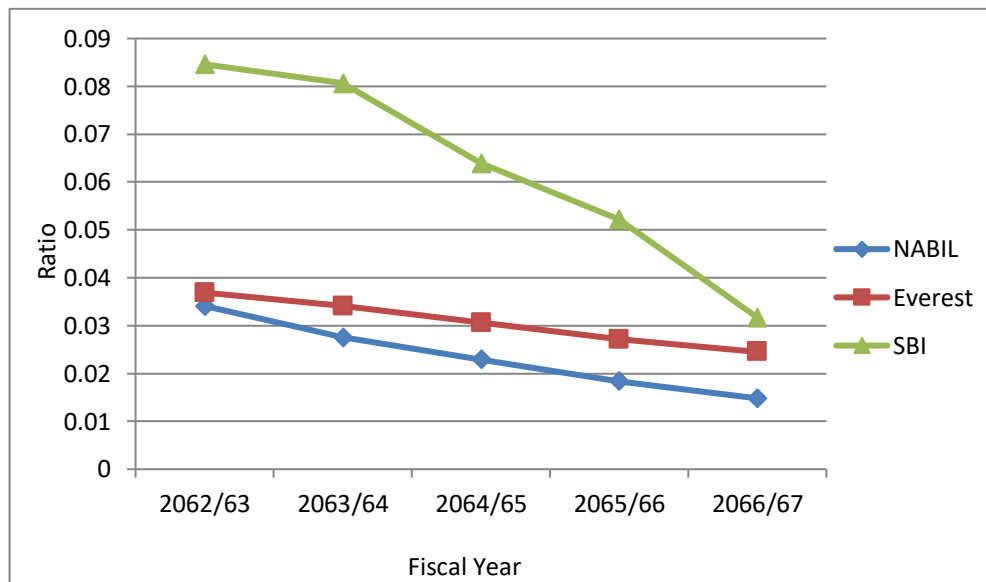
**Loan Loss Provision to Total Loans and Advances Ratio**

<b>Banks</b>	<b>2062/63</b>	<b>2063/64</b>	<b>2064/65</b>	<b>2065/66</b>	<b>2066/67</b>	<b>Mean</b>
NABIL	0.0341	0.0275	0.0229	0.0184	0.0148	0.235
Everest	0.0369	0.0341	0.0306	0.0271	0.0245	0.0306
SBI	0.0846	0.0806	0.0639	0.0522	0.0317	0.0626
Combined mean						0.0389

*Sources: Appendix- A-3/A-11(Annual report of NABIL, EBL, SBI)*

**Figure 4.10**

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



In above table and figure, the ratio of NABIL, Everest and SBI have decreasing trend in all the years. Their non-performing loan has increased in the total assets which is quite risky as it might cause a great failure in future performance of the banks as the loans and advances are crucial part of earning income for a bank and it also occupied part a large portion in the volume of total assets.

## **Loan Classification and Provisioning**

The assets side of the balance sheet is dominated by loans and advances. The profit of the banks depends on the interest earned from the loan borrowers and paid to the depositors. Banks may not be able to pay its depositors if the banks fail to collect the loan amount.

The new directive regarding loan classification and provisioning was issued on 2003, was effective from the fiscal year 2003/04. I am taking three years data as per the new directives. Loan classification and provisioning of the three banks are analyzed and presented as per the new NRB directives. The NRB directives have classified the loan and advances as pass, substandard, doubtful and loss and provision should be made 1%, 25%, 50% and 100% respectively. The loan under the category of pass loan is called as performing loan and the substandard, doubtful and loss loans are called non-performing loan. The loan loss provision for performing loan is defined as general loan loss provision and loan loss provision for non-performing loan is defined as specific loan loss provision. General loan loss provision may include any other provision provide by bank in excess of the proportion as required by the NRB directive. One of the main purposes of NRB directives related to loan classification and provisioning is protect the deposits of public.

On the basis of the NRB directives NABIL, Everest and SBI has been following the directives and has provided the provisioning as follows:

### **Performing Loan**

Loans and advances, which principle amounts are past due and past due for period up to three months, should be included in this category.

### **Non-performing Loan**

All loan and advances that are past due for a period of more than one year as well as advances which have least possibility to recovery in future should be included in this category.

Particular	2062/63		2063/64		2064/65		2065/66		2066/67	
	TL	Total LLP	TL	Total LLP	TL	Total LLP	TL	Total LLP	TL	Total LLP
<b>PL (1)</b>	<b>13096.1578</b>	<b>215.30</b>	<b>15724.7298</b>	<b>255.34</b>	<b>15724.72</b>	<b>214.74</b>	<b>21598.37</b>	<b>256.34</b>	<b>27774.19</b>	<b>294.74</b>
Pass	13096.1578	215.30	15724.7298	255.34	<b>15724.72</b>	214.74	21398.37	256.34	<b>27774.19</b>	294.74
<b>NPL(2)</b>	<b>182.6245</b>	<b>143.92</b>	<b>178.2939</b>	<b>101.88</b>	<b>178.28</b>	<b>141.92</b>	<b>161.07</b>	<b>101.88</b>	<b>224.82</b>	<b>99.67</b>
Substandard	62.6659	43.57	119.7046	56.63	119.70	42.57	66.22	56.63	113.31	32.31
Doubtful	29.5660	14.89	14.4716	7.11	14.47	13.89	42.57	7.11	45.79	21.27
Loss	90.3926	85.46	44.1177	38.14	44.11	85.46	52.28	38.14	65.76	46.09
<b>Total</b>	<b>13278.7823</b>	<b>359.2391</b>	<b>15903.0238</b>	<b>357.22</b>	<b>15903</b>	<b>356.22</b>	<b>21759.44</b>	<b>358.22</b>	<b>27999.01</b>	<b>394.41</b>

T

a

## ble 4.11

## Loan Classification and Provisioning in NABIL

(Rs. in millions)

Source: Annual Report of Nabil (Various years)

Table 4.11 shows that NABIL has classified its loan and advances and loan provision on the year 2062/63, 2063/64, 2064/65, 2065/66 and 2066/67. The loans are categorized under different categories as per NRB directives requirement. In 2062/63, total loans of NABIL's Rs. 13278.7823 million and out of total loan and advances. Pass loan, substandard, doubtful, and loss loans consist of 13096.1578million, 62.6659million, 29.5660million and 90.3926million.

The loan loss provision has been maintained for the categorized loans out of total loan loss provision 215.30million was made for performing loans. 43.5739 million For substandard loan, 14.89 million for doubtful loan loss provision and 85046million for bad.

Similarly, in the year 2063/64 total loan and advances is 15903.0238 out of the total loans there is 15724.7298 pass loans i.e. performing loan. The non-performing loan is 178.2939 million, which consists of 119.7046 substandard loans, 14.4716 million of doubtful loans and 44.1177 of loan loss. The loan loss provision for performing loan is 255.3437 million and for non performing loss is 101.88 million. The loan loss provision for non-performing loan consists of 56.6364 million of substandard loan, 7.1194 million of doubtful loans and 38.1455 million of the loan loss provision.

Similarly, in the year 2064/65 total loan and advances is 15903million out of the total loans there is 15724.72 pass loans i.e. performing loan. The non-performing loan is 178.2939million, which consists of 119.704substandard loan, 14.47million of doubtful loans and 44.47 of loan loss. The loan loss provision for performing loan is 214.74million and for non performing loss is 141.92million. The loan loss provision for non-performing loan consists of 42.57million of substandard loan, 13.89million of doubtful loans and 85.46million of the loan loss provision.

Similarly, in the year 2065/66 total loan and advances is 21759.44 million out of the total loans there is 21598.37 million pass loan i.e. performing loan. The non-performing loan is 161.07 million, which consists of 66.22 substandard loan, 42.57 million of doubtful loans and 52.28 of loan loss. The loan loss provision for performing loan is 256.34 million and for non performing loss is 101.88million. The loan loss provision for non-performing loan consists of 56.63million of substandard loan, 7.11 million of doubtful loans and 38.14million of the loan loss provision. Similarly, the proportion of doubtful loan has increased in 2065/66 than previous year. The doubtful loan in 2064/65 was 14.47million and on 2065/66 is 42.57 million. The increase of doubtful loans indicates the deteriorating quality of assets of NABIL. However there has been increase in the performing loan and non performing loan than previous year.

Similarly, in the year 2066/67 total loan and advances is 27999.01 out of total loans there is 27774.19 million pass loan i.e. performing loan. The non-performing loan is 224.82 million which consists of 113.31million substandard loan, 45.79 million doubtful loan and 65.76million of loan loss. The loan loss provision for performing loan is 294.74million and for non-performing loan is 99.67million. The loan loss provision for non-performing loan consists of 32.31million of substandard loan 21.27 million of doubtful loan and 46.09 million loan loss provision.

However there has been increase and decrease in the non-performing loan than previous year, which indicates that the current loans and good loans and default cases are lowered.

Particular	2062/63		2063/64		2064/65		2065/66		2066/67	
	TL	Total LLP	TL	Total LLP	TL	Total LLP	TL	Total LLP	TL	Total LLP
<b>PL (1)</b>	<b>10007.018</b>	<b>128.799</b>	<b>13979.507</b>	<b>166.86</b>	<b>13969.5</b>	<b>129.8</b>	<b>2066/673.7</b>	<b>164.8</b>	<b>24351.5</b>	<b>204.7</b>
	<b>7</b>	<b>9</b>	<b>2</b>			<b>0</b>	<b>8</b>	<b>6</b>	<b>7</b>	<b>8</b>
Pass	10007.018	128.799	13979.507	166.86	13969.5	128.8	2066/673.7	164.8	24351.5	204.7
	7	9	2			0	8	6	7	8
<b>NPL(2)</b>	<b>129.2355</b>	<b>120.891</b>	<b>116.1790</b>	<b>109.82</b>	<b>113.16</b>	<b>120.8</b>	<b>127.29</b>	<b>108.8</b>	<b>117.99</b>	<b>112.2</b>
		<b>9</b>				<b>9</b>		<b>2</b>		<b>1</b>
Substandard	10.6693	2.6673	5.2185	1.054	4.21	2.67	6.30	1.05	1.36	1.58
Doubtful	0.6838	0.3419	3.3533	1.97	2.35	0.34	0.74	1.17	28.51	0.37
Loss	117.8827	117.882	107.6072	106.60	106.60	117.8	120.25	106.6	88.11	120.2
		7				8		0		6
<b>Total</b>	<b>10136.25</b>	<b>249.691</b>	<b>14095.686</b>	<b>276.705</b>	<b>14082.6</b>	<b>250.6</b>	<b>20221.07</b>	<b>273.6</b>	<b>24469.5</b>	<b>326.9</b>
		<b>8</b>	<b>1</b>	<b>2</b>	<b>6</b>	<b>9</b>		<b>8</b>	<b>6</b>	<b>9</b>

**Table 4.12**

**Loan Classification and Provisioning in Everest**

(Rs. in millions)

*Source: Annual Report of Everest (Various Years)*

Table 4.12 exhibits classification of loans and advances and loan loss provision of Everest for the year 2062/63, 2063/64 2064/65, 2065/66 and 2066/67. The total loan amount is 10136.25 million in the year 2062/63 out of which 10007.0187 million consists of performing loan and 129.2355million is non-performing loan. The non-performing loan consists of substandard 10.6693million, doubtful 0.6838million and loss loan 117.8827million. The total loan loss provision amount is 249.6918 million in the year 2062/63. The performing loan amount is 128.7999million and non-performing loan is 120.8919million. The loan loss provision for non-performing loan consists of 2.6673million of substandard loan, 0.3419million of doubtful loan and 117.8827million of loan loss provision.

In the year 2063/64 the total loan is 14095.6861 million out of which 13979.5072 million consists of performing loan and 116.1790 million is non-performing loan. The non-performing loan consists of substandard 5.2185 million, doubtful 3.3533 million and loss loan 107.6072 million. The total loan loss provision amount is 276.7052 million in the year 2063/64. The loan loss provision for performing loan amount is 166.86 million and non-performing loan is 109.82 million. The loan loss provision for non-performing loan consists of 1.054 million of substandard loan, 1.97 million of doubtful loan and 106.60 million of loan loss provision.

In the year 2064/65 the total loan is 14082.66 million out of which 13969.5 million consists of performing loan and 113.16 million is non-performing loan. The non-performing loan consists of substandard 4.21million, doubtful 2.35 million and loss loan 106.60 million. The total loan loss provision amount is 250.69 million in the year 2064/65. The provision for loan for performing loan amount is 129.80 million and non-performing loan is 112.21million. The loan loss provision for non-performing loan consists of 1.58 million of substandard loan, 0.37 million of doubtful loan and 120.26 million of loan loss provision.

In the year 2065/66, the total loan amount is Rs 20221.07 million out of which 20093.8760 million is performing loan and 127.29 million is non-performing loan. The non performing loan consists 6.30 million substandard, 0.74 million doubtful and 120.25 million loss loan. The loan loss provision has been maintained for the categorized loans out of total loan loss provision 164.86 million was made for performing loans, 108.82 million was made for non-performing loans which consists of 1.05 million substandard, 1.17 million doubtful and 106.60 million loss loan. Similarly, the proportion of doubtful loan has decreased in 2065/66 than the previous year. The doubtful loan in 2064/65 was 2.35 and on 2065/66 is 0.74.

Similarly, in year 2066/67 the total loan amount is Rs. 24469.56 million out of which 24351.57 million performing loan and 117.99 million is non-performing loan. The non-performing loan consists of 1.36 million substandard 28.51 million doubtful and 88.11 million loss loan. The loan loss provision has been maintained for the categorized loans out of total loan loss provision 204.78 million was made for performing loan, 112.21 million was made for non-performing loan which consists of 1.58 million substandard, 0.37 million doubtful and 120.26 million loss loans.

Similarly, the proportion of doubtful loan has increased in 2066/67 than the previous year. The doubtful loan in 2065/66 was 0.74 million and on 2066/67 is 28.51million.

Particular	2062/63		2063/64		2064/65		2065/66		2066/67	
	TL	Total LLP	TL	Total LLP	TL	Total LLP	TL	Total LLP	TL	Total LLP
PL (1)	7736.1196	117.1192	9606.2965	157.94	9668.29	171.19	12257.80	158.94	15296.09	165.69
Pass	7736.1196	117.1192	9606.2965	157.94	9668.29	171.19	12257.80	158.94	15296.09	165.69
NPL(2)	505.3369	497.5912	458.7557	446.64	460.75	514.88	488.41	449.64	315.95	466.83
Substandard	1.7970	0.3182	3.2848	0.54	3.28	0.31	3.87	0.54	1.24	0.57
Doubtful	3.8426	1.9213	11.1680	3.89	1.16	19.21	21.62	3.89	11.34	9.87
Loss	499.6973	495.3617	444.3029	442.21	446.30	495.36	462.90	445.21	291.38	456.39
Total	8241.4565	614.7204	10065.0522	604.58	10129.04	686.07	12746.21	608.58	15612.04	632.52

**Table 4.13**  
**Loan Classification and Provisioning in SBI Bank**

(Rs. in millions)

*Source: Annual Report of SBI (Various Years)*

Table 4.13 shows that there has been classification of loan and advances made and provision has been provided on each category of the loan. In year 2062/63, the total loan is 8241.4565 million out of which 7736.1196 million is performing loan and 505.3369 million is non-performing loan. The non-performing loan consists of substandard 1.7970 million, doubtful 3.8426 million and loss loan 499.6973 million. There is loan loss provision of 614.7204 million and out of which 117.1192 million is performing loan and 497.5912 is non-performing loan. The non-performing loan loss provision consists of substandard 0.3182 million, doubtful 1.9213 million and loss loan 495.3617 million.

In year 2063/64, the total loan is 10065.0522 million out of which 9606.2965 million is performing loan and 458.7557 million is non-performing loan. The non-performing loan consists of substandard 3.2848million, doubtful 311.1680 million and loss loan 444.3029 million. There is loan loss provision of 604.58 million and out of which 157.94 million is performing loan and 446.64 million is non-performing loan. The non-performing loan loss provision consists of substandard 0.54 million, doubtful 3.89 million and loss loan 442.21 million.

In year 2064/65, the total loan is 10129.04 million out of which 9668.29 million is performing loan and 460.75 million is non-performing loan. The non-performing loan consists of substandard 3.2848million, doubtful 311.1680 million and loss loan 446.30 million. There is loan loss provision of 686.07 million and out of which 171.19 million is performing loan and 514.88 million is non-performing loan. The non-performing loan loss provision consists of substandard 0.31 million, doubtful 19.21 million and loss loan 495.36 million.

In year 2065/66 total loan is 12746.21 million out of which 12257.80million is performing loan and 488.41million is non-performing loan. The non-performing loan consists of substandard 3.87million doubtful 21.62 million and loss loan 462.90 million. There is loan loss provision of 604.58 million out of

which 158.94million general loan loss provision and 449.64 million is specific loan loss provision which consists of substandard 0.54 million, doubtful 3.89 million and loss loan 445.21million.

In 2066/67 total loan is 15612.04 million and out of which 15296.09 million performing loans and 315.95 million non-performing loans. The non-performing loans consist of substandard 1.24 million substandard 11.34million doubtful and 291.38 million loss loan. There is loan loss provision of 632.52 million out of which 165.69 million is performing loan and 466.83million is non-performing loan. The performing loan is defined as general loan loss provision and non-performing loan is defined as specific loan loss provision. The specific loan loss provision consists of substandard 0.57 million, doubtful 9.87 million and loss loan 456.39 million.

This analysis shows that NABIL, Everest and SBI have been classifying loans according to the NRB guidelines. Increase in provision for loan loss means less profit and when there is less profit then the dividend will be paid in lower rate or there might be no dividend. A decrease in dividend might sometimes disseminate the wrong information and it will negatively impact the company. In the past major portion of profit were distributed as dividends and little portion were booked as capital. The most profitable amongst all parties were the shareholders. The new directives secured the depositors fund and helped to strengthen the financial health of the banks. The impact of the directives on the profitability of bank is short term, after the banks have enough provisions for loan loss and sufficient capital to support the risks, the performance for the banks will again pick up. The bank will have better strength with adequate provisioning.

As per the NRB directives given to the finance companies commercial banks has to formula a specific loan loss provision against doubtful and bad debts. The substandard, doubtful and bad loans are categorized under non-performing

loans. An increase in non-performing loans increases loan loss provision and interest suspense account which leads to profit deduction.

**Table 4.14**

**Non-Performing Loans to Total Loans and Advances Ratio (%)**

(Rs. in

millions)

<b>Banks</b>	<b>2062/63</b>	<b>2063/64</b>	<b>2064/65</b>	<b>2065/66</b>	<b>2066/67</b>	<b>Mean</b>
NABIL	4.19	1.41	1.14	0.75	0.81	1.66
Everest	2.59	1.32	0.83	0.694	0.49	1.18
SBI	7.35	6.62	4.85	4.03	2.09	4.99
Combined mean						2.61

*Source: Annual Report of NABIL, SBI and Everest (Various years)*

**Figure 4.11**

**Non-Performing Loans to Total Loans and Advances Ratio (%)**

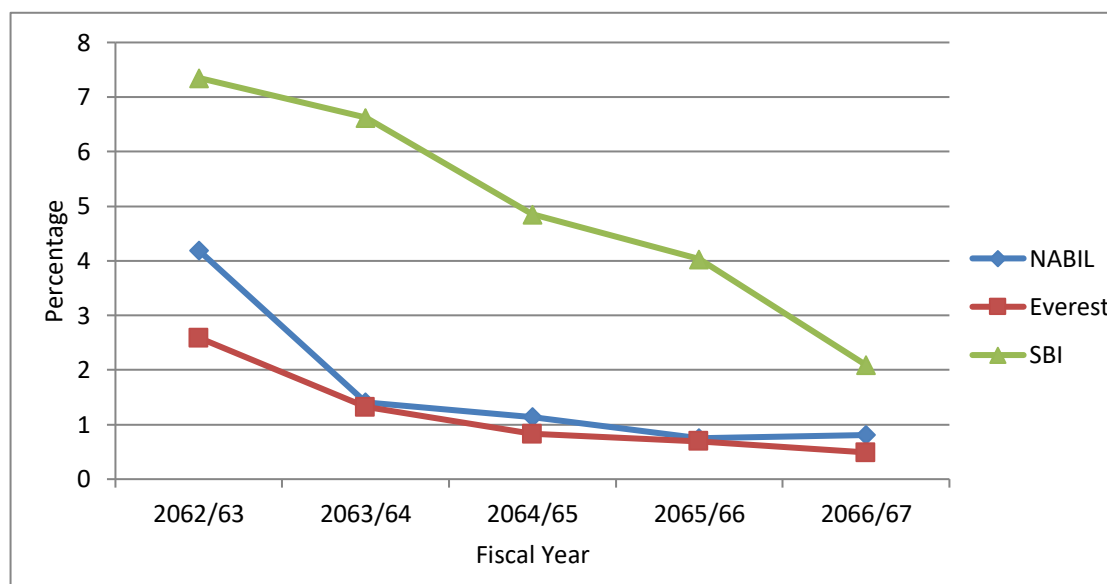


Table and figure 4.14 shows, that the non-performing loans to total loans and advances ratio of the three banks are decreasing trend in all the years except in year 2066/67 of NABIL. SBI has recorded the highest mean of all i.e. 4.99 and Everest bank has recorded lowest mean ratio i.e. 1.18. Everest bank has highest performance than other two banks.

Non-Performing Assets (NPAs) of this sector is covering around 8 percent which is slightly higher than the internationally acceptable level of 5 percent. However, as this sector has also built up loan loss provision to the extent of nearly 6 percent this will definitely cushion any disaster emanating from the level of NPAs. NPAs does occur in the process of capital formation in any economy and it would be wise controlling NPAs rather than restrict capital formation. Besides, it is a fact that any developing economy does, built up NPAs of the initial stages of development, which gets diluted and is brought down as development picks up. Appropriate tax policies also help in improving the balance sheet of bank with respect to NPAs.

If the banking industry average for non-performing asset is 8% then we can conclude that Everest has the small percentage of non-performing loans, SBI ratios are lower than of industry average and greater than combined mean. So they should also take major steps in recovering non-performing loans and review its current policy.

#### **4.2.2 Interest Income to Total Income Ratio**

Income is one of the most important parts of any business organization. Interest income occupies a greater portion of the total income in a banking business. This ratio measures the banks performance on other fee-based activities also. The high ratio indicates the high contribution made by lending and investment and high contribution by other fee based activities in total income.

**Table 4.15**

**Interest Income to Total Income Ratio**

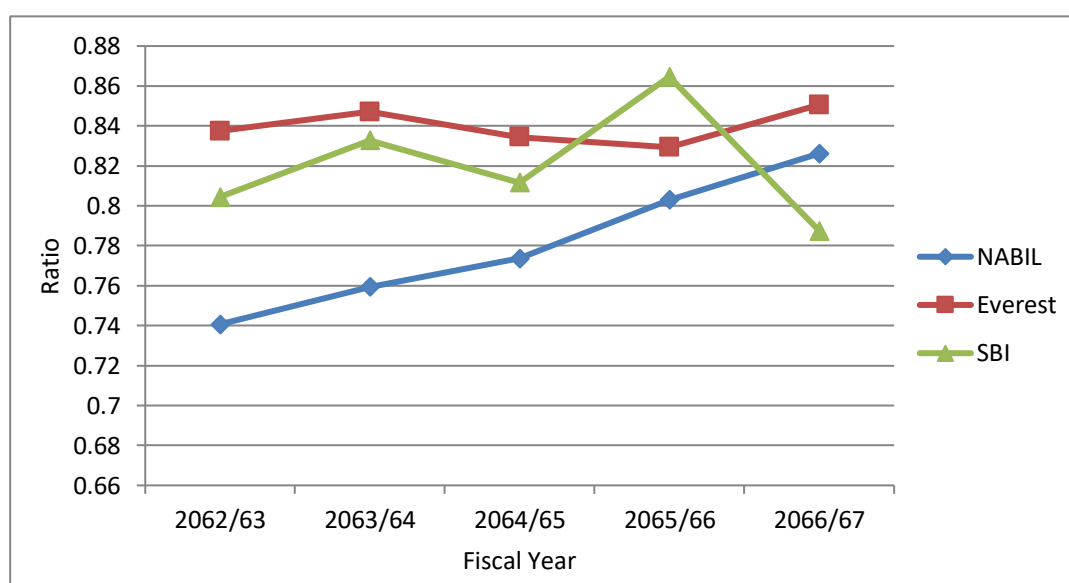
(Rs. in millions)

<b>Banks</b>	<b>2062/63</b>	<b>2063/64</b>	<b>2064/65</b>	<b>2065/66</b>	<b>2066/67</b>	<b>Mean</b>
NABIL	0.7407	0.7593	0.7737	0.8030	0.8262	0.7806
Everest	0.8374	0.8470	0.8344	0.8293	0.8506	0.8397
SBI	0.8044	0.8328	0.8116	0.8646	0.7875	0.8202
Combined mean						0.8135

*Source: Annual Report of NABIL, SBI and Everest (Various years)A-6/A-8*

**Figure 4.12**

**Interest Income to Total Income Ratio**



Literally, the above table and figure, ratios of all the banks have remained almost constant. Comparatively, the NABIL bank which has recorded the lowest mean ratio i.e. 0.7806. More specifically, Everest bank has the highest mean ratio i.e. 0.8397. The combined mean ratio is 0.8135.

**4.2.3 Interest Expenses to Total Deposit Ratio**

This ratio measures the cost of total deposits in relative term. The joint venture banks performance depends upon its ability to generate cheaper funds. Cheaper

fund more will be the profitability in generating loan advances and vice versa. The high ratio indicates of costly fund this adversely affects its lending performance.

**Table 4.16**  
**Interest Expenses to Total Deposit Ratio**

(Rs. in millions)

Banks	2062/63	2063/64	2064/65	2065/66	2066/67	Mean
NABIL	0.0167	0.0184	0.0238	0.0237	0.0309	0.0227
Everest	0.0297	0.0290	0.0284	0.237	0.0304	0.0288
SBI	0.2986	0.0304	0.0360	0.0331	0.0295	0.0855
Combined mean						0.0457

Sources: Appendix A-7/A-2(Annual report of NABIL,EBL,SBI)

**Figure 4.13**

**Interest Expenses to Total Deposit Ratio**

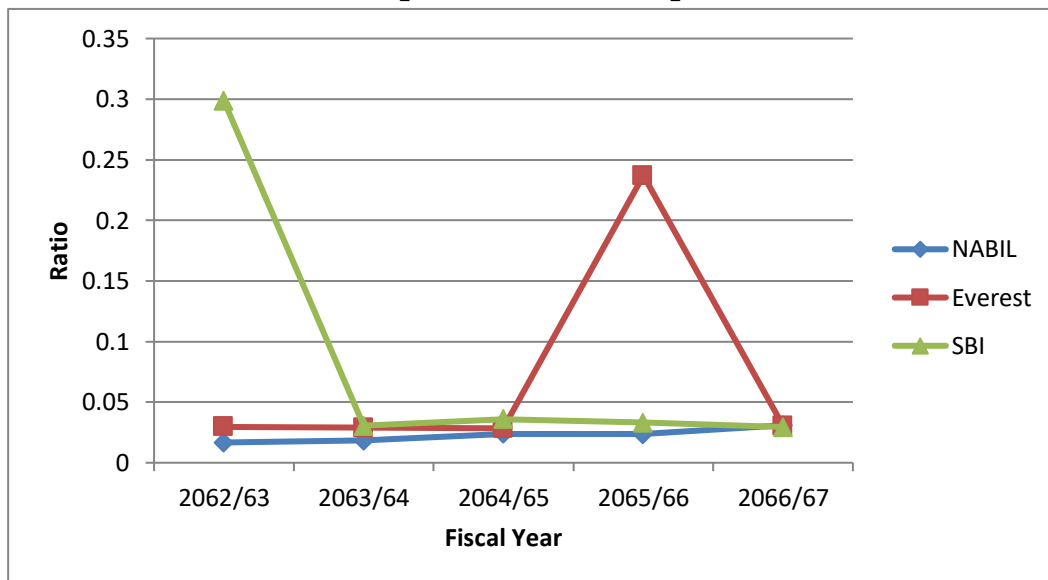


Table 4.16 shows that the costs of deposit of NABIL and SBI have been slightly fluctuating in the study period. And Everest has been decreasing trend in all the study period. The highest mean ratio of SBI i.e. 0.0855 and lowest mean ratio of NABIL i.e. 0.0227. NABIL is successful collecting cheaper fund by its modern and personalized services to the customer.

#### 4.2.4 Interest Suspense to Interest Income from Loans and Advances Ratio

Interest suspense means the interest due but not collected. NRB directive do not allow the commercial banks to book due but unpaid interest into income. The increase in the interest suspense decreases the profit of the company. Such interest is shown in assets side of balance sheet under the heading “other assets”. This ratio of interest suspense to total interest income from loans and advances measures the composition of due but uncollected interest in the total interest income from loans and advances. The high degree of this ratio indicates to low interest turnover and low degree of this ratio indicates high interest turnover. This ratio also helps to analyze the capacity of the bank in collecting the repayments of the loans and advanced.

**Table 4.17**

#### **Interest Suspense to Income from Loans and Advances Ratio**

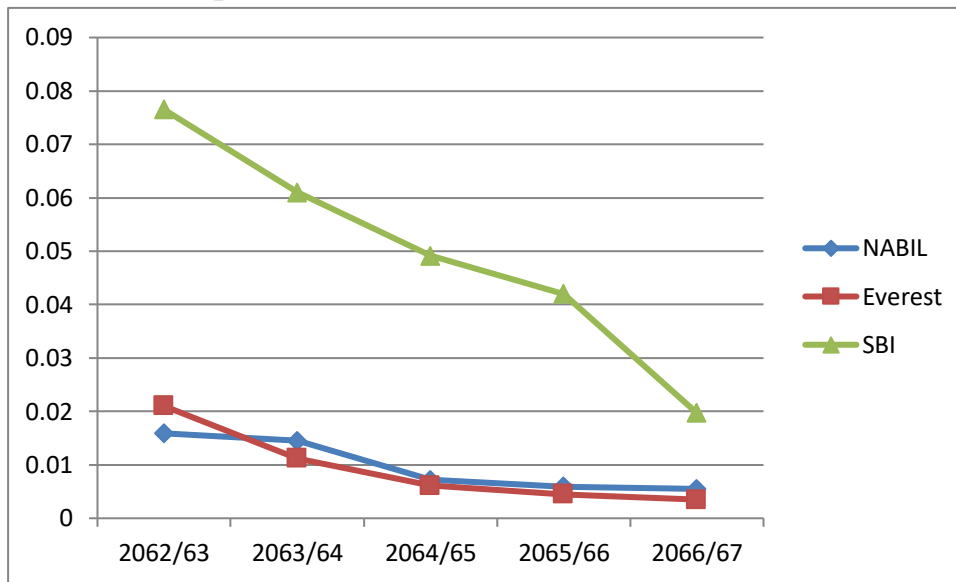
(Rs. in millions)

<b>Banks</b>	<b>2062/63</b>	<b>2063/64</b>	<b>2064/65</b>	<b>2065/66</b>	<b>2066/67</b>	<b>Mean</b>
NABIL	0.0159	0.0145	0.0072	0.0059	0.0055	0.0098
Everest	0.0210	0.0112	0.0061	0.0045	0.0035	0.0093
SBI	0.0765	0.0610	0.0491	0.0420	0.0197	0.0497
Combined mean						0.0229

*Sources: Appendix A-7/A-3(Annual report of NABIL,SBI,EBL)*

**Figure 4.14**

**Interest Suspense to Income from Loans and Advances Ratio**



The table and figure shows that the ratio of interest suspense to income from loans and advances. In all the banks have been slightly decreasing trend in all the study period. The highest mean ratio of SBI i.e. 0.0497 and lowest mean ratio of Everest i.e. 0.0093. The combined mean ratio has 0.0229. The highest performance of Everest and NABIL than SBI bank's has to improve its interest turnover to decrease the ratio suspense account. These banks have to concentrate on recovery of the loans and advances, plan and act according for the proper collection of repayments schedules.

**4.2.5 Interest Income to Interest Expenses Ratio**

The ratio of interest income to interest expenses ratio measures the difference between interest rates offered and interest rate charged. The spread between the interest income and interest expenses if the main foundation for the profit of the bank. NRB had restrictions on the interest rate spread of the commercial banks. The interest offered and the interest charged should not be more than 5 percent. The commercial banks are free to fix interest rate on deposits and loans. Interest rates on all types of deposits and loans should be published in the local newspapers and communicated to Nepal Rastra Bank on quarterly

basis and immediately when revised. Deviation of 0.50 percent from the published rate is allowed on all types of loans and deposit. However in rate fixation but it does not specify the conditions that would oblige NRB to do so.

**Table 4.18**

**Interest Income to Interest Expenses Ratio**

(Rs. in millions)

<b>Banks</b>	<b>2062/63</b>	<b>2063/64</b>	<b>2064/65</b>	<b>2065/66</b>	<b>2066/67</b>	<b>Mean</b>
NABIL	4.3884	3.6678	2.8572	2.6089	2.4265	3.1898
Everest	2.4012	3.7094	3.2041	2.4480	2.1591	2.7844
SBI	2.2380	2.1170	2.0159	2.1334	1.7709	2.0550
Combined mean						2.6764

*Sources: Appendix A-6/A-7(Annual report of NABIL,SBI,EBL)*

**Figure 4.15**

**Interest Income to Interest Expenses Ratio**

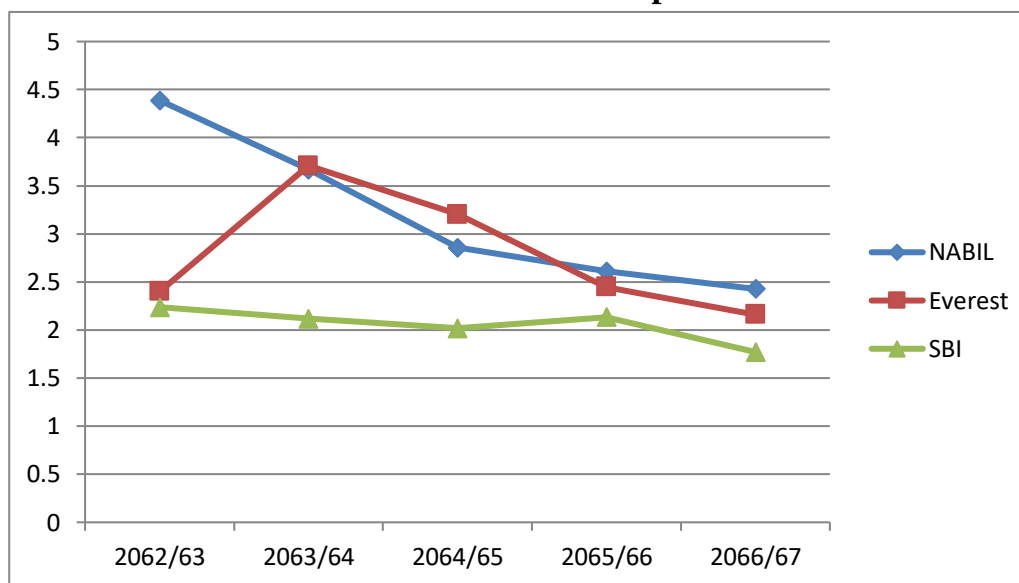


Table and figure shows that NABIL has recorded slightly decreasing in the study period. Everest and SBI have been slightly decreasing trend in the study period except in year 2065/66. The mean ratio of NABIL is highest i.e. 3.1898 and lowest mean ratio is SBI i.e. 2.0550. Everest and SBI are charging high rate of interest on loans and advances and providing low interest rate on its deposited. The highest cost of deposits and low volume of non-interest bearing deposit in the deposit mix of SBI has resulted on the least ratio in the interest income to interest expenses ratio.

### 4.3 Analysis of Growth Rate

Growth analysis of the banks involves analysis of growth in deposits, loans, investment and net profit. Growth analysis ascertains how much growth in deposit liability is supported by growth in assets. The analysis also concerns which asset portfolio has significant increment corresponding to the increment deposit liability. The analysis of growth rate can help to compare the loans, profit, deposit portion of the banks as the 3<sup>rd</sup> objective.

#### 4.4.8 Growth Ratio of Total Deposit

Deposits are the main source of capital for the joint venture banks. Bank utilizes these funds in loan and advances and as investments.

**Table 4.19**  
**Growth Ratio of Deposit**

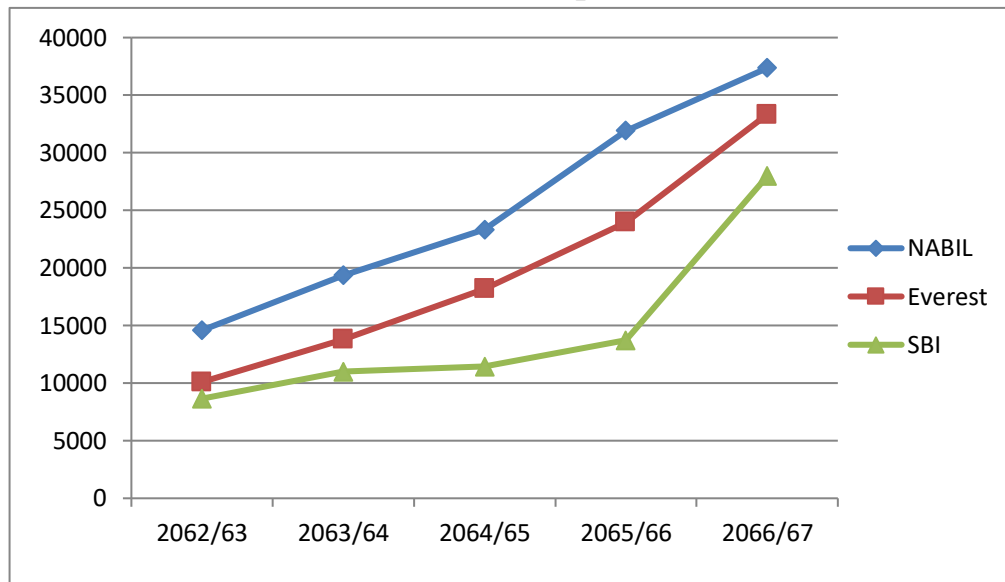
(Rs. in  
million)

<b>Banks</b>	<b>2062/63</b>	<b>2063/64</b>	<b>2064/65</b>	<b>2065/66</b>	<b>2066/67</b>	<b>Growth Ratio (%)</b>
NABIL	14586.61	19347.40	23342.28	31915.04	37348.26	60.94
Everest	10097.69	13802.44	18186.25	23976.29	33322.95	69.69
SBI	8654.77	11002.04	11445.28	13715.39	27957.22	69.04

*Sources: Appendix (Annual report of NABIL, EBL, SBI)*

**Figure 4.16**

**Growth Ratio of Deposit**



The table and figure shows that all the banks have been increasing trend in all the year. The highest growth ratio of Everest i.e. 69.69% and lowest growth ratio of NABIL i.e.60.94%. Everest has been able to collect deposits higher degree. It has different kind of deposit schemes, which must have been effected on deposit ratio. Being NABIL has lowest growth ratio than other two, it has less improved their collection and should lunch various deposit scheme to increase its deposit ratio. SBI has slightly lower ratio than Everest, so it has been able to collect deposits higher degree than NABIL but slightly lower than SBI.

**4.4.9 Growth Ratio of Loan and Advances**

Loan and Advances is the major function of the joint venture banks the growth of these loans and advances determine the banking performance.

**Table 4.20**  
**Growth Ratio of Loan and Advances**

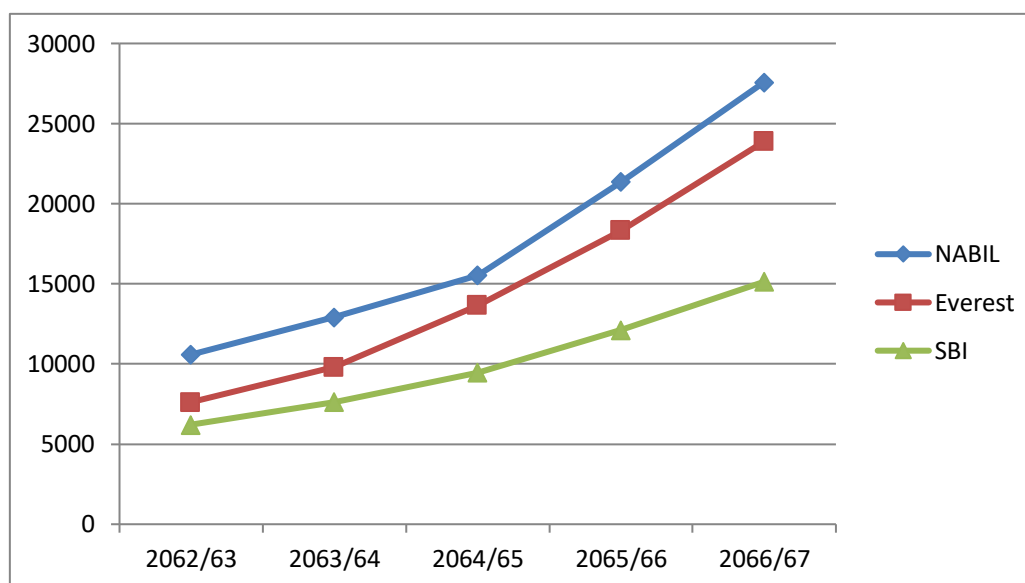
(Rs. in million)

<b>Banks</b>	<b>2062/63</b>	<b>2063/64</b>	<b>2064/65</b>	<b>2065/66</b>	<b>2066/67</b>	<b>Growth Ratio (%)</b>
NABIL	10586.17	12922.54	15545.77	21365.05	27589.93	61.63
Everest	7618.67	9801.30	13664.08	18339.08	23884.67	68.10
SBI	6213.88	7626.73	9460.45	12113.69	15131.75	58.93

*Source: Appendix I(Annual report of NABIL,EBL,SBI)*

**Figure 4.17**

**Growth Ratio of Loan and Advances**



The table and figure shows the growth ratio of loan and advances in all the banks have been increasing in all the years. Everest bank has highest growth ratio i.e. 68.10% and lowest growth ratio of SBI bank i.e. 58.93%. Everest has adopted aggressive policy while increasing loan and advances. During the study period it has a significant growth and explains it aggressive as compare to other two banks. SBI seems too weak in growth of loan and advances.

#### 4.4.10 Growth Ratio of Total Investment

Investment is another important function of banking besides loan and advances investment determines the utilization and utilization of funds.

**Table 4.21**

#### Growth Ratio of Total Investment

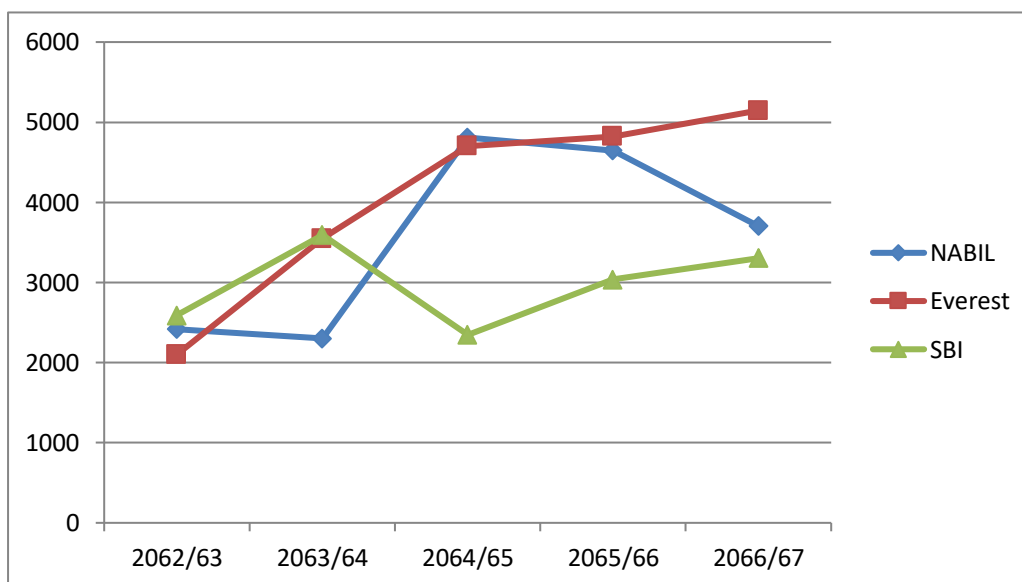
(Rs. in million)

Banks	2062/63	2063/64	2064/65	2065/66	2066/67	Growth ratio%
NABIL	2418.42	2301.45	4808.34	4646.87	3706.10	52.14
Everest	2100.29	3548.61	4704.63	4821.59	5146.05	59.19
SBI	2588.14	3591.76	2345.57	3035.54	3306.57	34.69

Sources: Appendix (Annual report of NABIL, EBL, SBI)

**Figure 4.18**

#### Growth Ratio of Total Investment



The table 4.21 shows that NABIL and SBI have been fluctuating in all the study period and Everest has been increasing growth over the study period. The highest growth ratio of Everest bank i.e. 59.19% and lowest growth ratio of SBI bank i.e. 34.69%. Everest has more significant than other two banks.

#### 4.4.11 Growth Ratio of Net Profit

A joint venture banks performance measuring criteria is its net profit. The growth of net profit reveals the overall performance of the banks.

**Table 4.22**

#### Growth Ratio of Net Profit

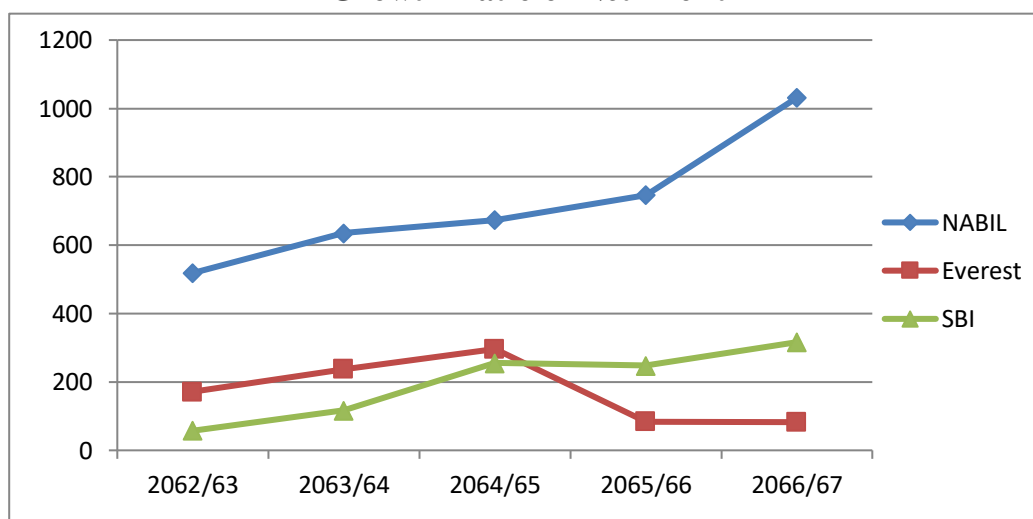
(Rs. in million)

Banks	2062/63	2063/64	2064/65	2065/66	2066/67	Growth ratio%
NABIL	518.63	635.26	673.95	746.46	1031.05	49.69
Everest	170.81	237.29	296.40	83.74	82.44	72.19
SBI	57.39	117.00	254.90	247.77	316.37	81.86

Sources: Appendix A-12(Annual report of NABIL,EBL,SBI)

**Figure 4.19**

#### Growth Ratio of Net Profit



The table and figure shows that the growth ratios of net profit of NABIL have been increasing trend in all the years. SBI has increasing trend except in 2065/66. Everest has fluctuating growth ratio in the study period. SBI has highest growth ratio. 81.86% and NABIL has the lowest growth ratio i.e. 49.69%. SBI has a significance growth ratio than other two banks.

## 4.5 Correlation Coefficient Analysis

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

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

The statistical tool correlation analysis is used in the study to measure the relationship between variables in determining whether the relationship is significant or not. For the purpose of decision making interpretation are based on the following terms.

- When,  $r = 1$ , there is perfect positive correlation
- When,  $r = -1$ , there is perfect negative correlation.
- When,  $r = 0$ , there is no correlation.
- When, 'r' lies between 0.7 and 0.999 (0.7 to -0.99) there is high degree of positive (or negative) correlation.
- When, 'r' lies between 0.5 and 0.6999 there is moderate degree of correlation.
- When, 'r' is less than 0.5, there is low degree of correlation.

### 4.5.1 Co-efficient of Correlation between Deposits and Loan and Advances

The coefficient of correlation between deposit and loan and advances is to measure the degree of relationship between these two variables. Deposit is independent variable and loan and advances is dependent variable. The main objectives of computing between two variables are to find out whether deposits

are significantly used as loan and advances of NABIL, Everest and SBI for the study period. Co-efficient of correlation is helpful to measure the strength of difficult variables like loan, deposit, profit, investment and income.

**Table 4.23**

**Correlation between Deposit and Loan and Advances**

<b>Banks</b>	<b>Evaluation Criterion</b>			
	<b>R</b>	<b>R<sup>2</sup></b>	<b>P.Ers</b>	<b>6*P.Er</b>
NABIL	0.9900	0.9801	0.0060	0.0360
Everest	0.9970	0.9940	0.0018	0.0108
SBI	0.9038	0.8169	0.0552	0.3312

*Sources: Appendix 13*

The table 4.23 shows the co-efficient of correlation between deposits and loan and advances of NABIL is 0.9900. We consider the value of the co-efficient of determination 'r<sup>2</sup>' is 0.9801 which 98.01% of the variation in the dependent variable (loan and advances) has been explained by the independent variable (deposit). Further, value of P.Er is 0.0060 and 6\*P.Er is 0.0360. The value of co-efficient of correlation 'r' is greater than the value of 6\*P.Er, which shows that the value of 'r' is significant. It has any rigid policy to maintain these fixed consistence ratio between these assets and the volume of these assets in NABIL and it is highly of seasonal character.

In case of Everest also the co-efficient of correlation between deposit and loan and advances is 0.9970, which indicates positive correlation between these two variables. Similarly, the value of co-efficient of determination r<sup>2</sup> is 0.9940, which means that 99.4% in the dependent variable (loan and advances) has been explained by the independent variable (deposit). Further, value of P.Er is 0.0018 and 6\*P.Er is 0.0108. It shows that the value of co-efficient of correlation is greater than 6 times probable error. Therefore, value of 'r' is significant. There is significant relationship between deposit and loan and advances and the bank is mobilizing its deposit as loan and advances successfully.

Likewise, when we observe the correlation between deposits and loan and advances of SBI bank, it is also positive. The value of 'r' is 0.9038 and 'r<sup>2</sup>' is 0.8169. It has P.Er is 0.0552 and 6\*P.Er is 0.3312. There will be the variation of 33.12% in the loan and advances. The value of 'r' is greater than value of 6\*P.Er. The relationship between the deposit and loan and advances of SBI is significant.

From the above analysis, we can be concluding that the three banks are successful in mobilizing their deposit as loan and advances. Value of 'r' and 'r<sup>2</sup>' of the three banks are positive and three banks have greater than the value of 6 times of there probable error. Everest has the highest value of 'r' which indicates that it is in better position on mobilizing deposits as loan and advances in comparison to NABIL and SBI are also satisfactory position.

#### 4.5.2 Co-efficient of Correlation between Investment and Loan and Advances

This coefficient of correlation between investment and loan and advances measures the degree of relationship between these two variables. This measure of correlation explains whether the banks have a rigid policy to maintain a consistent relationship between two assets or other factor such as seasonal opportunity, economic demand. NRB directives etc have impact on loans and advances as every bank has first priority on loan and advances to investment. The critically, increase or decrease in the volume of loans and advances directly reduces or increase the level of idle fund and this idleness of fund increases the investments.

**Table 4.24**  
**Correlation between Investment and Loan and Advances**

Banks	Evaluation Criterion			
	R	R <sup>2</sup>	P.Er	6*P.Er
NABIL	0.6408	0.4106	0.1778	1.0668
Everest	0.8642	0.7486	0.0764	0.5483
SBI	0.2981	0.0888	0.2748	1.6490

*Sources: Appendix A-4/A-3(Annual report of NABIL,EBL,SBI)*

The table 4.24 shows the co-efficient of correlation between investment and loan and advances of NABIL is 0.6408. We consider the value of the co-efficient of determination ( $r^2$ ) is 0.4106, which mean 41.06% of the variation in the dependent variable (loan and advances) has been explained by the independent variable (investment). The value of P.Er is 0.1778 and  $6*P.Er$  is 1.0668. The value of co-efficient of correlation 'r' is less than the value of  $6*P.Er$ , which shows that the value of 'r' is insignificant.

In case of Everest, the co-efficient of correlation between investment and loan and advances is 0.8642. The value of coefficient of determination  $r^2$  is 0.7486, which mean that 74.86% in the dependent variable (loan and advances) has been explained by the independent variable (investment). Further, value of P.Er is 0.0764 and  $6*P.Er$  is 0.4583. It shows that the value of co-efficient of correlation is greater than probable error. Therefore, value of 'r' is significant. There is significant relationship between investment and loan and advances.

Likewise, when we observe the correlation between investment and loan and advances of SBI bank it is also positive. The value of 'r' is 0.2981 and  $r^2$  is 0.0888. It has P.Er is 0.2748 and  $6*P.Er$  is 1.6490. The value of 'r' is less than value of  $6*P.Er$ . Therefore, value of 'r' is insignificant. So the relationship between investment and loan and advances of SBI is insignificant.

#### **4.5.3 Co-efficient of Correlation between Shareholders Equity and Loans and Advances**

Co-efficient of correlation between shareholders equity and loan and advances measures the degree of relationship between these two variables. Here loan and advances are the independent variable and shareholders equity is dependent variable.

**Table 4.25****Correlation between Shareholders Equity and Loans and Advances**

<b>Banks</b>	<b>Evaluation Criteria</b>			
	<b>r</b>	<b>R2</b>	<b>P.Er</b>	<b>6*P.Er</b>
NABIL	0.9938	0.9876	0.0037	0.0222
Everest	0.9514	0.9052	0.0286	0.1716
SBI	0.9912	0.9825	0.0053	0.0318

*Sources: Appendix I A-5/A-3(Annual report of NABIL,EBL,SBI)*

Table 4.25 shows that there is high degree of positive correlation between shareholders equity and loan and advances in NABIL, Everest and SBI banks. It shows good fund mobilization..

The value of 'r' in all the banks which we considered are significant due to the value of 'r' in the banks is higher than 6 times of P.Er. It is likely to conclude that the volume of shareholders equity is accidental and there is no relationship between these two variables.

#### 4.5.4 Co-efficient of Correlation between Total Income and Loan and Advances

The correlation between total income and loan and advances measures the degree of relationship between these two variables. The value of 'r' explains whether a percentages change in loan and advances contribute to increase the same percentage of income or not. Loan and advances is independent variable and total income is dependent variable.

**Table 4.26****Correlation between Total Income and Loan and Advances**

<b>Banks</b>	<b>Evaluation Criteria</b>			
	<b>r</b>	<b>R2</b>	<b>P.Er</b>	<b>6*P.Er</b>
NABIL	0.9911	0.9823	0.0079	0.0475
Everest	0.9958	.9916	0.0025	0.015
SBI	0.9481	0.8989	0.0305	0.183

*Sources: Appendix I A-8/A-3(Annual report of NABIL,EBL,SBI)*

The table 4.26 shows that the coefficient of correlation between total income and loan and advances of NABIL, Everest and SBI are 0.9911, 0.9958 and 0.9481 respectively. The value  $6*P.Er$  of NABIL, Everest and SBI are 0.0475, 0.015 and 0.183 respectively. In all the banks coefficient of correlation 'r' is higher than the value of  $6*P.Er$ . So values of coefficient of correlation 'r' are significant in all the banks. Hence, there are relationship between total income and loan and advances in all three banks.

#### 4.5.5 Co-efficient of Correlation between Interest suspense and Interest Income

This correlation measures the relationship between interest suspense and interest income. Interest suspense is earned but uncollected interest is the outcome of the interest income in this analysis interest suspense is the dependent variable and interest income is the independent variable, interest income which is due and uncollected for three months are transferred to interest suspense and thus interest income is reduced.

**Table 4.27**  
**Correlation between Interest Suspense and Interest Income**

Banks	Evaluation Criterion			
	r	R2	P.Er	6*P.Er
NABIL	0.3259	0.1062	0.2664	1.5984
Everest	0.7035	0.4949	0.1524	0.9144
SBI	0.2167	0.0469	0.2841	1.7045

Sources: Appendix I A-9/A-6(Annual report of NABIL,SBI,EBL)

The table 4.27 shows that NABIL, Everest and SBI have insignificant value of 'r' since value of 'r' is less than  $6*P.Er$ . The values of coefficient of correlation 'r' of NABIL, Everest and SBI are 0.3259, 0.7035 and 0.2167 and

values of **6\*P.Er** of NABIL, Everest and SBI are 1.5984, 0.9944 and 1.7045 respectively. Hence, there are no relationships between interest suspense and interest income in all the three banks.

#### **4.5.6 Co-efficient of Correlation between Provision for Loan Loss and Advances**

The correlation between provision for loan loss and loan and advances measures the degree of relationship between two variables. Provision for loan loss is dependent variable and loan and advances is independent variable. Loan loss provision is the product of loan and advances and these two variables are correlated. The main objective of computing 'r' between these two variables is to justify whether loan loss provision increase in the same proportion of increase in loan and advances.

**Table 4.28****Correlation between Provision for Loan Loss and Loan and Advances**

Banks	Evaluation Criterion			
	r	R <sup>2</sup>	P.Er	6*P.Er
NABIL	0.9456	0.8942	0.0319	0.1914
Everest	0.9963	0.9926	0.0022	0.0132
SBI	0.3050	0.0930	0.2740	1.644

Sources: Appendix I A-11/A-3(Annual report of NABIL,SBI,EBL)

The table 4.28 explains that NABIL and Everest have significant value of 'r' since its value is greater than the value of 6\*P.Er. Hence, there is positive relationship between provision for loan loss and loan and advances. In SBI, there is small value of 'r' than 6\*P.Er, so value of 'r' is insignificant in this case and has the negative relationship between provision for loan loss and loan and advances.

**4.5.7 Co-efficient of Correlation between Interest Income and Net Profit**

The correlation between interest income and net profit measures the degree of relationship between these two variables. The interest income contributions a major portion of total volume of joint venture banks income. In this analysis, interest income is independent variables and net profit is dependent variable.

**Table 4.29****Correlation between Interest Income and Net Profit**

Banks	Evaluation Criterion			
	r	R <sup>2</sup>	P.Er	6*P.Er
NABIL	0.9887	0.9775	0.0068	0.0408
Everest	0.6626	0.4390	0.1692	1.0152
SBI	0.8669	0.7515	0.0749	0.4494

Sources: Appendix I A-6/A-12(Annual report of NABIL,SBI,EBL)

The table 4.29 explained that the value of 'r' in NABIL and SBI are significant and relationships between these two variables are certain, as the value of 'r' is

more than 6 times of P.Er. The value of 'r' in Everest is not certain and significant. It shows negative relationship between these two variables in case of Everest.

#### **4.6 Major Finding of the Study**

In this research mainly secondary data are used in the analysis of computed with the help of different financial and statistical tools. In financial tools ratio analysis have been used and on statistical tools standard deviation, co-efficient of variation (C.V.), correlation co-efficient and trend analysis has been used. A primary data analysis is done from the information collected from structured interview with the concerned banks officials. This chapter focuses on the major findings from the year 2062/63 to 2066/67.

The major findings of the financial and statistical analysis are presented here.

##### **Lending Strength in Relative Term**

- The total asset to total liability ratio remained almost constant in the study period of all the three banks. SBI has slightly less than NABIL and Everest bank.
- Loan and advances to total assets ratio has been fluctuating in the study period of NABIL, Everest and SBI banks. NABIL has tendency to invest in government securities has resulted in lowest mean ratio of loan and advances to total assets ratio. The increasing ratio of loan and advances of Everest except in years 2063/64 and 2066/67 has resulted in highest mean ratio of loan and advances to total assets ratio because EBL has the consistency in activities
- Everest has the highest loan and advances and investment to total deposit ratio which refers that it has maximum mobilization of deposits than other banks. The ratio of loan and advances and investment to deposit ratio measures the portion of total deposit that is used to increase the income of the banks irrespective of the portfolio of its application. The mean ratio of

NABIL has lower than combined mean ratio. NABIL has not been able to mobilize the deposit.

- The ratio of loan and advances to shareholders equity has gained the significant importance in measuring the capital fund and contribution in loan and advances. The combined mean is slightly deviated from the mean ratio of the bank, which indicates that there is significant difference in the performance of the banks. Everest has the highest mean ratio i.e. 12.7153, which is slightly deviated from the combined mean of the banks. The ratio of NABIL is lowest and it is lower than the combined mean and slightly deviated from combined mean.
- The ratios conclude that Everest and SBI have successful to advance high volume of credit as much as the capital fund allows it than NABIL.

#### Lending strength in Absolute Terms

- The loans and advances of NABIL are highest of all the three banks. Loans and advances have been increasing trend over the study period. The highest ratio of NABIL i.e. 17601.89 and SBI has the lowest ratio i.e. 10109.30. CV has also lowest of SBI i.e. 31.59. Therefore, the performance of SBI is more consistent and Everest is least consistent.
- Lending Efficiency and Its Contribution in Total Profitability
- SBI has the highest loan loss provision and NABIL has lowest loan loss provision. NABIL has been decreasing trend in all the study period. Everest and SBI have been decreasing order in the study period except in year 2062/63. NABIL has lowest mean ratio and it indicates that the banks are working towards reducing the non-performing loans and following good lending policy for the new loans.
- Non-performing loans out of the total loan and advances is highest in case of SBI. NABIL and Everest have lower non-performing loan than SBI
- The ratio of interest income from loan and advances to total income shows that there is a large contribution of interest income in the total income.

SBI has highest mean ratio and Everest has the lowest mean ratio. NABIL has lower mean ratio than the combined mean ratio.

- The ratio of interest expenses to total deposit shows that, the mean ratio of SBI has highest than other two banks. NABIL and Everest mean ratio is lower than combined mean ratio.
- SBI has the highest ratio of interest suspense to interest from loan and advances. It's ratio also higher than combined mean. Everest has lowest mean ratio and best among the banks. Since, high ratio is unfavorable. It indicates that the borrower's default in paying the interest or either it could be lack of strict measures to collect the interest in the bank.
- The interest income to interest expenses ratio of the banks are not widely deviated. The highest mean ratio of NABIL, with one rupee of interest expenses it has been able to earn Rs.3.18 highest among the banks.

### **Growth Ratio**

- The growth ratio of total deposit and loan and advances by analysis of five years of study period found out that Everest has highest growth ratio and it has improved exceptionally well in collecting deposits and extending loan and advances where as NABIL and SBI has more steady growth ratios and has not been able to increase substantial amount of deposits and loan and advances yearly.
- The growth ratio of investment of Everest is highest. SBI has lowest growth ratio in comparison with Everest and NABIL. So SBI has decreased its investment.
- The growth ratio of net profit of SBI is highest and that of NABIL is lowest. It indicates that the performance of SBI is good with respect to increase in profit.

### **Co-efficient of Correlation and Regression Analysis**

- Correlation co-efficient between total deposit and loan and advances of all the banks show positive relationship between these two variables. This

shows value of 'r' is significant. There are significant relationship between deposit and loan and advances and the banks are mobilizing their deposits as loan and advances successfully.

- Generally, correlation of investment and loan and advances of Everest bank shows positive relationship. Everest has highest correlation in investments loans and advances and NABIL and SBI have negative relationship between investment and loan and advances.
- Correlation co-efficient of shareholder's equity and loan and advances shows that all the banks have significant value of 'r'. This shows high degree of positive correlation between shareholders equity and loan and advances.
- Correlation co-efficient of total income and loan and advances of all three banks have significant value of 'r' i.e. positive relation between total income and loan and advances since value of  $6 * P.Er$  is lesser than value of 'r'.
- Correlation co-efficient of the interest suspense and interest income of NABIL and SBI have insignificant value of 'r' and it shows negative relation between interest suspense and interest income. Everest shows positive correlation and has positive relationship between interest suspense and interest income. Everest has high degree of correlation. SBI has low degree of correlation.
- Correlation co-efficient of provision for loan loss and loan advances shows that NABIL and Everest have positive correlation between provision for loan loss and loan advances and SBI has negative correlation between provision for loan loss and loan advances.
- Correlation co-efficient of invest income and profit shows that there is no relationship in case of Everest and positive relation between invest income and profit in case of NABIL and SBI.

## **CHAPTER –V**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

This chapter highlights some selected actionable conclusions and recommendations on the basis of the major findings of the study derive from the analysis of NABIL, Everest and SBI bank. In order to carry out this study mainly secondary data are used. The analysis of the data is carried out with the help of varies financial and statistical tools.

#### **5.1 Summary**

Lending is one of the most important functions of a commercial bank and JV's bank and the composition of loan and advances directly affects the performance and profitability of the bank. There is intense competition in banking business with limited market and less investment opportunities available. Every bank is facing the problem of default loan and there is always possibility of a certain portion of the loan and advances turning in non-performing loan. A study of the liquidity position loan and advances, profitability, deposits position of the commercial banks are analyzed and the banks lending strength, lending efficiency and its contribution in total profitability has been measured.

In this study, “the financial tools – ratio analysis via asset management ratios and profitability ratios are calculated to find out the lending strength of the commercial banks. Also growth ratios, statistical tools like mean, standard deviation, C.V. and coefficient of correlation. The data used in this research is secondary nature and extracted from the annual reports of the concerned banks and website of Nepal stock exchange. The financial statements of five years 2062/63 to 2066/67 were selected for the study purpose.

The analysis of lending strength in relative terms the ratio remained almost constant in the study period of all the three banks. SBI has slightly less than NABIL and Everest. Similarly Everest is most successful in collecting cheaper funds and its major portion of deposits consists of non interest bearing deposits. The cost of deposits is the major expense of a bank. Everest is properly utilizing the collected deposits (funds) in terms of loan and advances and investments. There are no idle deposits and hence maximum utilization of funds in loan and advances and investments. Similarly SBI is also successful in converting liability into assets, in terms of investment made, from shareholders equity; it has successfully generated proportionately higher volume of loans and advances.

The analysis of lending strength in absolute terms, NABIL has advances large volume of loan and the interest income from loan and advances is highest among the banks. Due to high volume of loans and advances the provision for doubtful debts is also the highest which indicates its superior performance than other two banks. However NABIL has the highest net profit followed by Everest and SBI.

The activity ratio shows that Everest has better performance than NABIL and SBI. The lowest loan loss provision ratio is the indicative of better performance of Everest than the other two banks in judging the borrower needs and quality of the borrower NABIL performed better than Everest and SBI because its interest suspense to interest income is the lowest. It indicates that the borrower's default in paying the interest or either it could be lack of strict measure to collect the interest in the bank. SBI's high loan loss provision reflects the increasing possibility of non performing loan out of total loan and advances. However, it has been found that the ratio of loan loss provision to total loan and advances is non increasing trend.

NABIL has the highest mean ratio of interest income from loan and advances which shows a large contribution of interest income to the total income and SBI has the lowest. NABIL's mean ratio is higher than the combined mean. SBI is successful in collecting low cost of deposits by its modern and personalized customer services. The low cost of deposit as shown by interest expenses to total deposit ratio has resulted this ratio of SBI to be the lowest. NABIL has lower interest suspense out of total income from loan and advances. SBI has the highest ratio of interest suspense.

Everest has maintained highest ratio of growth in total deposit, loan and advances and net profit but in growth ratio of investment lower than SBI. However, the growth of Everest is limited to growth ratio only and does not maintain the highest growth in volumes. The liquidity position of these three banks is likely to increase in the near future.

All the three banks are fluctuating in loan and advances and total deposit ratio 0.1 and increasing trend in total investment and to total deposit. The commercial bank has been following NRB directives in terms of loan loss provision and loan classification as the figures are revealed in the appropriate heading in their annual reports.

## **5.2 Conclusions**

The overall performance of all the JV's banks is satisfactory. Due to high volume of loan and advances NABIL has provision for doubtful debts also. However, NABIL has the highest profit among the banks as a result of low cost of deposits, consists good quality of assets in total volume of loan and advances as shown by the result of loan loss provision to total loan and advances ratio and a lower interest suspense account. The interest suspense proportion of SBI is the highest among the banks.

Everest has performed exceptionally well in increasing the growth ratio of deposit, loan and advances and net profit however its performing loans portion is highest among the three banks.

All the banks have good lending procedures, preliminary screening is done of all the loan application, credit appraisal and financial position of the business and cash flows of the proposal is given high importance which is essential criteria for loan approval. There is proper control mechanism like delegation of authority, follow up visits and books of accounts inspection of the client which result in good performance of the banks. The banks are following NRB guidelines of loan classification and provisioning which makes the banks financial position strong instead of holding high volume of non- performing assets in addition to all the guidelines followed of NRB and the banks internal policy.

### **5.3 Recommendations**

On the basis of analysis and findings of the study, following recommendations have been forwarded.

The ratio of non- interest bearing deposit to total deposit of Everest is the lowest and as a result of this it has highest ratio in interest expense to total deposits. There is high propensity to grow in loan and advances. Therefore, this bank is suggested to reduce the interest rate. Consequently the volume of interest bearing deposit in its deposit mix will reduce and as a result the gap between interest income and interest expenses will increase which will provide new lending opportunities. Then it will offset the liquidity arising from high propensity of deposits. The bank is further suggested to launch new schemes for low interest bearing deposits as a result of which the consumer's focuses on the facilities rather than the interest provided on deposits.

The interest suspense to interest income from loan and advances is high in case of SBI. The increase in interest suspense account will increase risk and the profitability of the bank will decrease. Therefore, these banks have to improve

its interest turnover rate to decrease the ratio of interest suspense to interest income from loan and advances. This bank has to concentrate on recovery of interest and loans advances, plan and act accordingly for proper collection of interest repayment schedules.

Everest contribution in loan and advances is the lowest and this has high degree of variation as compare to NABIL and SBI. Lending is most important function of commercial bank. The low tendency towards lending affects the performance of the banks in long term. Low level of lending and investment activities will affect the economy of a country by low level of productivity and employment opportunities. This economic slackness will eventually affect the banking business also. Therefore, Everest bank is recommended to at least this growth of loan in the coming year also.

The high amount of provision on loan loss and high volume of non-performing loans of SBI is certainly not sign of efficient credit management. SBI bank is recommended to revise its current policy and improve its credit management techniques and take major steps in recovering of the non-performing loans. However, there has been an improvement in the non-performing loans in reducing its portion during the 2062/63.

The low percentage of non-performing loan and low provision of loan loss of Everest is not entirely due to proper lending and investment policy of the bank. The portfolio of the bank has low deposit cost, increased foreign currency deposits and high portion of fee based income and exchange earning due to fluctuation is the main source of its income and has contributed comparatively less in the core function of the bank. Since the bank is less oriented in the lending activities it has low ratio of provisioning and low percentage of bad debts. The portfolio of loans seems, due to the compulsion of NRB directives and guidelines. However, Everest bank should realize that if the exchange income is reduced due to strength of Nepalese currency in future and the fee

based activities decline due to the economic slackness the existence of the bank may be questioned in future. Therefore, this bank is highly recommended to focus on lending activities. Everest's should increase the sustainable banking practices and emphasize more on lending functions besides its fee-based activities.

The low ratio of loan and advances and investment to total deposit indicates that NABIL has not been properly mobilizing its fund. The lending functions have not been fully utilized. Therefore, it is suggested to invest the funds as an idle deposit is a cost to the bank. The bank with the marketing efforts should increase its facilities on credit. As a result of increasing in lending activities, its profitability will further increase.

Banks does not provide loan without collateral. It is recommended that proper assessment and viability of the project should also be considered apart from the traditional concept of collateral based lending. If there is good proposal and all other factors of credit analysis are fulfilled then collateral should not be the only deciding factors for advancing the loans besides following the proper guidelines and policy of credit appraisal.

There has been communication gap between the banks is lacking even through they are on the same business. Banks need to develop a mechanism for inter bank transparence, a committee which will help the better understanding of the various types of risk, disseminate information regarding bad debts and fraud cases, minimize customer misleads and practices fair competition.

## BIBLIOGRAPHY

### Books

- Clements, J.H. (1963). *Bank Lending*: London: Butterworth Publishers.
- Crosses, H.D. (1963). *Management Policies for Commercial Banks*: New Jersey: Prentice Hall Inc.
- Dadhaswamy, I.M.& Vasudevan, S.V. (1979). *A Text Book of Banking*: New Delhi: S.Chand and Co.Ltd.
- Edward, R. et.al. (1980). *Commercial Banking*, New Jersey: Prentice Hall Inc.
- Joshi, P.R. (2001). *Research Methodology*, Kathmandu: Buddha Academic Publishers and Distributors Pvt.Ltd.
- K.C., S. & Lekshmy, S. (1999). *Banking Theory and Practices*: New Delhi: Vikas Publishing House.
- Kothari, C.R. (1989). *Quantitative Techniques*: New Delhi: Vikas Publishing House Pvt.Ltd.
- Kothari, C.R. (1990). *Research Methodology Methods and Techniques*: 2<sup>nd</sup> Edition, New Delhi: Wishwa Prakashan, House Pvt. Ltd.
- Kumar, P. (1994). *Elements of Management Accounting*: Kedar Nath Ram Nath, Meerut (u.p.).
- Lawarance, J.G. (1988). *Principal of Managerial Finances*: San Diego University, Halper Colling Publishers.
- Pandey, I.M.(1993). *Financial Management*, Sixth Revised Edition, New Delhi: Vikas Publishing House Pvt. Ltd.
- Vaidya S. (1999). *Banking Management*: Kathmandu: Monitor Nepal.
- Van Horne, J.C. (2000). *Fundamental of Financial Management*: Prentice Hall Inc, New Delhi.
- Wolff, H.K.& Pant, P.R. (2000). *Social Science Research and Thesis Writing*: Second Edition, Kathmandu: Buddha Academic Enterprises Pvt Ltd

### **Booklets, Periodicals and Journals**

- Everest Bank Limited (2060/61 - 2066/67). *Annual Report*: Kathmandu.
- Khatri, Sudhir (2004). *One Umbrella Act's Pros. and Cons*: New Business Age, 3(12):18-20.
- NABIL Bank Limited (2060/61 - 2066/67). *Annual Report*: Kathmandu.
- NRB, Mid July (2004). *Banking and Financial Statistics*, 41:6-8.
- SBI Bank Limited (2060/61- 2066/67). *Annual Report*: Kathmandu.
- Sharma, Gopal (2004). *Two Deeades of Private Sector Banks in Nepal....An Analysis*: Business Age,6(6):40-42.
- Sharma,Gopal (2004). *Two Deeades of Private Sector Banks in Nepal...Analysis: Kathmandu: Business Age*, 6(6): 40-42.
- Shrestha, Atma (2003). *Entrepreneur- Friendly Credit Policy*: Business Age, 5(5):33-34.
- Subedi, Kamal (2004). *Comments on Umbrella Ordinance*: New Business Age, 3(12):16-17.

### **Articles:**

- khadka, .(2000). *A Study on investment policy of NABIL in comparision to other joint venture banks of Nepal* : NRB Samachar Annual Publication.
- Gurung (2006). *Lending policy and recovery management of Standard Chartered Bank Nepal Ltd.*
- Gupta (2007).*comparative Analysis of Financial Performance of Commercial Banks in Nepal .(the special issue of Banijya sansar, Tribhuvan University, Kirtipur.*
- Ghimire(2005).Non Performing Assets of Commercial Banks Cause and Effect

### **Thesis:**

- Joshi, R. (2007). *A Comparative Study of Investment Policy of SCBNL & EBL.*  
An Unpublished Master Degree Thesis submitted to faculty of Management T.U.
- Khadka, R.R. (2008). *A Study on the Investment Policy of Nepal Arab Bank Ltd. in Comparison to other Joint Venture Banks of Nepal.* An

Unpublished Master Degree Thesis submitted to faculty of Management T.U.

Maskey, L. (2009). *A Comparative study of Lending Performance of Nepal Arab Bank Limited, SCBNL and NIBL*. An Unpublished Master Degree Thesis submitted to faculty of Management T.U.

Raya, T.K. (2008). *Investment Policy and Analysis of commercial banks in Nepal (A Comparative Study of SCBNL with NIBL & NBBL)*. An Unpublished Master Degree Thesis submitted to faculty of Management T.U.

Sharma, R. (2009). *Loan Disbursement and Collection of Nepal Bangladesh Bank Limited*. An Unpublished Master Degree Thesis submitted to faculty of Management T.U.

Shasi, R. (2008). *Lending Operation and Practices of Joint Venture Banks in Nepal. A Case Study of NABIL, Standard Chartered and Himalayan Bank Limited*. An Unpublished Master Degree Thesis submitted to faculty of Management T.U.

Tuladhar, U. (2005). *A Study on Investment Policy of Nepal Standard Chartered Bank Limited in Comparison to Other Joint Venture Banks of Nepal*. An Unpublished Master Degree Thesis submitted to faculty of Management T.U.

### **Websites**

[www.commercialbank.com.np](http://www.commercialbank.com.np)

[www.everstbank.com.np](http://www.everstbank.com.np)

[www.nabilbankltd.com.np](http://www.nabilbankltd.com.np)

[www.nepalstock.com.np](http://www.nepalstock.com.np)

[www.sbibank.com.np](http://www.sbibank.com.np)

## APPENDICES

### Total Assets

<b>Banks</b>	<b>2062/63</b>	<b>2063/64</b>	<b>2064/65</b>	<b>2065/66</b>	<b>2066/67</b>
NABIL	17186.33	22329.97	27253.39	37132.75	43867.39
Everest	11792.13	15959.28	21432.57	271490.34	36916.84
SBI	10345.37	13035.83	13901.20	17187.44	30916.68

A-1

### Total Liabilities

<b>Banks</b>	<b>2062/63</b>	<b>2063/64</b>	<b>2064/65</b>	<b>2065/66</b>	<b>2066/67</b>
NABIL	15528.69	21957.83	26874.84	37132.75	43364.49
Everest	11022.51	15195.73	19797.97	27149.34	36538.27
SBI	9656.36	12878.55	13763.83	17187.44	30685.14

A-1

### Non- Interest Bearing Deposits

<b>Banks</b>	<b>2062/63</b>	<b>2063/64</b>	<b>2064/65</b>	<b>2065/66</b>	<b>2066/67</b>
NABIL	2792.18	2910.56	3395.23	5284.34	5480.53
Everest	1025.02	1145.79	1673.98	24992.34	4859.95
SBI	1773.54	1408.29	1930.43	1738.10	2864.73

A-2

### Total Deposits

<b>Banks</b>	<b>2062/63</b>	<b>2063/64</b>	<b>2064/65</b>	<b>2065/66</b>	<b>2066/67</b>
NABIL	14586.61	19347.40	23342.28	31915.04	37348.25
Everest	10097.69	13802.44	18186.25	23976.29	33322.95
SBI	8654.32	11002.04	11445.28	13715.39	27957.22

A-2

### Loan and Advances

<b>Banks</b>	<b>2062/63</b>	<b>2063/64</b>	<b>2064/65</b>	<b>2065/66</b>	<b>2066/67</b>
NABIL	10586.17	12922.54	15545.77	21365.05	27589.93
Everest	7618.67	9801.30	13664.08	18339.08	23884.67
SBI	6213.88	7626.73	9460.45	12113.69	15131.74

A-3

### Total Investment

<b>Banks</b>	<b>2062/63</b>	<b>2063/64</b>	<b>2064/65</b>	<b>2065/66</b>	<b>2066/67</b>
NABIL	2413.94	2301.45	4808.34	4646.87	3706.10
Everest	2100.29	3548.61	4704.63	4821.59	5146.05
SBI	2588.14	3591.76	2345.57	3035.55	3306.57

A-4

### Shareholders Equity

<b>Banks</b>	<b>2062/63</b>	<b>2063/64</b>	<b>2064/65</b>	<b>2065/66</b>	<b>2066/67</b>
NABIL	1657.64	1873.20	2055.11	2439.82	3129.02
Everest	769.62	822.8	1106.6	7770.01	12799.41
SBI	689.01	971.72	1153.31	1404.22	1702.53

A-5

### Interest Income

<b>Banks</b>	<b>2062/63</b>	<b>2063/64</b>	<b>2064/65</b>	<b>2065/66</b>	<b>2066/67</b>
NABIL	1068.75	1309.99	1587.75	1978.69	2798.84
Everest	719.30	903.41	1144.40	1548.65	2186.81
SBI	578.37	708.71	831.11	970.51	1460.44

A-6

### Interest Expenses

<b>Banks</b>	<b>2062/63</b>	<b>2063/64</b>	<b>2064/65</b>	<b>2065/66</b>	<b>2066/67</b>
NABIL	243.54	357.16	555.71	758.43	1153.28
Everest	299.56	401.39	517.16	632.60	1012.87
SBI	258.43	334.77	412.26	454.91	824.70

A-7

**Total Income**

<b>Banks</b>	<b>2062/63</b>	<b>2063/64</b>	<b>2064/65</b>	<b>2065/66</b>	<b>2066/67</b>
NABIL	1510.68	1725.13	2052.07	2464.01	3387.07
Everest	858.96	1066.51	1371.50	1548.65	2570.89
SBI	718.99	850.92	1024.03	970.51	1460.45

A-8

**Interest Suspense**

<b>Banks</b>	<b>2062/63</b>	<b>2063/64</b>	<b>2064/65</b>	<b>2065/66</b>	<b>2066/67</b>
NABIL	168.86	188.63	112.18	128.04	151.57
Everest	159.79	110.01	83.37	83.37	83.34
SBI	475.45	465.92	465.56	509.49	297.89

A-9

**Provision for Doubtful Debts**

<b>Banks</b>	<b>2062/63</b>	<b>2063/64</b>	<b>2064/65</b>	<b>2065/66</b>	<b>2066/67</b>
NABIL	358.66	360.56	356.23	357.24	394.41
Everest	211.72	281.41	334.94	148.60	497.35
SBI	388.17	525.46	614.72	604.60	632.52

A-10

**Loan Loss Provision**

<b>Banks</b>	<b>2062/63</b>	<b>2063/64</b>	<b>2064/65</b>	<b>2065/66</b>	<b>2066/67</b>
NABIL	360.57	356.23	357.24	394.40	409.08
Everest	281.42	334.94	418.60	497.34	584.88
SBI	525.47	614.72	604.60	632.51	480.30

A-11

**Net Profit**

<b>Banks</b>	<b>2062/63</b>	<b>2063/64</b>	<b>2064/65</b>	<b>2065/66</b>	<b>2066/67</b>
NABIL	518.63	635.26	673.95	746.46	1031.05
Everest	170.81	237.29	296.40	451.20	638.73
SBI	57.39	117.00	254.90	247.77	316.37

A-12

### Coefficient of Correlation between Deposit and Loan and Advances of NABIL

Year	Deposit(x)	X <sup>2</sup>	L&A(y)	Y <sup>2</sup>	XY
2062/63	14586.61	212769191.3	10586.17	112066995.3	154416333.2
2063/64	19347.40	374321886.8	12922.54	166991040.1	250017550.4
2064/65	23342.28	544862035.6	15545.77	241670964.9	362873716.2
2065/66	31915.04	1018569778.0	21365.05	456465361.5	681866425.4
2066/67	37348.26	1394892525	27589.93	761204237.4	1030435879
Total	126539.59	3545415417	88009.46	1738398599	2479609904

A-13

Now, we have

Here No. of variables = n

$$N = 5, \quad \sum x = 126539.59, \quad \sum y = 88009.46, \quad \sum xy = 2479609904, \\ \sum x^2 = 3545415417, \quad \sum y^2 = 1738398590$$

Coefficient of correlation can be calculated by using following formula

$$R_{xy} (r) = \frac{n \times \sum xy - \sum x \times \sum y}{\sqrt{n \times \sum x^2 - (\sum x)^2} \times \sqrt{n \times \sum y^2 - (\sum y)^2}}$$

$$= \frac{5 \times 2479609904 - 126539.59 \times 88009.46}{\sqrt{5 \times 3545415417 - (126539.59)^2} \times \sqrt{5 \times 1738398590 - (88009.46)^2}}$$

$$r = 0.99$$

$$r^2 = 0.9801$$

Calculation of Probable Error

P.E. of coefficient of correlation can be calculated by following formula

$$P.E (r) = 0.6745 \times 1 - r^2 / \sqrt{n}$$

$$= 0.6745 \times 1 - 0.9801 / \sqrt{5}$$

$$= 0.0060$$

$$\text{Now, } 6 * P.Er = 6 \times 0.0060 = 0.0360$$

**Coefficient of Correlation between Deposit and Loan and Advances of EBL**

Year	Deposit(x)	X <sup>2</sup>	L&A(y)	Y <sup>2</sup>	XY
2062/63	10097.69	101963343.336	7618.67	58044132.5689	76930967.8723
2063/64	13802.44	190507349.953	9801.30	96065481.69	135281855.172
2064/65	18186.25	330739689.062	13664.08	186707082.246	248498374.9
2065/66	23976.29	574862482.164	18339.08	336321855.246	439703100.413
2066/67	33322.95	1110418996.70	23884.67	570477461.008	795907664.176
Total	99385.62	2308491861.21	73307.8	1247616012.75	1696321962.52

A-13

Now, we have

Here No. of variables = n

N = 5,  $\sum x = 99385.62$   $\sum y = 73307.8$   $\sum xy = 1696321962.52$   $\sum x^2 = 2308491861.21$   
,  $\sum y^2 = 1247616012.75$

Coefficient of correlation can be calculated by using following formula

$$R_{xy} (r) = \frac{n \times \sum xy - \sum x \times \sum y}{\sqrt{n \times \sum x^2 - (\sum x)^2} \times \sqrt{n \times \sum y^2 - (\sum y)^2}}$$

$$= \frac{5 \times 1696321962.52 - 99385.62 * 73307.80}{\sqrt{5 \times 2308491861.21 - (99385.62)^2} \times \sqrt{5 \times 1247616012.75 - (73307.8)^2}}$$

$$r = 0.997$$

$$r^2 = 0.9940$$

Calculation of Probable Error

P.E. of coefficient of correlation can be calculated by following formula

$$P.E (r) = 0.6745 \times 1 - r^2 / \sqrt{n}$$

$$= 0.6745 \times 1 - 0.9940 / \sqrt{5}$$

$$= 0.0018$$

Now, 6 \* P.Er = 6 × 0.0018 = 0.0108

### Coefficient of Correlation between Deposit and Loan and Advances of SBI

Year	Deposit(x)	X <sup>2</sup>	L&A(y)	Y <sup>2</sup>	XY
2062/63	8654.32	74897254.6624	6213.88	38612304.6544	53776905.9616
2063/64	11002.04	121044884.161	7626.73	58167010.4929	83909588.5292
2064/65	11445.28	130994434.278	9460.45	89500114.2025	108277499.176
2065/66	13715.39	188111922.852	12113.69	146741485.416	166143982.689
2066/67	27957.22	781606150.128	15131.74	228969555.427	423041384.162
<b>Total</b>	<b>72778.21</b>	<b>1296654646.07</b>	<b>50546.49</b>	<b>561990470.191</b>	<b>835149360.517</b>

A-13

Now, we have

Here No. of variables = n

$$N = 5, \quad \sum x = 72778.21 \quad \sum y = 50546.49 \quad \sum xy = 835149360.517$$

$$\sum x^2 = 1296654646.07, \quad \sum y^2 = 561990470.191$$

Coefficient of correlation can be calculated by using following formula

$$R_{xy} (r) = \frac{n \times \sum xy - \sum x \times \sum y}{\sqrt{n \times \sum x^2 - (\sum x)^2} \times \sqrt{n \times \sum y^2 - (\sum y)^2}}$$

$$= \frac{5 \times 835149360.517 - 72778.21 \times 50546.49}{\sqrt{5 \times 1296654646.07 - (72778.21)^2} \times \sqrt{5 \times 561990470.191 - (50546.49)^2}}$$

$$r = 0.9038$$

$$r^2 = 0.8169$$

Calculation of Probable Error

P.E. of coefficient of correlation can be calculated by following formula

$$P.E (r) = 0.6745 \times 1 - r^2 / \sqrt{n}$$

$$= 0.6745 \times 1 - 0.8169 / \sqrt{5}$$

$$= 0.0552$$

$$\text{Now, } 6 * P.Er = 6 \times 0.0552 = 0.3312$$

**Coefficient of Correlation between Investment and Loan and Advances of NABIL**

Year	Investment (x)	X <sup>2</sup>	L&A(y)	Y <sup>2</sup>	XY
2062/63	2413.94	5827106.3236	10586.17	112066995.3	25554379.2098
2063/64	2301.45	5296672.1025	12922.54	166991040.1	29740579.6830
2064/65	4808.34	23120133.5556	15545.77	241670964.9	74749347.7218
2065/66	4646.87	21593400.7969	21365.05	456465361.5	99280609.8935
2066/67	3706.10	13735177.21	27589.93	761204237.4	102251039.573
Total	17876.70	69572489.9886	88009.46	1738398599	331575959.079

A-14

Now, we have

Here No. of variables = n

$$N = 5, \quad \sum x = 17876.70, \quad \sum y = 88009.46, \quad \sum xy = 331575959.079,$$

$$\sum x^2 = 69572489.9886, \quad \sum y^2 = 1738398590$$

Coefficient of correlation can be calculated by using following formula

$$R_{xy} (r) = \frac{n \times \sum xy - \sum x \times \sum y}{\sqrt{n \times \sum x^2 - (\sum x)^2} \times \sqrt{n \times \sum y^2 - (\sum y)^2}}$$

$$= \frac{5 \times 331575959.079 - 17876.70 \times 88009.46}{\sqrt{5 \times 69572489.9886 - (17876.70)^2} \times \sqrt{5 \times 1738398590 - (88009.46)^2}}$$

$$r = 0.6408$$

$$r^2 = 0.4106$$

Calculation of Probable Error

P.E. of coefficient of correlation can be calculated by following formula

$$P.E (r) = 0.6745 \times 1 - r^2 / \sqrt{n}$$

$$= 0.6745 \times 1 - 0.4106 / \sqrt{5}$$

$$= 0.1778$$

$$\text{Now, } 6 * P.Er = 6 \times 0.1778 = 1.0668$$

**Coefficient of Correlation between Investment and Loan and Advances of EBL**

Year	Investment (x)	X <sup>2</sup>	L&A(y)	Y <sup>2</sup>	XY
2062/63	2100.29	4411218.0841	7618.67	58044132.5689	16001416.4143
2063/64	3548.61	12592632.9321	9801.30	96065481.69	34780991.1930
2064/65	4704.63	22133543.4369	13664.08	186707082.246	64284440.6904
2065/66	4821.59	23247730.1281	18339.08	336321855.246	88423524.7372
2066/67	5146.05	26481830.6025	23884.67	570477461.008	122911706.053
Total	20321.17	88866955.1837	73307.8	1247616012.75	326402078.087

A-14

Now, we have

Here No. of variables = n

N = 5,  $\sum x = 20321.17$   $\sum y = 73307.8$   $\sum xy = 326402078.087$   $\sum x^2 = 1247616012.75$

,  $\sum y^2 = 1247616012.75$

Coefficient of correlation can be calculated by using following formula

$$R_{xy} (r) = \frac{n \times \sum xy - \sum x \times \sum y}{\sqrt{n \times \sum x^2 - (\sum x)^2} \times \sqrt{n \times \sum y^2 - (\sum y)^2}}$$

$$= \frac{5 \times 326402078.087 - 20321.17 * 73307.8}{\sqrt{5 \times 88866955.1837 - (20321.17)^2} \times \sqrt{5 \times 1247616012.75 - (73307.8)^2}}$$

$$r = 0.8642$$

$$r^2 = 0.7486$$

Calculation of Probable Error

P.E. of coefficient of correlation can be calculated by following formula

$$P.E (r) = 0.6745 \times 1 - r^2 / \sqrt{n}$$

$$= 0.6745 \times 1 - 0.7486 / \sqrt{5}$$

$$= 0.07646$$

Now, 6 \*P.Er = 6 \* 0.07646 = 0.5483

**Coefficient of Correlation between Investment and Loan and Advances of SBI**

Year	Deposit(x)	X <sup>2</sup>	L&A(y)	Y <sup>2</sup>	XY
2062/63	2588.14	6698468.6596	6213.88	38612304.6544	16082391.3832
2063/64	3591.76	12900739.8976	7626.73	58167010.4929	27393383.7448
2064/65	2345.57	5501698.6249	9460.45	89500114.2025	22190147.7065
2065/66	3035.55	9214563.8025	12113.69	146741485.416	36771711.6795
2066/67	3306.57	10933405.1649	15131.74	228969555.427	50034157.5318
Total	72778.21	45248876.1495	50546.49	561990470.191	152471792.044

A-14

Now, we have

Here No. of variables = n

N = 5,  $\sum x = 72778.21$   $\sum y = 50546.49$   $\sum xy = 152471792.044$

$\sum x^2 = 45248876.1495$ ,  $\sum y^2 = 561990470.191$

Coefficient of correlation can be calculated by using following formula

$$R_{xy} (r) = \frac{n \times \sum xy - \sum x \times \sum y}{\sqrt{n \times \sum x^2 - (\sum x)^2} \times \sqrt{n \times \sum y^2 - (\sum y)^2}}$$

$$= \frac{5 \times 152471792.044 - 72778.21 \times 50546.49}{\sqrt{5 \times 45248876.1495 - (72778.21)^2} \times \sqrt{5 \times 561990470.191 - (50546.49)^2}}$$

$$r = 0.2981$$

$$r^2 = 0.0888$$

Calculation of Probable Error

P.E. of coefficient of correlation can be calculated by following formula

$$P.E (r) = 0.6745 \times 1 - r^2 / \sqrt{n}$$

$$= 0.6745 \times 1 - 0.0888 / \sqrt{5}$$

$$= 0.2748$$

Now, 6 \*P.Er = 6 × 0.2748 = 1.6490

**Coefficient of Correlation between Shareholders Equity and Loan and Advances of NABIL**

<b>Year</b>	<b>Shaherholders Equity (x)</b>	<b>X<sup>2</sup></b>	<b>L&amp;A(y)</b>	<b>Y<sup>2</sup></b>	<b>XY</b>
2062/63	1657.64	2747770.3696	10586.17	112066995.3	17548058.8388
2063/64	1873.20	3508878.24	12922.54	166991040.1	24206501.9280
2064/65	2055.11	4223477.1121	15545.77	241670964.9	31948267.3847
2065/66	2439.82	5952721.6324	21365.05	456465361.5	52126876.2921
2066/67	3129.02	9790766.1604	27589.93	761204237.4	86329442.7686
<b>Total</b>	<b>11154.7900</b>	<b>26223613.5145</b>	<b>88009.46</b>	<b>1738398599</b>	<b>212159147.210</b>

A-15

Now, we have

Here No. of variables = n

$$N = 5, \quad \sum x = 11154.79, \quad \sum y = 88009.46, \quad \sum xy = 212159147.210,$$

$$\sum x^2 = 26223613.5145, \quad \sum y^2 = 1738398590$$

Coefficient of correlation can be calculated by using following formula

$$R_{xy} (r) = \frac{n \times \sum xy - \sum x \times \sum y}{\sqrt{n \times \sum x^2 - (\sum x)^2} \times \sqrt{n \times \sum y^2 - (\sum y)^2}}$$

$$= \frac{5 \times 212159147.210 - 11154.79 \times 88009.46}{\sqrt{5 \times 26223613.5145 - (11154.79)^2} \times \sqrt{5 \times 1738398590 - (88009.46)^2}}$$

$$r = 0.9938$$

$$r^2 = 0.9876$$

Calculation of Probable Error

P.E. of coefficient of correlation can be calculated by following formula

$$P.E (r) = 0.6745 \times 1 - r^2 / \sqrt{n}$$

$$= 0.6745 \times 1 - 0.9876 / \sqrt{5}$$

$$= 0.0037$$

$$\text{Now, } 6 * P.Er = 6 \times 0.0037 = 0.0222$$

**Coefficient of Correlation between Shareholders Equity and Loan and Advances of EBL**

Year	Shareholders equity (x)	X <sup>2</sup>	L&A(y)	Y <sup>2</sup>	XY
2062/63	769.62	592314.9444	7618.67	58044132.5689	5863480.8054
2063/64	822.8	676999.84	9801.30	96065481.69	8064509.6400
2064/65	1106.6	1224563.56	13664.08	186707082.246	15120670.9280
2065/66	7770.01	60373055.4001	18339.08	336321855.246	142494834.99
2066/67	12799.41	163824896.348	23884.67	570477461.008	305709684.044
Total	23268.44	226691830.092	73307.8	1247616012.75	477253180.407

A-15

Now, we have

Here No. of variables = n

N = 5,  $\sum x = 23268.44$   $\sum y = 73307.8$   $\sum xy = 477253180.407$   $\sum x^2 = 226691830.092$

,  $\sum y^2 = 1247616012.75$

Coefficient of correlation can be calculated by using following formula

$$R_{xy} (r) = \frac{n \times \sum xy - \sum x \times \sum y}{\sqrt{n \times \sum x^2 - (\sum x)^2} \times \sqrt{n \times \sum y^2 - (\sum y)^2}}$$

$$= \frac{5 \times 477253180.407 - 23268.44 * 73307.8}{\sqrt{5 \times 226691830.092 - (23268.44)^2} \times \sqrt{5 \times 1247616012.75 - (73307.8)^2}}$$

$$r = 0.9514$$

$$r^2 = 0.9052$$

Calculation of Probable Error

P.E. of coefficient of correlation can be calculated by following formula

$$P.E (r) = 0.6745 \times 1 - r^2 / \sqrt{n}$$

$$= 0.6745 \times 1 - 0.9052 / \sqrt{5}$$

$$= 0.0286$$

Now, 6 \* P.Er = 6 \* 0.0286 = 0.1716

**Coefficient of Correlation between Shareholders Equity and Loan and Advances of SBI**

Year	Shareholders equity (x)	X <sup>2</sup>	L&A(y)	Y <sup>2</sup>	XY
2062/63	689.01	474734.7801	6213.88	38612304.6544	4281425.4588
2063/64	971.72	944239.7584	7626.73	58167010.4929	7411046.0756
2064/65	1153.31	1330123.9561	9460.45	89500114.2025	10910831.5895
2065/66	1404.22	1971833.8084	12113.69	146741485.416	17010285.7718
2066/67	1702.53	2898608.4009	15131.74	228969555.427	25762241.3022
Total	5920.79	7619540.7039	50546.49	561990470.191	65375830.1979

A-15

Now, we have

Here No. of variables = n

$$N = 5, \quad \sum x = 5920.79 \quad \sum y = 50546.49 \quad \sum xy = 65375830.1979$$

$$\sum x^2 = 7619540.7039, \quad \sum y^2 = 561990470.191$$

Coefficient of correlation can be calculated by using following formula

$$R_{xy} (r) = \frac{n \times \sum xy - \sum x \times \sum y}{\sqrt{n \times \sum x^2 - (\sum x)^2} \times \sqrt{n \times \sum y^2 - (\sum y)^2}}$$

$$= \frac{5 \times 65375830.1979 - 5920.79 \times 50546.49}{\sqrt{5 \times 7619540.7039 - (5920.79)^2} \times \sqrt{5 \times 561990470.191 - (50546.49)^2}}$$

$$r = 0.9912$$

$$r^2 = 0.9825$$

Calculation of Probable Error

P.E. of coefficient of correlation can be calculated by following formula

$$P.E (r) = 0.6745 \times 1 - r^2 / \sqrt{n}$$

$$= 0.6745 \times 1 - 0.9825 / \sqrt{5}$$

$$= 0.0053$$

$$\text{Now, } 6 * P.Er = 6 \times 0.0053 = 0.0318$$