

CREDIT MANAGEMENT OF JOINT VENTURE BANKS

(With reference to Himalayan Bank Limited, Nabil Bank Limited and Everest Bank Limited)

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RECOMMENDATION

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DECLARATION

I hereby declare, this submission of thesis entitled “CREDIT MANAGEMENT OF JOINT VENTURE BANKS WITH REFERENCE TO HIMALAYAN BANK LIMITED, NABIL BANK LIMITED & EVEREST BANK LIMITED” to office of the dean, faculty of management, Tribhuvan University, is my original work and to the best of my knowledge and belief, it contains no material previously published or written by another person nor materials which to a substantial extent has been accepted for the award of any other degree of a university or other institution of higher learning, except where due acknowledgements.

I also certify that the thesis has been written by me. Any help that I received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the reference section of the thesis.

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Sincerely,

Shruti Shrestha

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TABLE OF CONTENTS

CONTENTS	PAGES
<i>Recommendation</i>	<i>i</i>
<i>Viva-Voce Sheet</i>	<i>ii</i>
<i>Declaration</i>	<i>iii</i>
<i>Acknowledgement</i>	<i>iv</i>
<i>Table of Contents</i>	<i>v</i>
<i>List of Tables</i>	<i>vii</i>
<i>Abbreviations</i>	<i>viii</i>
CHAPTER I: INTRODUCTION	1-10
1.1 General Background of the Study	1
1.2 Introduction to financial Service	3
1.3 Statement of The Problem.....	7
1.4 Objectives of The Study.....	8
1.5 Significance of The Study	8
1.6 Limitations of the Study	9
1.7 Organization of The Study	9
CHAPTER II: REVIEW OF LITERATURE.....	11-41
2.1 Introduction	11
2.2 Conceptual Review	11
2.3 Review of Rules, Regulation and NRB Directives Regarding Credit Management of Commercial Banks.....	30
2.4 Review of Thesis.....	37

2.5	Research Gap	40
CHAPTER III: RESEARCH METHODOLOGY.....		42-52
3.1	Introduction	42
3.2	Research Design.....	42
3.3	Nature & Sources of Data	43
3.4	Population and Sample.....	44
3.5	Methods and Tools of Data Analysis	44
3.6	Financial Tools	45
3.7	Statistical Tools.....	50
CHAPTER IV: DATA PRESENTATION AND ANALYSIS		53-68
4.1	Financial Tools	53
4.2	Correlation Testing.....	61
4.3	Test of Hypothesis.....	62
4.4	Major Findings	66
CHAPTER V: SUMMARY, CONCLUSION & RECOMMENDATIONS		69-72
5.1	Summary	69
5.2	Conclusion.....	70
5.3	Recommendation.....	72

BIBLIOGARPHY

ANNEXURES

LIST OF TABLES

Table no.	Title of Table	Pages
2.1	Guidelines of Assessing Risk.....	28
2.2	Fund Required on the basis of R.W.A (%).....	31
2.3	Classification of Losses.....	33
2.4	Public Corporation and their Specified Merchandize.....	39
4.1	Total Loan and Advances to Total Deposit Ratio & to Total Assets Ratio. ..	53
4.2	Total Investment to Total Loan and Advances & to Total Deposit Ratio ...	54
4.3	LLP, NPL, Priority Sector Credit & Deprived Sector Credit to Total Loan and Advances Ratio.....	56
4.4	Operating Profit, Net Profit & Interest Income to Total Loan & Advances Ratio.....	58
4.5	Interest Expenses to Total Deposit Ratio.....	59
4.6	Spread Analysis.....	60
4.7	Correlation Coefficient between Net Profit to Total Deposit	61
4.8	Correlation Coefficient between Total Deposits and Loans and Advances.....	62

ABBREVIATIONS

ADB	:	Agriculture Development Bank
BFI	:	Bank Financial Institution
C.V	:	Coefficient of Variation
CAR	:	Capital Adequacy Ratio
CB	:	Commercial Bank
CEO	:	Chief Executive Officer
CRR	:	Cash Reserve Ratio
EBIL	:	Emirates Bank International Ltd.
EBL	:	Everest Bank Limited
HBL	:	Himalayan Bank Limited
LDC	:	Least Developed Countries
LTD	:	Limited
NBL	:	Nepal Bank Limited
NBBL	:	Nepal Bangladesh Bank Limited
NGO	:	Non-Government Organization
NPA	:	Non-Performing Loan
NRB	:	Nepal Rastra Bank
P.E	:	Probable Error
RBB	:	Rastriya Banijya Bank
Rs.	:	Rupees
S.D	:	Standard Deviation

CHAPTER I

INTRODUCTION

1.1 General Background of the Study

Nepal, like a sandwiched between the two giant countries, India and china, is one of the land locked countries, and survives with her own natural beauty in Asia. Its half-century of experiments and efforts to raise the quality of life of its populace is defeated. Almost half of its population lies under absolute poverty line, especially living in the rural areas are deprived of even basic needs and facilitates like enough calories pure drinking water sanitation facilities, electricity, road facility etc. Some of the basic human indicators like life expectancy, literacy, nutrition level etc. also shows that Nepal occntes among the nation to eliminate the massive poverty persisting in the country through gradual development of the total nation and by providing and availing basic needs to poor people. Actually slow pace of developing of Nepal is due to nothing but landlocked position, poor resources mobilization and its utilization, weak infrastructure development and more over unstable eco-political environment.

Banking plays significant role in the economic development of a country Bank is a resource for the economic development, which maintains the self- confidence of various segments of society and extends credit to the people. So commercial banks are those financial institutions mainly dealing with activities of the trade, commerce, industry and agriculture that seek regular financial and other helps from them for growing and flourishing, the objectives of commercial banks is to mobilized idle resources into the most profitable sector after collecting them from scattered sources commercial bank contributes significantly in the formation of internal capital and development effort Bhattarai (1997:49).

The concept of the banking has been developed from the ancient history with the effort of ancient goldsmiths who developed the practice of storing people's gold and valuables under such arrangement the would leave their gold for safekeeping would get back their gold and valuables after paying a as small amount as fee for safekeeping and serving.

The role of money in the economy is very important. Proper and well – planned management of money directs, determines and enhances the health and productivity of total financial sector and the performance of financial sector affect the growth of economy. Hence, Money is the topic to manage and banks are the manager. The existence of a bank is for the change in every aspect of human being and its presence is for the economic upliftment of people. Banks are the economy. They act as intermediaries to channel funds to productive business companies and projects.

The finance institutions are:

- Commercial Banks
- Development Banks
- Finance companies
- Saving and credit Associations
- Mutual Saving Banks
- Credit Unions
- Investment Companies
- Pension Funds
- Investment Companies
- Investment Bankers
- Securities Brokers and Dealers

Banks grants loan and advances to industries, people and companies that result in the increase in the productivity of nation. For example: The lone against to agricultural sector enhances the agricultural product on. The loan amount can be used by the farmers as per their need to produce their product that will promote the agriculture production. Similarly, the loan and advances to different where monetary transaction occurs. It creates fund from its clients saving and lends the same to needy person or business companies in term loans, advances and investment. Therefore, proper financial decision making is more important in banking transactions for its efficiency and profitability. Most of the financial decision making loan management of lending policy is needed (Dahal, 2002:90)

The source of finance is the most essential element for the establishment and operation of any profit and non-profit oriented institutions usually obtain these sources through ownership capital, public capital through the issues of shares and through financial institutions such as banks, in the form of credits, overdrafts etc. Commercial banks, others banking institutions, on-bank Financial Institutions occupy important role in mobilizing financial resources. There are about 17 insurance companies including deposit insurance and Credit Guarantee Corporation, one Employee Provident Fund and one Citizen Investment Trust belong to this type of financial institutions. Apart from this, securities such as corporate shares debentures and bonds.

Capital accumulation plays an important role in accelerating the economic growth of a nation, which in terms is basically determined among others, by saving and investment propensities. But the capacity to save in the developing countries is quite low with a relatively higher marginal propensity of consumption. As a result, such countries are badly entrapped into the circle of poverty. Therefore, the thus investments (Bhattacharya, 1998.)

1.2 Introduction to financial Service

Finance, the art and science of managing money, affects the lives of every aspect of every person every organization. Finance is concerned with process, institution market and instructions involved in the transfer of money among and between individuals, business and government. Financial market is the place where moneylender and borrowers are busy to act and react. All the facilities that are provided by the financial market are financial services. Financial services cover all banking and non-banking institution. The establishment of Nepal Bank Limited (NBL) in 1937 marks the beginning of financial services in Nepal. This was followed by Nepal Rastra Bank (NRB) in 1986; Rastriya Banijya Bank (RBB) in 1986 and Agricultural Development Bank (ADB) in 1968. Commercial banks, Development banks, Micro finance Development banks, Finance Companies, finance cooperatives, Financial NGO's and Insurance companies are working under the heading of financial institutions (Dhungana, 2004).

1.2.1 Introduction of Sample Banks

1.2.1.1 Himalayan Bank Limited (HBL)

Himalayan Bank Limited was established in 1992 with an authorized capital of Rs240 million by the distinguished business personalities of Nepal in partnership with Employees provident Habib Bank Limited, one of the largest commercial bank of Pakistan. It is the first commercial bank of Nepal with maximum shareholding by the Nepalese private sector. Besides, commercial activities, the bank also offers industrial and merchant banking services. Its composition of the ownership capital is-51%of share owned by Nepalese promoters, 20% by Habib Bank Limited Pakistan,14%by Employees Provident Fund and 15% by public.

The bank at present has paid up capital of Rs.8.11 Billion and has total of 64 branches with 127 ATMs in Nepal. The bank has a very aggressive plan of establishing more branches in different parts of the kingdom in the near future. Himalayan Bank's policy is to extend quality and personalized service to its customers as promptly as possible. All customers are treated with utmost courtesy as valued clients. The Bank as far as possible offers facilities to its clients based on the unique needs and requirements. To extend more efficient services to its customers, Himalayan Bank has been adopting innovative and latest banking technology. This has not only helped the bank to constantly improve its service level but is prepared for future adoption of new technology. It is committed to be a "Bank with differences". The loan position of Himalayan Bank Ltd is average good. Performing loan of this bank has been increasing along with non-performing loan and loan loss provision.

1.2.1.2 Everest Bank Limited (EBL)

Everest Bank Limited is highly successful commercial bank of Nepal established on 18th October 1994 under the company Act 1964 and licensed by Nepal Rastra Bank as an "A" class commercial bank, United Bank of India Ltd, under technical services agreement signed between it and Nepalese promoters was managing the bank from very beginning till November 1996. Later on, it was handed over the management to Punjab National Bank Ltd. India (PNB). PNB is the largest Public Sector Bank of having 109 years of banking history with more than

4400 offices all over India and is known for its strong systems and procedures and a distinct work culture. PNB is providing the top management services to EBL under a technical services agreement signed between the two institutions. EBL thus has advantage of the banking expertise and financial strength of its partner. Drawing its strength from its joint venture, EBL has been steadily growing in its size and operations and established itself as a leading private Sector Bank.

At present, Everest Bank Limited has total paid up capital of Rs. 802.68 crore with main branch is located at New Baneshwor Kathmandu, and Corporate/Head office is situated at Lazimpat, Kathmandu. Its branches are spread from Mechi, eastern part of Nepal to Mahakali, western part of Nepal. The Bank provides general banking services from 94 main branches, 7 Province Offices and 122 ATM and 30 Revenue Collection Counters throughout the nation. The loan position of Everest Bank Ltd is good. Performing loan is in increasing trend along with decreasing trend of non-performing loan. But its loan loss provision is in increasing trend that seeks upset in the banking.

1.2.1.3. Nabil Bank Limited (NABIL)

Nepal Arab Bank Limited Nabil Bank, the 1st foreign joint venture Bank set up in the nation with an objective to introduce modern banking services, commenced its operations on 12th of July 1984 or 2041 Ashad 29 B.S with Rs. 352.09 billion capitals. Dubai Bank Limited, Dubai was the foreign joint venture partner who extended Nabil a technical service freeman in the initial period. The Bank, through its quality customer service and innovative products, has today attained a distinguished recognition in the banking industry of Nepal. The first joint venture bank in Nepal with 35 year's old journey of history.

Nabil Bank Limited was the first joint venture bank established in 1984 with 50% invest by Dubai Bank Limited of UAE and of remaining 50% by Nepalese financial institutions comprise% and 20% by general public. The shares owned by DBL were transferred to Emirates Bank International; Ltd (EBIL), Dubai. Later EBIL sold its entire holding go National Bank ltd, Bangladesh (NBLB). Hence 50% of equity shares of Nabil Bank Ltd are held by NBLB

and out of remaining, financial institutions have taken 20% and 30% were issued to general public of Nepal. NABIL was incorporated with the objective of extending international standard modern banking services to various sectors of the society. Pursuing its objective, NABIL provides a full range of commercial banking services across the national and globe. Currently, it has total paid up capital of Rs. 352.09 Billion with 118 branches and 178 ATMs as well as provides services of remittance form 1500 agents throughout the nation. The loan position of Nabil Bank Ltd is better along with increment in performing loan and decrement in non-performing loan.

1.2.2 An Overview of Credit

Credit is the provision of resources (such as granting a loan) by one part to another party where that second party does not reimburse the first party immediately, there by generation a debt, and instead arranges either to repay or return those resources (or materials) of equal value at a later date. The first party is called a Creditor, also known as a 'Lender', while the second party is called a Debtor, also known as 'Borrower.

Credit is also trended in the market. The pursued from is the credit default swap market, which is essentially a traded market in credit insurance. A credit default swap represents the price at which two parties exchange this risk-the protection "seller" takes the risk of default of the credit in returns for a payment, commonly denoted in basis (one basis point is 1/100 of a percent) of the national amount to be referenced, while the protection " buyer" pays this premium and in the case of default of the underlying (a loan, bond or other receivable) delivers this receivable to the protection seller and receives from the seller the paramount (that is made whole) . Borrowing money or money equivalent instrument through formal or informal lender is known as credit.

Credit Management strongly recommends analyzing and managing the credit risks. Credit risk is defined as the possibility that a borrower will fail to meet its obligations in accordance with the agreed terms and conditions. Credit risk is not restricted to lending activities only but includes off balance sheet and inters bank exposures. The goal of the credit risk management

is to maximize a bank's risk adjusted rate of return by maintaining the credit risk exposure within acceptable parameters. For most bank, loan is the largest and most obvious source of credit risk, however other sources of credit risk exist throughout the activities of a bank, including in the banking book and in the trading book and both on and off balance sheet. Banks are increasingly facing credit risk in various financial instruments other than land including acceptances; inter –bank transactions, trade financing, foreign exchange transactions, guarantees and the settlement of transactions. In Nepalese market various types of loan can be found against gold and silver, loan against first class bank guarantee, loan against mortgage of government security, demand loan, margin lending, overdraft pledge loan hypothecation, auto-loan, personal loan, structure demand loan etc. (Meir, 1996:74)

1.3 Statement of The Problem

This study is conducted to obtain overall view of credit management of the selected joint venture banks. Credit management is one of the most important and complicated functions performed by the bank each bank has credit department and loan administration to conduct, monitor and supervise credit operations. The administration of a particular loan ends when it is recovered. But the process never ends until the bank exists. Commercial banks act as an investment intermediary linking the savers and users of capital. Capital formation is thus regarded as one of the indispensable functions executed by any commercial bank. Capital formation is done through credit advancement and its management.

Trends of bank expansions, operations and establishment are in apex growth condition in Nepal. Recent political changes are also adding fuel to grow the financial sector. Daily various news is broadcasted by media in the concern of merge upgrade, new establishment, branch expansion etc. Recent activities of banking sector are also unique, some of them are busy to introduce new deposit product in high interest rate, some other are trying to catch attention of client by lowering interest rate on loan. Thus study aim to answer following problem and has tried to analyze how the banks are performing in credit sector and how they stand in comparison to one another. Looking the increased interest rate on deposit of commercial banks, everyone says that bank is getting sufficient fund for their operation. So the matter of concern

is to find out the movement of bank credit during the recent five years' period. Normally, following problem of commercial bank will be solved by this study.

- What is the trend of credit and their mix (loan and advances of sampled banks)?
- What is their interest pattern on credit at present?
- What is the relationship between loans and advances, NPL and profit?
- What is the impact of credit management on profitability of sample banks?

1.4 Objectives of The Study

The main objective of this study is to analyze the credit management of selected joint venture Banks of Nepal. The specific objectives are as follows:

- To examine the trend of credit (loans and advances) of bank
- To analyze the priority and deprived sector loans of joint ventures bank.
- To examine the relationship between loans and advances, NPL and profit.
- To analyze the impact of credit management on profitability

1.5 Significance of The Study

Credit performance analysis of any banking sector is very important because it is only one measure to evaluate prosperity or recession of organization after having the real knowledge of indicators of financial performance any stakeholder can decide what they ought to do. Similarly, any concerning bodies will be benefited to study whole organization. So this study will be fruitful for those who want to know about HBL, EBL and NABIL in financial concern. Moreover, this study can also be used by government bodies, investors, competitions.

Thus, a study on the joint venture banks and especially in their lending and investment practices carry a great significant to various groups but in particular is directed to a certain groups of people\organization which are as follows:

- Importance to shareholders
- Importance to the management bodies of these banks for the evaluation of the performance of their banks and in comparison with other banks

- Importance to “outsiders” which are mainly the customers, financial agencies stock exchanges.
- Importance to the government bodies or the policy makers such as the central bank.
- This study would be important for the students as it provides theoretical as well as conceptual framework of different aspect of credit management.

1.6 Limitations of the Study

Every study has its own limitations. All the data may not be available due to business secrecy. Its limitation is as follows:

- This study will be concentrated only on few performances related factors that are related with credit practices.
- This study has focused on the credit behavior between three banks.
- Whole study is based on data of five years’ period (2014/15 to 2018/19).
- Some of the financial tools of comparison shall be used in this study. Hence the drawbacks and weakness of those tools may adversely affect the outcomes of the study.
- Standard performance level may not be available especially in Nepalese context. In thesis context, concerned experts are also consulted. Secondary sources of data will be taken for the study.
- The source of data will be published annual report and internet website which is assumed to be correct.
- Lack of sufficient time and resources.

1.7 Organization of The Study

The study has been organized in five chapter viz. Introduction, Literature Review, Research Methodology, Data Presentation and Analysis and Summary, Conclusion and Recommendation. Each of the chapter has been described as below:

Chapter 1: Introduction

First chapter deals with introduction. The chapter provides general introductions and background of the study. It clarifies the motive behind the study. This includes background of the study, statement of problem, objectives of study, limitation of study and organization of the study.

Chapter 2: Review of Literature

Second chapter is the review of literature. We review available literatures in the related subject matter. Various books, research papers, journals, articles and previous unpublished master degree dissertations has been reviewed in this chapter with their findings. Further, methodology used, sample size, period covered etc. also has been reviewed in possible cases.

Chapter 3: Research Methodology

Research methodology used here has been explained in third chapter. Different tools and techniques used by the research for the analysis purpose are described here. It includes research design. Nature and sources of data population and sampling, method of data collection and analysis etc.

Chapter 4: Data Presentation and Analysis

Data presentation and analysis is the main part of a thesis. In forth chapter, collected data is presented in a tabulated form and analysis of these data is done by using different methods explained in third chapter. Further, different charts and graphs have been used to present the tabulated data.

Chapter 5: Summary, Conclusion and Recommendation

The last chapter summarizes the thesis and presents the conclusion that flows from the study and offers suggestions for further improvement.

CHAPTER II

REVIEW OF LITERATURE

2.1 Introduction

The review of literature is the important aspects of planning of the study. Review of literature means reviewing research studies of other relevant preposition in the related area of the study so that all parts, studies, their conclusions and deficiencies may be known and further research can be concluded (Panta & Wolf, 1999:6) This chapter deals with the review of materials is related with 'credit management' in more detail and descriptive manner. It provides the basis for developing a comprehensive framework. In this chapter, an emphasis is given to the review of major related literature on the credit management and its analysis. To explore the relevant and true facts for the research purpose, this chapter highlights the literature available related to the study. An attempt has been made to look into bank publications, periodicals and central banks rules and regulations. In addition, informal interviews with bank personal and a few customers /borrowers have been aimed to receive. Further, interaction programs related with the financial issues transmitted by the various television channels will be taken as supportive concept. For review study, the researcher uses different books, reports, journals and research studies published by various institutions, unpublished dissertations submitted by master level students have been reviewed. This chapter is divided mainly into two parts, which are as follows:

- Conceptual Review
- Review of Different Studies

2.2 Conceptual Review

2.2.1 Concept of Bank

Simply, bank is financial institutions that accepts deposits and invest the amount in the leading activities and also commercial service provide. In ancient, the world Bank was emerged from Latin word Banca, French word Banque and Italian word Banca, which means a Bench where

sitting over there, invest, exchange, and keep record of money and cash. These all functional activities are formed as current banking activities.

Generally, the organization that transacts money is called bank. It accepts deposits and invests the amount in the productive sector. Bank plays a great role that it helps investors to invest in different sector by providing loan. So, banking is a major need for developing activities and for other various developments. Development of trade and industry is dependent upon the development of banking facilities. So it is said that the bank is back bone of economic development in modern society. There are different types of bank focusing on different types of services to their customers but the basic principle is same i.e. mobilize idle resources in productive sector for the growth of trade, industry and commerce (Radhaswami & Vesudevan 1979).

According to S. and S.' definition of bank, a banker or bank is a person or company carrying on the business of receiving money collecting drafts, for customers' subject to the obligation of honoring cheque drawn upon them from time to time by the customers to the extent to the amount available on their customer (Shekher & Shekher, 1999). No one can be a banker who does not take deposit accounts, take current accounts, issues and pay cheques of crossed and uncrossed, for his customers. He further adds that if the banking business carried on by any person is subsidiary to some other business he cannot be regarded as a banker.

The World Bank refers as Central Bank, Merchant Bank, Housing Bank, Equipment Bank, Infrastructure Bank and Mutual fund etc. they provide financial as well as non-financial services. It is a financial intermediary between depositors or lender and withdrawal or loaner. Bank plays a great role that it helps investors to invest in different sector by giving a loan and providing other consultancy and agency services. Thus, the word bank itself provides huge sense of banking activity.

2.2.2 Commercial Bank

Commercial bank is a corporate business venture which have certain paid up capital and provide loan, accept deposit, exchange money and other consultancy, agency, guarantee etc. services are perform. Commerce is the financial transactions related to selling and buying activities of goods and services. Therefore, commercial banks are those bands, which word from commercial viewpoint. They perform all kinds of banking functions as accepting deposits, advancing credits, credit creation and agency functions. They provide short-term credit, medium term credits and long terms credit as well as issuing guarantee, bonds, letter of credit, etc. to trade and industry.

Commerce is the financial transactions related to selling and buying activities of goods and services. Therefore, commercial banks are those banks, which work for commercial view point. They perform all kinds of banking functions as accepting deposits, advancing credits, credit creation and agency functions. They provide short-term credit, medium term credits and long terms credit to trade and industry. They also operate off balance sheet functions such as issuing guarantee, bonds, letter of credit, etc. commercial bank deals with other people's money. Commercial bank alone holds deposit to drawn upon by cheque. It has power of certain and application of money, within limits through the use of loan and deposit.

A commercial bank is the bank which exchanges money, accepts deposit transfer loans and performs banking functions (Commercial Bank Act, 1974). A banker is one who in the ordinary course of business honors cheque drawn upon him by persons from and for whom it receives money on current account (Ronald, 1951: 87). Principally commercial Bank accepts deposits and provides loans, primarily to business firms there by facilitating the transfer of fund in economy (Rose, 2003:9).

The commercial bank has its own role and contribution in the economic development. It is a resource for the economic development, it maintains economic confluence of various segments and extends credit to people (Ronald, 1951). A Bank is a business organization that's receives

and holds deposits and funds from others, makes loans and extend credits and transfer funds by written order of depositors.

Commercial Banks function as an intermediary; accepting deposits and providing credits to the needy area. The primary source of funds for commercial bank are capital (Shareholder equity) reserve (retain earning) and other main source of the commercial banks are restricted to invest their funds in corporate securities. They invest their funds in long term as well as short-term need of any trade and industry. They grant credits in form of cash credits and overdraft.

Bank undertaking business with the objective of earning profits are commercial banks. Commercial banks pool scattered fund and channels it productive use. Commercial Banks Apart from financing, they also render a variety of service like collection of bills and cheques, safe keeping of valuables, financial advising, agencies function, keeping of guarantee etc. to their value customers (Radhaswamy & Vesudevan, 1979).

2.2.3 Joint Venture Banks (JVBs)

Joint venture is a general model of direct foreign direct investment. It is a mode of trading through the partnership among nations and also a form of negotiation between the various groups of traders, industrialists and mercantile to achieve mutual exchange of goods and services for sharing comparative advantage in their contribution. Joint venture is joining the forces between two or more enterprises for the purpose of carrying out specific operation.

For the economic boost of nation good and sound competition is needed in the banking sectors. With the understanding the fact, Nepal government adopted the strategy to establish banking compares in joint venture with the foreign banks, importing the high foreign banking techniques in Nepal. In Nepal, the history of the development of financial institution as compared to the other developed and developing countries has been new experiment, prior to the introduction of modern banking in Nepal in 1937, industry, business and commerce were in a pity conditions. In order to initiate industrialization his government of Nepal has given due emphasis for development of development of the industrial sector. The government

continues to maintain its efforts to follow liberal and market oriented economic policies, encouragement to private participation in infrastructure activities such as power, telecommunication and gradual privatization of public sector companies among various factors of industrialization, shortage of capital is an important factor that hinders the process of industrialization in less developed countries. In order to set up and develop industries, huge financial investment is required.

In such manner, joint venture banks are successful to bring healthy competition among banks, increase in foreign investment, promote and expand export-import trade, introduce new techniques and technologies. The various roles played by the joint venture banks in Nepal can be classified into three categories. The joint venture banks in Nepal have been largely responsible for the introduction of the new banking techniques such as computerization, hypothecation, consortium finance, fee based activities and syndicating under the foreign exchange transactions by importers, and exporters, merchant banking, inter banking market for the money and securities, arranging foreign currency loans etc. The introduction of joint venture banks also brings the benefit of healthy competition of which the main beneficiaries are bank customers and the economy. The increase in competition also forces the existing banks to improve their qualities of services by simplifying procedures, providing training and motivation to their own staff to respond to the new challenge.

There has been substantial growth in the numbers of joint venture banks in Nepal since 1990's. The basic reason behind this is the government's deliberate policy of allowing foreign joint venture banks to operate in Nepal. Government liberalization policy also encourages the traditionally run domestic commercial banks (Nepal Bank Limited and Rastriya Banijya Bank) to enhance their efficiency and to improve services and competitiveness through modernization, mechanization via computerization and prompt customer service by setting them to the exposure of the Joint Venture Banks.

In Nepal, Nepal Arab Bank Limited was the first joint venture bank which was established in 2041 B.S. under the Commercial Bank Act 2031 and the Companies Act 2021. Its Joint Ventures partner was Emirates Bank International Limited, Deirm, and Dubai. Now its name is Nabil Bank Limited.

The positive aspect of joint venture banks

1. Increase in highly skilled personnel with modern banking technology.
2. Efficient modern banking service.
3. Commercialization of demotic technologies.
4. Advances management skills.
5. An international network for banks branches.
6. Import of up dated technology.
7. Transfer of managerial skill.

2.2.4 Functions of Joint Venture Commercial Bank

The business of commercial bank is primarily to hold deposits and make credits and investments with the object of securing profits for its shareholders. Its primary motive is profit; other considerations are secondary. Regarding the function of commercial bank Commercial bank act state that a commercial bank is one that exchanges money, accept deposits, grants loans, and performs commercial banking functions in the same way, joint venture banks provide all these functions mentioned bellows as commercial banks provide,

- To accept deposits from customers in the forms of current, saving and fixed deposits.
- To grant loans and advances to businessman, the industrialist, the individuals, the different organizations etc. in the forms of term loans, cash credit, overdraft, trust receipts, hire purchase loans etc. Banks changes
- To act as an agent of individual's customers, business institutions and different organization.
- To issue guarantee on behalf of customers.
- To Issue travelers Cheque reduce the fear of getting money stolen during the travel
- To issue letter of credit.
- To provide remittance services through various modes like demand drafts, telegraphic payment order, swift, and fax and mail payment orders.

Besides these, Joint venture banks attend extra role for economic development of the nation. Joint venture banks are important for the economic development to necessity experiences short

of such institutions, which can serve such problems. The role of joint venture banks can be presented as follows;

1) Creation of Competitive Environment

Clients are beneficial either by higher rate of interest in their deposition or by lower rate of interest on credit. This is possible only under competitive environment. After the arrival of joint venture banks, old banks are also being competitive. Fair competition among banks not only beneficial for bank themselves and economy too. Fair personnel management efficient financial performance, quality services and research-oriented development is possible only in the competitive environment.

2) Introducing new method and Technology in Banking Service

Modern managerial principles and practices in banking sector have been introducing by joint venture banks in Nepal. New banking techniques such as hypothecation and syndication are also introducing under Nepal Rastra Bank guidance. Various techniques follow by international banks in deposition, lending exchange and they have been introducing by these banks in Nepal.

After the establishment of these banks, other new and old banks began to computerize the banking system. Some new banks have adopted new techniques such as tele-banking, credit, debit card system, twenty-four hour services, and ATM service. Now these banks are seeking to follow some developing techniques in international banking sectors.

3) Providing more resource for Investment

The joint venture banks have played a significant in canalizing the additional resources for investment for the development of the country. Although it is argued by many that resources raised to locally in the prevailing market those resources would have been mobilized by any other domestic institution, it is assumed that the joint venture banks have mobilized net additional resources if they tap so far untapped resources in the local market.

4) Information to Foreign Investors

The role of joint venture banks is significant for the collection of fund for mega projects. The various type of publications to be acquainting with Nepalese rules, regulations and practices of concerned sector. Before the establishment of joint venture banks, some large projects should be established through two or three local banks but mega project could not be established. Because of the political instability, offer the restoration of multiparty democracy also the foreign investigation of joint venture banks has been playing a vital role to introduce the Nepalese financial rules, regulation, policies and practices to the foreign investors.

5) Contribution to National Economy

Join venture banks, comparatively are adopting new banking systems. They are already established in financial, garments, agricultural and housing needs and playing a significant role to contribute in national economy from own sector.

Thus, through such banks managerial and banking techniques, new ideas and philosophy, foreign investment and capital, healthy, competitive atmosphere and diversified market concepts transfer to other companies.

2.2.5 Concept of Credit

Credit is the sum amount of money lent by the creditor (Bank) to the borrower (customers) either on the basis of security or without security. Sum of the money lent by a bank, is known as credit (Oxford Advanced Learners Dictionary, 2006). Credit and advances is an important item on the asset side of the balance sheet of a commercial bank. Bank earns interest on credits and advances, which is one of the major sources of income for banks. Bank prepares credit portfolio, otherwise it will not only add bad debts but also affect profitability adversely (Varsahney&Swaroop, 1994:42).

In Economics, the term credit refers to a promise by one party to pay another party for money

or goods on demand at some future date (Johnson, 1985:83). It is financial assets resulting from the delivery of cash or other assets by a lender to a borrower in return for an obligation of repay on specified on demand. Banks generally grants credit on four ways (Cherry & Moses 1998:595).

Banking is the business of collecting and safeguarding money as deposits and lending of the same. The banker's business is then to take the debt of other people to offer his own in exchange and hereby to create money. He may be a dealer in debts, but in distress is only the observe of wealth and it would be equally permissible the banker as a liquefies of wealth.

Credit administration involves the creation and management of risk assets. The process of lending takes into consideration the people and system required for the evaluation and approval of loan requests, negotiation of terms, documentation, disbursement, administration of outstanding loans and workouts ,knowledge of the process and awareness of its strength and weaknesses are important in setting objectives and goals for lending activities and for allocating available funds to various lending functions such as commercial, installment and mortgage portfolios, (Johnson, 1940:132).

Bhandari, in "Banking and Insurance Management", says that in banking sector or transaction, an unavoidable of lone management and its methodology is regarded very important. Under this management, many subject matters are considered and thought, for example, there are subject matters like the policy of loan flow, the documents of loan flow, loan administration, audit for loan, renewal of loan, the condition of loan flow, and the provision of security, the provision of the payment of capital and its interest and other such procedures. This management plays a great role in healthy competitive activities (Bhandari, 2003:170).

It is very important to be reminded that most of the bank failures in the world are due to shrinkage in the value of loan and advances. Hence, risk of non-payment of loan is known as credit risk or default risk (Dahal&Dahal, 2002).

Portfolio management helps to minimize or manage the credit risks by spreading over the risk

to various portfolios. These methods of managing credit risk are guided by the saying do not put all the eggs in a single basket (Bhandari, 2003:300).

2.2.6 Types of Credit

- Cash Credit
- Term Credit (Loan)
- Overdraft
- Working capital Credit
- Credit against Fixed Deposit
- Hire Purchase Financing (Installment Credit)
- Housing financing (Real- estate credit)
- Project Credit
- Consortium Credit
- Credit Cards and Revolving Lines of Credit
- Off-Balance Sheet Transaction
- Bank Guarantee
- Letter of Credit (L/C)

2.2.7 Objectives of sound Credit Policy

The main purpose of Credit Policy is:

a. To have performing assets

Performing assets are those loans that repay principal and interest to bank from the cash flow it generates. Loans are risky assets a bank invests most of its resources in granting loans and advances. If an individual bank has around 10% nonperforming assets/loans (NPAs), it sounds the death knell of sound loan policy is to maintain the financial health to the shareholders. Since the loan is a risky asset there is inherent risk in every loan. However, the bank should not take risk above a certain degree irrespective of returns prospect.

b. To contribute to economic development

Sound credit policy is required to ensure that loans are to the productive sector which contributes to the society and economic development of a country.

c. To give guidance to lending officials

A borrower should be assured that there will be no discrimination whether he deals with one officer or another and one branch or another. A sound credit policy is imperative to achieve a uniform standard procedure throughout the organization. In the absence of a sound credit policy it is likely that individual loan officers make judgment inconsistent from each other and also inconsistent with the organizational goal.

d. To establish standard for control

Every policy requires periodic follow up ensure its proper implementation. A sound policy helps to determine the variance between actual performance and practices and to take corrective actions. A sound policy is always flexible and works as a guideline rather than as a straitjacket. However, if the deviation between of the policy is observed, proper education to lending officers or amendment of the policy becomes inevitable. These objective can be summarized as the sound policies that help commercial banks to maximize quality and quantity of investment and thereby achieve the own objectives of profit maximization. Formulation of sound policies and coordinated planned efforts pushes forces of economic growth. Sound policy is also important to find the deviation between the practices and establish a standard for control.

2.2.8 Concept of Investment Policy

The income and profit of the bank depends upon investment policy, lending policy and investment of its fund in different securities. In the investment procedures and policies, it is always taken in mind that "the greater the credit created by the bank, the higher will be the profitability." but also crucially significant for the promotion of commercial savings of a financially like Nepal.

The bank and finance companies are such type of institutions, which deal in money and substitute for money. They also deal with credit and credit instruments. To collect fund and mobilize them in a productive sector is a difficult task for any institutions. An investment of fund may be the banker must think seriously before making an investment decision. The investment policy of a bank consists of earning high returns on its un-loaned resources so as to meet the objectives of profitability which conflicts with each other and investment policy strikes a judicious balance among them. Therefore, a bank should lay down its investment policy in such a manner so as to ensure the safety and liquidity of its funds and at the same time maximize its profit. The investment objective is to increase systematically the individual wealth, defined as asset minus liabilities. The higher the level of designed wealth the higher it will be received. An investor seeking higher return must be higher level of risk (Chery& Moses, 1988:595).

Credit and investment command number first and number second positions and investment at times serves as times serves as substitute of loan. That is why when loan demands weaken; a bank increases securities in investment portfolio. Similarly banks start shedding securities from investment portfolio when loan demand increases to entertain loan request. This warrants careful management of investment portfolio so that net interest income/spread (excess of interest income over interest expenses) can be maximized (Dahal&Dahal, 2002:88).

Every bank manager should have awareness about the major risk associated with the securities because price of securities is affected by some kind of risk like credit risk, interest rate risk and liquidity risk. These are the sources of investment risk. The policy should specify what rated securities it wants to hold in the portfolio. If unrated, whether it buys or not. Since risk is overpriced during recession and underpriced during boom respectively. Normally banks buy investment rated securities only (Dahal&Dahal, 2002:92).

2.2.9 Considerations for sound lending and investment

The major source of income and profit generation of every banks and financial institution is its loan investment in different sectors. If loans are not distributed properly and cautiously then it may be the main cause of the failure of the company. As prescribed by Bhattacharya in his book “Banking Strategy, credit appraisal and lending decisions, a Risk Return Framework, “the important consideration which the finance company should review and analyzed is briefly illustrated below.

a. Principle of sound Lending

- **Safety**

Every finance company must invest in those opportunities which are safe against losses and risky. Collateral should be accepted which is not so depreciable and whose value hold constancy.

- **Security**

Finance company should accept that kind of security, which is commercial, durable, marketable and high market price. In those cases, "MAST" should be applied for the investment.

Where,

M= Marketability

A= Ascertain ability

S= Stability

T= Transferability

- **Profitability**

Financial institution can maximize its volume of wealth through maximization of return on their investment and lending. So, they must investment their fund where they gain maximum profit. The profit of these companies mainly depends on the interest rate, volume of loan, its time period and nature of investment in different securities.

- **Liquidity**

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

- **Purpose of Loan**

Why does a customer need a loan? This is a very important question for any banker. If a borrower misuses the loan granted by these companies, they can never repay and the company will pass heavy bad debts. Detailed information about the scheme of the project or activities should be examined before lending.

- **Diversification**

"A financial institution should not lay all eggs on the same basket." In order to minimize risk, diversification on its investment on different sectors should be adopted which helps to sustain loss according to the law of average because if securities of a company are deprived, there may be appreciation in the securities of other companies, so the loss can be recovered.

- **Legality**

Illegal securities will bring out many problems for the investor. The financial institution must follow the rules and regulations as different directions issued by Nepal Rastra Bank and other concerning bodies while mobilizing its funds.

- **Tangibility**

Though it may be considered that tangible property doesn't yield an income apart from direct satisfaction of possession of property, many times, intangible securities have lost their finance company, so they should prefer tangible security to intangible one.

- **National Interest`**

Even if an advance (loan) satisfies all the aforesaid principles, it may still not be suitable. The lending program may run counter to national interest. Central Bank may have issued directives prohibiting finance companies to allow particular types of advances (Bhattacharya, 1998:660)

b. Major information for Analyzing the Potential of Borrower for Lending

- Payment record and credit information from concern field
- Income level and its source
- Residence (local or migrates)
- Marital Status (local or migrates)
- Age factor
- References
- Reserves, assets and collateral

c. Basis of Granting Loan and Analysis of Credit Risk

- World is surrounded by certain risk associated with the related field of task. The risk is vital factor which can be seen in the field of lending and investing money by financial institution. It is true that "There is no return associated with it. With respect to this, financial institution approaches the loan request by analyzing five 'Cs' of credit risk as illustrated by Bhattacharya
- Character of the applicant
- Capacity of qualification and work experience
- Capital of the proposed plan
- Collateral for security and its safety
- Conditions of credit environment and credit information
- Additionally, external factor also directly and indirectly effects on loan granting decision. They can be political crisis, national and international economic condition, policy and practice, cultural practice etc.

d. Basic requirement in a borrower/lending documentation

Commercial Banks cannot lend money to just anyone blindfold. It should be confident regarding the trustworthiness and intentions of the probable beforehand. The borrower, on the other hand, should provide all pertinent documents that the company seeks to build confidence on borrower. There are some requirements that should be fulfilled by the client to stand him as a probable borrower. The basic requirement that the borrower should submit with loan proposal are as follows:

If applicant is an individual

- Applicant should be Nepali citizen. Citizenship certificate should be submitted.
- Should have good knowledge about work they intend to commence.
- Normally the applicant should not have taken loan from any other institutions previously.
- Applicant should present the job planning scheme with perfect business plan.
- Personal information is also requiring.
- Business and income tax registration certificate with renewal.
- Quotation and personal guarantee with reference of well recognized personal.
- Certificate of ownership.
- Driving license if required.
- Description of securities with full proof evidence.
- Other documentation as per company rules whichever required

If the applicant is partnership form

- The firm should be registered in related department.
- The person dealing with the borrowing of the firm should specify in the partnership contact.
- Income Tax Registration certificate with renewal.

If the applicant is private Limited Company or Public Limited Company

- Company should be registered.
- Working place, project place should be specified and all the assets should be in the name of company.
- Audited balance sheet, profit and loss account, and other required financial statement.
- Document of at least of one year should be presented.
- If the work place or one years should be presented.
- The authorized person should apply for the loan.
- Loan amount applied must be within of memorandum of the company or must be decided by the board.
- Decision of the promoters.
- Personal information of the main person is required.
- Written personal guarantee of the proprietors is required.
- Citizenship of promoters and proprietors is required.

e. Basic feature of Collateral

Collateral is the most important item for granting loan. Loan should be granted by analyzing details related to collateral. Generally, in Nepalese practice-land and building; gold silver and some classified document are accepted as safe and reliable collateral, but there are some features which must be analyzed. They are

- Market availability
- Price stability
- Durability
- Storing facility
- Transportation
- Profitability

Guidelines for Assessing Risk

Risk is dependent upon the quality found in 'c' and the combination of these five 'Cs' assuming the same conditions prevail; the following guideline is generally suggested.

Table 2.1 Guideline of Assessing Risk

Applicant Characteristics	Credit Risk
Character +capacity	Very low
Character +capacity without capital	Low to moderate
Capacity + capital but insufficient capital	Low to moderate
Capacity + capital but impaired character	Moderate
Capacity capital without character	High
Character +capital without capacity	High
Character +no capital + No capacity	Very high
Capital +no character +No capacity	Very high
Capital +No Character +No Capacity	Fraudulent

(Source: Book by Bhattacharya, 1998)

2.2.10 Lending Procedures

According to Dahal and Dahal, lending procedures include lone approval and disbursement process (Dahal& Dahal, 2002:115):

Loan Approval and disbursement Process

Loan is approved by approving authority only after being convicted that the loan will be repaid together with interest. There are many processes involved to approve the loan which has been listed below:

a. Application

A borrower is normally required to submit an application to the bank along with required documents: project proposal, historical financial statements and documents pertaining to company's legal existence.

b. Conducting the interview

During the loan rendering process respective clients are asked by the respective credit offer of banks about the financial strength to know the creditworthiness of clients. Documents that are submitted by the borrowers also give detail information about the borrowers which plays great important role to know the borrowers. Normally, such interview takes place at the bank premise.

c. The credit analysis

During the credit analysis phase various aspects are evaluated by the banks which is broadly included under the heading of 5cs which are: Character, Capacity, Condition, Collateral, and Capital.

d. Forecast and risk rating system

Based on the findings of historical analysis, and in light of present and foreseeable future environment, the analyst has to forecast impending major risks. The analyst future environment, the analyst has to forecast impending major risks. The analyst should also highlight to what extent inherent risks will be mitigated and how unmitigated risks can be covered.

e. Return

The amount of loan has got inherent cost as it is obtained from either shareholder or depositor or creditor. The analysis should be made to calculate total return and compare whether it meets banks standard.

f. Liquidation

The analyst should ascertain Banks's ability to recover loan in case of liquidation of the borrower. If liquidation analysis reveals insufficient security, additional security may be asked for.

g. Credit worthiness and debt structure

If analyst finds the borrower creditworthiness and decides the extend loan, he should structure the debt facility to be extended.

2.3 Review of Rules, Regulation and NRB Directives Regarding Credit Management of Commercial Banks.

Various rules, regulation, acts and directives are reviewed while preparing the concept of this study. Different types of directives, which are issued for the commercial banks to manage credit in a proper way, obviously play the great role for the comparative analysis of credit management of the commercial banks.

NRB is the leader of the money market. It is the chief of all the banks operating in the country. It supervises, regulates and controls the functions of commercial banks and other financial institutions. Various directives have direct or indirect impact while making decisions to discuss those rule and regulations which are formulated NRB in terms of investment and credit to priority sector, deprived sector, other institutions, single borrower limit, CRR, loan loss provision, capital adequacy ratio, interest spread, productive sector investment etc. Cash reserve ratio (CRR) is kept unchanged at 3 percent for BFIs. The two-week maintenance period for CRR and daily maintenance at least of 70 percent is kept unchanged.

A commercial bank is directly related to the fact that how much fund must be collected as paid up capital while being established at a certain place of the nation, how much fund needed to expand the branch and counters, how flexible and helpful the NRB rules are important. But only those, which are related to credit aspect of commercial banks, are described in the study. The main provision established by NRB in the form of prudential norms in above relevant are briefly discussed here:

2.3.1 Regulation on Maintain Minimum Capital Fund by the Commercial Bank as per NRB Directive.

Capital adequacy ratio (CAR) is the relationship between capital funds to total risk weighted

assets of the bank. The higher the CAR, the less levered the bank and safer from depositor's point of view because the proportion of shareholder, stake to the risk weighted assets is also high.

Risk weight is assigned to various assets and off balance sheet items of the bank to arrive at the risk weighted assets. Banks in Nepal are required to have minimum 6% core capital and 10% total capital fund of total risk weighted assets.

Table 2.2: Fund Required on the basis of RWA (%)

Core capital	Capital fund
6	10

(Source: NRB directives 2077)

Classification of Capital

To calculate the capital fund, commercial banks should classify the capital in two parts:

- a) Core capital
- b) Supplementary capital

And,

Capital fund = Core capital + Supplementary capital

Provision for pass loan made up to 1.25% of total risk weighted assets is treated as supplementary capital.

$$\text{Capital fund ratio} = \frac{\text{Core Capital} + \text{Supplementary Capital}}{\text{Sum of Risk Weighted Assets}} \times 100$$

Where, sum of weighted risk assets (WRA) = Total WRA appeared in balance sheet + Total WRA appeared outside the balance sheet.

2.3.2 Loan Classification and Loan Loss Provisioning

A bank is required to classify their loan on the basis of overdue ageing schedule and provide on a quarterly basis as follows:

a. Pass Loan

All loan and advances whose principal amount is past due for period up to one month should be included in this category. These loans are classified as performing loans.

b. Watch list

Loans and advances are overdue more than one month up to three months.

c. Substandard

All loans and advances that are past due for a period of six months should be included in this category. Substandard loan is classified as nonperforming loan.

d. Doubtful

All loan and advances which are due for a period of more than one year should be included in this category.

Provision for Loss Loan

Loan should be classified as loss in the following case,

- No security or security not as per contract.
- Borrower has been declared as bankrupt.
- In case of borrower not fund.
- Purchased or discounted bill are not repayable within 90 days from due date.
- Loans amount has not been used for taken purpose.
- Loan provided for blacklisted borrowers.

2.3.3 Loan Loss Provision

The loan loss provision on the basis of outstanding loans and advances and bills purchased classified as per directives, which is as follows:

Table 2.3: Classification of Loans

Classification of Loans	Loan Loss Provision	Time Duration
Pass	1%	Not overdue or overdue by a period of one month
Watch list	5%	Overdue by a period from one month to a maximum period of three months
Substandard	25%	Overdue by a period from three months to a maximum period of six months
Doubtful	50%	Overdue by a period from six months to a maximum period of one year
Loss	100%	Overdue by a period of more than one year

(Source: NRB Directive 2077)

- Bank can reschedule and restructure loan if nonperforming loan receiver submit the external/internal reasons. If loan is restructured and rescheduled, provision requirement for such loan is minimum 12.5%.
- If priority and deprived sector loan is restructured and rescheduled, such loan will have to be provisioned at 25% of the provision percentage to loan loss.
- Provision requirement in case of loan given against personal guarantee only is additional 20% for pass, substandard and doubtful loans.
- Loss provision for performing loan is called general loan loss provision and loss provision for non-performing loan is called specific loan loss provision.

2.3.4 Directives relating to single Borrower Credit Limit

With the objectives of lowering the risk of over concentration of bank loans to few big borrowers and also to increase the access to small and middle size borrowers to the bank loans, NRB has directed commercial bank to set an upper limit for single borrower limit. According to the directive, commercial banks may extend credit to single borrower or group of related borrowers in such a way that the amount if fund based loan (overdraft, trust receipt, term loan etc.) and advances up to 25% of core capital and non-fund off the balance sheet facilities like

letter of credit, guarantees, acceptances, commitments is up to 50% of its core capital fund, but in case of advances and facilities to be used for the purpose of importing specified merchandize by the following public corporations, the exemption in the limit of credits and facilities is not applicable:

Table 2.4: Public Corporation and their Specified Merchandized

Name of corporation	Merchandize
Nepal oil corporation	Petrol, Diesel, Kerosene and LPG gas
Agriculture Input corporation	Fertilizers, sets
Nepal food corporation	Cereals

(Source: NRB Directives 2077)

2.3.5 Directives Regarding Investments in shares and Securities by Commercial Banks

a. Arrangement as to implantation of investment policy under approval of the board of directors

Banks should prepare written policy relating to investments in the shares and securities of organized institutions. Such policies should be implemented only under the approval of restrictions as to investment by the banks securities by NRB.

b. Arrangement relating to investment in shares and securities of organized institutions.

- Bank may invest in shares and securities of any organized institution not exceeding 10% of the paid up capital of such organized institution. Any amount of the capital fund, should be deducted from the core capital fund.
- The total amount of investment should be restricted to 30% of the paid up capital of the bank. Any amount of investment made on excess of 30% of paid up capital of the bank, for the purpose of calculation of the capital fund, should be deducted from the core capital fund.

- Banks should invest in the x shares and securities of organized institutions, which are already listed in the stock Bank exchange.
- Where the shares and securities are not listed within the period prescribed, provisioning equivalent to the whole amount of such investment be provided and credited to investment adjustment reserve. The outstanding amount in such reserve should not be utilized for any other purpose till the sold shares and securities of the organized institution are listed. The outstanding amount in investment adjustment reserve should be included supplementary capital.
- Banks should not invest in any shares, securities and hybrid capital instruments issued by any banks and financial institutions licensed by NRB where such investment exists prior to issuance of this directive such investment should be brought within the strives limitations imposed by this directive within 3 years.

2.3.6 Directives Regarding Interest Rate Spread

The interest rate spread is the difference between the interest taken from loan and advance or investment and the interest given to the depositor. As NRB direction lending rate and deposit rate should not exceed 5%. Such rates are calculated as under.

WALR= Interest income for a month / total interest –earned asset

WADR = Interest expense for a month/Total deposit outstanding

Interest spread = WALR-WADR

Where.

WALR= Weighted average lending rate

WADR= Weighted average deposit rate

2.3.7 Requirements to Extend Loans and Advances to priority Sector and Deprived Sector.

Commercial banks are required to extend loans and advances in the priority and deprived sector as follows:

Distribution of total loan and advances on said heading

- 25% to priority sector (including deprived sector)
- 5% to Deprived sector

a. Priority sector credit

Priority sector is defined to include micro and small enterprises which help to increase production, employment and income as prioritized under the national development plans with an objective to uplift the living standard of low income people and progressively reducing the prevalent unemployment, poverty, economic inequality and backwardness. Micro and small enterprises are classified as agriculture enterprises, cottage and small industries and services. In addition, other business specified by NRB from time to time are also included under micro and small enterprises. All credit extended to priority sector up to the limit specified by NRB are termed as priority sector credit. Commercial banks extend credit under priority sector programs specified by NRB time to time.

b. Deprived Sector credit

Deprived sector includes low income and particularly socially backward women, tribes, lower caste, blind, hearing impaired and physically handicapped persons and squatter family. All credit extended for the betterment of the economic and social status of deprived sector up to the limit specified by NRB is termed as "Deprived Sector Credit."

Examination of the fulfillment of priority or deprived sector lending shall be made at the end of each quarter (i.e. mid Jan, mid-April and mid-July) on the basis of total outstanding loan and advances (Expect investments) as of immediately preceding six months. On the failure of fulfilling such lending, penalty in shortfall amount at the maximum prevailing lending rate of the bank during the examination period shall be imposed as per NRB act, 2058. If the priority sector lending is fulfilled, but the deprived sector is not, the penalty is imposed on shortfall amount and if both sector lending is not fulfilled, then the penalty is imposed on greater shortfall amount for one sector only.

2.4 Review of Thesis

Zerith (2008), has conducted a research on "Credit Portfolio Management", and has the objectives manage the credit portfolio, bankers must understand not only the risk posed by each credit but also how the risks of individual lending and portfolios are interrelated. These relationships can multiply risk many times beyond what be if the risks were not related. Until recently, few banks used modern portfolio management concepts to control credit risk. Now, many banks view the credit portfolio in its segment as well as among loans. These practices provide management with a more tools to analyze and control the risk. Finally, she concluded that effective portfolio management begins with oversight of the risk in individual loans.

Shrestha(1998) has conducted a research on " Lending operations of commercial bank of Nepal and its impact on GDP" with the objectives of making an analysis of contribution of commercial bank's lending to Domestic Product (GDP) of Nepal. She has set a hypothesis that there has been a positive impact of lending of commercial banks to the GDP. In research methodology, she has considered GDP as the dependent variable and various sectors of lending viz. agriculture, industrial, commercial, service, general, and social sectors as independent variables. A multiple regression technique has been applied to analyze the contribution. The multiple analysis has shown that all the variable expect service sector lending have positive impact on GDP. Thus, in conclusion, she has accepted the hypothesis, i.e. there has been positive impact on GDP by the lending of commercial banks in various sectors of economy, expect service sector investment.

Misra (2008), conducted the dissertation entitled "Credit management of Everest Bank Limited" illustrate that liquidity position, cash reserve ratio shows the more liquidity position. Cash and bank balance to interest sensitive ratio shows the bank is able to maintain good financial condition. Cash and bank balance to current assets ratio shows that the bank's sound ability to meet the daily cash requirement of their customer's deposit. That is why liquidity position of the bank is the better.

In the aspect of profitability position, interest income to interest expenses ratio shows the more

profitable salivation. In addition, total income to total expenses ratio shows the overall predominance of the bank is satisfactory operating income. Return on loan advances are showing position that is more profitable on of the EBL. Analysis of the assets management ratio, loan advances to total assets ratio shows the better performance but loan and advances to total deposit position in minimum than the averages. Whereas investment in loan and advances is safely and not taking more risk. That's why assets management position of the bank shows better performance in the latest year.

After analyzing him lending efficiency of the bank, the loan loss provision to loan advances indicator shows the better performance in the latest year. The interest expenses to total deposit ratios shows the improving efficiency of the bank. EBL bank has sufficient liquidity. It shows that bank has not got investment sectors to utilize their liquid money.

This is to recommend that cash bank balance of EBL bank is high. Finally, he concluded that the banks efficiency should be increased to satisfy the demand of depositor at low level of cash and bank balance does not provide return to the bank. Therefore, some percentage of the cash and bank balance should be invested in profitable sectors. Bank should open their branches in the remote area with the objective to provide the banking services and minimum deposit amounts should be reduced.

Paudel (2010), conducted a thesis entitled "A study lending practices of joint venture commercial banks with reference to Nepal Bangladesh Bank Ltd (NBBL) and Himalayan Bank Ltd. (HBL)" with an objective to make comparative study of these two bank in different lending aspects and strategies. As per the findings, the liquidity position of NBBL is comparatively better than HBL. The liquidity ratio of HBL is more stable and consistent than NBBL than indicates the stable policy of HBL. NBBL is found slightly better to be maintaining between assets and liabilities. NBBL has high loan and advances to total deposit ratio, but HBL has high investment to total deposit ratio. He has concluded that NBBL is able to manage its assets to complete in this competitive banking business that HBL. As per his findings the liquidity position of NBBL is better and hence HBL is recommended to increase its liquidity position. Finally, he concluded that both banks need to strictly follow the NRB directives, which will help them to reduce risk arising from borrower's defaulter, lake of proper credit

appraisal, defaulter by blacklisted borrowers and professional defaulter. Loan loss provision of both banks is in fluctuating trend.

Ojha (2012), in his dissertation entitled "Lending Practices" has written that the commercial banks have to expand their credit in the area of rural economy so as to compromise between the liquidity and credit need of such economy. This helps in minimizing the idle funds in business and at the same time contribute to the national economy. The banks should also increase the volume of credit in the sector of agriculture as the ratio of contribution made by the banks in this priority sector is decreasing. He has found out that following the normal guidance of Nepal Rastra Bank and acting upon reduces many of the credit risks arising from borrower's default, lack of proper credit appraisal, defaulter by blacklisted borrowers, and professional defaulter. The over confidence of commercial banks regarding credit appraisal efficiency and negligence in taking information from credit information bureau has caused many of the bad debts in these banks. He thinks that these banks have to follow the directives of NRB strictly and be more cautious and realistic while granting loans and advances.

Ojha has found that the high volume of liquidity reveals that a degree of lending strength has been prevailing in all of the commercial banks. The lack of reliable lending opportunities and fear of losing the principal in the rural sector has been keeping these banks less oriented towards the lending function. Hence, he concluded that the government should take appropriate action to initiate these banks to attract and flow credit in the rural economy. Posing the compulsions by directives does not create long term healthy lending practices unless the commercial banks are not self-motivated to flow credit in this sector.

Joshi (2013), submitted the thesis entitled "A comparative Study on Financial Performance of Standard Chartered Bank Nepal Limited and Everest Bank Ltd" stated that the mean current ratio of EBL is slightly higher than that of SCBNL and the variability of the ratio of EBL is more consistent than SCBNL in comparison. The mean ratio of cash and bank balance to total deposit of SCBNL in comparison to EBL. SCBNL has a better liquidity position than EBL because of the high volume of liquidity indicated the inability of the bank to mobilize its current assets. Moreover, SCBNL's ratios are more homogeneous than EBL. The mean ratio of cash and bank balance to current assets. Moreover, SCBNL's ratios are more consistent than EBL.

The mean ratio of loan and advances to total deposit of EBL is higher than SCBNL. It can be said that EBL used to provide greater loan and advance in comparison to its total deposit than SCBNL. Likewise, SCBNL's ratio seems to be variable than EBL. The mean ratio of investment on government securities to total working fund of SCBNL is higher than EBL. Consequently, it has consistency in maintaining the ratio than EBL. The mean ratio of return on loan and advances of SCBNL has found to be significantly greater than EBL with more consistency than that of EBL. The mean ratio of credit risk of SCBNL is lower than that of EBL's ratios are more consistent than that of SCBNL. Growth ratio of deposit are more consistent than that of SCBNL is lower i.e. 19.28% in comparison to EBL i.e. 76.46%

The main statement of the problem of his research is the investment decision is the major tool of financial institution. There are many finance companies and commercial banks operating in Nepal. The fast growth of such organizations has made pro-rata increment of in collecting deposits and their investment. They collected adequate amount from the mass, however they could not find or locate new investment sectors required to mobilizes their fund on the changing context of Nepal. Many banks or companies succumbed to liquidation although they had sustainable investment capacity. The increasing rate of liquidity has caused a downward trend in investment sectors. It has ensured etc. for the assessment of such adverse impact, this study has shown to contrast and analyses the investment policy of joint venture banks. Joint venture banks viz. standard chartered bank Nepal Ltd and Everest bank limited. The main objectives are compare investment policy of concern banks, find out the empirical relationship among total investment, deposit, deposit utilization loan and advance, net profit and outside asset and compare of SCBNL and EBL.

2.5 Research Gap

The previous study is done relating different factors of different commercial banks. No study has yet been conducted on credit management of HBL, EBL, and NABIL bank.

The trend of credit and their interest pattern have not been shown by other researchers. Similarly, the relationship between loans and advances, NPL, LLP and profit have not been shown by other researchers Lending in priority sector and deprived sector analysis has not been

done by other researchers which are done in this study. Hence, this study fulfills prevailing research gap about the in- depth analysis of lending efficiency, investment in priority and deprived sector by the banks.

CHAPTER III

RESEARCH METHODOLOGY

3.1 Introduction

Research Methodology is a way to systematically solve the research problem. It may be understood as a science of studying how research is done scientifically. It is study of various steps that is generally adopted by a researcher, studying his research problem among with the logic behind them. “Research is the process of systematic and in-depth collection, presentation and interpretation or relevant detail or data.”

“Research Methodology refers to the various sequential steps to be adopted by a researcher in studying a problem with certain objectives in view” A research methodology helps us to find out accuracy, validity and suitability of the study. The justification on the present study, the descriptive and analytical methodology is used.

In other words, research methodology is a systematize way to solve the research problem. The prime objective of this study is to compare, evaluate and assess the credit performance of selected joint venture banks i.e. HBL, EBL and NABIL. This chapter contains the methods that make convenience for comparison of the performance made so far by these banks by analyzing the strength and weakness of the financial performance of these sampled banks. In order to reach and accomplish the objectives of this study, different activities are carried out and different stages are crossed during the study period. For this purpose, the chapter aims to present and reflect the methods and techniques those are carried out and followed during the study period.

3.2 Research Design

Research design is the planned structure and strategy of investigation conceived so as to obtain answer to research questions and to control variances. In other words, research design is the frame work for a study that helps the analysis of data related to study topic.

Research methodology helps us to find out accuracy, validity and suitability of research. The justification on the present study cannot be obtained without help of proper research methodology. For the purpose of achieving the objective of study, the descriptive and analytical methodology will be used. Research methodology describes the methods processes applied in the entire aspect of the study.

Research design is very important for scientific investigation. Research design gives the investigator a systematic direction to research work. It presents a series of guideposts to enable the researcher to process in the right direction to achieve the goal. There are various approaches of research design. This study depends on the secondary data. It includes all the process of collecting, verifying and evaluating of past evidence systematically and objectively to reach final conclusion. Some financial and statistical tools have been adopted to examine factors in this study. There are many methods of research design and this study will be based on recent historical data. Mostly, secondary data and information to be collected, evaluated, verified and synthesized to reach a conclusion (Panta& Wolff, 10999). In this study, descriptive and analytical research design is used.

3.3 Nature & Sources of Data

For any research work, information is the life blood. Therefore, it is the major task to gather the information and data collection. Only secondary data has been used in the study. It has been collected from the following sources.

- Published annual accounting and financial report of HBL, EBL and NABIL from 2014/15 – 2018/19
- Publication of Nepal Rastra Bank, publication of National Planning, Central Bureau of Statistics and related publication.
- Books, booklets, articles, magazines of different authors towards HBL, EBL and NABIL.
- Previous dissertations, electronic media such as websites.

3.4 Population and Sample

The population in most studies usually consists of large groups. Because of its large size it is fairly difficult to collect detailed information from each number of populations. To overcome this difficulty small unit is chosen from the total which represents the population which is called a sample.

There are altogether 6 Joint Venture Banks working all over Nepal. Among them the three Joint Venture Banks are taken for the sample by using the Convenience method of Sampling to find out effectiveness of credit management. They are as follows;

- 1, Nabil Bank Limited (NABIL)
2. Everest Bank Limited (EBL)
3. Himalayan Bank Limited (HBL)

So, 6 Joint Venture Banks are taken as the population and 3 banks are chosen as the sample

3.5 Methods and Tools of Data Analysis

It indicates the sources of data and how they collected. In this study data are collected through published sources. They were collected from the correspondent offices and their respective websites. The annual reports of HBL, EBL and NABIL, NRB publications, the data regarding the profile of HBL, EBL and NABIL and other related documents were collected from internet websites. Unpublished master's thesis, books, research papers, articles, journals have been collected mainly from Centre Library of Tribhuvan university, library of Nepal Commerce Campus and NRB Magazines and newspapers were from concerned authorities.

Various accounting, financial and statistical tools will be used to complete the research study such as Credit/loss related ratios, Credit Efficiency Ratios, Loans and Advances Portfolio and Profitability, Arithmetic Mean, Standard Deviation, Coefficient of Variance, correlation and hypothesis for presentation purpose, different types of tables, charts, figures and graphs are used as per necessary.

3.6 Financial Tools

Financial Tools basically help to analyze the financial strength and weakness of a firm. Ratio analysis is a part of the whole process of analysis of financial statement of any business or industrial concerned especially to take output and credit decisions. Ratio analysis is used to compare firm's financial performance and status with of the other firms. Even though there are many ratios to analyze and interpret the financial statement following ratios are calculated and analyzed.

3.6.1 Credit/Loan related Ratios

In this study followings tools of ratio analysis have been used:

a. **Loan and advances to Total Assets Ratio**

Loan and advances is an important part of total assets (total working fund). Total working fund play important role in profit earning through fund mobilization. So bank should carefully mobilize the total assets. The ratio of loan and advances to total assets measures the volume of loan and advances in the structure of total assets. A high ratio indicates better in mobilization of funds as loan and advances and vice-versa.

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

b. **Total Investment to Total Deposit Ratio**

Commercial banks may mobilize its deposits by investing its fund in different securities issued by government and other financial and non-financial companies. Efforts have been made to measure the extent to which the banks are successful in mobilizing the total deposit on investment. A high ratio is the indicator of high success to mobilize the banking funds as investment and vice-versa.

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

c. Loan and Advances to Total Deposit Ratio

This ratio is calculated to find out how successfully the banks are utilizing their deposit on loan and advances for profit generating activities. Greater ratio indicates the better utilization of total deposits.

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

d. Investment to Loan & Advances and Investment Ratio

This ratio measures the contribution made by investment in total amount of loan& advances and investment. The proportion between investment and loan measures the management attitude towards risky assets and safety assets. Investment and loan and advances in whole do not provide the quality of assets that a bank has created. The ratio indicates the mobilization of funds in safe area and vice-versa.

$$\text{Investment to Loan \& Advances and Investment} = \frac{\text{Investment}}{\text{Loan \& Advances and Investment}}$$

3.6.2 Credit Efficiency Ratio

It measures the performance efficiency of an organization from various angles of its operations. These ratios indicate the efficiency of activity of an enterprise to utilize available funds, particularly short term funds. These ratios are used to determine the efficiency, quality and the contribution of loan and advances in the total profitability. The efficiency of a firm depends to a large extent on the efficiency with which its assets are managed and utilized. This ratio also shows the utilization of available fund. The following ratio measures the performance efficiency of the bank to utilize funds:

a. Loan Loss Provision to Total Loan and Advances Ratio

NRB has directed the commercial banks to classify its loans and advances into the category of pass, watch list, substandard, doubtful and loss. NRB has classified the pass and watch list as well as substandard loan as performing loan and other two types of loan as non-performing loans. The provision created against the pass, watch list & substandard loan is called the general loan loss provision whereas provision created against the doubtful and loss loan is called specific loan loss provision. The provision of loan loss means the net profit of the banks will come down by such amount. Increase in loan loss provision decreases profits that result to decrease in dividends but its positive impact is that it strengthens the financial conditions of the banks by controlling the credit risk and reduces the risks related to deposits. Loan loss provision to total loan and advances ratio is calculated by dividing loan loss provision by total loan and advances. The low ratio indicates the good quality of assets in total volume of loan and advances and vice-versa.

$$\text{Loan Loss Provision to Total Loan and Advances Ratio} = \frac{\text{Loan Loss Provision}}{\text{Total Loan and Advances}}$$

b. Non-Performing Loan to Total Loan and Advances Ratio

Nonperforming loans to total loan and advances ratio shows the percentage of non-recovery loan in total loan and advances. This ratio is calculated as dividing non-performing loan by total loan and advances.

$$\text{Non-performing loan to Total Loan and Advances} = \frac{\text{Non-Performing Loan}}{\text{Total Loan and Advances}}$$

3.6.3 Loan and Advances Portfolio

a. Priority Sector Loan to Total Loan and Advances

Priority sector indicates micro and small enterprises. Micro and small enterprises are classified as agriculture enterprises, cottage, small industries and services. This ratio is calculated by dividing priority sector loan by total loan and advances.

b. Deprived Sector to Total Loans and Advances

Deprived sector credit includes low income and particularly socially backward women, tribes, lower caste, blind, hearing impaired and physically persons and squatter family. Deprived sector credit to total loan and advances ratio can be calculated by dividing deprived sector loan by total loan and advances.

3.6.4 Profitability Ratios

In this regard following tools are taken for the effectiveness of credit mobilization:

a. Operating Profit to Total Loan and Advances Ratio

Operating profit to loan and advances ratio measures the earning capacity of commercial banks. This ratio is calculated by dividing operating profit by loan and advances.

$$\text{Operating Profit to Total Loan and Advances} = \frac{\text{Operating Profit}}{\text{Total Loan and Advances}}$$

b. Net Profit to Total Loan and Advances Ratio

This ratio measures the earning capacity of commercial banks through its fund mobilization as loan and advances. Higher ratio indicates greater success to mobilize fund as loan and advances and vice-versa. Mostly loan and advances include loan cash credit, overdraft, bill purchased and discounted.

$$\text{Return on Loan and Advances} = \frac{\text{Net Profit}}{\text{Total Loan and Advances}}$$

c. Interest Income to Total Loan and Advances Ratio

Interest income is the major source of bank revenue. Interest income are the function of mobilized loan and advances which are mobilized under the different headings of credit. Higher interest income shows higher revenue for the bank.

$$\text{Interest Income to Total Loan and Advances Ratio} = \frac{\text{Interest Income}}{\text{Total Loan and Advances}}$$

d. Interest Expenses to Total Deposit Ratio

Interest expenses are the function of deposit products under the various headings. Which is corporate, individual, saving, fixed deposit, call etc. Since, bank pays interest on the deposit fund. It is the cost or expenses of the bank which is a major part of the total expenses of the bank. But the cost of deposits and interest income of a loan is determined by market movement. So, bank does not have strong control over interest expenses.

$$\text{Interest Expenses to Total Deposit} = \frac{\text{Interest Expenses}}{\text{Total Deposit}}$$

e. Spread Analysis

Gap between interest income and interest expenses is known as spread. Generally, banks are trying to maintain high spread either collecting lower costing deposit or lending high interest earning credits. In aggregate widening spreads are the indicators of banks profitability and vice-versa.

$$\text{Spread} = \text{Interest Income} - \text{Interest Expenses}$$

3.7 Statistical Tools

For supporting the study, statistical tools such as – Mean, Standard Deviation, Coefficient of Variation, Correlation, Hypothesis Testing have been used.

3.7.1 Arithmetic Mean

Averages are measures that condense a huge mass of data into single value representing whole data. Average is statistical constants which enable us to comprehend in a single effort the significance of the whole. It is calculated as;

$$\bar{X} = \frac{\sum x}{N}$$

Where,

\bar{X} = Mean Value or Arithmetic Mean

$\sum X$ = Sum of the Observation

N = Number of Observation

3.7.2 Standard Deviation

The standard deviation is the square root of mean squared deviation from the arithmetic mean and is denoted by S.D. It is calculated as;

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

Where

S.D = Standard Deviation

$\frac{\sum x^2}{N}$ = Sum of Squares of Observation

$\frac{(\sum x)^2}{(N)^2}$ = Sum of Square of Mean

3.7.3 Coefficient of Variation (C.V)

The coefficient of variation (C.V) is the relative measure based on standard deviation and is defined as the ratio of standard deviation to mean expressed in percent. It is calculated as;

$$C.V = \frac{S.D}{\bar{X}} \times 100$$

Where,

C.V = Coefficient of Variation

S.D = Standard Deviation

\bar{X} = Mean

It is independent of units. Hence, it is suitable measure for comparing variability of two series with same or different units. A series with smaller C.V is said to be less variable or more consistent or more homogenous or more uniform or more stable than others and vice-versa.

3.7.4 Correlations

Correlation analysis is the statistical tool that describes the degree to which one variable is linearly related to other variable. Value of correlation coefficient lays in between -1 to +1. If the correlation coefficient is positive, there exists a positive relation between dependent and independent variables. Likewise, if the value is negative, there exists a negative correlation between two variables. If there is zero correlation between two variables, then they are non-related with each other. Value of coefficient of correlation (r^2), probable error (P.Er) and $6P.Er$ is directly calculated from excel for testing of significance differences.

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

3.7.5 Hypothesis Testing

A quantitative statement about the population parameter is hypothesis. It is an assumption to test the validity of parameters. The hypothesis test helps to conclude whether it deserves the

acceptance or rejection of parameters. In the research, hypothesis provides direction to the activities done by the researchers. The objectives of these tests are the significances regarding the parameters of the population on the basis of sample drawn from the population. Followings are the hypothesis test conducted between the sampled joint venture banks;

- i. Test of hypothesis on Non-performing loan to Total loan and advances
- ii. Test of hypothesis on Net profit to Total loan and advances

3.7.5.1 T-Statistics

T-statistics is one of the best methods to test hypothesis where sample size is small i.e. less than 30. The test is also called students t statistics or simply students test since generally students use small size of sample for their study purpose. The t-statistics has been calculated and it has been compared with critical value at a significance level of 5%. T-statistics uses following formula;

$$t = \frac{\bar{x}_s - \bar{x}_s}{\sqrt{\frac{S^2}{v} \left[\frac{1}{n_s} + \frac{1}{n_e} \right]}} \sim n_1 + n_2 - 2$$

The t-statistics has been calculated directly using Microsoft excel. For the testing of hypothesis, following value and formulated have been used:

Level of Significance = 5%

Degree of Freedom = $n_1 + n_2 - 2$

a= constant of the equation

CHAPTER IV
DATA PRESENTATION AND ANALYSIS

4.1 Financial Tools

Various financial tools are used to draw the meaningful conclusion of the study. Ratio analysis is a part of the whole process of analysis of financial statement of any business or industrial concerned especially to take output and credit decisions. Ratio analysis is used to compare firm's financial performance and status that of the other firms. Even though there are many ratios to analyze and interpret the financial statement those ratios that are related to the investment and credit operation of the bank have been covered in this study.

4.1.1 Credit/Loan Related Ratios

In this study following ratios are analyzed;

Table 4.1: Total Loans & Advances to Total Deposits Ratio and to Total Assets Ratio

FY/Banks	HBL		EBL		NABIL	
	Loan & Advances To		Loan & Advances To		Loans & Advances To	
	Total Deposits	Total Assets	Total Deposits	Total Assets	Total Deposits	Total Assets
2014/15	72.72	64.58	65.57	54.84	62.84	56.47
2015/16	77.57	67.84	72.50	59.67	69.02	59.78
2016/17	81.16	69.84	82.32	66.62	75.53	64.20
2017/18	87.07	74.57	81.53	65	83.56	70.57
2018/19	86.79	73.76	85.90	70	80.60	65.87
Mean	81.06	70.05	77.56	63.25	74.31	63.38
S.D	6.14	4.16	8.33	5.96	8.46	5.46
C.V %	7.57	5.94	10.74	9.42	11.38	8.61

(Source: Annual Report of HBL, EBL and NABIL, 2014/15-2018/19, Appendix 1 & 3)

Loans and advances to total deposit ratio is calculated to measure the banks success in utilizing their deposits on loan and advances for profit generating activities. Greater ratio indicates the better utilization of total deposit but may cause to face liquidity crunch. Similarly, lower

indicators may defend the liquidity crunch but restrict but restrict to reap interest income from the potential credit mobilization. In Table 4.1, the deposit utilization of HBL seems higher with mean ratio but mean ratio of HBL is less than the ratio of FY 2017/18 and also is less risky with S.D and C.V of 6.14% and 7.57% respectively. The deposit utilization of other two banks is also satisfactory. NABIL and EBL have utilized their deposits in loan and advances in a ratio of 74.31% and 77.56% with less risky in deposit utilization of EBL rather than NABIL i.e. S.D and C.V of NABIL and EBL are 8.46% and 11.38% as well as 8.33% and 10.74% respectively.

Loan and advances is the major part of total assets for the bank. This ratio indicates the volume of loan and advances out of total assets. A higher degree of ratio indicates that the bank has been able to mobilize its funds throughout lending function but not better from the point of liquidity. In Table 4.1, the mean ratio of total loan and advances to total assets of HBL is highest among sampled banks in recent five years. HBL ratio of this is higher than its mean shown in FY 2017/18 and 2018/19. Also, the ratio of HBL is less volatile among other banks with standard deviation and C.V of 4.16 and 5.94 respectively. Similarly, the same average ratio of EBL and NABIL is almost same but ratio of EBL of is highly volatile among all sampled.

Table 4.2: Total Investment to Loans & Advances and to Total Deposits Ratio

FY/Banks	HBL		EBL		NABIL	
	Total Investment To	Total Investment To	Total Investment To	Total Investment To	Total Investment To	Total Investment To
	Total Deposits	Loans & adv and Inv.	Total Deposits	Loans & adv and Inv.	Total Deposits	Loans & adv and Inv.
2014/15	23.27	24.24	18.18	21.70	29.71	32.10
2015/16	22.11	22.80	19.41	21.12	32.74	27.60
2016/17	19.30	19.22	12.58	13.26	27.39	30.72
2017/18	12.48	12.54	13.24	13.97	21.08	20.15
2018/19	14.55	14.36	16.47	16.08	25.86	24.29
Mean	18.34	18.51	15.98	17.23	27.36	26.97
S.D	4.69	4.99	3.00	3.97	4.36	4.86
C.V %	25.58	26.98	18.76	23.02	15.95	18.02

(Source: Annual Report of HBL, EBL and NABIL, 2014/15-2018/19, Appendix 2 & 4)

Joint venture banks may mobilize its deposits by investing its fund in different securities issued by government and other financial and non-financial companies. High ratio of total investment to total deposit is the indicator of high success to mobilize the banking fund as investment and vice-versa. In Table 4.2, banks total investment to total deposit ratio is at decreasing trend in initial periods but after FY 2015/16, it is at increasing trend of EBL and NABIL. The deposit mobilization ratio of NABIL seems higher with an average of 27.36% but it is less than the ratio of FY 2015/16. EBL has less volatility in assets management ratio having S.D and C.V of 3.00% and 18.76% respectively as well as HBL has assets utilization of 18.34% with S.D and C.V of 4.69% and 25.58% respectively, which seems more volatile than NABIL.

Investment to total loans & advances and Investment ratio measures the contribution made by investment in total amount of loan and advances and investment. The proportion between investment and loan and advances measures the management attitude towards risky assets and safety of assets. Investment and loan and advances in whole do not provide the quality of assets that a bank has created. The ratio indicates the mobilization of funds in safe area and vice-versa. In Table 4.2, the average of fund mobilization ratio of NABIL seems to be higher than other sampled banks with the value in average of 26.97% having S.D and C.V i.e. 4.86% and 18.02% respectively. Similarly, HBL and EBL has the fund ratio of 18.51% and 17.23% respectively. HBL has the moderate high fund mobilization of 24.24% in FY 2014/2015 and EBL has the lowest fund mobilization of 13.26% in FY 2016/2017. EBL has less volatile ratio and NABIL and HBL have highly volatile ratio of utilization of funds.

4.1.2 Credit Efficiency Ratio

This ratio indicates the efficiency of activity of an enterprise to utilize available funds, particularly short term funds. These ratios are used to determine the efficiency, quality and the contribution of loan and advances in the total profitability. This ratio also shows the utilization of available funds. The following activity ratio measures the performance efficiency of the bank to utilize funds.

Table 4.3 LLP, NPL, Priority Sector Credit & Deprived Sector Credit to Total Loans & Advances Ratio

FY	HBL				EBL				NABIL			
	LLP	NPL	Pri. Sec.	Dep. Sec.	LLP	NPL	Pri. Sec.	Dep. Sec.	LLP	NPL	Pri. Sec.	Dep. Sec.
2014/15	3.65	3.34	10.10	3.10	1.62	0.67	10.10	3.07	2.53	1.86	9.23	4.09
2015/16	2.00	1.26	9.92	2.39	1.41	0.39	9.37	0.32	2.13	1.17	10.18	4.44
2016/17	1.09	0.88	10.52	4.85	1.27	0.25	11.12	1.70	1.80	0.81	9.11	5.06
2017/18	1.09	1.40	11.18	4.77	1.00	0.20	10.27	1.26	0.98	0.54	10.64	.92
2018/19	1.08	1.12	10.60	3.32	1.01	0.16	12.15	0.54	1.66	0.74	11.26	5.52
MEAN	1.78	1.60	10.46	3.69	1.26	0.33	10.60	1.38	1.82	1.03	10.08	4.81
SD	1.12	0.99	0.49	1.08	0.26	0.21	1.07	1.09	0.58	0.52	0.92	0.56
C.V%	62.69	61.97	4.69	29.38	20.91	62.24	10.05	79.36	31.73	50.79	9.12	11.56

(Source: Annual Report of HBL, EBL and NABIL, 2014/15-2018/19, Appendix 5, 6, 7 & 8)

The provision for loan loss reflects the increasing profitability of non-performing loan. Increase in loan loss provision decreases profit which results to decrease in dividend. But its positive impact is that it strengthens the financial condition of banks by controlling the credit risk and reduces the risk related to deposit. The low ratio indicates the good quality of assets in total volume of loan and advances. High ratio indicates riskier assets in total volume of loan and advances. In Table 4.3, average loan loss provision ratio of HBL is highest i.e. 1.78%. The lowest average loan loss provision ratio is of EBL. There is a maximum average loan loss provision HBL in FY 2014/15 and the minimum average loan loss provision is 1.00% of EBL in FY 2017/18. It can be assumed that profit of HBL was lowest in FY 2014/15 because of highest loan loss provision to total loan and advances ratio. NABIL has been decreasing in loan loss provision from FY 2015/16 to FY 2017/18 with S.D and C.V of 0.58% and 31.73% respectively. EBL is seen more consistent than other sampled banks with having S.D and C.V of 0.26% and 20.91% respectively in terms of credit efficiency. HBL seems more volatile as well as NABIL seems little more volatile according to this study.

Non-performing loans to total loan and advances ratio shows the percentage of non-recovery loans in total loan and advances. This ratio is calculated as dividing non-performing loan by total loan and advances. Loan loss provision is the function of substandard credit which is also known as non-performing loan (NPL). Higher the NPL, higher would be deduction on profit

because of provision. In Table 4.3, the average ratio of non-performing loan to total loan and advances of HBL is highest i.e. 1.60% than other two sampled banks EBL and NABIL. This indicates that the credit efficiency of HBL is weak among sampled banks. HBL has highest non-performing loan to total loan and advances ratio in FY 2014/15 and EBL has lowest of same ratio in FY 2018/19 i.e. 0.16%. In this context, HBL is more volatile and NABIL is less than other sampled banks having S.D of 0.52% and C.V of 50.79%.

Priority sector includes micro and small enterprise. Micro and small enterprises are classified as agriculture enterprises, cottage, small industries and services. This ratio is calculated by dividing priority sector loan by total loan and advances.

Note: Priority sector lending also includes deprived sector lending)

In Table 4.3, the average priority sector lending of EBL, figuring 10.60% of lending against total loans and advances seems higher among all the sampled banks. NRB directives has stated this ratio should be 10% or above. HBL in FY 2014/15, FY 2016/17, FY 2017/18 EBL in FY 2014/15, 2016/17 and 2018/19 and NABIL in FY 2015/16, FY 2017/18 and FY 2018/19 has also satisfactorily maintained their priority sector credit ratio though they have slightly decreased the amount of credit in this sector. The priority sector lending of HBL is less volatile having S.D and C.V of 0.49% and 4.69% respectively whereas that of EBL is more having S.D of 1.07% and C.V of 10.05%

Deprived sector credit includes low income and particularly socially backward women, tribes, lower caste, blind, bearing impaired and physically challenged persons and squatter family. Deprived sector credit to total loan and advances ratio can be calculated by dividing deprived loan by total loan and advances. In Table 4.3, reflects the position of lending of sampled joint venture commercial banks in deprived sector. The average lending of NABIL is highest among all sampled banks and that of EBL is lowest during the sampled five years but it has lower ratio than its average in FY 2015/16. HBL has not crossed 3.5% till FY 2015/16, EBL has not crossed 3.5% from FY 2015/16 to 2018/19 but NABIL has crossed 3.5% during the sampled five years. NABIL is less volatile bank in this context having S.D and C.V of 0.56% and 11.56% respectively. Similarly, EBL is the most volatile bank with S.D and C.V of 1.09% and 79.36% respectively.

4.1.4 Profitability Ratios

Profit is the outcome of monetary or non-monetary efforts that the bank has made from the clients. Main source of bank income is credit and main sources of expenses are deposits. So, the proper trade off should be made between these two variables. Besides this two components, various services generate income to the bank. Similarly, staffs, advertisement etc. impose the cost of bank. So, the study deals with the overall operating income, net income, interest income, interest expenses and spread analysis.

Table 4.4 OP, NP & Interest Income to Total Loans & Advances Ratio

FY	HBL			EBL			NABIL		
	OP	NP	Int. Income	OP	NP	Int. Income	OP	NP	Int. Income
2014/15	3.65	3.34	10.10	1.62	0.67	10.10	2.53	1.86	9.23
2015/16	2.00	1.26	9.92	1.41	0.39	9.37	2.13	1.17	10.18
2016/17	1.09	0.88	10.52	1.27	0.25	11.12	1.80	0.81	9.11
2017/18	1.09	1.40	11.18	1.00	0.20	10.27	0.98	0.54	10.64
2018/19	1.08	1.12	10.60	1.01	0.16	12.15	1.66	0.74	11.26
MEAN	1.78	1.60	10.46	1.26	0.33	10.60	1.82	1.03	10.08
SD	1.12	0.99	0.49	0.26	0.21	1.07	0.58	0.52	0.92
C.V%	62.69	61.97	4.69	20.91	62.24	10.05	31.73	50.79	9.12

(Source: Annual Report of HBL, EBL and NABIL, 2014/15-2018/19, Appendix 9, 10 & 11)

Operating profit to total loan and advances ratio measures the earning capacity of joint venture commercial banks. This ratio is calculated by dividing operating profit by total loan and advances. In Table 4.3, there is highest average ratio of operating profit of NABIL resulting 5.29% Similarly, HBL has the lowest average among the sampled banks. In FY 2016/17, NABIL has registered the highest operating profit of 6.23% and in the FY 2014/15, HBL has earned the lowest during the sampled period resulting the operating profit of 1.27%. Considering the risk factor or volatility of the earning of sampled banks, EBL is less volatile whereas HBL is the most having S.D and C.V of 0.11% and 24.20% respectively.

The Net Profit to Total Loans and Advances ratio measures the earning capacity of joint venture commercial banks through its fund mobilization as loan and advances. Higher ratio indicates greater success to mobilize fund as loan and advances and vice-versa. Mostly loan

and advances include loan as cash credit, overdraft, bill purchased and discounted. In Table 4.3, the earning capacity of NABIL is stronger among sampled banks with an average earnings ratio of 3.53. HBL in FY 2014/15 has the lowest ratio of net profit to total loan and advances and its ratios of net profit to total loan and advances is not crossed over the line of 3%. The earnings of EBL is less volatile among sampled banks having S.D and C.V of 0.14% and 5.28% respectively. Similarly, HBL has fluctuating earnings having S.D and C.V of 0.40% and 15.77% respectively.

Interest Income to Total Loan and Advances Ratio tells income as interest from total credit and advances. It is useful to know the fact that whether credit has given good return or not. One can increase interest income by taking policy. In Table 4.3, the mean ratio of interest income to total loan and advances of HBL is highest among the sampled banks having the ratio of 9.66% but in FY 2018/19, HBL's interest income is more than its average. EBL has earned the lowest interest income in FY 2015/16 i.e. 7.44%. Similarly, NABIL is less volatile having S.D and C.V of 1.38% and 14.55% respectively among all sampled banks.

Table 4.5: Interest Expenses to Total Deposit Ratio

FY/Banks	HBL	EBL	NABIL
2014/15	2.66	2.55	2.15
2015/16	1.79	1.95	1.66
2016/17	3.42	3.17	2.17
2017/18	5.42	4.53	3.74
2018/19	5.83	5.62	4.92
Mean	3.82	3.56	2.93
S.D	1.75	1.50	1.36
C.V	45.70	42.03	46.49

(Source: Annual Report of HBL, EBL and NABIL, 2014/15-2018/19, Appendix 12)

Interest Expense to Total Deposit ratio measures the percentage of total interest paid against total deposit. A high ratio indicates higher interest expenses on total deposit

Commercial bank is dependent upon its ability to generate cheaper funds. The cheaper fund has moved profitability of generating loans and advances and vice-versa. In Table 4.4, HBL has accepted most expensive deposits in an average cost of deposit equal to 3.82% during the

sampled five years of period. Similarly, HBL has provided deposits to customers at highest rate of expenses which is over than all bank's average. NABIL is success in using cheaper fund i.e. 2.93%. NABIL's cost of deposit is less volatile having S.D and C.V of 1.36% and 46.49% and the cost of HBL is most volatile having S.D and C.V of 1.75% and 45.70% respectively.

Table 4.6 Spread Analysis

FY	HBL	EBL	NABIL
2014/15	4.35	4.76	3.97
2015/16	4.59	4.89	3.74
2016/17	4.44	4.48	4.23
2017/18	4.7	4.72	4.87
2018/19	4.47	4.29	4.43
Mean	4.51	4.63	4.25
S.D	0.14	0.24	0.43
C.V	3.03	5.19	10.23

(Source: Annual Report of HBL, EBL and NABIL, 2014/15-2018/19, Appendix 13)

Gap between interest income and interest expenses is known as spread. Generally, banks are trying to maintain high spread either collecting lower costing deposit or lending high interest earning credits. In aggregate widening spreads are the indicators of banks profitability and vice-versa. Net spread of a particular year may not provide proper information about the profitability because previous year credit mobilization also affects the profitability of the bank due to loan loss provisions, non-performing loans etc. But after knowing the figure of particular year one can estimate, how bank is trying to maintain its spread higher. In Table 4.5, the average percentage of spread of EBL is highest i.e. 4.63%. Spread rate of NABIL seems to be more fluctuating with high volatile having S.D and C.V of 0.43% and 10.23% respectively. Similarly, HBL's spread rate is less volatile with S.D and C.V of 0.14% and 3.03% respectively.

4.2 Correlation Testing

4.2.1 Relationship between Net Profits to Total Loans & advances of HBL, EBL & NABIL

Table 4.7: Correlation Coefficient between Net Profits to Total Loans & Advances

Banks	Evaluation Criteria				Impact
	R	r ²	P.Er	6P.Er	
HBL	0.8793	0.7733	0.0684	0.4104	Significant
EBL	0.9883	0.9767	0.0070	0.0422	Significant
NABIL	0.9337	0.8718	0.0387	0.2320	Significant

(Source: Annual Report of HBL, EBL and NABIL, 2014/15-2018/19, Appendix20)

Table 4.6 shows the correlation coefficient between net profit and total loans and advances of HBL, EBL and NABIL for FY 2014/15 to FY 2018/19. From the table it is found that the correlation coefficient of net profit and total loans and advances of HBL is 0.0.8793. This shows that positive correlation between these two variables. The value of coefficient of determination ($r^2= 0.7733$) is higher than the value of 6P. Er i.e. 04104 which says that the relationship between net profit and total loans and advances is significant. In case of EBL the correlation coefficient of net profit and total loans and deposits of EBL is 0.9883 shows that there is positive correlation between these two variables. The value of coefficient of determination ($r^2 = 0.9767$) is higher than the value of 6P. Er i.e. 0.0422 which says the relationship between net profit and total loans and advances is significant. Similarly, in case of NABIL, the correlation coefficient of net profit and total loans and advances is 0.9337 which shows positive correlation between these two variables. The value of coefficient of determination ($r^2 = 0.8718$) is higher than the value of 6P. Er 0.42320 which says the relationship between net profit and total loans and advances is significant.

4.2.2 Relationship between Non-Performing Loans & Loans and Advances of HBL, EBL and NABIL

Table 4.8 Correlation Coefficient between Non-performing loans and Loans & Advances

Banks	Evaluation Criteria				Impact
	R	r ²	P.Er	6P.Er	
HBL	-0.4026	0.1621	0.2528	1.5166	Insignificant
EBL	-0.8739	0.7637	0.0713	0.4276	Significant
NABIL	-0.4069	0.1656	0.2517	1.5102	Insignificant

(Source: Annual Report of HBL, EBL and NABIL, 2014/15-2018/19, Appendix21)

Table 4.7 states the coefficient of correlation between the value of non-performing loans and loan and advances of HBL, EBL and NABIL for the study of period of FY 2014/15- FY 2018/19. From the table it is found that the correlation coefficient of non-performing loans and loans & advances of HBL is -0.4026. This shows highly negative correlation between these two variables. The value of coefficient of determination ($r^2 = 0.1621$) is less than the value of 6P. Er I.e. 1.5166 which says that the relationship between non-performing loans and loan & advances is insignificant. In case of EBL, the correlation coefficient of non-performing loans and loans & advances is -0.8739 shows negative correlation between these two variables. The value of coefficient of determination ($r^2 = 0.7637$) is higher than the value of 6P. Er i.e. 0.4276 which says that the relationship between non-performing loans and loan & advances is significant. In case of NABIL, the correlation coefficient of non-performing loans and loans & advances of NABIL is -0.4069 shows there is highly negative correlation between these two variables. The value of coefficient of determination ($r^2 = 0.1656$) is less than the value of 6P. Er i.e. 1.5102 which says that the relationship between non-performing loans and loan & advances is insignificant.

4.3 Test of Hypothesis

To test significant relation between the ratios of two banks t-test is suitable. So it has been done here.

4.3.1 The test of Hypothesis of Non-Performing Loans to Total Loan and Advances between HBL, EBL and NABIL

4.3.1.1 Test of Significant Difference between HBL and EBL

Following hypothesis has been set to test if there is significant difference between non-performing loan to total loan and advances ratios of HBL and EBL.

Null Hypothesis, H₀: $\mu_1 = \mu_2$. There is no significant difference between non-performing loans to total loan and advances ratio between HBL and EBL.

Alternative Hypothesis, H₁: $\mu_1 \neq \mu_2$. There is significant difference between non-performing loans and total loan and advances ratio between HBL and EBL

Tabulated Value = 2.3060 (being two tailed test)

Calculated Value = 0.0251 (Source-Appendix 22)

Decision: Since the calculated value of t is 0.0251 which is smaller than the tabulated value 2.3060, the null hypothesis is accepted which means there is no significant difference between non-performing loans to total loan and advances between HBL and EBL.

4.3.1.2 Test of Significant Difference between HBL and NABIL

Following hypothesis has been set to test if there is significant difference between non-performing loan to total loan and advances ratios of HBL and NABIL.

Null Hypothesis, H₀: $\mu_1 = \mu_2$, there is no significant difference between non-performing loan to total loan and advances ratio between HBL and NABIL.

Alternative Hypothesis, H₁: $\mu_1 \neq \mu_2$, There is significant difference between non-performing loans to total loans and advances ratio between HBL and NABIL.

Tabulated value = 2.3060

Calculated value = 0.0979 (Source-Appendix 23)

Decision: Since the calculated value of t is 0.0979 which is smaller than the tabulated value 2.3060, the null hypothesis is accepted which means there is no difference between non-performing loans to total loan and advances between HBL and NABIL.

4.3.1.3 Test of Significant Difference between EBL and NABIL

Following hypothesis has been set to test if there is significant difference between non-performing loan to total loan and advances ratio of EBL and NABIL:

Null Hypothesis, $H_0: \mu_1 = \mu_2$, there is no significant difference between non-performing loan to total loan and advances ratio between EBL and NABIL.

Alternative Hypothesis: $H_1: \mu_1 \neq \mu_2$, there is significant difference between non-performing loan to total loan and advances ratio between EBL and NABIL

Tabulated value = 2.3060

Calculated value = 0.0085 (Source-Appendix 24)

Decision: Since the calculated value of t is 0.0085 which is smaller than the tabulated value 2.3060, the null hypothesis is accepted which means there is no significant difference between non-performing loans to total loan and advances between EBL and NABIL.

4.3.2 Test of Hypothesis of Net Profit to Total loan and Advances between HBL, EBL and NABIL

4.3.2.1 Test of Significant Difference between HBL and EBL

Following hypothesis has been set to test if there is significant difference between net profit to total loan and advances ratio of HBL and EBL

Null Hypothesis, $H_0: \mu_1 = \mu_2$, there is no significant difference between net profit to total loan and advances ratio between HBL and EBL

Alternative Hypothesis: $H_1: \mu_1 \neq \mu_2$, there is significant difference between net profit to total loan and advances ratio between HBL and EBL

Tabulated value = 2.3060

Calculated value = 0.6934 (Source-Appendix 25)

Decision: Since the calculated value of t is 0.6934 which is smaller than the tabulated value 2.3060, the null hypothesis is accepted which means there is no significant difference between net profit to total loan and advances between HBL and EBL.

4.3.2.2 Test of Significant Difference between HBL and NABIL

Following hypothesis has been set to test if there is significant difference between net profit to total loan and advances ratio of HBL and NABIL:

Null Hypothesis, $H_0: \mu_1 = \mu_2$, there is no significant difference between net profit to total loan and advances ratio between HBL and NABIL.

Alternative Hypothesis, $H_1: \mu_1 \neq \mu_2$, there is significant difference between net profit to total loan and advances ratio between HBL and NABIL.

Tabulated value = 2.3060

Calculated value = 0.0042 (Source-Appendix 26)

Decision: Since the calculated value of t is 0.0042 which is smaller than the tabulated value 2.3060, the null hypothesis is accepted which means there is no significant difference between net profit to total loan and advances between HBL and NABIL.

4.3.2.3 Test of Significant Difference between EBL and NABIL

Following hypothesis has been set to test if there is significant difference between net profit to total loan and advances ratio of EBL and NABIL.

Null Hypothesis, $H_0: \mu_1 = \mu_2$, there is no significant difference between net profit to total loan and advances between EBL and NABIL.

Alternative Hypothesis, $H_1: \mu_1 \neq \mu_2$, there is significant difference between net profit to total loan and advances between EBL and NABIL.

Tabulated value = 2.3060

Calculated value = 0.0140 (Source-Appendix 27)

Decision: Since the calculated value of t is 0.0140 which is smaller than the tabulated value 2.3060, the null hypothesis is accepted which means there is no significant difference between net profit to total loan and advances between EBL and NABIL.

4.5 Major Findings

Credit/loan related ratios

- Comparatively HBL is aggressively deploying credit, trend of credit mobilization of EBL and NABIL is moderate for credit mobilization.
- Comparatively NABIL is mobilizing higher deposit to investment, HBL is in moderate condition and EBL is in lower level.
- Deposit mobilization on credit of HBL is in higher side, EBL is slightly lower in mobilizing its deposit on credit than HBL and in the same way EBL is mobilizing its credit slightly higher than that of NABIL.
- Ratio of investment to total loan and advances and investment is in higher side for NABIL than other. Similarly, EBL has moderate ratio and HBL has lower ratio.

Credit Efficiency Ratio

- HBL has highest loan loss provision, NABIL has second higher and EBL is in third position which indicates that EBL is able to manage its credit more effectively and efficiently than other sampled banks.
- Sampled banks are trying to lower the non-performing loan than past however ratio of HBL is higher than other which seems that HBL is inefficient in lowering non-performing loan or improving credit efficiency. EBL has improved most among these banks.

Priority and Deprived Sector Credit

- Comparatively EBL is mobilizing higher fund to the priority sector, HBL is moderately mobilizing priority sector credit and in the case of NABIL it can be said that credit to priority sector is lower than other sampled banks.
- Deprived sector credit ratio of NABIL is higher enough than other two sampled banks. EBL has lent less among other banks.

Profitability Ratio

- HBL is losing the operating profit among the sampled banks however operating profit of NABIL is in increasing trend. EBL also in slightly losing its profit trend since FY 2016/17.
- Relationship between net profit and loan and advances of NABIL seems fluctuating. NABIL has crossed the line of 3% but EBL and HBL are still under this line. There is a slow and small growth in profit of EBL and a serious declination in profit of HBL in FY 2014/15.
- Interest income and interest expenses ratios of all sampled banks are almost moving in parallel trend. Looking at movement of NABIL, trends of interest income has highly exceeded the expenses in FY 2018/19.

- Interest income to loan and advances of NABIL is in increasing trend but the same of EBL and HBL have slight decreasing trend in 2015/16 but decreasing rate of EBL is higher than others.

Spread Analysis

The spread of EBL is found higher than other two sampled banks. NABIL is following a highly increasing trend and similarly HBL is also following satisfactory increasing and decreasing both trends.

Correlation Analysis

- There is highly positive correlation between the net profit and total loans & advances of HBL and the relationship between these variables is significant.
- There is highly positive correlation between the net profit and total loans & advances of EBL and the relationship between these variables is significant.
- There is highly positive correlation between the net profit and total loans & advances of NABIL and the relationship between these variables is significant.
- There is highly negative correlation between non-performing loans and total loan & advances of HBL and the relationship between these variables is insignificant.
- There is negative correlation between non-performing loans and total loan & advances of EBL and the relationship between these variables is significant.
- There is highly negative correlation between non-performing loans and total loan & advances of NABIL and the relationship between these variables is insignificant

CHAPTER V

SUMMARY, CONCLUSION & RECOMMENDATIONS

5.1 Summary

Being the first chapter, as an introduction, this study basically provides the brief background of the bank regarding its establishment, its capital composition and its vision. As there are six joint venture commercial banks only three joint venture banks: HBL, EBL and NABIL are taken for sample study. This study gives brief view of credit aspect and tried to analyze the study of priority and deprived sector loans, evaluation of non-performing loans, issues of profitability, liquidity position which is set as an objective of the study.

Chapter second deals with the overall review of credit related issues of other relevant studies in related areas so that all part of studies can be conducted. This study deals with major reviews of literature related to credit management in more descriptive and detailed manner. It consists of review from other articles, books, journals, research studies and conceptual review of overall banking sector and its growth in Nepal, legal frame work, guidelines and directives of Nepal Rastra Bank etc.

Chapter third consists of research methodology designed to solve the research problems. In this study among many tools of analysis, financial tools and statistical tools are used to draw out conclusion. All the data are taken from the secondary Sources-Annual reports of sampled banks, telephone conversation with bankers etc. so accuracy of data depends upon the publisher. Only five years' data are taken so the results may not be fully applicable.

Fourth chapter shows the presentation, analysis and interpretation of relevant sampled data of selected banks. Various types of ratio and statistical tools are calculated and presented in proper diagram to show the real picture of the banks.

Chapter five presents the summary, conclusion and recommendation of above studies.

5.2 Conclusion

Comparatively HBL is aggressively deploying credit, trend of credit mobilization of EBL is moderate and NABIL seems very defensive for credit mobilization. Comparatively NABIL is mobilizing higher deposit to investment, HBL is in moderate condition and EBL is in lower level. Deposit mobilization on credit of HBL is in higher side, EBL is slightly lower in mobilizing its deposit on credit than HBL and in the same way EBL is mobilizing its credit slightly lower than that of NABIL. Ratio of investment to total loan and advances and investment is in higher side for NABIL than other. Similarly, EBL has moderate ratio and HBL has lower ratio. HBL has highest loan loss provision, NABIL has second higher and EBL is in third position which indicates that EBL is able to manage its credit more effectively and efficiently than other sampled banks. Sampled banks are trying to lower the non-performing loan than past however ratio of HBL is higher than other which seems that HBL is inefficient in lowering non-performing loan or improving credit efficiency. EBL has improved most among these banks. Comparatively EBL is mobilizing higher fund to the priority sector, HBL is moderately mobilizing priority sector credit and in the case of NABIL it can be said that credit to priority sector is lower than other sampled banks. Deprived sector credit ratio of NABIL is higher enough than other two sampled banks. EBL has lent less among other banks and all sampled banks are lending satisfactorily in this sector.

HBL is losing the operating profit among the sampled banks however operating profit of NABIL is in increasing trend. EBL also in slightly losing its profit trend since FY 2016/17 NABIL is able to generate higher operating profit than other sampled banks. Relationship between net profit and loan and advances of NABIL seems fluctuating. NABIL has crossed the line of 3% but EBL and HBL are still under this line. There is a slow and small growth in profit of EBL and a serious declination in profit of HBL in FY 2014/15. Interest income and interest expenses ratios of all sampled banks are almost moving in parallel trend. Looking at movement of NABIL, trends of interest income has highly exceeded the expenses in FY 2018/19. Interest income to loan and advances of NABIL is in decreasing trend but the same of EBL and HBL have slight decreasing trend since FY 2015/16 but decreasing rate of EBL is

higher than others. All sampled banks are in decreasing trend in the interest income generated for loan mobilization.

The spread of EBL is found higher than other two sampled banks. NABIL is following a highly increasing trend and similarly HBL is also following satisfactory increasing and decreasing both trend.

There is highly positive correlation between the net profit and total loans & advances of HBL and the relationship between these variables is significant. There is highly positive correlation between the net profit and total loans & advances of EBL and the relationship between these variables is significant. There is highly positive correlation between the net profit and total loans & advances of NABIL and the relationship between these variables is significant. There is highly negative correlation between non-performing loans and total loan & advances of HBL and the relationship between these variables is insignificant. There is negative correlation between non-performing loans and total loan & advances of EBL and the relationship between these variables is significant. There is highly negative correlation between non-performing loans and total loan & advances of NABIL and the relationship between these variables is insignificant

There is no significant difference between non-performing loans to total loan and advances between HBL and EBL. There is no significant difference between non-performing loans to total loan and advances between HBL and NABIL. Similarly, there is no significant difference between non-performing loans to total loan and advances between EBL and NABIL. There is no significant difference between net profit to total loan and advances between HBL and EBL. There is no significant difference between net profit to total loan and advances between HBL and NABIL. There is no significant difference between net profit to total loan and advances between EBL and NABIL.

5.3 Recommendation

Based on the study, following recommendation are made to the joint venture commercial banks, and stakeholders i.e. shareholders, creditors, depositors, borrowers, government authority, society etc.

- NABIL seems very defensive for credit mobilization which may lower its earning. So, it is recommended to mobilize its fund properly by forwarding efficient credit policies.
- EBL seems weak in mobilizing its deposits so it should create efficient portfolio for further investment in profitable sectors.
- Loan loss provision of HBL is higher, so it should follow the credit guidelines properly and it should focus on proper regulation in its lending.
- EBL is managed in non-performing assets but two sampled banks HBL and NABIL seem weak in managing non-performing loans so they should improve credit efficiency more rapidly.
- Priority sector lending of NABIL is low, so it is recommended to increase lending in such sector to earn goodwill and remain within the NRB regulations.
- Deprived sector lending of EBL is comparatively low, so it is recommended to EBL to increase such lending to earn goodwill and to remain within the NRB guidelines.
- HBL is losing its profit trend in FY 2016/17, so it is recommended to HBL to increase overall banking efficiency to increase profitability for sustainability.
- Interest expenses ratio of HBL is more than other two banks, so it is recommended to HBL to reduce the cost of fund to increase profitability by adopting efficient financing decision.
- The spread ratio of HBL is weak which is adversely affecting its growth, so it is recommended for HBL to take necessary corrective action to enhance its growth.

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Calculation of Average Using the formula

$$AVERAGE = \frac{TOTAL}{N}$$

$$= \frac{350.23}{5}$$

$$MEANOFHBL = 70.05$$

Calculation of SD Using the formula,

$$SD = \sqrt{\frac{\sum (x - \bar{x})^2}{N - 1}}$$

$$= \sqrt{\frac{15020.30}{5 - 1}}$$

$$SDOFHBL = 4.16$$

Calculation of CV using th formula,

$$CV (\%) = \left(\frac{Standard\ deviation}{Mean} \right) \times 100$$

$$= \frac{4.16}{70.05} * 100$$

$$CVofHBL = 5.94$$

Appendix 1: Total Loans and Advances to Total Assets Ratio

Banks	Years				
	2014/15	2015/16	2016/17	2017/18	2018/19
HBL					
Total Loans and Advances	53,476,229,873	67,745,978,944	75,383,443,000	86,847,000,000	98,206,000,000
Total Assets	82,801,550,614	99,863,008,080	108,502,000,000	116,462,000,000	133,151,000,000
Result	0.65	0.68	0.69	0.75	0.74
Total	64.58	67.84	69.48	74.57	73.76
EBL					
Total Loans and Advances	54,482,465,225	67,955,107,021	78,284,600,000	94,182,200,000	111,821,800,000
Total Assets	99,167,293,661	113,885,046,402	117,507,360,000	144,811,151,443	170,077,533,454

Result	0.55	0.60	0.67	0.65	0.70
Total	54.94	59.67	66.62	65.00	70.00
NABIL	2014/15	2015/16	2016/17	2017/18	2018/19
Total Loans and Advances	65,501,925,164	76,106,016,881	89,877,000,000	113,625,000,000	132,486,473,766
Total Assets	115,985,701,411	127,300,195,373	140,000,000,000	161,000,000,000	201,140,000,000
Result	0.56	0.60	0.64	0.71	0.66
Total	56.47	59.78	64.20	70.57	65.87

Calculation of Average Using the formula

	HBL	EBL	NABIL
2014/15	64.58	54.94	56.47
2015/16	67.84	59.67	59.78
2016/17	69.48	66.62	64.20
2017/18	74.57	65.00	70.57
2018/19	73.76	70.00	65.87
Total	350.23	316.23	316.89
Mean	70.05	63.25	63.38

Calculation of SD and CV Using the formula,

	HBL	EBL	NABIL
	$(x_1 - \bar{x}_1)^2$	$(x_2 - \bar{x}_2)^2$	$(x_3 - \bar{x}_3)^2$
2014/15	29.88	68.99	47.72
2015/16	4602.27	3560.51	3573.65
2016/17	4827.47	4438.22	4121.64
2017/18	5560.68	4225.00	4980.12
2018/19	5440.54	4900.00	4338.86
Total	15020.30	17192.72	17061.99
S.D	4.16	5.96	5.46
Coefficient of Variation (C V)	5.94	9.42	8.61

Appendix 2: Total Investment to Total Deposit Ratio

Banks	Year				
	2014/15	2015/16	2016/17	2017/18	2018/19
HBL					
Total Investment	17,113,389,432	19,306,073,338	17,930,480,198	12,449,220,000	16,466,201,909
Total Deposit	73,538,200,185	87,335,785,849	92,881,114,255	99,743,000,000	113,151,000,000
Result	0.23	0.22	0.19	0.12	0.15
Total	23.27	22.11	19.30	12.48	14.55
EBL					
Total Investment	15,102,674,197	18,198,739,944	11,964,600,000	15,292,314,230	21,434,199,007
Total Deposit	83,093,789,957	93,735,480,708	95,094,500,000	115,511,800,000	130,177,400,000
Result	0.18	0.19	0.13	0.13	0.16
Total	18.18	19.41	12.58	13.24	16.47
NABIL					
Total Investment	30,972,487,414	36,098,549,503	32,594,000,000	28,666,000,000	42,510,000,000
Total Deposit	104,237,910,083	110,267,271,749	119,000,000,000	135,980,000,000	164,370,000,000
Result	0.30	0.33	0.27	0.21	0.26
Total	29.71	32.74	27.39	21.08	25.86

Calculation of Average Using the formula

	HBL	EBL	NABIL
2014/15	23.27	18.18	29.71
2015/16	22.11	19.41	32.74
2016/17	19.30	12.58	27.39
2017/18	12.48	13.24	21.08
2018/19	14.55	16.47	25.86
Total	91.72	79.88	136.78
Mean	18.34	15.98	27.36

Calculation of SD and CV Using the formula,

	HBL	EBL	NABIL
	$(x_1 - \bar{x}_1)^2$	$(x_2 - \bar{x}_2)^2$	$(x_3 - \bar{x}_3)^2$
2014/15	24.29	4.84	5.55
2015/16	488.66	376.94	1071.73

2016/17	372.67	158.30	750.21
2017/18	34.36	7.49	39.38
2018/19	211.77	271.11	668.86
Total	1131.75	818.68	2535.74
S.D	4.69	3.00	4.36
Coefficient of Variation (C V)	25.58	18.76	15.95

Appendix 3: Total Loans and Advances to Total Deposits Ratio

Banks	Years				
HBL	2014/15	2015/16	2016/17	2017/18	2018/19
Total Loans and Advances	53,476,229,873	67,745,978,944	75,383,443,000	86,847,000,000	98,206,000,000
Total Deposit	73,538,200,185	87,335,785,849	92,881,114,255	99,743,000,000	113,151,000,000
Result	0.73	0.78	0.81	0.87	0.87
Total	72.72	77.57	81.16	87.07	86.79
EBL	2014/15	2015/16	2016/17	2017/18	2018/19
Total Loans and Advances	54,482,465,225	67,955,107,021	78,284,600,000	94,182,200,000	111,821,800,000
Total Deposit	83,093,789,957	93,735,480,708	95,094,500,000	115,511,800,000	130,177,400,000
Result	0.66	0.72	0.82	0.82	0.86
Total	65.57	72.50	82.32	81.53	85.90
NABIL	2014/15	2015/16	2016/17	2017/18	2018/19
Total Loans and Advances	65,501,925,164	76,106,016,881	89,877,000,000	113,625,000,000	132,486,473,766
Total Deposit	104,237,910,083	110,267,271,749	119,000,000,000	135,980,000,000	164,370,000,000
Result	0.63	0.69	0.76	0.84	0.81
Total	62.84	69.02	75.53	83.56	80.60

Calculation of Average Using the formula

	HBL	EBL	NABIL
2014/15	72.72	65.57	62.84
2015/16	77.57	72.50	69.02
2016/17	81.16	82.32	75.53
2017/18	87.07	81.53	83.56
2018/19	86.79	85.90	80.60
Total	405.31	387.82	371.55

Mean	81.06	77.56	74.31
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Calculation of SD and CV Using the formula,

	HBL	EBL	NABIL
	$(x_1 - \bar{x}_1)^2$	$(x_2 - \bar{x}_2)^2$	$(x_3 - \bar{x}_3)^2$
2014/15	69.61	164.68	131.58
2015/16	12.20	34.85	27.98
2016/17	0.01	15.39	1.48
2017/18	36.10	9.82	85.57
2018/19	32.83	136.41	39.60
Total	150.75	361.16	286.22
S.D	6.14	8.33	8.46
Coefficient of Variation (C V)	7.57	10.74	11.38

Appendix 4: Total Investment to Total Loan and Advances & Investment Ratio

Banks	Years				
	2014/15	2015/16	2016/17	2017/18	2018/19
HBL					
Total Investment	17,113,389,432	19,306,073,338	17,930,480,198	12,449,220,000	16,466,201,909
Loan And Advance & Investment	70,589,619,305	87,052,052,282	93,313,923,198	99,296,220,000	114,672,201,909
Result	0.24	0.22	0.19	0.13	0.14
Total	24.24	22.18	19.22	12.54	14.36
EBL					
Total Investment	15,102,674,197	18,198,739,944	11,964,600,000	15,292,314,290	21,434,199,007
Loan And Advance & Investment	69,585,139,422	86,153,846,965	90,249,200,000	109,474,514,290	133,255,999,007
Result	0.22	0.21	0.13	0.14	0.16
Total	21.70	21.12	13.26	13.97	16.08
NABIL					
Total Investment	30,972,000,000	39,850,000,000	39,951,000,000	28,666,000,000	42,510,000,000
Loan And Advance & Investment	96,474,412,578	112,204,566,384	129,727,000,000	14,229,100,000	174,996,473,776
Result	0.32	0.28	0.31	2.01	0.24
Total	32.10	27.60	30.72	20.15	24.29

Calculation of Average Using the formula

	HBL	EBL	NABIL
2014/15	24.24	21.70	32.10
2015/16	22.18	21.12	27.60
2016/17	19.22	13.26	30.72
2017/18	12.54	13.97	20.15
2018/19	14.36	16.08	24.29
Total	92.53	86.13	134.87
Mean	18.51	17.23	26.97

Calculation of SD and CV Using the formula,

	HBL $(x_1 - \bar{x}_1)^2$	EBL $(x_2 - \bar{x}_2)^2$	NABIL $(x_3 - \bar{x}_3)^2$
2014/15	32.91	20.05	1030.66
2015/16	13.48	15.19	761.93
2016/17	0.50	15.76	943.62
2017/18	35.63	10.61	406.02
2018/19	17.20	1.31	590.10
Total	99.72	62.92	3732.33
S.D	4.99	3.97	4.86
Coefficient of Variation (C V)	26.98	23.02	18.02

Appendix 5: Loan Loss Provision to Toal Loan and Advances Ratio

Banks	Years				
	2014/15	2015/16	2016/17	2017/18	2018/19
HBL					
Loan Loss Provision	1,951,777,381	1,354,910,397	822,550,590	943,202,316	1,061,130,071
Loan and Advance	53,476,229,873	67,745,978,944	75,383,443,000	86,847,000,000	98,206,000,000
Result	0.04	0.02	0.01	0.01	0.01
Total	3.65	2.00	1.09	1.09	1.08
EBL					
Loan Loss Provision	881,053,609	956,436,303	996,914,426	945,408,000	1,127,292,000
Loan and Advance	54,482,465,225	67,955,107,021	78,284,600,000	94,182,200,000	111,821,800,000
Result	0.02	0.01	0.01	0.01	0.01
Total	1.62	1.41	1.27	1.00	1.01

NABIL	2014/15	2015/16	2016/17	2017/18	2018/19
Loan Loss Provision	1,659,745,749	1,624,384,655	1,614,124,964	1,117,842,358	2,194,868,230
Loan and Advance	65,501,925,164	76,106,016,881	89,877,000,000	113,625,000,000	132,486,473,766
Result	0.03	0.02	0.02	0.01	0.02
Total	2.53	2.13	1.80	0.98	1.66

Calculation of Average Using the formula

	HBL	EBL	NABIL
2014/15	3.65	1.62	2.53
2015/16	2.00	1.41	2.13
2016/17	1.09	1.27	1.80
2017/18	1.09	1.00	0.98
2018/19	1.08	1.01	1.66
Total	8.91	6.31	9.10
Mean	1.78	1.26	1.82

Calculation of SD and CV Using the formula,

	HBL	EBL	NABIL
	$(x_1 - \bar{x}_1)^2$	$(x_2 - \bar{x}_2)^2$	$(x_3 - \bar{x}_3)^2$
2014/15	3.49	0.13	0.51
2015/16	0.05	0.02	0.10
2016/17	0.48	0.00	0.00
2017/18	0.48	0.07	0.70
2018/19	0.49	0.06	0.03
Total	4.99	0.28	1.33
S.D	1.12	0.26	0.58
Coefficient of Variation (C V)	62.69	20.91	31.73

Appendix 6: Non-Performing Loan to Total Loans and Advances Ratio

Banks	Years				
HBL	2014/15	2015/16	2016/17	2017/18	2018/19
Non-Performing loan	1,783,952,501	851,375,948	661,807,697	1,215,858,000	1,099,907,200
Total Loans and Advances	53,476,229,873	67,745,978,944	75,383,443,000	86,847,000,000	98,206,000,000

Result	0.03	0.01	0.01	0.01	0.01
Total	3.34	1.26	0.88	1.40	1.12
EBL	2014/15	2015/16	2016/17	2017/18	2018/19
Non-Performing loan	367,164,030	264,422,150	198,904,860	187,716,000	177,258,000
Total Loans and Advances	54,482,465,225	67,955,107,021	78,284,600,000	94,182,200,000	111,821,800,000
Result	0.01	0.00	0.00	0.00	0.00
Total	0.67	0.39	0.25	0.20	0.16
NABIL	2014/15	2015/16	2016/17	2017/18	2018/19
Non-Performing loan	1,220,819,346	889,035,409	728,059,005	614,000,000	985,043,869
Total Loans and Advances	65,501,925,164	76,106,016,881	89,877,000,000	113,625,000,000	132,486,473,766
Result	0.02	0.01	0.01	0.01	0.01
Total	1.86	1.17	0.81	0.54	0.74

Calculation of Average Using the formula

	HBL	EBL	NABIL
2014/15	3.34	0.67	1.86
2015/16	1.26	0.39	1.17
2016/17	0.88	0.25	0.81
2017/18	1.40	0.20	0.54
2018/19	1.12	0.16	0.74
Total	7.99	1.67	5.13
Mean	1.60	0.33	1.03

Calculation of SD and CV Using the formula,

	HBL	EBL	NABIL
	$(x_1 - \bar{x}_1)^2$	$(x_2 - \bar{x}_2)^2$	$(x_3 - \bar{x}_3)^2$
2014/15	3.02	0.11	0.70
2015/16	0.12	0.00	0.02
2016/17	0.52	0.01	0.05
2017/18	0.04	0.02	0.24
2018/19	0.23	0.03	0.08
Total	3.92	0.17	1.08
S.D	0.99	0.21	0.52
Coefficient of Variation (C V)	61.97	62.24	50.79

Appendix 7: Priority Sector Credit to Total Loan and Advances Ratio

Banks	Years				
HBL	2014/15	2015/16	2016/17	2017/18	2018/19
Priority Sector Credit	5,980,467,327	7,180,476,357	3,678,833,075	9,553,170,000	3,928,240,000
Total Loan & Advance	53,476,229,873	67,745,978,944	75,383,443,000	86,847,000,000	98,206,000,000
Result	0.10	0.09	0.10	0.11	0.04
Total	10.10	9.92	10.52	11.18	4.77
EBL	2014/15	2015/16	2016/17	2017/18	2018/19
Priority Sector Credit	5,595,733,241	8,259,099,340	8,611,306,000	9,418,220,000	13,418,616,000
Total Loan & Advance	65,501,925,164	76,106,016,881	78,284,600,000	94,182,200,000	111,821,800,000
Result	0.09	0.09	0.11	0.10	0.12
Total	10.10	9.37	11.12	10.27	12.15
NABIL	2014/15	2015/16	2016/17	2017/18	2018/19
Priority Sector Credit	6,970,431,886	8,572,449,336	8,088,930,000	11,362,500,000	14,573,512,114
Total Loans and Advances	65,501,925,164	76,106,016,881	89,877,000,000	113,625,000,000	132,486,473,766
Result	0.09	0.10	0.09	0.10	0.11
Total	9.23	10.18	9.11	10.64	11.26

Appendix 8: Deprived Sector Credit to Total Loans and Advances Ratio

Banks	Years				
HBL	2014/15	2015/16	2016/17	2017/18	2018/19
Deprived sector Credit	1,659,481,650	1,617,450,347	3,656,096,985	4,142,601,900	3,258,051,680
Total Loans & advances	53,476,229,873	67,745,978,944	75,383,443,000	86,847,000,000	98,206,000,000
Result	0.03	0.02	0.05	0.05	0.03
Total	3.10	2.39	4.85	4.77	3.32
EBL	2014/15	2015/16	2016/17	2017/18	2018/19
Deprived sector Credit	1,670,882,431	219,238,369	1,327,917,522	1,185,465,963	606,736,730
Total Loans & advances	54,482,465,225	67,955,107,021	78,284,600,000	94,182,200,000	111,821,800,000
Result	0.03	0.00	0.02	0.01	0.01

Total	3.07	0.32	1.70	1.26	0.54
NABIL	2014/15	2015/16	2016/17	2017/18	2018/19
Deprived sector Credit	2,681,663,702	3,378,471,065	4,551,827,015	5,584,733,241	7,318,202,852
Total Loans & advances	65,501,925,164	76,106,016,881	89,877,000,000	113,625,000,000	132,486,473,766
Result	0.04	0.04	0.05	0.05	0.06
Total	4.09	4.44	5.06	4.92	5.52

Calculation of Average Using the formula

	HBL	EBL	NABIL
2014/15	3.10	3.07	4.09
2015/16	2.39	0.32	4.44
2016/17	4.85	1.70	5.06
2017/18	4.77	1.26	4.92
2018/19	3.32	0.54	5.52
Total	18.43	6.89	24.04
Mean	3.69	1.38	4.81

Calculation of SD and CV Using the formula,

	HBL	EBL	NABIL
	$(x_1 - \bar{x}_1)^2$	$(x_2 - \bar{x}_2)^2$	$(x_3 - \bar{x}_3)^2$
2014/15	0.34	2.85	0.51
2015/16	1.69	1.11	0.14
2016/17	1.36	0.10	0.07
2017/18	1.18	0.01	0.01
2018/19	0.14	0.70	0.51
Total	4.69	4.78	1.24
S.D	1.08	1.09	0.56
Coefficient of Variation (C V)	29.38	79.36	11.56

Appendix 9: Operating Profit to Total Loan and Advances Ratio

Banks	Years				
HBL	2014/15	2015/16	2016/17	2017/18	2018/19
Operating Profit	679,560,515	2,297,520,673	2,450,000,000	2,989,000,000	3,942,000,000

Total Loans & advances	53,476,229,873	67,745,978,944	75,383,443,000	86,847,000,000	98,206,000,000
Result	0.01	0.03	0.03	0.03	0.04
Total	1.27	3.39	3.25	3.44	4.01
EBL	2014/15	2015/16	2016/17	2017/18	2018/19
Operating Profit	2,252,640,623	2,666,102,674	3,179,600,000	3,685,700,000	4,352,100,000
Total Loans & advances	54,482,465,225	67,955,107,021	78,284,600,000	94,182,200,000	111,821,800,000
Result	0.04	0.04	0.04	0.04	0.04
Total	4.13	3.92	4.06	3.91	3.89
NABIL	2014/15	2015/16	2016/17	2017/18	2018/19
Operating Profit	3,235,924,937	4,344,447,596	5,599,819,742	5,653,000,000	6,108,429,000
Total Loans & advances	65,501,925,164	76,106,016,881	89,877,000,000	113,625,000,000	132,486,473,766
Result	0.05	0.06	0.06	0.05	0.05
Total	4.94	5.71	6.23	4.98	4.61

Calculation of Average Using the formula

	HBL	EBL	NABIL
2014/15	1.27	4.13	4.94
2015/16	3.39	3.92	5.71
2016/17	3.25	4.06	6.23
2017/18	3.44	3.91	4.98
2018/19	4.01	3.89	4.61
Total	15.37	19.92	26.46
Mean	3.07	3.98	5.29

Calculation of SD and CV Using the formula,

	HBL $(x_1 - \bar{x}_1)^2$	EBL $(x_2 - \bar{x}_2)^2$	NABIL $(x_3 - \bar{x}_3)^2$
2014/15	3.25	0.02	18.27
2015/16	0.10	0.00	25.42
2016/17	0.03	0.01	30.96
2017/18	0.14	0.01	18.57
2018/19	0.88	0.01	15.56
Total	4.40	0.05	108.78
S.D	1.05	0.11	0.66

Coefficient of Variation (C V)	34.13	24.20	12.47
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Appendix 10: Net Profit to Total Loan and Advances Ratio

Banks	Years				
HBL	2014/15	2015/16	2016/17	2017/18	2018/19
Net Profit	1,112,285,716	1,935,907,634	2,178,000,000	1,876,000,000	2,764,000,000
Total Loans and Advances	53,476,229,873	67,745,978,944	75,383,443,000	86,847,000,000	98,206,000,000
Result	0.02	0.03	0.03	0.02	0.03
Total	2.08	2.86	2.89	2.16	2.81
EBL	2014/15	2015/16	2016/17	2017/18	2018/19
Net Profit	1,574,352,443	1,730,207,025	2,006,200,000	2,581,700,000	3,054,100,000
Total Loans and Advances	54,482,465,225	67,955,107,021	78,284,600,000	94,182,200,000	111,821,800,000
Result	0.03	0.03	0.03	0.03	0.03
Total	2.89	2.55	2.56	2.74	2.73
NABIL	2014/15	2015/16	2016/17	2017/18	2018/19
Net Profit	2,093,813,608	2,823,461,039	3,645,279,751	3,980,000,000	4,238,853,581
Total Loans and Advances	65,501,925,164	76,106,016,881	89,877,000,000	113,625,000,000	132,486,473,766
Result	0.03	0.04	0.04	0.04	0.03
Total	3.20	3.71	4.06	3.50	3.20

Calculation of Average Using the formula

	HBL	EBL	NABIL
2014/15	2.08	2.89	3.20
2015/16	2.86	2.55	3.71
2016/17	2.89	2.56	4.06
2017/18	2.16	2.74	3.50
2018/19	2.81	2.73	3.20
Total	12.80	13.47	17.66
Mean	2.56	2.69	3.53

Calculation of SD and CV Using the formula,

	HBL	EBL	NABIL
	$(x_1 - \bar{x}_1)^2$	$(x_2 - \bar{x}_2)^2$	$(x_3 - \bar{x}_3)^2$

2014/15	0.23	0.04	0.11
2015/16	0.09	0.02	0.03
2016/17	0.11	0.02	0.27
2017/18	0.16	0.00	0.00
2018/19	0.06	0.00	0.11
Total	0.65	0.08	0.53
S.D	0.40	0.14	0.36
Coefficient of Variation (C V)	15.77	5.28	10.30

Appendix 11: Interest Income to Total Loan and Advances Ratio

Banks	Years				
HBL	2014/15	2015/16	2016/17	2017/18	2018/19
Interest Income	4,627,750,829	5,015,843,968	6,938,502,556	9,724,870,892	11,625,415,050
Total Loans and Advances	53,476,229,873	67,745,978,944	75,383,443,000	86,847,000,000	98,206,000,000
Result	0.09	0.07	0.09	0.11	0.12
Total	8.65	7.40	9.20	11.20	11.84
EBL	2014/15	2015/16	2016/17	2017/18	2018/19
Interest Income	4,996,428,451	5,057,077,497	6,747,148,285	10,103,451,389	13,019,443,721
Total Loans and Advances	54,482,465,225	67,955,107,021	78,284,600,000	94,182,200,000	118,211,800,000
Result	0.09	0.07	0.09	0.11	0.11
Total	9.17	7.44	8.62	10.73	11.01
NABIL	2014/15	2015/16	2016/17	2017/18	2018/19
Interest Income	5,762,345,126	6,155,660,129	8,116,152,416	11,350,000,000	15,465,840,200
Total Loans and Advances	65,501,925,164	76,106,016,881	89,877,000,000	113,625,000,000	132,486,473,766
Result	0.09	0.08	0.09	0.10	0.12
Total	8.80	8.09	9.03	9.99	11.67

Calculation of Average Using the formula

	HBL	EBL	NABIL
2014/15	8.65	9.17	8.80
2015/16	7.40	7.44	8.09
2016/17	9.20	8.62	9.03
2017/18	11.20	10.73	9.99

2018/19	11.84	11.01	11.67
Total	48.30	46.97	47.58
Mean	9.66	9.39	9.52

Calculation of SD and CV Using the formula,

	HBL	EBL	NABIL
	$(x_1 - \bar{x}_1)^2$	$(x_2 - \bar{x}_2)^2$	$(x_3 - \bar{x}_3)^2$
2014/15	1.01	0.05	0.52
2015/16	5.09	3.81	2.04
2016/17	0.21	0.60	0.24
2017/18	2.37	1.78	0.22
2018/19	4.74	2.62	4.66
Total	13.42	8.86	7.67
S.D	1.83	1.49	1.38
Coefficient of Variation (C V)	18.96	15.85	14.55

Appendix 12: Interest Expenses to Total Deposits Ratio

Banks	Years				
	2014/15	2015/16	2016/17	2017/18	2018/19
HBL					
Interest Expenses	1,954,262,604	1,565,895,670	3,173,333,669	5,403,047,172	6,594,074,206
Total Depositi	73,538,200,185	87,335,785,849	92,881,114,255	99,743,000,000	113,151,000,000
Result	0.03	0.02	0.03	0.05	0.06
Total	2.66	1.79	3.42	5.42	5.83
EBL					
Interest Expenses	2,116,993,166	1,828,492,869	3,009,792,494	5,233,687,535	7,320,851,928
Total Deposit	83,093,789,957	93,735,480,708	95,094,500,000	115,511,800,000	130,177,400,000
Result	0.03	0.02	0.03	0.05	0.06
Total	2.55	1.95	3.17	4.53	5.62
NABIL					
Interest Expenses	2,236,063,893	1,829,689,197	2,586,865,889	5,088,000,000	8,082,279,000
Total Depositi	104,237,910,083	110,267,271,749	119,000,000,000	135,980,000,000	164,370,000,000
Result	0.02	0.02	0.02	0.04	0.05
Total	2.15	1.66	2.17	3.74	4.92

Calculation of Average Using the formula

	HBL	EBL	NABIL
2014/15	2.66	2.55	2.15
2015/16	1.79	1.95	1.66
2016/17	3.42	3.17	2.17
2017/18	5.42	4.53	3.74
2018/19	5.83	5.62	4.92
Total	19.11	17.82	14.64
Mean	3.82	3.56	2.93

Calculation of SD and CV Using the formula,

	HBL	EBL	NABIL
	$(x_1 - \bar{x}_1)^2$	$(x_2 - \bar{x}_2)^2$	$(x_3 - \bar{x}_3)^2$
2014/15	1.36	1.03	0.61
2015/16	4.12	2.60	1.61
2016/17	0.16	0.16	0.57
2017/18	2.54	0.94	0.66
2018/19	4.02	4.24	3.96
Total	12.20	8.97	7.41
S.D	1.75	1.50	1.36
Coefficient of Variation (C V)	45.70	42.03	46.49

Appendix 13: Spread Analysis

Banks	Years				
HBL	2014/15	2015/16	2016/17	2017/18	2018/19
Average Yield	4.35	4.59	4.44	4.7	4.47
EBL	2014/15	2015/16	2016/17	2017/18	2018/19
Average Yield	4.76	4.89	4.48	4.72	4.29
NABIL	2014/15	2015/16	2016/17	2017/18	2018/19
Average Yield	3.97	3.74	4.23	4.87	4.43

Calculation of Average Using the formula

	HBL	EBL	NABIL
2014/15	4.35	4.76	3.97
2015/16	4.59	4.89	3.74
2016/17	4.44	4.48	4.23
2017/18	4.7	4.72	4.87
2018/19	4.47	4.29	4.43
Total	22.55	23.14	21.24
Mean	4.51	4.63	4.25

Calculation of SD and CV Using the formula,

	HBL $(x_1 - \bar{x}_1)^2$	EBL $(x_2 - \bar{x}_2)^2$	NABIL $(x_3 - \bar{x}_3)^2$
2014/15	0.03	0.02	0.08
2015/16	0.01	0.07	0.26
2016/17	0.00	0.02	0.00
2017/18	0.04	0.01	0.39
2018/19	0.00	0.11	0.03
Total	0.07	0.23	0.76
S.D	0.14	0.24	0.43
Coefficient of Variation (C V)	3.03	5.19	10.23

Appendix 14: Correlation between Net Profit and Total loans and advances of HBL

Year	2014/15	2015/16	2016/17	2017/18	2018/19
Net Profit	1,112,285,716	1,935,907,634	2,178,000,000	1,876,000,000	2,764,000,000
Loans and Advances	53,476,229,873	67,745,978,944	75,383,443,000	86,847,000,000	98,206,000,000
Correlation					0.8793

Using Formula,

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

$$r = 0.9213$$

Calculation of Correlation between Net Profit and Total Loan and Advances

In Million

Year	Net Profit (X)	Total Loans and advances(Y)	XY	X ²	Y ²
2013/14	1,112.29	53476.23	59,480,846.63	1,237,179.51	2,859,707,161.43
2014/15	1,935.91	67745.98	131,149,957.81	3,747,738.37	4,589,517,663.08
2015/16	2,178.00	75383.44	164,185,138.85	4,743,684.00	5,682,663,478.53
2016/17	1,876.00	86847.00	162,924,972.00	3,519,376.00	7,542,401,409.00
2017/18	2,764.00	98206.00	271,441,384.00	7,639,696.00	9,644,418,436.00
Total	9,866.19	381,658.65	789,182,299.30	20,887,673.88	30,318,708,148.05

Appendix 15: Correlation between Net Profit and Total Loans and advances of EBL

Year	2014/15	2015/16	2016/17	2017/18	2018/19
Net Profit	1,574,352,443	1,730,207,025	2,006,200,000	2,581,700,000	3,054,100,000
Loans and Advances	54,482,465,225	67,955,107,021	78,284,600,000	94,182,200,000	111,821,800,000
Correlation					0.9883

Using Formula,

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

Calculation of Correlation between Net Profit and Total loans and advances

In Million

Year	Net Profit (X)	Total Loans and advances (Y)	XY	X ²	Y ²
2013/14	1,574.35	54482.47	85,774,602.23	2,478,585.61	2,968,339,016.99
2014/15	1,730.21	67955.11	117,576,403.55	2,993,616.35	4,617,896,570.24
2015/16	2,006.20	78284.60	157,054,564.52	4,024,838.44	6,128,478,597.16
2016/17	2,581.70	94182.20	243,150,185.74	6,665,174.89	8,870,286,796.84
2017/18	3,054.10	111821.80	341,514,959.38	9,327,526.81	12,504,114,955.24

Total	10,946.56	406,726.17	945,070,715.42	25,489,742.10	35,089,115,936.47
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Appendix 16: Correlation between Net Profit and Total loans and advances of NABIL

Year	2014/15	2015/16	2016/17	2017/18	2018/19
Net Profit	2,093,813,608	2,823,461,039	3,645,279,751	3,980,000,000	4,238,853,581
Loans and Advances	65,501,925,164	76,106,016,881	89,877,000,000	113,625,000,000	132,486,473,766
Correlation					0.9337

Using Formula,

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

Calculation of Correlation between Net Profit and Total loans and advances

In Million

Year	Net Profit (X)	Total Loans and advances (Y)	XY	X2	Y2
2013/14	2,093.81	65501.93	137,148,822.26	4,384,055.43	4,290,502,200.19
2014/15	2,823.46	76106.02	214,882,373.50	7,971,932.24	5,792,125,805.49
2015/16	3,645.28	89877.00	327,626,808.18	13,288,064.46	8,077,875,129.00
2016/17	3,980.00	113625.00	452,227,500.00	15,840,400.00	12,910,640,625.00
2017/18	4,238.85	132486.47	561,590,763.76	17,967,879.68	17,552,665,730.95
Total	16,781.41	477,596.42	1,693,476,267.69	59,452,331.81	48,623,809,490.63

Appendix 17: Correlation between NPL and Loans and Advances of HBL

Year	2014/15	2015/16	2016/17	2017/18	2018/19
Total Deposit	73,538,200,185	87,335,785,849	92,881,114,255	99,743,000,000	113,151,000,000
NPL	1,783,952,501	851,375,948	661,807,697	1,215,858,000	1,099,907,200
Correlation					-0.4026

Using Formula,

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

Calculation of Correlation between NPL and Loans and advances

In Million

Year	NPL(X)	Loans and advances (Y)	XY	X2	Y2
2013/14	1,783.95	53,476.23	95,399,054.03	3,182,486.53	2,859,707,161.43
2014/15	851.38	67,745.98	57,677,297.05	724,841.00	4,589,517,663.08
2015/16	661.81	75,383.44	49,889,342.80	437,989.43	5,682,663,478.53
2016/17	1,215.86	86,847.00	105,593,619.73	1,478,310.68	7,542,401,409.00
2017/18	1,099.91	98,206.00	108,017,486.48	1,209,795.85	9,644,418,436.00
Total	5,612.90	381,658.65	416,576,800.09	7,033,423.48	30,318,708,148.05

Appendix 18: Correlation between NPL and Loans and Advances of EBL

Year	2014/15		2016/17	2017/18	2018/19
Total Deposit	83,093,789,957	93,735,480,708	95,094,500,000	115,511,800,000	130,177,400,000
NPL	367,164,030	264,422,150	198,904,860	187,716,000	177,258,000
Correlation					-0.8739

Using Formula,

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

Calculation of Correlation between NPL and Loans and advances

In Million

Year	NPL (X)	Loans and advances (Y)	XY	X2	Y2
2013/14	367.16	54,482.47	20,004,001.50	134,809.42	2,968,339,016.99
2014/15	264.42	67,955.11	17,968,835.50	69,919.07	4,617,896,570.24

2015/16	198.90	78,284.60	15,571,187.40	39,563.14	6,128,478,597.16
2016/17	187.72	94,182.20	17,679,505.86	35,237.30	8,870,286,796.84
2017/18	177.26	111,821.80	19,821,308.62	31,420.40	12,504,114,955.24
Total	1,195.47	406,726.17	91,044,838.88	310,949.34	35,089,115,936.47

Appendix 19: Correlation between NPL and Loans and Advances of NABIL

Year	2014/15	2015/16	2016/17	2017/18	2018/19
Total Deposit	104,237,910,083	110,267,271,749	119,000,000,000	135,980,000,000	164,370,000,000
NPL	1,220,819,346	889,035,409	728,059,005	614,000,000	985,043,869
Correlation					-0.4069

Using Formula,

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

Calculation of Correlation between NPL and Loans and advances

In Million

Year	Total Deposits (X)	Loans and advances (Y)	XY	X ²	Y ²
2013/14	1,220.82	65,501.93	79,966,017.44	1,490,399.88	4,290,502,200.19
2014/15	889.04	76,106.02	67,660,943.85	790,383.96	5,792,125,805.49
2015/16	728.06	89,877.00	65,435,759.19	530,069.91	8,077,875,129.00
2016/17	614.00	113,625.00	69,765,750.00	376,996.00	12,910,640,625.00
2017/18	985.04	132,486.47	130,504,988.71	970,311.42	17,552,665,730.95
Total	4,436.96	477,596.42	413,333,459.19	4,158,161.17	48,623,809,490.63

Probable Error (PE) of multiple correlations is given by

$$P.E.(r) = \frac{1 - R^2}{\sqrt{N}}$$

Appendix 20: Calculation of r, P.Er and 6P.Er between Net Profit and Total Loans and advances

Banks	Evaluation Criteria				Impact
	r	r ²	P.Er	6P.Er	
HBL	0.8793	0.7733	0.0684	0.4104	Significant
EBL	0.9883	0.9767	0.0070	0.0422	Significant
NABIL	0.9337	0.8718	0.0387	0.2320	Significant

Appendix 21: Calculation of r, P.Er and 6P.Er between Non Performing Loans and Loans and Advances

Banks	Evaluation Criteria				Impact
	R	r ²	P.Er	6P.Er	
HBL	(0.4026)	0.1621	0.2528	1.5166	InSignificant
EBL	(0.8739)	0.7637	0.0713	0.4276	Significant
NABIL	(0.4069)	0.1656	0.2517	1.5102	InSignificant

Appendix 22: T-value of Non-performing Loan to Loan and Advances of HBL and EBL

Banks	Years				
	2014/15	2015/16	2016/17	2017/18	2018/19
HBL	3.34	1.26	0.88	1.40	1.12
EBL	0.67	0.39	0.25	0.20	0.16
Calculated T-Value				0.0251	
Tabulated T-Value				2.306	

Appendix 23: T-value of Non-performing Loan to Loan and Advances of HBL and NABIL

Banks	Years				
	2014/15	2015/16	2016/17	2017/18	2018/19
HBL	3.34	1.26	0.88	1.40	1.12
NABIL	1.86	1.17	0.81	0.54	0.74
Calculated T-Value				0.0979	
Tabulated T-Value				2.306	

Appendix 24: T-value of Non-performing Loan to Loan and Advances of EBL and NABIL

Banks	Years				
	2014/15	2015/16	2016/17	2017/18	2018/19
EBL	0.67	0.39	0.25	0.20	0.16
NABIL	1.86	1.17	0.81	0.54	0.74
Calculated T-Value				0.0085	
Tabulated T-Value				2.306	

Appendix 25: T-value of Net Profit to Loan and Advances of HBL and EBL

Banks	Years				
	2014/15	2015/16	2016/17	2017/18	2018/19
HBL	2.08	2.86	2.89	2.16	2.81
EBL	2.89	2.55	2.56	2.74	2.58
Calculated T-Value				0.6934	
Tabulated T-Value				2.306	

Appendix 26: T-value of Net Profit to Loan and Advances of HBL and NABIL

Banks	Years				
	2014/15	2015/16	2016/17	2017/18	2018/19
HBL	2.08	2.86	2.89	2.16	2.81
NABIL	3.2	3.71	4.06	3.5	3.2
Calculated T-Value				0.0042	
Tabulated T-Value				2.306	

Appendix 27: T-value of Net Profit to Loan and Advances of EBL and NABIL

Banks	Years				
	2014/15	2015/16	2016/17	2017/18	2018/19
EBL	2.89	2.55	2.56	2.74	2.58
NABIL	3.2	3.71	4.06	3.5	3.2
Calculated T-Value				0.0140	
Tabulated T-Value				2.306	