

NON PERFORMING LOAN: STATUS, CAUSE AND EFFECT IN COMMERCIAL BANKS OF NEPAL

(With Special Reference to NBL, NABIL, NIBL AND BOK)

A THESIS

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RECOMMENDATION

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DECLARATION

I hereby declare that the work reported in this thesis entitled

**NON PERFORMING LOAN: STATUS, CAUSE AND EFFECT IN
COMMERCIAL BANKS OF NEPAL**

(With Special Reference to NBL, NABIL, NIBL AND BOK)

submitted to Nepal Commerce Campus, Faculty of Management, Tribhuvan University, is my original work done in the form of partial fulfillment of the requirements for the Master's Degree of Business Studies under the supervision of Dr. Prakash Neupane, Lecturer of Nepal Commerce Campus.

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TABLE OF CONTENTS

CONTENTS	PAGE NO.
VIVA-VOCE SHEET	
RECOMMENDATION	
DECLARATION	
ACKNOWLEDGEMENTS	
TABLE OF CONTENTS	
LIST OF TABLES	
LIST OF FIGURES	
ABBREVIATIONS	
CHAPTER I	
INTRODUCTION	1-8
1.1 General Background	1
1.2 Statement of Problem	5
1.3 Objectives of the Study	6
1.4 Rationale of the study	6
1.5 Limitation of the Study:.....	7
1.6 Plan of the Study:.....	7
CHAPTER II	
REVIEW OF LITERATURE	9-58
2.1 Introduction:	9
2.2 Commercial Bank.....	12
2.2.1 Function of Commercial banks	13
2.3 Review of Books	14
2.4 Review of Relative Terminologies	16
2.5 Review of Relevant Laws:.....	19
2.5.1 Bank's Approval Required for Accepting Deposits or Giving Credits:	21
2.5.2 State of Problematic Commercial Bank and Financial Institution:.....	21
2.5.3 Bank can Take Action Against Problematic Commercial Bank or Financial Institution:	23
2.5.4 Right of the Bank for Corrective Action:	25

2.5.5	Application for the Dissolution:.....	25
2.5.6	Establishment of Credit Information Center:.....	26
2.6	Major Provision in NRB directives related with NPL and its effect	27
2.6.1	Definition of NPA:.....	27
2.6.2	Classification of NPA:.....	27
2.6.3	Loan Loss Provisioning Regarding NPA	31
2.7	Effect of NPA on Profitability of the Bank.....	34
2.8	Reasons of loans being non performing.....	35
2.8.1	Reduced attention to borrowers.....	35
2.8.2	Moving along the risk curve.....	36
2.8.3	Increasing loan size increases risk.....	36
2.8.4	Lenders lack plans to deal with risk	37
2.8.5	Borrowers probe a credit operation's weakness	37
2.8.6	Rent seekers capture the credit program.....	38
2.8.7	Lenders and project designers have low expectation	38
2.8.8	The lender is unwilling to collect.....	39
2.8.9	Lack of good models.....	39
2.8.10	Loan sanctioned by corruption.....	40
2.8.11	Donors give loans to dominate	40
2.8.12	Weak follow up weaken the system.....	40
2.9	Recovery of Non Performing Assets	41
2.9.1	Procedures of debt recovery:.....	42
2.10	Review of International Studies:.....	44
2.10.1	NPL in India.....	46
2.10.2	NPL in Pakistan	47
2.10.3	NPL in Bangladesh	48
2.10.4	NPL in Malaysia.....	48
2.10.5	NPL in Japan.....	49
2.10.6	NPL in Turkey:	50
2.10.7	Study of Luis Cotbaria & Inwon Song:	51
2.10.8	Study of Lue Laevan an dGiobanni Majononi :	51

2.10.9 Study of Kay Ellen Herr and Goe Miyazaki :	52
2.11 Review of National Studies:	52
2.12 Review of Relevant Thesis:.....	55

CHAPTER III

RESEARCH METHODOLOGY 59-68

3.1 Introduction:	59
3.2 Research Design.....	59
3.3 Population and Samples:	60
3.4 Sources of data and Collection Procedure:.....	62
3.5 Data Processing and Presentation:.....	63
3.6 Data Analysis Tools:	63
3.6.1 Financial tools	63
a. Relative lending strength measurement:.....	64
b. Ratio Analysis:	64
3.6.2 Statistical Tools	65
a. Arithmetic Mean:	65
b. Standard Deviation:	65
c. Coefficient of Correlation:	66

CHAPTER IV

DATA PRESENTATION AND ANALYSIS 69-115

4.1 Financial Tools.....	69
4.1.1 Relative lending strength measurement of the banks	69
a. Deposits.....	69
b. Loans and Advances	71
c. Investments.....	73
d. Interest income from Loan and Advances.....	76
e. Non Performing Loan	77
f. Loan Loss Provision	79
g. Net Profit.....	82
4.1.2 Ratio Analysis	84

a.	Loan and Advances to Total Assets Ratio	84
b.	Investment to Total Assets Ratio	86
c.	Loan and Advances to Total Deposit Ratio.....	89
d.	Non Performing Loan to Total assets Ratio.....	91
e.	Non Performing Loan to Loan and Advances Ratio	93
f.	Loan Loss Provision to Loan and Advances Ratio	95
g.	Total Provision to Non Performing Loan Ratio	98
h.	Return on Loan and Advances Ratio	100
4.2	Statistical Tools	103
4.2.1	Coefficient of Correlation Analysis	103
4.3	Primary Data Analysis.....	109
4.4	Major Findings of the Study	112

CHAPTER V

SUMMARY, CONCLUSION AND RECOMMENDATIONS	116-122
5.1 Summary.....	116
5.2 Conclusion	118
5.3 Recommendations	121

Bibliography

Annexes:

- Annex-1: Annual report data
- Annex-2: Calculation of Ratios
- Annex-3: Calculation of Correlation Coefficient
- Annex-4: Supplementary questionnaire

LIST OF TABLES

Table 1: Soundness Indicators of Commercial Banking System	4
Table 2: Criteria for Provisioning	32
Table 3: Type of Effects on NPL.....	41
Table 4: Present Status of Case (2065 Poush).....	44
Table 5: Classification of NPL	45
Table 6: List of Class a Licensed Financial Institutions (Commercial Banks)	61
Table 7: Mean, S.D. and C.V. of Deposit	71
Table 8: Mean, S.D. and C.V. of Loan and advances.....	73
Table 9: Mean, S.D. and C.V. of Investments	75
Table 10: Mean, S.D. and C.V. of Interest income from loan and advances	77
Table 11: Mean, S.D. and C.V. of Non performing loan	78
Table 12: Mean S.D. and C.V. of Loan loss provision	81
Table 13: Mean, S.D. and C.V. of Net profit	83
Table 14: Loan and advances to Total Assets Ratio.....	86
Table 15: Investments to Total Assets Ratio	88
Table 16: Loan and advances to Deposit Ratio	90
Table 17: Non Performing Loan to Total Assets Ratio.....	92
Table 18 :Non performing Loan to Loan and advances Ratio	94
Table 19: Loan Loss Provision to Loan and advances Ratio.....	97
Table 20: Loan Loss Provision to Non Performing Loan Ratio.....	99
Table 21: Net Profit to Loan and advances Ratio	102
Table 22: Correlation between Deposit and Loan and Advances	104
Table 23: Correlation between Loan and Advances and NPL.....	105
Table 24: Correlation between Loan Loss Provision and NPL	106
Table 25: Correlation between Loan and Advances to Net Profit	107
Table 26: Correlation between NPL and Net Profit	108
Table 27: Internal Factors that Cause NPL.....	109
Table 28: External Factors that Cause NPL	110
Table 29: Behaviours that Effect NPL.....	110
Table 30: Strategies to Reduced NPL	111

LIST OF FIGURES

Figure 1: Deposit Status.....	70
Figure 2: Status of Loan and Advances	72
Figure 3: Status of Investments	74
Figure 4: Interest Income from Loan and Advances	76
Figure 5: Status of Non Performing Loan.....	78
Figure 6: Status of Loan Loss Provision.....	80
Figure 7: Status of Net Profit.....	82
Figure 8: Loan and Advances to Total Assets Ratio	85
Figure 9: Investments to Total Assets Ratio	87
Figure 10: Loan and Advances to Deposit Ratio	89
Figure 11: NPL to Total Assets Ratio.....	91
Figure 12 : NPL to Loan and Advances Ratio	93
Figure 13: Loan Loss Provision to Loan Advances Ratio.....	96
Figure 14: Loan Loss Provision to Non Performing Loan Ratio	98
Figure 15: Net Profit to Loan and Advances Ratio	101

ABBREVIATION

A.D.	=	Anno Domini
ADB/N	=	Agriculture Development Bank/ Nepal
BOK	=	Bank of Kathmandu Limited
B.S.	=	Bikram Sambat
CD	=	Credit Deposit
CV	=	Coefficient of Variation
d.f.	=	Degree of Freedom
e.t.c	=	Etcetra
e.g.	=	Example
Fig.	=	Figure
FY	=	Fiscal Year
GDP	=	Gross Domestic Product
HBL	=	Himalayan Bank Limited
i.e.	=	That is
ibid	=	In the same place
LLP	=	Loan Loss Provision
Ltd.	=	Limited
NABIL	=	NABIL Bank Limited
NBL	=	Nepal Bank Limited
NIBL	=	Nepal Investment Bank Limited
NPA	=	Non Performing Asset
NPL	=	Non Performing Loan
NGO	=	Non Government Organization
NRB	=	Nepal Rastra Bank
No.	=	Number
p.	=	Page
p.p	=	pages
Pvt.	=	Private
RBB	=	Rastra Banijya Bank
Rs.	=	Rupees
SD	=	Standard Deviation
T.U	=	Tribhuvan University.
US	=	United States of America
Viz	=	Namely

CHAPTER ONE

INTRODUCTION

1.1 General Background

Globalization, free market and economic liberalization are the key phenomenon taking in this 21st century making the activities of banks and financial institutions more complex and challenging. Recent development of science and information technology has turned the whole world as a small village. A small mistake made by an organization effect in numerous sectors for the long run; to the organization as well as to nation and even the whole world. To get stand on this 21st century the organization making their financial activity should modify their operating procedures and structures according the changes so that their organization could not bear loss.

Recently in Asian, European and American continent, the economic recession has created the massive economic destruction. American capital market lost around 10 trillion US dollar owing to the recession just in the difference of a month in the last year 2008. The economic recession started in America through the failure of real state companies and it subsequently affected in bank and financial institution. The 2nd largest bank of America, Lehman Brothers bankrupted which had 2 trillion US dollar as its capital. And this causes the rapid expansion of economic recession over the whole world. The failure of the bank and financial institutions in the America, Japan, China and even in Singapore are owing to the sub-standard, doubtful and bad loan and advances. This dark and growing economic crisis caused to loose the millions of job. Millions of employees working in bank, software, real state and others companies

lost their jobs and billions of profit making banks of previous year went into overnight bankruptcy. This global economic crisis has started sprinkling its affect in Nepal through the overseas jobs cut which is going to create disastrous situation in the foreign currency reserve. In this line, proper management of non performing loan is the bottom line of any country to ensure its smooth function of the economy. Various countries of the world now have been attempting to reduce the amount of NPL adopting several methods.

The role of money in an 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 a subject to manage and banks are the manager thereof. Bank, as a manager collects, disperses and controls the flow of money. Banks collect the fund from public who has savings and it disperse the fund to the person who are in need of it. As per W.A.L.Kulbarn, "A bank is a firm of the safe deposit of currency and for the granting of the credit."

Banks are expected to make loans to all qualified customers and thereby aid the commodities they serve to grow and to improve their living standards. Indeed, making loans is the principle economic function of banks. But it is also a risky function because both external factors (Principally economic conditions) and internal factors (including management errors and illegal manipulation) can result in substantial losses for the bank. In order to keep risk factor under control, the bank lending function is closely regulated to ensure prudent policies and practices.¹

¹ Rose, Peter S. (1997), "Commercial bank management", Mc Graw-Hill Irwin., 5th edition.

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 the economy. Hence, money is a subject to manage, and banks are the manager thereof. Bank, as a manager collects disperse and controls the flow of money. Banks collect the fund from public who has savings and it disperse the fund to the person who are in need of it. This way, whole infrastructure of national development, direction of economy, rate of progress and even the habit of people is being the function of banking system.

The issue of development always rests upon the mobilization of resources. Banks function of lending ensures required volume of capital to resources mobilization. The existence of an ideal commercial banking system regularizes the scattered fund from public and investing the same in a profitable manner. The resources may include capital funds consisting of shareholders equity, money deposited by the people, borrowings and profit capitalization. The competency of any commercial banks is referred as to the utilization of the resources on most profitable manner. The profit should be adequate to meet its costs of funds as well as there should be some margin left over as the reward for risk bearing. As the return from loan flotation is higher than the return from any other activities commercial banks are concentrating their financial activities for the management of loans and advances. The mushrooming growth of the banks and financial institutions has led them towards cut throat competition. The competition among the banks is just to share from the small and same size of the market.

Quality of the loans and advances could not be maintained to the desirable level if there is no choice whether to finance or not. Once the loan is given it is supposed that the re-payment of interest or principal shall have to be served without any hindrance. The resources couldn't be

considered utilized properly when the loans provided to the clients couldn't be regular and if there is cumulative overdue outstanding. The main reason may be economic situation of the country which has global and far reaching impact. The smooth operation of the commercial banks is possible only when the economy of the country functions well. Satisfactory level of return on investment is the pre-requisite for the financial sector to be groomed. The other contributing factors that turn the good loan into bad are the attitude of the borrower, types and quality of security, legal hurdles created by the borrower when the recovery action is started. Once the distributed loan is not returned timely by clients and becomes overdue then it is known as Non Performing Loans (NPL) for the banks. Reduction of NPL has always been significant problem for every commercial banks and proper attention for the management of the NPL and now comes under top priority. Due to various hurdles in management of NPA and NPL, commercial banks lose their profitability.

Table 1: Soundness Indicators of Commercial Banking System²

Mid - July								
Indicators	2001	2002	2003	2004	2005	2006	2007	2008
Profitability (Rs.in million)	-7843	-9428	-3317	3707	5205	7983	8797	11911
NPL as Percentage of Total Loan	29.3	30.4	28.8	22.8	18.94	14.22	9.65	6.08
Total Capital Fund as Percentage of RWA	-5.49	-9.88	-12.04	-9.07	-6.33	-5.30	-1.71	4.04

Source: Banking and Financial Statistics, Vol. 51,NRB, Mid July 2008

² Banking and Financial Statistics, Vol. 51,NRB, Mid July 2008

The Nepalese Banking system is riddled with a significant amount of Non Performing Assets (NPA). The total volume of NPA as on Mid July 2008 was Rs.18.64 billion, which was 6.08 percent of loans and advances. The volume of Non Performing assets is largely on account of the portfolio of the public banks. The volume of NPA, thus, needs to be broken down into the public banks and private banks, to better understand the reasons for the existing levels of NPA. The NPA ratio of the public banks is still higher than preferred international standard, though it has shown signs of improvement in the last couple of years. The reform process initiated in the public banks has significantly lowered the volume of NPA in these banks by virtue of recovery and write-offs.

1.2 Statement of Problem

Banking industry in the eyes of the layman appears as a very profitable sector, giving rich dividends and profitability to the investors. However, NPL has become severe headache of banking system which even challenges the economic stability of nation. At present, the world is facing the economic recession started from the failure of banking system which started sprinkling its affect in Nepal. In these circumstances, it becomes necessary to find out the strong causes of NPL in Nepal, its current status, initiations to improve it. The core contents of this study are highlighted below.

- NPL in commercial banks are increasing.
- What are the causes of NPL in commercial bank?
- What are the effects of NPL?
- What are the initiations undertaken to minimize the NPL?

1.3 Objectives of the Study

NPL is the major hindrance coming over the financial institution making them more vigorous in cutting their investing fund by allowing provisions for unexpected future loses in NPL. Therefore, the study basically aims to evaluate the NPL status of commercial banks and its relation with the different variables. The specific objectives of this study will be:

- To evaluate and analyze the NPL in commercial banks.
- To find out the relation of loan and NPL with different variables.
- To study the status, causes and effects of NPL in commercial banks.
- To provide suggestions and recommendation based on the findings.

1.4 Rationale of the study

Banking sector is vital sector for economic growth in a country. Any study in this sector will helpful for several stakeholders. Researcher believes that following institution and individual will be benefited from the study

- Individual who will carryout further research work in commercial banks regarding Non performing loan.
- Commercial banks whose study been made.
- Individuals who have keen interest in Nepalese economy and banking sector.
- Investors, depositors, borrowers, etc.

1.5 Limitation of the Study:

The study and outcome of the study will be an individual effort. Therefore management and resource mobilization will limit the in-depth study of few commercial banks operating in the country.

- The study will be based on secondary data; therefore, the accuracy of results and conclusions highly depends upon the reliability of these data.
- The study covers five fiscal years data only and drawn conclusion through it.
- The evaluation is made through the analysis of financial statement published and presented by the banks.
- This study may not be precise as it is prepare to fulfill the partial requirement of the MBS program which have time constraint.

1.6 Plan of the Study:

After the successful completion of the research the study report is divided into five major chapters.

1. Introduction
2. Review of Literature
3. Research methodology
4. Data presentation and Analysis
5. Summary, conclusion and recommendation.

The first chapter “Introduction” deals with general background, statement of the problem, objective of study, rationale for study, limitation of the study and plan of study.

Second Chapter “**Review of literature**” includes review of literature through different relevant books, Journals, reports, published and unpublished dissertations. It also contains conceptual framework and legal provision regarding NPL.

Third chapter “**Research Methodology**” includes introduction, research design, population and sample of data, nature and sources of data, data collection techniques tools for data analysis.

Fourth chapter “**Data Presentation and Analysis**” includes the presentation of collected data and analyzing them. Secondary data as well as primary data are collected, presented and analyzed.

Last chapter includes “**summary, conclusions and recommendations**”.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction:

A literature review is an essential part of all studies. It is a way to discover what other researchers have covered and left in the area. A critical review of the literature helps the researcher to develop a thorough understanding and insight into previous research works that relates to the present study. It is also a way to avoid investigation problems that have already been definitely answered. Thus a literature review is the process of locating, obtaining, reading and evaluating the research literature in the area of the student's interest³. The purpose of literature review is to find out what research studies have been conducted in one's chosen field of study and what remains to do. The primary purpose of literature review is to learn not to accumulate. It enables the researcher to know⁴.

- What research has been done in the subject?
- What others have been done in the study?
- What theories have been advanced?
- The approach taken by the other researchers
- Area of agreement or disagreement
- Whether there are gaps that can fill through the proposed research?

Capital formation from both domestic and foreign sources is the first step to get in the economic development process. Once a targeted level of capital formation is achieved, the questions of investment come. With no

³ Howard K. Wolff and P.R. Pant (2005), Social Science research and Thesis writing, Buddha Academic publishing and distributors, Kathmandu, Nepal

⁴ Ibid

investment situation due to lack of feasible areas to invest, capital formation can earn nothing. And lastly, the invested funds are required to be serviced at their maturity. This is development loop, in a sense. Previously, when Bangladesh starts as a new country, capital formation was a problem as the country suffers severely from scarcity of funds. During that time, most of the capital was generated through international borrowing, foreign direct investment, aids and grants or through governmental channel. But now people have fund in their hand as they save and there are sufficient areas too. In a developing country like Nepal, the areas of investment are unlimited. Investment is not the end of story; the invested funds are needed to be settled in a timely fashion so that the fund again gets its way to be flooded down in the economic process either by re-investment or by immediate consumption.

“Till now, Nepalese economy can not achieve soundness in this process and the development loop stops in the mid-way that is considered one of the main reasons for our economic backwardness. Loans that are considered sound at the time of sanctioning become unsound with passes of time and turn our wheels of economic development in a backward way. This very much unexpected situation becomes customary at present economic scenario and draw the attention of concerned authority as the financial institutions are suffering from this economic hazard acutely. All are concerned and cautioned to develop specific tools to be used to handle the unstructured situations structurally. Whether or not saving and investment play a leading role in development, serving as the engine of growth, has on other hand been a source of controversy since the early days of development economics (Meir and Rauch 2000). The focal point of the study is to identify the major reasons of non performing loan, specific areas where loan deflections are common place and some ways non performing loans, Its causes, consequences and some learning to

control it in present economic structure with some forecasted ways that may be followed in future. “⁵

According to Wikipedia, a non-performing loan is a loan that is in default or close to being in default. Many loans become non-performing after being in default for 3 months, but this can depend on the contract terms. “A loan is nonperforming when payments of interest and principal are past due by 90 days or more, or at least 90 days of interest payments have been capitalized, refinanced or delayed by agreement, or payments are less than 90 days overdue, but there are other good reasons to doubt that payments will be made in full” (IMF).

The existing NPL situation appears to be improving in most of Asia. Nevertheless, there is a possibility of future NPL problems if underlying conditions in banking sectors do not improve. For example, some banks and/or AMCs have utilized debt-equity swaps as a disposal method. These practices immediately improve the capital adequacy ratios of banks, but may not lead to sound banking operations, leaving the possibility of more NPLs in the future. NPLs are a reflection of problems in the banking and corporate sectors. As far as loans are made with poor appraisal and inadequate follow-up and supervision, NPLs are likely to recur. In addition, the NPL situation could be exacerbated if it is combined with external shocks such as a currency crisis and unfavorable phase of the macroeconomic cycle, or inadequate political or legal support. Therefore, it is imperative that policy makers continue their efforts to develop a competitive environment for the financial sector as a whole while the macroeconomic environment is relatively favorable in developing Asia. Major efforts should include:

⁵ Islam, M.S., Shil, N.C. and Mannan, M.A., “Non Performing Loans-its causes, consequences and some learning”, MPRA, Bangladesh, 2008

- Development of capital markets-not only to serve as alternative financing sources, but also to enhance the competitive environment in the financial sector as a whole.
- Improvement of corporate governance of banks-strengthening institutional aspects of banking operations to achieve enhanced efficiency, transparency, and accountability.
- Implementation of appropriate legal frameworks-without efficient enforcement of the insolvency framework, the cost of the NPL problem will be amplified as resolution is delayed. Therefore, both further improvement of insolvency laws and enhanced efficiency of judiciary systems are needed.

Thus, one of the most important lessons from the financial restructuring experience in developing Asia is the need for strong legal and institutional support, accompanied by government resolve to improve the financial system. The role that globalization has played in exposing financial sector weaknesses suggests that financial sector problems could become more acute over the coming decade-unless, critically, governments take advantage of the current macroeconomic buoyancy to address them. The costs of preventing a crisis are, needless to say, far less than the costs of the crisis itself.

2.2 Commercial Bank

Bank is resource for economic development that maintains economic confidence of various segments and expands credit to people. Bank means “A financial establishment for the deposit, loans exchange or issue of money and for the transmission of funds.”⁶

⁶ Bhandari, Dilli Raj, Banking & Insurance, Aayush Publication, Kathmandu, January 2003, P-119

Commercial Bank is an organization which uses to lend its customer and take deposit from them. It works as a financial institution and promote the monetary transaction of the country. It is a resource for the economic development, it maintain economic confidence of various segments and extends credit to people.

The main function of commercial Bank is the accumulation of the temporarily idle money of general public for the purpose of providing short term loan which is necessary for trade and commerce. It accepts deposit and grants loan exchange, purchase and discount bill for promissory notes, exchanges foreign currency as well.

Commercial Bank Act 1975 AD (2031 BS) defined, "A commercial Bank one which exchanges money, deposits money, accepts deposits, grant loans and performs. Commercial banking functions and which is not a Bank, meant for co-operative, agriculture, industries of such specific purpose."⁷

2.2.1 Function of Commercial banks

Following are the main function of commercial bank

- Accepting deposits from the public in different headings such as fixed, current, saving, recurring, call and others as mentioned by the banks
- Advancing loans for needy individual or firm on different headings for specific period as mentioned in the agreement. Various types of loan may be trust receipt, term loan, over draft, cash credit, etc.

⁶. Commercial Bank Act 1974 (2031 BS)

- Rendering general utility services as safekeeping valuables, financial advising, assisting foreign trade, ATM services, etc.

2.3 Review of Books

"A Bank is a government regulated, profit making that operates in competition with other banks and financial institutions to serve the saving and credit needs of its customers. The primary business of banks is accepting deposit and Lending money. Banks accept deposits from customer who wants the safety and convenience of deposits service and the opportunity to earn interest on their excess funds. Banks put their depositors' funds to other individualsto business...and to federal, state and local government."⁸

Hrishikes Bhattacharya in his book 'Banking Strategy, Credit Appraisal and Lending Decisions'⁹ has put the recommendation of Tandon Committee from the report submitted by the committee. The committee has prepared the report in 1975, however these recommendation stills deserve great significance in the sector of credit appraisal and lending. Breaking away from the traditional methods of credit appraisal, the system proposed by the Committee enjoined upon the banker.

- To assess the need based credit of the borrower on a rational basis;
- To ensure proper end-use of bank credit by keeping a closer watch on the borrower's business and thus to ensure safety of the banks fund;
- To improve the financial discipline of the borrower, and;

⁸ Halter, O. Gerald, Banks Investments and Funds Management, Second Edition, Macmillan, India Ltd, 1999, p.2

⁹ Bhattacharya, Hrishikes, "Banking Strategy, Credit Appraisal and Lending Decisions-A Risk-Return framework", First Edition, Oxford University Press, Delhi, 1998

- d) to develop healthy banker – borrower relationship.

The Committee examined the existing system of Lending and recommended the following broad changes in the Lending system;

- a) The credit needs of borrowers be assessed on the basis of their business plans.
- b) Bank credit only be supplementary to the borrowers resources and not in replacement of them, i.e. banks not to finance one hundred per cent of borrowers' requirements.
- c) Borrowers be required to hold inventory and receivables according to norms prescribed by the Reserve bank of India from time to time.
- d) Credit be made available in different components only, depending upon the nature of holding of various current assets.
- e) In order to facilitate a close watch on the operations of borrowers, they are required to submit, at regular intervals, data regarding their business and financial operations, both for the past and future period.

"Lending is the essence of commercial banking; consequently the formulation and implementation of sound lending policies are among the most important responsibilities of bank directors and management. Well conceived lending policies and careful lending practices are essential if a bank is to perform its credit creating function effectively and minimize the risk inherent in any extension of credit."¹⁰

¹⁰ Cross, H.D., Management policies for Commercial banks, Second Edition, Englewood Cliffs, Prentice Hall Ind., N.J., 1963

2.4 Review of Relative Terminologies

Total Assets

The resources or properties owned by the business are known as assets. Assets provide current and/or future economic benefits such as cash, land, building etc. An asset can also have physical properties such as cash or a building, or it may be only the right to collect money or money worth from a customer for having sold goods to him.

Deposits

Financial institutions collect deposits from customers in various accounts like: current account, saving account and fixed deposit account. Therefore, the sum of money is collected by the financial institutions from the depositors in various account are called deposits. It is a main source of fund of the financial institutions.

Loan and advances

Loan and advances and overdraft are the main sources of income for a firm. Bank deposits can be crossed beyond a desired level but the level of loans and advances and overdrafts will never cross it. Commercial Banks and other financial institution may take more preferential collateral while granting loan and advances. Some portion of loan and advances and overdrafts include that amount which is given to staffs of the Banks as home loan, vehicle loan, personal loan etc.

Investments

Investments are those funds seen in the Assets side of the balance sheet which the institution has utilized in inter-banking placement, investment in shares, debentures, government bonds, etc. The nature of Investments is more liquid than Loans and Advances. Investment thus provides a cushion against liquidity risk.

Performing Loan

Performing loan are those loans whose principal are not past due for a period up to three months and restructured. Earlier restructured loan were not included in this category but the new directive issued by NRB has permitted the banks to treat the restructured loans as performing loan.

Non Performing Loan

Non Performing loan are those loans whose principal are past due for a period up to three months. Non Performing loan is further categorized in Sub-standard, doubtful, and loss.

Non Performing Assets

Performing assets are those assets which generate regular income where as Non Performing Assets are those assets which is not generating income to the bank. Accumulated lost, Non Banking Asset, Non performing Loans are some example of NPA.

Loan Loss Provision

Loan Loss Provision (LLP) is a provision made to reduce the possible loss due to non payment of principal. NRB has made it mandatory to provide provision according to the classification of outstanding loan. By doing so NRB has protected the interest of Stakeholders.

Net Profit

This is the remaining amount in profit and loss account received after allowing all types of deduction such as bonus to employees, taxes, provisions, etc. Positive amount means net profit and negative amount shows net loss of the institution. The volume of Net profit measures the success of a firm in every aspect of its operation and strategy.

Standard Deviation

Standard Deviation is the positive square root of the mean of the deviations taken from the arithmetic mean, which measured the variability of a set of observations. It is denoted by 'σ' and measures risk.

Coefficient of Variation

Co-efficient of variation (C.V.) is the proportion of standard deviation with mean multiplied by 100 Mathematically,

$$C. V. = \frac{\sigma}{x} \times 100\%$$

Mean

A mean is the average value or sum of all the observation divided by the numbers of observation. It is denoted by \bar{x} . Mathematically,

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

Correlation

Correlation is a statistical tool, which represents the relationship between two variables. Under correlation analysis two variables are correlated if a change in one variable result in a corresponding change in the other. It does not however explain the causes and effects of the change in variables. It is of two types positive correlation and negative correlation.

Ratio Analysis

The relationship between two accounting figures, expressed mathematically, is known as ratio. Ratios help to summarize the large quantities of financial data and to make qualitative judgment about the firm's financial performance. In financial analysis, a ratio is used as a benchmark for evaluating the financial position and performance of a firm.

2.5 Review of Relevant Laws:

Under this topic all the relevant chapter of the banking laws, rules, regulation and directives of Nepal government will be briefly reviewed and in addition to which, the research will attempt to examine their effect in Non Performing Loan (NPL)

Provision in Nepal Rastra Bank Act 2002 and its interpretation of relevancy in NPL (Here, bank term refers the central bank for the content of 2.2.1.)¹¹.

¹¹ Nepal Rastra Bank Act 2002

Central bank carries the following objectives:

- (a) To promote stability and liquidity required in banking and financial sector;
- (b) To regulate, inspect, supervise and monitor the banking and financial system; and
- (c) To promote entire banking and financial system of Nepal and to enhance its public credibility.

The Bank shall, without any prejudice to the objectives extend co-operation in the implementation of the economic policies of Government of Nepal.

NRB Act 2002 A.D. assigns the responsibility of promoting stability and liquidity required in banking and financial sector for which it can take the several actions and controls the activities of commercial banks. Naturally, Credit control, CRR, SRR and other measures along with the loan sanctioning methods are described by the NRB. So success or failure of these tools keeps the stake with Non performing loan of Commercial Banks. Even, it has responsibility to cooperate in the implementation of economic policies of Government of Nepal. In line of its objectives, during this process with the change in monetary policies, some affect naturally prevailed in the NPL of Commercial Bank and Financial Institutions. So, central bank actions should be conscious about the impression of their action in the banking industry.

2.5.1 Bank's Approval Required for Accepting Deposits or Giving Credits:

Any person, firm, company or institution shall, in order to accept any type of deposit or to provide loan, obtain approval from the Bank as may be prescribed. The Bank, while giving approval may subject the approval to the terms and conditions prescribed by the Bank and it shall be the duty of the concerned person, firm, company or institution to abide by such terms and conditions.

Prior approval of transacting money i.e. accepting deposits or giving credits from NRB ensures the legal money market. This clause creates the obligation of commercial banks to disburse loan of large amount only with the consent of central bank. It supports to check the unlawful and willful act of directors of commercial bank. It contributes to control the NPL.

2.5.2 State of Problematic Commercial Bank and Financial Institution:

Bank shall declare any commercial bank or financial institution problematic by providing written notice to it when bank is convinced that the following conditions are prevailing in any commercial bank or financial institution on the basis of information received or from the report of inspection and or from any other means.

- (a) In case of any action which is against the interest of the depositors, shareholders, creditors, or general public,
- (b) In case of not fulfillment of any financial liabilities or not having probability to do that or not payment of due amount,

- (c) In case of insolvency or going to fall under insolvency or facing material financial difficulties,
- (d) In case of discredit or breach of this Act, prevailing law related to bank and financial institution, other prevailing law, terms of license or regulation, directives or order of bank,
- (e) In case the license obtained on the basis of submitting false, fraudulent, wrong document or data,

- (f) In case of unable to maintain the capital fund as per this Act, prevailing law related to bank and financial institution and directives issued by the bank at time to time,
- (g) In case of the initiation of the process of liquidation or insolvency of any commercial bank or financial institution under the prevailing law,
- (h) In case of undue delay in the process of voluntary liquidation,
- (i) For the commercial bank or financial institution established with the joint venture of the foreign commercial bank or financial institution while such foreign commercial bank or financial institution is in insolvent or liquidator is appointed for the liquidation or the license of such commercial bank or financial institution is terminated under the provision of the law of respective country or transaction is banned either full or partial or in case of operation of banking transaction being involved with such commercial bank or financial institution, or
- (j) If the bank is convinced that commercial bank or financial institution is unable to pay it's due or can make negative effect in its liability or duties, which it has to perform.

2.5.3 Bank can Take Action Against Problematic Commercial Bank or Financial Institution:

Whatever may be mentioned in the Companies Act or other prevailing law, the bank can take any or all of the following actions against the commercial bank or financial institution which is declared problematic under the provision of section 86B.

- (a) To increase the paid capital by issuing new shares or by receiving due amount of issued capital.
- (b) To suspend the right to vote or other rights of shareholder.
- (c) To stop payment of dividend or any other amount to the shareholders to increase the capital.
- (d) To determine limitation to the amount of bonus, salary, compensation and other expenses for the director and other high level management officials.
- (e) To make necessary arrangement for the corporate governance, internal control and risk management of commercial bank or financial institution.
- (f) To prohibit or make limitation in collection of deposit, credit supply or investment.
- (g) To maintain sufficient capital and high proportion of liquidity or prohibit business transaction or determination of other necessary terms.
- (h) To limit transaction of the commercial bank or financial institution or prohibit sale of property or expansion of branch office or close any domestic or international branch.
- (i) To maintain necessary arrangement for reduction of risk of the properties which are materially doubtful or securities without proper evaluation or other properties.

- (j) To prohibit any action carried out illegally by breaching the prevailing law and regulation of the bank that is against the interest of commercial bank or financial institution.
- (k) To prohibit from doing some specific business among the businesses allowed to commercial bank or financial institution for specific time.
- (l) To receive prior approval of the bank for major capital expenditure, substantial commitments having major liabilities or for the expenditure of contingent liabilities.
- (m) To issue order to remove from the post to single or more director or manager or employee as per the necessity.
- (n) Bank can remove the director or manager or employee in case of not discharge of the order made under clause (m) by respective commercial bank or financial institution.
- (o) To suspend board of director of the commercial bank or financial institution and takeover the management of such commercial bank or financial institution in self control or operate the management and transaction of such commercial bank or financial institution by appointed official. Clarification: "Appointed Officer" means any person, firm, company or organization appointed by the bank for the management and operation of transaction of the commercial bank or financial institution which is in the control of bank under the provision of this clause.
- (p) To order commercial bank or financial institution, which is listed in Stock Exchange for the application of de-listing.
- (q) To prohibit payment of interest and principal for time bond auxiliary loan without having securities of commercial bank or financial institution.
- (r) To take any other action as bank feels necessity and proper.

2.5.4 Right of the Bank for Corrective Action:

Bank has to publish in public the report of management auditing or auditing within one year of the control of the commercial bank or financial institution which declared problematic either conducted itself or by others. Whatever may be mentioned in the Companies Act or any other prevailing law, on the basis of the management auditing or auditing report if bank convinced that the controlled commercial bank or financial institution can operate properly it can carry out following corrective actions as per necessity:-

- (a) Issue order to manage and operate the transaction to the board of director by releasing the suspension order issued,
- (b) Assign the management and operation of transaction to the new board of director formed among the shareholders of such commercial bank or financial institution by removing suspended board of director,
- (c) Call or cause to call the general meeting of the shareholders of such commercial bank or financial institution to elect the new board of director for the management and peration of transaction after removing suspended board of director, or
- (d) Carry out any other corrective action, which the bank thinks proper.

2.5.5 Application for the Dissolution:

In case the bank is convinced that any problematic commercial bank or financial institution even after the action under section 86C, reformative action under section 86E or corrective action under section 86F, such commercial bank or financial institution is unable to discharge its liabilities or there is no possibility to operate in

healthy way, can apply to the Appellate Court for the dissolution of such commercial bank or financial institution.

2.5.6 Establishment of Credit Information Center:

The Bank shall establish or cause to establish one credit information Center for the following purposes:-

- (a) To obtain information on the flow of credit from commercial banks and financial institutions in order to ensure fairness and appropriateness in credit flow;
- (b) To require the exchange of the information received amongst the commercial banks and financial institutions for the purpose
- (c) To require to send the name-list of the debtors not repaying the loan in time or misusing the loan to the Center;
- (d) To require to obtain on compulsory basis the information from the Center prior to making investment or advancing loan of an amount more than the limit prescribed by the Bank;
- (e) To have the name-list received blacklisted by the Center upon confirmation and to take necessary action in this regard; and
- (f) To submit report to the Bank, on the exchange of information among the commercial bank and financial institution and use such information while making loan investment on the basis of inspection, supervision and monitoring.

2.6 Major Provision in NRB directives related with NPL and its effect

2.6.1 Definition of NPA:

To define NPA first of all meaning of Assets should be understood. Assets mean the property of a person or a company. This indicates that assets are the property of a company accumulated with the help of sources.

Non Performing Loan means an outstanding loan that is not repaid, i.e. neither payments of interest or principal are made. In case of the banks, the loans and advances are the assets as the banks flow loans from funds generated through shareholders' equity, money deposited by the public and fund having through the borrowings. Hence, the term NPA means the loans and advances that are not performing well. Thus, all the irregular loans and advances can be termed as NPA.

2.6.2 Classification of NPA:

As per the NRB directives, NPA are said as classified loans. And this includes sub-standard, doubtful and loss categories as defined by New NRB directives (NRB, 2057)

The Primary guiding factor for recognition a non- performing assets will be the interest Income Recognition and Assets classification (IRAC) norms prescribed by NRB. As per the norms currently in force, among other conditions, if interest/or installment remains unpaid for a period exceeding a quarter, the concerned 100 an account would be classified as (NPA). In other words, the loan

accounts classified under the heading of Sub-Standard, Doubtful and Loss loan would be treated as NPAs. With an objective to minimize the possible loss of credits extended by commercial banks. Nepal Rastra Bank amended the Policies relating to loan classification and provisioning by their circular NO. 71/058 dated 2058/5/29 (14 sept, 2001). As per the new circular of NRB the Commercial Banks Should classify the principal amount of loans and advance on the basis of aging. Under these new rules the Loans advances are classified into the following categories.

Pass Loan

Loan in this category are performing and have sound fundamentals which includes borrowers overall financial conditions resources and cash flow, credit history and character. They also include the purpose of loan, and types of secondary sources of repayment. Loans and advances whose principal amount is not past due and past due for a period for three months shall be including in this category. These are classified and defined as performing Loan or Performing Assets.

Substandard Loan

Loans in this category have well defined weaknesses, where the current sound worth and repayment capacity of borrower is not assured. Orderly repayment debt is in jeopardy. All loans and advances that are past due for a period of 3 months to 6 months shall be included under this category.

Doubtful Loan

Doubtful Loans exhibits all the characteristics of substandard loans; with the added characteristics that collection in full is highly questionable and improbable. Classification of loss is differed because of specific pending factors that may strengthen the quality of assets. Such factors include merger, acquisition, liquidation procedures, capital injection, perfecting liens on additional collateral, and refinancing plan. All loans and advances, which are past due for a period of 6 months to 1 year, shall be included in this category.

Loss/Bad Loan

These loans are considered uncollectible and of such little value that their continuance as bankable assets is not warranted. This classification does not mean that the assets has absolutely no recovery or salvage value, but rather that it is not practical or desirable to defer full provision or writing of this basically worthless loan . Partial recovery may be possible in the future. All loans and advances which are past due for a period of more than 1 year as well as advances which have least possibility of recovery or considered unrecoverable and those having thin possibility of even partial recovery in future shall be included in this category.

Apart from the above- mentioned classification following additional arrangement in respect of loan classification are in rule.

- a. If it is appropriate in the view of Bank's management, there is no restriction in classifying the loans and advances from low risk category to high-risk category. For instance, loans failing under sub standard may be classified into Doubtful

and Loss Loan and loans failing under Doubtful may be classified into Loan Loss category.

- b. Loans and advances fully secured by gold, silver, fixed deposit receipt and NG (Government of Nepal) securities shall be included under pass category. However, where collateral of fixed deposit receipt or NG securities or NRB Bonds is placed as security against loan for other purpose, such loan has to be classified as per the age up to which they are due.
- c. Even if the Loan is not past due, loans having any or all of the following discrepancies shall be classified as loss loan or Bad loan.
 - i. No security at all or security that is not in accordance with the borrower's agreement with the Bank.
 - ii. The borrower declared bankrupt.
 - iii. The borrower is absconding or not found.
 - iv. Purchase or discounted bills are not realized within 90 days from the due date.
 - v. The credit has not been used for the purpose originally intended.
 - vi. Owing to non-recovery, initiation as to auctioning of the collateral has passed six months and if the recovery process is under litigation.
 - vii. Loans provided to the borrowers include in the Blacklist and where the credit information bureau blacklist the borrower.

“The Loans advances, which are classified as Substandard, Doubtful and bad are categorized as NPA.”

2.6.3 Loan Loss Provisioning Regarding NPA

Before to state the loans loss provisioning relation to NPA, it is necessary to know about the meaning and implication of loan provisioning. General Provision is the provision made for possible or latent loss not yet identified,. (Cotvaris , Dziobek, Kanaya and Song, WP/00/195, December 2000 : 14)

For example, when review shows that a loan value has become “doubtful” a provisions need to be established to reflect the loss of loan value. In some respect, provisioning is similar to the concept of depreciation of th property and equipments of non banks. The cost of provisioning constitutes a normal business expenses and reduce banks net profit. Form a prudential perspective, an important distinction is made between specific and provisions, which are discussed below.

General Provision

“General Provision is the provision made for possible or latent losses not yet identified” (Cotvaria, Dziobek , Kanaya and Song, WP/00/195, December 200:14)

This amount of loss provisioning can be included in capital in calculation of capital adequacy ratio. General provisioning is the amount set aside to protect from the degradation of pass loan in future.

Specific Provision

“Specific Provision are the amount of provisioning set aside for the loans classified as substandard, doubtful and Bad” (Cotvaria, Dziobek , Kanaya and Song, WP/00/195, December 200:14)

More clearly specific provisioning can be recognized as provisioning for NPA. This amount could not be included in capital in calculation of capital adequacy ratio and strongly hits to the profitability. Nepal Rastra Bank has made it mandatory to commercial Banks through their directives circular no 71/058 dated 2058.5.09, to make the loan loss provisioning on the basis of the outstanding loans and advance and bills purchases on the following basis:

Previously, NRB had classified the loans into six categories; however as per new circular issued and effective from F/Y 20058/059, commercial banks are required to make provision against loans and advances as follows:

Table 2: Criteria for Provisioning

Categories	Criteria for provisioning	Provision rate
Pass	Not past due and past due for a period up to 3 months (Performing Loan)	1%
Sub-standard	Past due for a period of 3 months to 6 months	25%
Doubtful	Past due for 6 months to 1 year	50%
Loss	Past due for a period of more than 1 year or advance which have least possibility of recovery	100%

Source: NRB Circular, 2057

However, for F/Y 2058/59, 2059/60 and 2060/61 there are certain relaxation on ageing of due loan. The above criteria are supposed to be effective fully onwards F/Y 2061/62(NRB Circular, 2057)

Apart from the above – mentioned arrangement following additional arrangement are provided for the loan loss Provisioning.

Where the loan is extended only against the personal guarantee statement of the assets, equivalent to the personal guarantee amount not claimed by any other shall be obtained. Such a loans shall be classified as per above and where loans fall under the category of pass, substandard and doubtful, in addition to the normal loan loss provision applicable for the category, an additional provision by 20% shall also be provided.

The loan loss provisioning in respect of rescheduled, restructured and swap loan shall be provided at a minimum of 12.5%

In case of priority sector loan the provisioning are made 1%,25%,50% and 100% to the loan categorized as pass, Substandard, Doubtful, and Loss/Bad respectively. However, in respect of insured loan, the provision should be made on the following ways:

<u>Types of Loan</u>	<u>Loan Loss Provisioning</u>
Pass	0.25%
Substandard	6.25%
Doubtful	12.50%
Loss/Bad	25.00%

2.7 Effect of NPA on Profitability of the Bank

Under the circumstances assets that do not earn any income to the bank affect the profit in a number of ways (Athmanathan and Venkatakrisnan, 2001)¹²

- a. The resources locked up in NPA are borrowed at a cost and have to earn a minimum return to service this cost
- b. NPA on the one hand do not ear any income but on the other hand drain the profits earned by performing assets through the claim on provisioning requirements.
- c. Since they do not earn interest they bring down the yield on advances and the net interest margin or the spread
- d. NPA have a direct impact on return on assets and return on equity, the two main parameters for measuring profitability of the bank
- e. Return on assets will be affected because while the total assets include the NPA they don't contribute to profits which are the numerator in the ratio.
- f. Return on equity is also affected as provisioning eats more and more into profits earned.
- g. The cost of maintaining these assets include administrative costs, legal costs, and cost of procuring the resources locked in.
- h. NPA bring down the profits, affect the shareholder value and thus adversely affect the investor confidence.

As a whole the impact of NPA can be assessed with the following

- a. Lower ROE and ROA
- b. Lower image and rating of bank
- c. Disclosure reduces investors confidence

¹² Athmanathan, S and Venkatakrisna, R.,” Management of Non Performing Assets, Hyderabad: State Bank Staff College, Distance Learning Department, p5

- d. Increases costs/difficulties in raising capital
- e. NPA do not generate income
- f. They require provisioning
- g. Borrowing cost of resources locked in
- h. Opportunity loss due to non recycling of funds
- i. 100% risk weight on net NPA for CAR
- j. Capital gets blocked in NPA
- k. Utilizes capital but does not generate income to sustain the capital that is locked
- l. Recapitalization by government comes with string
- m. Administration and recovery cost of NPA
- n. Effect on employee morale and decision making.

2.8 Reasons of loans being non performing¹³

Default culture is not a new dimension in the arena of investment. Rather in the present economic structure, it is an established culture. The redundancy of the unusual happening becomes so frequent that it seems that people prefer to be declared as defaulted. In developing and under-developed country, the reasons of being default have a multidimensional aspect. Various researches have concluded various reasons for a loan to be default. Some of them are discussed below that are very much pertinent to the study.

2.8.1 Reduced attention to borrowers

This is related to the **Hawthorne effect**. Researchers at Hawthorne Electric Company in the US in the 1920's wondered what effect changes in lighting; heating and similar variables would have on

¹³ Islam, M.S., Shil, N.C. and Mannan, M.A., "Non Performing Loans-its causes, consequences and some learning", MPRA, Bangladesh, 2008

factory workers. To the researcher's amazement, productivity increased throughout the study, during which time lighting was varied greatly from normal to dim to brilliant and back, the heat was turned up and down, etc. The puzzled researchers eventually concluded that the workers were responding positively because they were the subjects of interests, not because of changes in their working conditions. Workers perception that someone is paying attention to them gets better results than perceptions of inattention, of being ignored. Borrowers may also perform in this manner.

2.8.2 Moving along the risk curve

This might be called the **Petroski Effect**. In "To engineer is human: The role of failure in successful design the failure of large structures notes that each new major bridge, for example, always has to be higher, longer, stronger or cheaper than the last bridge of similar design. Something that works tends to be the subject of attempts at replication and improvement in new environments. This means that risk increase and are always to some degree unknown as the low risk situations become saturated.

2.8.3 Increasing loan size increases risk

This may be called the Inverted **Pyramid Effect**. In the 1980's the manager of a donor funded project to develop rural credit unions in Malawi were pleased to note a large increase in deposit mobilization in a small credit union in a remote location. Project funds were used to enable borrowers to obtain loans equal three times their deposit or share balances. But one day, the expansion ended, as did the credit union. This may be easily explained with a numerical example: one farmer deposited 100 and borrowed 300.

He kept 100 and gave a relative or friend 200, which that person deposited in the credit union. That person then borrowed 600, kept 200 and gave 400 to another relative or friend. After everyone in the village had participated and the loot was shared, the exercise ended. This is also seen clearly in loan use progressions by members of Grameen Bank in our country.

2.8.4 Lenders lack plans to deal with risk

Donor-funded credit programs are usually designed without a clear focus on risk. In micro finance promotion there seems to be no clear vision of risk or no industry-wide concern about means of addressing it, other than running a tight ship. The literature is largely concerned with outreach, measured by number of borrowers and covering administrative costs. The jury is still out of micro-lender performance, which is currently supported by a tidal wave of donor funds that lifts all but the most leaky of ships. This inattention to risk may be called The **Pollyanna Effect**.

2.8.5 Borrowers probe a credit operation's weakness

Credit programs have no special claim to infallibility. A borrower may be determined to repay on time but because of some unexpected events fail to do so. If the lender does not follow up promptly with a query, the borrower will take note. She may simply be grateful not to have been embarrassed. A second way in which borrowers are tempted to probe a credit program's weakness is when some borrowers blatantly refuse to pay on time or skillfully avoid payment. Borrower's probing of a lender's weakness may be called by the **Jurassic Park Effect**. The dinosaurs in this popular film tested the structures and devices used to contain them within

certain areas of Jurassic Park and eventually gained control over the entire park to the dismay, discomfort and eventual departure of demise of their human captors. In addition, the park's dinosaurs become more aggressive after the developers lost control of dinosaur breeding as a result of unexpected risks. This was captured by the remark of one actor that, "life finds a way

2.8.6 Rent seekers capture the credit program

Credit programs attract rent seeking of all sorts, especially when some subsidy is involved. In certain cases hijacking is blatant, as when the pattern of funding follows election year cycles. This was a prominent feature of crop credit insurance in costarica in one election year, and more egregiously in Mexico through the 1980's when missive crop failures were reported every six years and massive indemnities were paid. In Bangladesh in 1991 a newly elected government decreed that agricultural loans of less than Tk. 5000, be forgiven, regardless of the source of the loan, which made collection on small loans more difficult generally for several years. It is proved to be almost foolproof recipes for unsustainable programs, the victims of the **Hijack Effect**.

2.8.7 Lenders and project designers have low expectation

In some cases credit is provided by donors because it is the easiest thing to offer, it makes many people happy and it corresponds to a certain view of development and the conditions required for it to occur. In this case repayment is not terribly important to donors because the objective is almost overwhelmingly to get the money working in order to stimulate development. This cause of declining repayment performance may be called the **Something-must-be-**

done Effect. Lacking more precise and effective tools, donors and governments embrace credit to accomplish purposes that it cannot realize in a sustainable manner or that are highly unlikely to be achieved. Reasons for this include fungibility and the impact of other, non-financial constraints lowering returns to the activities for which credit is provided.

2.8.8 The lender is unwilling to collect

Another possibility is that the lender is unwilling to collect. Unwillingness may arise from a number of factors, but almost always requires soft funds that the lenders can afford to lose. Unwillingness to collect may result from the realization that the credit program was poorly designed, destined to fail. It may also reflect a view that the beneficiaries are poor while the sponsors are not, and that a sense of fairness precludes any serious action against defaulters. This can be called the **Patronizing Effect**.

2.8.9 Lack of good models

Another possibility is that lenders are simply not familiar with successful examples of dealing with bad and doubtful debts. This is likely in transition economies in North and Central Asia where commercial banking is still something of a novelty compared to banking in service to economic planning. It also occurs, as in Bangladesh and Nepal, where state domination of the banking system has been accompanied by a high tolerance of non-repayment associated with politicization of financial markets. Legal recourse in these situations is remote, costly and uncertain. This lack of credible models can be called **High Default Culture Effect**.

2.8.10 Loan sanctioned by corruption

In countries like Bangladesh, sometimes loan sanctioning authority sanctions loans for satisfying their self-interested behavior. Thus, they engage themselves with the clients and corrupt the total system by giving some benefits for taking something in return. This may be called as Give and **Take the chance effect**. This is the result of too much politicization and power-relatedness in the institutional system.

2.8.11 Donors give loans to dominate

Till now, we depend on the donations made by donor countries. The strategies that most donor country follows are to weaken our system so that they can hold the bargaining option to ensure their dominance. They seem to help us by earning our bread and butter, but in the long run, they are paving the way to let us die in future. This may be termed as **Live and Let Die Effect**.

2.8.12 Weak follow up weaken the system

In our society, people give more importance on current consumption. So they do not mind to spend the borrowed fund to spend for consumption if they are not strictly followed up. People hold a very short vision of thinking for today leaving sufferings tomorrow. So a significant portion of capital goes to unproductive sector that may be termed as **Die another Day Effect**.

Here, the twelve above mentioned causes and their ultimate effects are the direct outcome of various research works conducted throughout the globe in different time. More interestingly, the study that is conducted under the concerned topic also finds out the same

reasons of major loans to be defaulted at the time of maturity. The response of the participants accumulated and descriptive statistics are used simply to rank the various reasons for such economic distress. These are listed below in order of importance and priority.

Table 3: Type of Effects on NPL

Ranks	Effects	Reasons
1	The Pollyanna Effect	Reduced attention to borrowers
2	Hawthorne effect	Lenders lack plans to deal with risk
3	Petroski Effect	Moving along the risk curve
4	Jurassic Park Effect	Borrowers probe a credit operation's weakness
5	Pyramid Effect	Increasing loan size increases risk
6	High Default Culture Effect.	Lack of good models

Source: ., "Non Performing Loans-its causes, consequences and some learning", MPRA, Bangladesh, 2008

2.9 Recovery of Non Performing Assets

In the distant past, banks had to deal with only few cases of bad-loans. So, they used to take legal actions against chronic defaulters of bank-loans. For the last ten/twelve years, banks are suffering from a large chunk of non-performing loans (assets) as a consequence of economic as well as non-economic factors in the country. By international parameter, non-performing assets of a bank should not exceed ten percent while such an indicator is estimated to have been crossed 26 percent, (Rs. 31 billion in aggregate) mainly due to the increase in willful defaulters in the government, semi-government and private sector banks.

Recovery of bad loans by banks and financial institutions has turned into a big issue in the financial sector of Nepal. This has greatly caused negative

impact upon Banks' profit, government revenue and the overall financial sector of the country. This calls for an effective system and mechanisms that ease the early recovery of debts of Banks and also of bank-like institutions as specified by Nepal Rastra Bank-the Monetary Authority. Against the above backdrop, a special institutional mechanism has been evolved to address the debt-recovery problem through judicial steps and early settlement of cases. This initiative needs to be transparent and informative to all concerned. Considering the above reality, Debt Recovery Tribunal (DRT) has set-up the following pages where visitors can acquire information on the introduction, powers, functions and jurisdiction and status report regarding different petition lodged with the Tribunal.

Constituted under the Act of Recovery for Debts of Banks and Financial Institutions 2058 (2002), Debt Recovery Tribunal is a 3 Member judicial body that not only takes decision on the petition filed by a Bank, or a Financial Institution but also recovers, as per the verdict, the bad loans and gets them provided to the concerned lending agency. As per the decision of the Council of Ministers, the Tribunal came into operation along with the Act which became effective from July 17, 2003.¹⁴

2.9.1 Procedures of debt recovery:¹⁵

1. Upon receipt of an order of the tribunal, the debt recovery officer has to recover the debt amount from the borrower within the time limit specified in that order and get it provided to the concerned bank and financial institution.
2. In recovering the principal and interest of a debt, the debt recovery officer may follow the following procedures, subject to the prevailing law.

¹⁴ The Regulation on Recovery of Debts of Banks and Financial Institutions, 2059(2002)

¹⁵ Ibid.

3. To take possession of, or auction, the borrower's other movable or immovable property whether furnished as security or not,
4. To take possession of, or auction, the guarantor's movable or immovable property,
5. Where any individual is a borrower or guarantor, to arrest such individual and detain him pursuant to the prevailing law.

“Out of a total of 94 cases filed in the Tribunal in fiscal year 2060/061 (2003/04), 39 cases (41.5%) were transferred from District Courts and 55 complaints/petitions (58.51%) were directly filed in the Tribunal. Out of a total of 65 cases related with the banking sector, 18 cases were transferred from District Courts and 47 complaints/petitions were directly filed in the Tribunal. Among a total of 29 cases related with the finance companies, 21 cases were transferred from the District Courts and only 8 complaints/petitions were directly filed in the Tribunal. Hence, the banking sector accounts for 69.15% of the total number of cases i.e. 94 filed in the Tribunal whereas the finance company sector accounts for 30.85%.

The various 65 cases filed by the various commercial banks in the country against defaulters amounted to a total claim of 817.6 million rupees. Nineteen cases have been adjudged; and in the course of recovery of 356.5 million rupees (43.61%), the Tribunal has already issued a written order for the recovery of 328.9 million rupees. Hence, 19 cases (29.33%) of 65 cases filed by the banking sector have already been settled.

Out of a total claim of 68.9 million rupees in a total of 29 cases filed by 10 finance companies/financial institutions, a sum of 27.7 million

rupees has gradually undergone the process of recovery following judgments on 11 cases (37.93%).

Hence, a total of 94 cases filed by the banking sector and finance companies amounts to a total claim of 878.4 million rupees. Out of the cases on both sides, 30 cases have been settled and a sum of 356.6 million rupees is in the process of recovery. Thus, 31.91% of cases have been settled.”¹⁶

Table 4: Present Status of Case (2065 Poush)

Amount in millions

No. of cases	Total Claim Amount	No. of Cases Decided	Decided Amount
2491	5815.40	1391	13780.95

Source: Debt Recovery Tribunal, Annual Report, 2008

2.10 Review of International Studies:

Tannan’s Banking Law and Practice India (1997)¹⁷. Assessing the gravity of the problem of Tannan (1997) found saying that banks and financial institutions at present face considerable difficulties in recovery of dues from the clients and significant portion of the funds of banks and financial institutions is thus blocked in unproductive assets.

¹⁶ Annual report, Debt Recovery Tribunal, 2004

¹⁷ Tannan, M.L. Tannan’s Banking Law and Practice in India, 19th Edition, Delhi: India Law House, P860,862

In India for addressing the question of speeding up the process of recovery was examined in great detail by a committee set-up by the government under the chairmanship of late Shri Tiwari.

As per the circular no. BP.BC.79/21-043-92 dated April 27, 1992 and Circular No. B.B.BC.59/22.04.943-92 dated December 17, 1992 the RBI has identified the NPA as an account of loan where on the Balance sheet date in respect of (Tannan, 1997);¹⁸

- Term Loan interest remains “past due” for more than 180 days, overdraft and cash credit account remain out of order.
- Bills purchased or discounted remain overdue or unpaid for more than 180 days
- Other accounts receivables remain past due for 180 days.

The Circular further says a NPA is a credit facility in respect of which interest has remained unpaid for two quarters. According to the Circulars the loans are classified based on weakness and dependence on collateral securities into four categories and prescribed the provisioning rate as follows (Tannan, 1997).

Table 5: Classification of NPL

Categories of Loan	Criteria of Classification	Provisioning Required
Standard	Not disclose any problem and not carry risk (Actually a performing assets)	1% of outstanding loans
Sub-standard	Overdue for not exceeding 2 years	10% of the total outstanding
Doubtful	Overdue for exceeding 2 years	- 100% Provision on unrealizable value of the

¹⁸ Tannan, M.L.,” Tannan’s Banking Law and Practice in India, 19th Edition, India Law House, Delhi, 1997 p.864

		security - 20% if the asset has to remain doubtful up to 1 years - 30% if the asset has remained doubtful upto 3 years - 50% if the asset has remained doubtful for more than 3 years
Loss	Uncollectible/Unrecoverable Loans, continuance as bankable asset is not warranted.	Entire amount should be written off. If assets are permitted to remain in the books for any reason, 100% outstanding should provide for provision.

Source: Tannan Repot, 1997

2.10.1 NPL in India¹⁹

In India, an asset is classified as Non-Performing Asset (NPA) if interest or installments of principal due remain unpaid for more than 180 days. However, with effect from March, 2004, default status would be given to a borrower if dues are not paid for 90 days. If any advance or credit facility granted by a bank to a borrower becomes non-performing, then the bank will have to treat all the advances/credit facilities granted to that borrower as non-performing without having any regard to the fact that there may still exist certain advances / credit facilities having performing status.

India has acquired an alarming number of Non-Performing Assets (NPA's) over the last two decades. NPA is surfaced in the Indian banking scenario around the eighties. As on 31.3.2003, the banks and financial institutions in India hold NPA's worth Rs. 1,10,000

¹⁹ Batra, Sumant, Maximizing Value of Non Performing Assets, Forum for Asian Insolvency Reform (FAIR), India, 2003 ,P.2

crore (approximately). There is the practice of 'ever-greening' of advances, through subtle techniques. As per a report appearing in a national daily, the banking industry has under-estimated its NPAs by whopping Rs. 3,862.10 crore as on March 1997. The industry is also estimated to have under-provided to the extent of Rs 1,412.29 crore. Nineteen nationalized banks are stated to have underestimated their NPAs by Rs 3,029.29 crore.

2.10.2 NPL in Pakistan²⁰

Pakistani government started the macro-economic and financial sector restructuring program under guidance of the International Monetary Fund (IMF) in 1996. The World Bank and Japanese government also co-financed the banking sector adjustment loan (BSAL) to support this Pakistani government's effort, of which the main goal is to improve the efficiency in financial markets through separating ownership and management, and strengthening the accountability mechanism. It was expected that the more efficient financial system would lead to mobilization of human resources in the banking industry, efficient allocation of domestic capital resources, and improvement in the access of the poor people to financial services. All effects are conducive to stable economic growth and poverty reduction.

The first phase program in 1997-1998 mainly consisted of:

- (i) preventing a further increase of bad loans,
- (ii) recovery of non-performing loans through the "IncentiveScheme," invented by the State Bank of Pakistan (SBP),

²⁰ Iimi, Atsushi, "Efficiency in the Pakistani Banking Industry: Empirical evidence after the structural reform in late 1990", WP/JBICI, No.8, 2002, P.5

- (iii) retrenchment of surplus sta. through the “Golden Handshake Scheme” and closure of over-extended branches,
- (iv) preparation for privatizing three NCBs and two DFIs,
- (v) introduction of international accounting standards and strengthening prudential regulation, and
- (vi) establishment of banking courts for enhancement of the solution of disputes related to non-performing loans through legal procedures.

2.10.3 NPL in Bangladesh²¹

In Bangladesh, the ratio of NPLs to total loans is very high in the government bank. The government^{bank} implemented directed credit programmes during the 1970s and 1980s. Poor appraisal, and inadequate follow-up and supervision of loan distribution eventually resulted in massive booking of poor-quality assets, the level of which remains high. The banks were reluctant to write off the historical bad loans because of the poor quality of underlying collateral as well as to avoid any possible legal complications due to a lacuna in the judicial framework. Therefore, in Bangladesh, revamping of the government bank also appears essential to ensuring a healthy development of the entire banking system in the country. Without such steps, both savings and labour misallocation will continue in Bangladesh.

2.10.4 NPL in Malaysia²²

In Malaysia, data indicate that much of the lending after the financial crises was directed to residential property with strict

²¹ Khanal, Dilli Raj, (2007) “Banking and insurance services liberalization and development in Bangladesh, Nepal and Malaysia:A comparative analysis”, APRT Network, WP no 41, p.20

²² Ibid

guidelines in lending. Prior to the crisis, substantial loans had been given to the construction sector, which experienced a greater burden of NPLs in domestic financial institutions. The reforms in the post-crises periods have tried to avoid both savings and labour misallocation in Malaysia.

2.10.5 NPL in Japan²³

One of the underlying causes of Japan's prolonged economic stagnation is the non-performing or bad loan problem. Some of the loans made to companies and industries by financial institutions during the bubble era became non-performing when the bubble burst. This has delayed structural reform and prevented the financial intermediary system from functioning properly. In its Emergency Economic Package of April 2001, the Japanese government declared that it would resolve both the non-performing bank loan problem and the excess borrower debt problem at the same time. It also emphasized the need to eliminate bad loans completely (In addition, a Major Policy Direction, Structural Reform of the Japanese Economy: Basic Policies for Macroeconomic Management, which was approved by the cabinet on June 26, 2001, considers the final resolution of bad loans to be the first step toward revitalizing the Japanese economy and proposes adopting additional measures as necessary.)

Japan's non-performing loans (NPLs) problem has become a millstone around the neck of the domestic economy, provoking discussion not only at home but throughout the international

²³ "The Disposal of Non-Performing Loans and Its Potential Influence" Study Project on the Potential Influence of Balance-Sheet Adjustments Executive summary, Japan ,2001

Community. Currently, figures for all Japanese banks suggest an aggregate of loss on disposal of NPLs from the end of March 1993 is 71.8 trillion yen. Despite this, the amount of NPLs disclosed under the Financial Service Agency standard stands at 32.5 trillion yen, a slight increase (In the end of March 2001, there was some improvement in the quality of NPLs, with past due loans in arrears diminishing while restructured increased . In terms of other changes too, the ratio of NPLs has in fact been growing not only in the usual bubble-related industries such as construction and real estate but also in manufacturing sector²⁴ .

2.10.6 NPL in Turkey²⁵

Currently, there are 47 banks registered in Turkey. In the beginning of 2000, there were 79 banks in the system. Therefore 32 banks became insolvent during the stabilization program which began in January 2000. For overcome in future from another insolvency deposit insurance program may play a crucial role in achieving financial stability. Governments in many advanced and developing economies established deposit insurance schemes for reducing the risk of systemic failure of banks. Deposit insurance has a beneficial effect of reducing the probability of a bank run. However deposit insurance systems have its own set of problems. Deposit insurance systems create moral hazard incentives that encourage banks to take excessive risk. Turkey established an explicit deposit insurance system in 1960. Until 1994, the coverage determined by a flat rate but in that date, Turkey experienced a major economic crisis. In April 1994, Turkish government started to apply an unlimited deposit insurance scheme to restore banking system

²⁴Asian Development Outlook 2004: "Developing Asia and the World"

²⁵ Karabulut, G.(2007) "Sources Of Non-Performing Loans In Turkish Banking System", Vol 5 Istanbul University, Istanbul, Turkey

stability. Unlimited deposit insurance caused a remarkable increase at non-performing loans

2.10.7 Study of Luis Cotbaria & Inwon Song: ²⁶

On working paper entitled “Loan review provision and macroeconomic linkages” Luis Cotbaria & Inwon Song analyzed the classification of Loans with their respective provisioning effect and trace out the linkage of NPA’s with Capital Adequacy Ratio. They find out that provisioning for NPA (Specific provisions) could not be included in capital fund but it reduces the portion of net income by eating through means of provisioning for NPA thus, NPA reduces the Capital Adequacy Ratio.

2.10.8 Study of Lue Laevan and Giovanni Majononi : ²⁷

Similarly Lue Laevan and Giovanni Majononi analyzed the relationship of loan loss provisioning with the loan portfolio of large commercial banks in different geographical areas of the world. Their studies revealed that a sound bank should show a positive association between the amount of loan loss provisioning and the growth of loan portfolio. In their conclusion they are stating that “We find the positive link between earnings provisioning is stronger for countries with highly income level , suggesting that pro cyclical behavior of loan loss provisioning is higher in developed countries than in developing countries

²⁶ Luis Cotbaria & Inwon Song , IMF, working paper, 2002

²⁷ Laevan L. and Majononi G., IMF, working paper, 2003,

2.10.9 Study of Kay Ellen Herr and Goe Miyazaki : ²⁸

On the study made by Kay Ellen Herr and Goe Miyazaki, find out that the securitization as a better solution to solve the problems of NPA. They analyzed that securitization would help the banks to reduce the levels of NPA from their balance sheet and enables them to get tax benefit which would otherwise not be by simple write off of NPA

2.11 Review of National Studies:

On way to conduct this research work some books, journals and publications have been studied to formulate ideas about the subject matter. Although, the specific books regarding the NPA could not be found, however, some banking related book has been consulted and described the feature.

Taking reference book on management of bank credit written by Suneja has also been consulted. Suneja (1992) pointing out the cause of NPA says that “the risk connected with lending to business depends on an enormous number of factors. For any particular type of business the risk failure is affected by the state of economy, trend in demand for the product or service provided competition from any other suppliers, financial resources are too limited and management skills are lacking.”²⁹ Reiterating, the difficulties Suneja (1992) says, “probably the most difficult decision facing banker is to determine when becomes necessary to recall a loan and to begin the process of liquidating the security. Further she

²⁸ Herr, K.E. and Miyazaki, G. “A comparative study of NPA”, Research paper, 2004

²⁹ Suneja, H.R., “Management of Bank Credit” First Edition, Himalaya Publishing House, Bombay, 1992

suggests that if a customer fails to make repayment on the due date the bank has to consider what steps need to be taken to recover the debt. “³⁰

Basyal (2057) discussing the financial performance of government owned banks in in his article “Placing RBB and NBL under Management Contracts Rational and Opposition”³¹ agreed that the disappointing performance of these two banks become serious concern to all the stakeholders. Further he mentions that they are having with huge level of NPA which could be termed as the darkest sides of their operational inefficiency and undisciplined financial behavior.

Ghimire (2056) in her article, “Efficiency Indicators of Commercial Bank: A comparative analysis”³², found saying that efficiency indicator of the bank may be viewed on the basis of amount allocated for loan loss provisioning against loan and investment.

Pradhan (2058) in his article “NPA: Some suggestions to make tackle them”³³ found saying that unless the growth in NPA is kept in control, it has the potential to cause systematic crisis. HE has mentioned that a dream of globalization led to huge investment which unfortunately could not be utilized properly due to hesitant liberalization policies. Large Corporate misused the credits and delayed payments and contributed indirectly for enhancing NPA ration. He further argues that lack of vision in appraisal of proposal while loan sanctioning, reviewing or enhancing credit limits, absence of risk management policy of financing, concentration of credit in few group of parties and sector, lack of coordination among various financiers, lack of initiatives to take timely action against willful defaulters, indecision on existing out of bad loans for fear of investigating

³⁰ Ibid.

³¹ Basyal, T.L., “Placing RBB and NBL under management contract: Rationale and Opposition, Economic Survey, 2000

³² Ghimire.S.” Efficiency indicator if Commercial Bank: A comparative study, Mifrmire, 2001

³³ Pradhan, S.M. “ NPA Some suggestiong to tackle them” Mirmire vol 1, 2003

agencies like special police, CIAA, Public Accounts Committee of the parliament have also contributed in whatsoever measures to the worsening situation of NPA front. He further pointed out that most crucial reason for the increase in the NPA is the shabby and defaulter friendly legal system. Suggesting the remedy of NPA he adds that administrative system should be strengthened, legal reforms should be made and Assets Reconstruction Company should be formed.

Henderson (2003), CEO of RBB during his interview to New Business Age agrees that “the challenging target of RBB turn around is restructuring and collection of NPA.”³⁴

The performance of the government bank in Nepal is not sound, as the NPL and profitability indicators reveal. The ratio of NPLs in the government bank is very high when compared with the private and joint-venture banks. The government bank still undertakes government-directed programs, including priority sector lending programs, partly to cater to the needs of people living in the rural areas. Therefore, profitability and performance issues are hardly considered while lending in the priority areas. Likewise, high overhead costs, political interventions in loan sanctions and the low quality of collateral create greater burdens for the government bank, leading to continued deterioration in the financial health of state-owned banks. Therefore, without autonomy in management supplemented by changes in ownership structure, it will be very difficult to improve the performance of state banks. However, unless this is done, misallocation of savings will continue. The persistence of non-profitability will also encourage continuing misallocation of labour³⁵.

³⁴ Henderson, B.F. Interview relating to challenging target of RBB, New Business Age, 2003

³⁵ Khanal, Dilli Raj, (2007) “Banking and insurance services liberalization and development in Bangladesh, Nepal and Malaysia:A comparative analysis”, APRT Network, WP no 41, p.20

2.12 Review of Relevant Thesis:

Khadka, Dinesh Kumar, (2004) in his thesis titled “Non-Performing Assets of Nepalese Commercial Bank: with reference to NABIL, Nepal SBI Bank, NIB, NBB and BOK”,³⁶ His main objectives are to examine the level of non-performing loan/ asset in total assets, total deposit and total lending of Nepalese commercial banks, effects of non-performing loans to return on assets (ROA) and return on equity (ROE) and following of NRB circulars by commercial banks.

He has pointed out the problems of commercial banks as escalating level of NPA has been becoming great problem in banking business in the world. In this context Nepal can not be fun off from such situation. The level of NPA is Nepalese banking in very alarming. It s well known fact that the bank and financial institution in Nepal have been facing the problem of swelling non-performing assets and the issue is becoming more and more unmanageable day by day. He added from different financial reports, newspaper and news , it is understood that total NPA in Nepalese banking system is about 35 billion, while it is very worse in case of two largest commercial bank i.e. Rastriya Banijya Bank and Nepal Bank Limited.

He has concluded that a high degree of negative correlation of different commercial banks between NPA and ROA and NPA and ROE indicates towards the inverse relation between them. It means the level of NPA effect the return on assets and return on shareholder's equity. High level of non performing asset not only decreases the profitability of the banks but also affects the entire financial as well s as operational health of organization.

³⁶ Khadka, Dinseh Kumar, “ Non-Performing Assets of Nepalese Commercial bank: with reference to NABIL, Nepal SBI Bank, NIB, NBB, BOK” An unpublished Master Thesis, TU, 2004

Shrestha, Niva, (2004) has conducted a research on “A study on Non Performing Loan and Loan Loss Provisioning Commercial Bank; with reference to NBL, NABIL, and SCBNL”³⁷ Main objectives of her study are to find the out the proportion of non performing loan, relationship between loan loss provision and profitability, factors that affects to accumulated the non performing loans in selected banks.

She has pointed out the problems if commercial banks as commercial/ financial institution in Nepal have been facing several problems like lack of smooth functioning of economy, different policies and guide lines of NRB, political instability, security problem , poor information system, over liquidity caused by lack of good lending opportunities, increasing non performing assets, etc. in the present context where Nepalese banks are facing the problem of increasing NPAs, more amounts have to be allocated for loan loss provision.

She has concluded ineffective credit policy, political pressure to lend to uncreditworthy borrowers, overvaluation of collateral are the major cause of mounting nonperforming assets in government owned banks like NBL. Other factors leading to accumulation of the NPAs are weak loan sanctioning process ineffective credit control review and classification of loans enables bank to monitor quality of their loan portfolios and to take remedial action counter deterioration in credit quality. In addition to these, establishing recovery cell, hiring Asset Management Company are also measure to resolve the problem on NPL. She has found the NBL has very high portion of Non performing loan resulting to higher provision in comparison of NABIL an SCNBL. Even the NBL has highest investment in the most income generation assets i.e. loans and advances, it is in loss. Even the private sector bank NABIL has also higher non performing loan

³⁷ Shrestha, Niva, “ A Study on Non-Performing Loan and Loan Loss Provisioning of Commercial bank: with reference to NBL, NABIL, and SCBNL” An unpublished Master Thesis, TU, 2004

loss and provision which is higher than acceptable during the study period.

Kafle, D.N., (2005) has conducted a research on “Non Performing Loan of Nepalese Commercial Banks”³⁸ Main conclusions of his study are:

- The level of NPL in sampled Nepalese commercial banks is not so alarming. The situations are quite satisfactory, but increasing trends remain continue in coming days, the situation will be unmanageable and alarming. The commercial banks could give full attention towards supervising and recovering their lending and bad loans perfectly.
- The high degree of negative correlation of different commercial banks between NPL and ROA, NPL and ROE indicates towards the inverse relation between NPL and ROA and NPL and ROE. It means the level of NPL affects the ROA and ROE, Therefore banks should reduce their NPL to increase the ROA and ROE. Last but not least, it is no wrong to say that NPL should be reducing to maintain the sound financial health of the bank.
- The coefficient of regression of Nepalese Commercial Banks exists negative. It indicates that the banks should decrease NPL to increase ROA.

Upadhyay, A.O, (2008) has conducted a research on “Analysis of Non Performing Assets of Nepalese Commercial Banks with special reference to NBL and HBL”³⁹ Main conclusions of his study are:

- Opinion survey was done to analyze factors causing for the growth of NPA, impacts of NPA and problems associated with the management of

³⁸ Kafle, D.N., “Non-Performing Loan of Nepalese Commercial banks” An unpublished Master Thesis, TU, 2005

³⁹ Upadhyay, A.O., “Non-Performing Loan Assets of Nepalese Commercial banks with reference to NBL and HBL” An unpublished Master Thesis, TU, 2008

NPA. Most of the respondent indicated that the external factors are more responsible than internal factors in the conversion of good loans to bad/loss loan.

- Among the external factors, factors related with political and economic situation of the country and borrower related factors are found most crucial in the conversion of good loan into bad/loss loan. While looking for the internal factor it is found that insufficient control and monitoring system, credit policy of the bank and faults in credit appraisal system are the most contributing factor in the growth of NPAs.
- Analyzing the problems associated with the management of NPA, most of the respondents revealed that proper documentation and strength guidelines are the problem area to be faced on the management of NPA. Lack of Asset Management Company, execution of the court proceedings and cumbersome legal procedure and economic recession and political stability are the main problem.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction:

Research methodology is a systematic way to solve the research problem. In other words, research methodology describes the methods and process applied in the entire aspect of the study. Research methodology refers to the various sequential steps (along with a rationale of each step) to be adopted by a researcher in studying a problem with certain objectives in view.⁴⁰ Thus the overall approach to the research is presented in this chapter. This chapter consists of research design, sample size and selection process, data collection procedure and data processing techniques and tools.

3.2 Research Design

A research design is the specification of methods and procedures for acquiring the information needed. It is the overall operational pattern or framework for the project that stipulates what information is to be collected, from which sources and by what procedures.⁴¹ Thus a research design is a plan for the collection and analysis of data. For research there exists different types of research design like; Historical research, Descriptive research, Case study research, Field study research, analytical research, True experimental research and so on. This study is mainly concerned with historical research. If applicable, sometime

⁴⁰ Kothari, C.R., (1994), "Research Methodology, Methods and Techniques", Vikash Publication House Pvt. Ltd, New Delhi, p. 9

⁴¹ Paul, E. Green and Donald. S. Till; Research for Marketing Decisions.

descriptive and analytical approach may also be used. But generally, to show the relationship of lending, non performing loan of commercial bank past historical data are used. The relevant and needed data has been collected from various publications of different commercial banks and Nepal Rastra Bank.

3.3 Population and Samples:

The term “population” or universe for research means the universe of research study in which the research is based.⁴² Since the research topic is about loan, all the lending and depository institution of Nepal are the member of population study. The population for the study comprises 25 commercial banks, 58 development banks, 78 finance companies, 12 micro credit development banks, 16 saving and credit co-operatives, and other 46 non-government financial organizations.⁴³

All 25 commercial banks are the population of this study and among them, only 4 commercial banks are chosen as samples from the total population. Among them Nepal Bank Limited is chosen as it is the first commercial bank established and has large NPL outstanding, NABIL has chosen because it is the first joint venture bank and Nepal Investment Bank Limited and Bank of Kathmandu are chosen as they are established as joint venture but now fully owned by Nepalese promoters.

⁴² Wolf, Howard K. & Pant, P.R. (2000), “Social Science Research & Thesis Writing” second edition, Buddha Academic Enterprises Pvt. Ltd, Kathmandu, p. 75

⁴³ Banking and financial statistics; Vol 51, NRB, Mid July 2008
Pokharel, Jhapindra, “Determination of interest rates in Nepalese Financial Market”, an unpublished MBS thesis, TU. Kathmandu.

Table 6: List of Class a Licensed Financial Institutions (Commercial Banks)

Names		Operation Date (A.D.)	Head Office
1	Nepal Bank Limited	1937/11/15	Dharmapath, Kathmandu
2	Rastriya Banijya Bank	1966/01/23	Singhdarbarplaza, Kathmandu
3	NABIL Bank Limited	1984/07/16	Kantipath, Kathmandu
4	Nepal Investment Bank Limited	1986/02/27	Durbar Marg, Kathmandu
5	Standard Chartered Bank Nepal Limited.	1987/01/30	Naya Baneshwar, Kathmandu
6	Himalayan Bank Limited	1993/01/18	Thamel, Kathmandu
7	Nepal SBI Bank Limited	1993/07/07	Hattisar, Kathmandu
8	Nepal Bangladesh Bank Limited	1993/06/05	Naya Baneshwar, Kathmandu
9	Everest Bank Limited	1994/10/18	Lazimpat, Kathmandu
10	Bank of Kathmandu Limited	1995/03/12	Kamaladi, Kathmandu
11	Nepal Credit and Commerce Bank Limited	1996/10/14	Siddharthanagar, Rupandehi
12	Lumbini Bank Limited	1998/07/17	Narayangadh, Chitawan
13	Nepal Industrial & Commercial Bank Limited	1998/07/21	Biaratnagar, Morang
14	Machhapuchhre Bank Limited	2000/10/03	Prithvichowk, Pokhara
15	Kumari Bank Limited	2001/04/03	Putali Sadak, Kathmandu
16	Laxmi Bank Limited	2002/04/03	Adarshanagar, Birgunj
17	Siddhartha Bank Limited	2002/12/24	Kamaladi, Kathmandu
18	Agriculture Development Bank Ltd.	2006/03/16	Ramshahapath, Kathmandu
19	Global Bank Ltd.	2007/01/02	Birgunj, Parsa
20	Citizens Bank International Ltd.	2007/06/21	Kamaladi, Kathmandu
21	Prime Commercial Bank Ltd.	2007/09/24	New Road, Kathmandu
22	Sun Rise Bank Ltd.	2007/10/12	Gairidhara Crossing, Kathmandu

23	Bank of Asia Nepal Ltd.	2007/10/12	Tripureswor, Kathmandu	
24	DCBL Bank Ltd.	2001/01/23	Kamaladi, Kathmandu	
25	NMB Bank Ltd.	1996/11/26	Babarmahal, Kathmandu	

Source: Banking and financial statistics, Vol 51, Mid july 2008, NRB.

Following are the sample banks that the researcher has chose for the study purpose.

- Nepal Bank Limited.
- NABIL Bank Limited.
- Nepal Investment Bank Limited.
- Bank of Kathmandu Limited.

3.4 Sources of data and Collection Procedure:

For this study, secondary as well as primary data are used. These secondary data are collected from published sources like annual report, prospectus, balance sheet, newspaper, journal, Internet and other sources. Besides this for getting precise conclusion the researcher has used primary data by collecting the views of different personnel through direct interview, observation and questionnaire.

Secondary data published on annual reports of concerned organizations, showing balance sheet, profit and loss account and other financial information as prescribed by NRB and relative ratios, growth, etc. Beside it their organizational profiles are collected through personal visit of respective organization as well as from their web sites. Some secondary data like source and use of funds of respective bank, comparative study, and additional information are collected from Nepal Rastra Bank.

3.5 Data Processing and Presentation:

The information or data obtained from the different sources are in raw form. From that information, direct presentation is not possible. So it is necessary to process data and convert it into required form. After then only, the data are presented for this study. This process is called data processing. For this study, only required data are taken from the secondary source (bank's publication) and presented in this study. For presentation, different tables are used. Similarly, in for additional information graphical presentation is also made. For reference, the photocopies of raw data are attached in the last portion of this thesis. So far as the computation is concerned, it has been done with the help of scientific calculator and computer software program.

3.6 Data Analysis Tools:

In order to get the concrete results from this research, data are analyzed by using different types of tools. As per topic requirements, emphasis is given on financial and statistical tools. So for this study following financial and statistical tools are going to use.

3.6.1 Financial tools

Financial tools basically help to analyze the strength and weakness of a firm. Ratio analysis is a technique of analysis and interpretation of financial statement through mathematical expression. It may be defined as the mathematical expression of the relationship between two accounting figures. To evaluate the different performances of an organization by creating the ratios from the figures of different accounts is termed as Ratio

Analysis. In short, ratio analysis can be defined as an analysis of financial statements with the help of ratios. Although there are various types of ratios to analyze and interpret the financial statement, only eight ratios have been taken in this study, which the researcher believes that it can relate the Non performing loan of Commercial Banks. They are as follows:

a. Relative lending strength measurement:

For relative measurement of financial position of banks following financial terms are analyzed.

- Deposit collection
- Loan and advances,
- Investments,
- Income from loan and advances
- Non performing loan
- Loan loss provision and
- Net profit.

b. Ratio Analysis:

Following ratio analyses are done and interpreted the result for the study.

- Loan and Advances to Total Assets Ratio
- Investments to Total Assets Ratio
- Loan and Advances to Deposit ratio (CD Ratio)
- NPL to Loan and Advances Ratio
- NPL to Total Assets Ratio
- Loan Loss Provision to Loan and Advances Ratio
- Loan Loss Provision to NPL Ratio
- Return on Loan and Advances Ratio

3.6.2 Statistical Tools.

Some important statistical tools have been used to present and analyze the data for achieving the objective of this study. Co-efficient of variance, co- efficient correlation analysis, standard deviation, etc. has been used for the purpose. The basic statistical analysis is related to this study are discussed below:-

a. Arithmetic Mean:

It is the sum of all the observations divided by the number of observations. In such a case all the items are equally important.⁴⁴ As arithmetic mean is most common and popular tools for data analysis, here in this study also, arithmetic mean is used. It is computed by using following formula:

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

Where \bar{X} = Mean

$\sum X$ = Sum of all the Variable X

n = Variables involved

b. Standard Deviation:

The standard deviation is the best tools to study fluctuation in any data. It is usually denoted by the letter sigma (δ). Karl Pearson suggested it as a widely used measure of dispersion and is defined as the positive square root of their arithmetic mean of squares of the deviation of the given

⁴⁴ Pant, G.D. & Chaudhary, A.K. (1999), "Business Statistics and Mathematics," Bhandupuran Prakashan, Kathmandu, P. 91

observations from their arithmetic mean of a set of value.⁴⁵ It can be computed by using following formula.

$$S.D(\delta) = \sqrt{\frac{1}{n} \sum (X - \bar{X})^2}$$

Greater the magnitude of standard deviation, higher will be the fluctuation and vice versa.

c. Coefficient of Correlation:

By this statistical tool, the degree of relationship between to variables is identified. In other words, this tool is used to describe the degree to which one variable is linearly related to other variables. Two or more variables are said to be correlated if change in the value of one variable appears to be linked with the change in the other variables. The correlation analysis refers the closeness of the relationship between the variables.⁴⁶ Correlation may be positive or negative and ranges from -1 to +1. Simple correlation between interest rate and deposit amount, interest rate and credit or lending amount and interest rate (both deposit rate and lending rate) and inflation is computed in this thesis. For example, let's say that the correlation between interest rate and inflation is positive. It indicates that when inflation increases, interest rate also increases in same direction and vice versa. For our study following reference is used⁴⁷

- Correlation may be positive or negative and ranges from -1 to +1. When $r = +1$, there is positive perfect correlation; when $r = -1$, there is

⁴⁵ Gupta, S.C. "Fundamental of Statistics," Himalyan Publishing House, Bombay, P.380

⁴⁶ Sharma, P.K. and Chaudhary, A.K. (2000), "Stastical Methods," Khanal Books Prakashan, Kathmandu, P. 420

⁴⁷ Pant, G.D. and Chaudhary A.K. (2053)"Statistics and Quantitative Techniques" 2nd edition, Nepal Sahitya Prakashan Kendra, Kathmandu, P.306

perfect negative correlation; when $r = 0$, there is no correlation and when $r < 0.5$ then there is low degree of correlation.

- When 'r' lies between 0.7 to 0.999 (or -0.7 to -0.999), there is high degree of positive (or negative) correlation.
- When 'r' lies between 0.5 to 0.699, there is a moderate degree of correlation.

The simple correlation coefficient, r , is calculated by using following formula:

$$\text{Simple Correlation Coefficient (r)} = \frac{n\sum X_1 X_2 - (\sum X_1)(\sum X_2)}{\sqrt{n\sum X_1^2 - (\sum X_1)^2} \sqrt{n\sum X_2^2 - (\sum X_2)^2}}$$

Together with Karl Pearson's coefficient of correlation probable error (P.E.) of the correlation coefficient is also computed. P. E is the measure of testing the reliability of the calculated value of 'r'. It is given by: P. E. =

$$0.6745 \frac{1 - r^2}{\sqrt{n}}$$

Where;

P. E. = Probable error of correlation coefficient

N= Number of pair of observations

r= correlation coefficient.

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

It $r < P. E.$, it is insignificant. So, perhaps there is no evidence of correlation.

It $r > 6P. E.$, it is significant .

But when $P. E. < r < 6 (P.E)$, the value of 'r' is inconclusive as to statistically significant / insignificant correlation.

The upper and lower limits within which the correlation coefficient is expected to lie are given by:

$r + P. E$ (Upper Limit) and

$r - P. E$ (Lower Limit), respectively

But when 'r' is of negative value, i.e. $-1.00 \leq r < 0$, in order to compare 'r' with P.E which is always in positive value, 'r modulus' or $|r|$ is calculated. $|r|$ is nothing but it is the positive value of 'r' itself.

For instance, if 'r' is calculated as $r = -0.5$, then $|r| = 0.5$.

This positive value of 'r' is compared with P. E. and 6 (P.E.) to derive to a conclusion of practically significant/insignificant correlation.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND MAJOR FINDINGS

In this chapter, the data collected from various sources have been presented and analyzed by using financial and statistical tools to measure the various dimensions of the problems of the study. Findings, conclusions and recommendations are based on the result of analysis.

4.1 Financial Tools

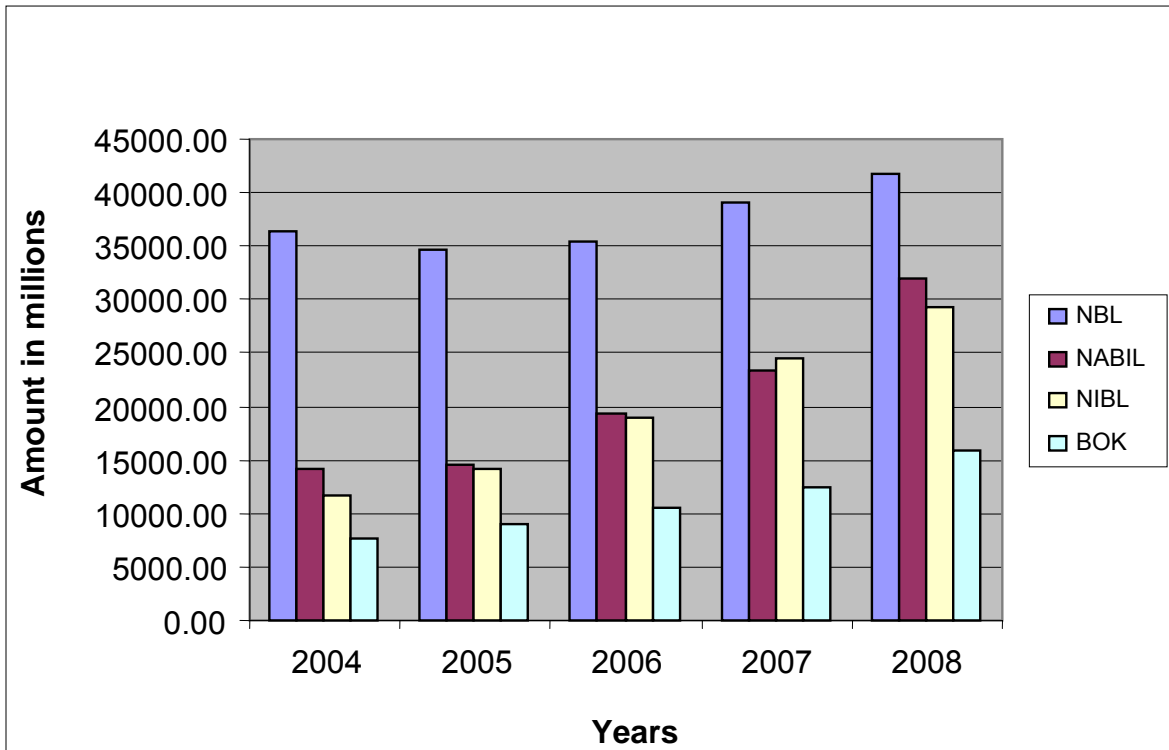
Financial analysis is the process of identifying the financial strength and weakness of the organization presenting the relationship between different variables. For the purpose of this study, ratio analysis has been used and with the help of it, data are analyzed.

4.1.1 Relative lending strength measurement of the banks

a. Deposits

Deposits consist of all type of demand and fixed deposits. It includes margin deposits and deposits in foreign currency either. Since the deposit is the main source of banks fund, its volume in total liability plays a vital role in administering the Lending and investing functions of a bank.

Figure 1: Deposit Status



Above chart explains that the deposit collections of the banks in last five years. All the banks have increasing deposit in the study period. Among them NBL has highest deposit collection. NABIL and NIBL follow each order in ranking and BOK has lowest deposit collection. In initial period deposit collection of NBL is much greater among them but later due to consistent and persistent deposit collection strategy made by NABIL and NIBL made them stand comparable with NBL in last year 2008.

Higher the deposit available there is higher the loans can be float which reflect in income of the bank and NBL has higher deposit collection through out the study period.

Table 7: Mean, S.D. and C.V. of Deposit

Bank	NBL	NABIL	NIBL	BOK
Mean	37464.24	20658.13	19724.16	11078.49
S.D.	2928.98	7340.56	7213.80	3177.16
C.V.	7.82	35.53	36.57	28.68

Above table reveal that, NBL has higher mean deposit collection followed by NABIL, NIBL and BOK. Standard deviation of NABIL is higher among banks shows that deviation from mean of deposit collection is 7340.56 millions and similarly 7213.80 millions for NIBL, 3177.16 millions for BOK and 2928.98 millions for NBL. NBL has lowest standard deviation shows the bank has lower deflection from mean in the study period.

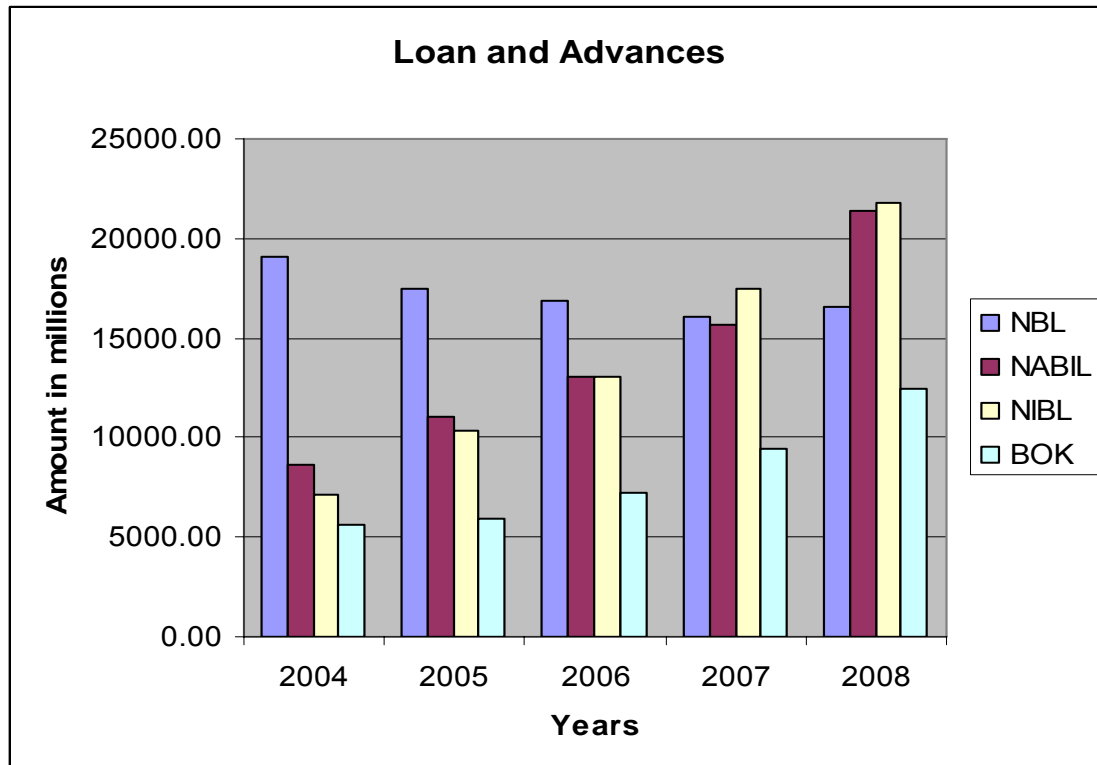
Coefficient of variation of NIBL, NABIL, BOK, NBL are 36.57, 35.53, 28.68 and 7.82 respectively. It tells us that in the study period the deposit collection for the NIBL has 36.57% variation, higher of the banks and 7.82% for NBL, lowest among them.

b. Loans and Advances⁴⁸

Commercial banks main function is to create credit from its borrowed fund. The bank doing so converts its liability into active assets. Loans and Advances are the assets coming from such activities. The high volume of Loans and Advances is indicative of good performance in credit sector. Since the survival of banking business is dependent on good performance of its lending function, the high volume of well performing loans and advances in economy is a symbol of healthy banking business.

⁴⁸ The figure of Loan and advances includes bill purchased and discounted in its term and this is valid for the entire study, if not otherwise mentioned.

Figure 2: Status of Loan and Advances



Above chart shows that, the mobilization of fund through loan and advances of all the banks are increasing besides the NBL, which has decreasing. Among them NIBL has highest loan and advances then after NABIL, NBL and BOK. In early years of the study period NBL has highest loan and advances but later years it deteriorate. But remaining all banks grows their loan and advances with soaring speed. NABIL and NIBL follow each order in mobilizing loan and advances. BOK has also mobilizing its fund through loan advances rapidly from 2006. Higher the loan and advances there is higher income could be expected from it so from above chart NIBL and NABIL could get higher return.

Table 8: Mean, S.D. and C.V. of Loan and advances

Year	NBL	NABIL	NIBL	BOK
Mean	17214.80	13951.31	13955.10	8136.07
S.D.	1170.86	4879.96	5798.93	2838.35
C.V.	6.80	34.98	41.55	34.89

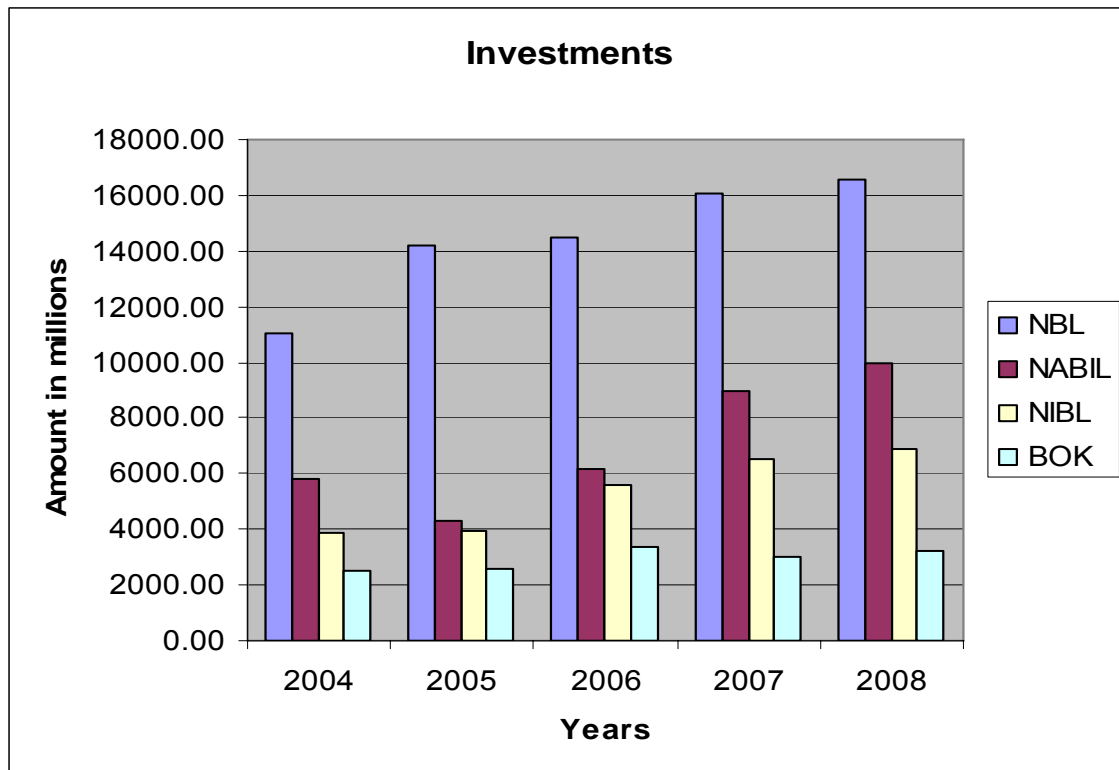
Above table reflect that NBL have higher average with 17214.80 millions in disbursement of loan and advances. But the lower standard deviation reveals lesser fluctuation in loan and advances. While NIBL has second highest average loan floated with 13955.10 millions and have higher deviation reflects larger amount fluctuation in loan and advances.

Similarly, NABIL stands at the mean of 13951.31 millions with standard deviation of 4879.96, which resembles that its loan disbursement may fluctuation of 4879.96 millions in the study period. Similarly, BOK has mean loan and advances of 8136.07 millions and standard deviation of 2838.35.

c. Investments

Investments includes inter-banking placement, investment in shares, debentures, government bonds, etc. Investments are the assets of banks. The nature of Investments is more liquid than Loans and Advances thus it provides a cushion against liquidity risk and give return lower than the loan and advances. In this study researcher analyzed the investments as the liquidity problem or not taking risk for higher return by the banks through using its fund in investments.

Figure 3: Status of Investments



Above chart shows that, NBL have higher fund used in investments. The growth of investments is increasing throughout the study period for NBL. NABIL lower its investment in 2005 compared to 2004 but later NABIL increases its investment and is in increasing trend from 2005. NIBL has lower growth rate and nearly steady in 2005 and 2008 compared to the previous year. BOK has higher amount of fund invested in 2006 and later the BOK lower the investments. As investments give lower return the bank investing in investment should be liquidity problem of the bank and lesser liberalize in loan and advances.

Table 9: Mean, S.D. and C.V. of Investments

Year	NBL	NABIL	NIBL	BOK
Mean	14471.23	7033.86	5355.86	2929.38
S.D.	2175.50	2340.15	1408.82	384.59
C.V.	15.03	33.27	26.30	13.13

Above table shows that NBL have higher average with 14471.23 millions in investments then NABIL with 7033.86 millions, NIBL with 5355.86 millions and BOK with 2929.38 millions. It informs that NBL is more concern in using their funds in investment and NABIL stand at second and NIBL at third and BOK at fourth.

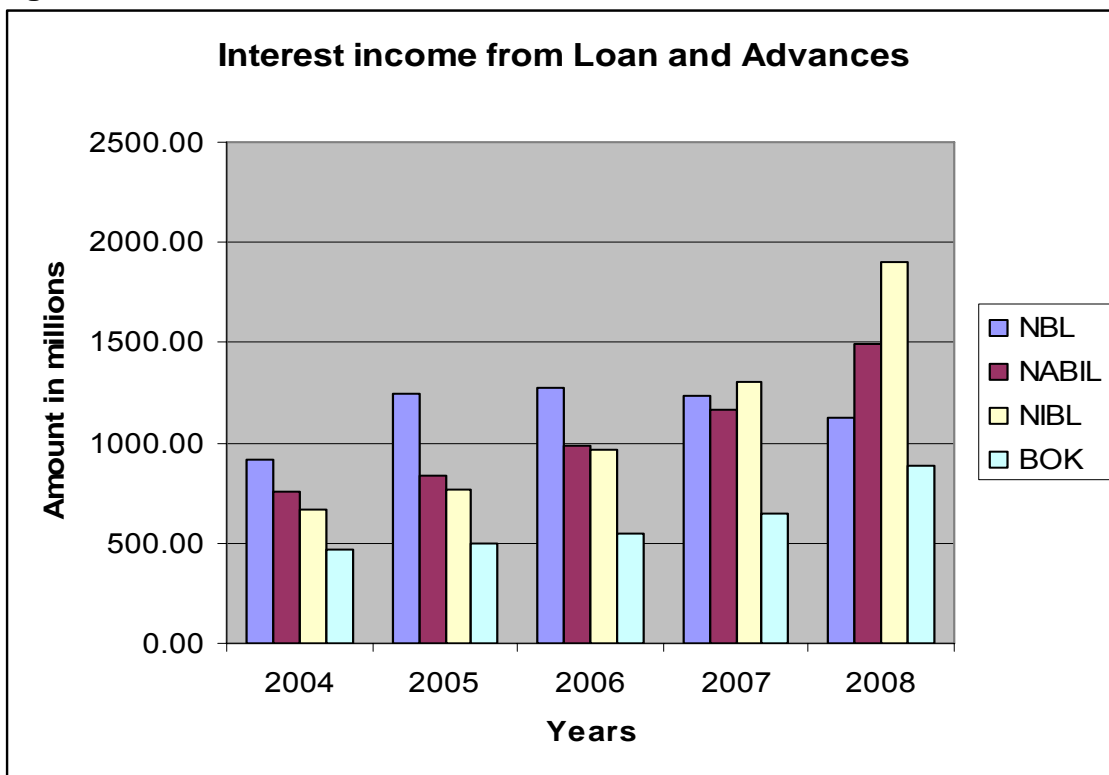
Standard deviation of NBL is highest among that reveals that in coming year NBL will investment more or less than mean 14471.23 millions. Similarly, NABIL has standard deviation of 2340.15 millions thus next year investments may be more or less by deviated amount with mean of 7033.86 millions. NIBL has standard deviation of 1408.82 millions thus next year investments may be more or less by deviated amount with mean of 5355.86 millions. BOK has standard deviation of 384.59 millions thus next year investments may be more or less by 384.59 millions with mean of 2929.38 millions.

Coefficient of variation of NABIL is higher among the banks with 33.27%, it means the variation of investments is 33.27% for NABIL and then NIBL comes which has CV of 26.3% so its investment is varied with 26.3%. After that NBL has CV of 15.03% which shows that the NBL's investment is 15.03% variation in study period. And BOK has CV of 13.13% thus variation in investments is 13.13%

d. Interest income from Loan and Advances

Volume of interest income from loan and advances measures the ability of bank to generate income through the lending activities. High volume is indicative to favorable contribution of lending in income generation.

Figure 4: Interest Income from Loan and Advances



Above chart shows that, the income generated through the mobilization loan and advances of all the banks are increasing besides the NBL. NBL has higher increment in its income till 2005 after that lesser increment in 2006, then after decreases. The chart shows NABIL has increasing trend throughout the study period. After that NIBL has higher rate of growth in income from loan and advances and reach highest in 2008 among the banks. BOK has also increasing trend in the study period.

Table 10: Mean, S.D. and C.V. of Interest income from loan and advances

Year	NBL	NABIL	NIBL	BOK
Mean	1158.70	1049.07	1121.26	611.08
S.D.	146.74	294.72	502.23	168.01
C.V.	12.66	28.09	44.79	27.49

Above table shows that NBL have higher income from loan and advances with 1158.70 millions, then, NIBL have with 1121.26 millions, NABIL with 1049.07 millions and BOK with 611.08 millions. It reveals that NBL have larger amount return through loan and advances.

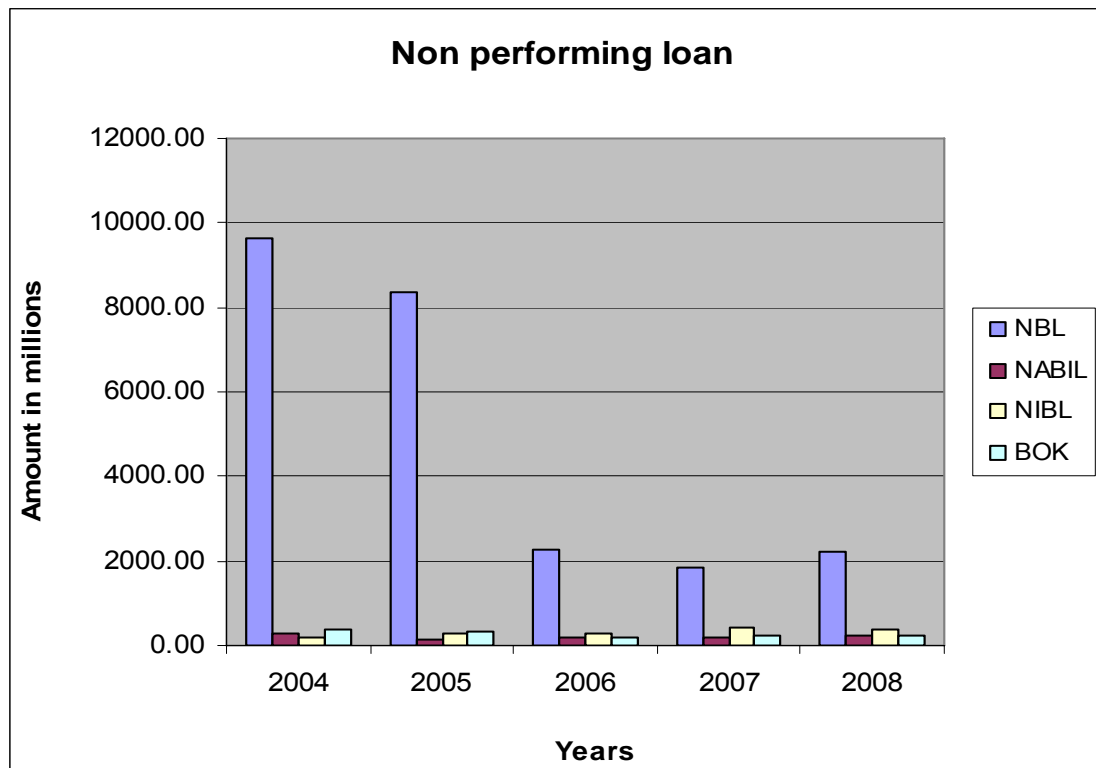
Standard deviation of NIBL is highest among the banks which shows that NIBL has income deviated by 502.23 millions in study period. Standard deviation of NABIL was found 294.72 millions and it shows the income of NABIL is deviated by 294.72 millions in the study period. Standard deviation of BOK was found 168.01 millions and it shows the income of BOK is deviated by 168.01 millions in the study period. Standard deviation of NBL was found 146.74 millions and it shows the income of NBL is deviated by 146.74 millions in the study period.

Coefficient of variation of NIBL is higher among the banks with 44.79%, it means the variation of investments is 44.79% for NIBL . NABIL has CV of 28.09% so its investment is varied with 28.09%. BOK has CV of 27.49% which shows that the NBL's investment is 27.49% variation in study period.

e. Non Performing Loan

All loans and Advances the principal of which are past due for a period of more than 3 months shall be included in this category. Non Performing Loan is categorized into sub-standard, doubtful, and loss. Higher NPL shows the higher risk present in its lending.

Figure 5: Status of Non Performing Loan



Above chart shows that NBL has higher NPL and fluctuating trend in the study period. NBL reduces its NPL in 2006 extremely. But, it was hovering around same amount in later years. NABIL maintains its NPL in lower amount and has control over it. Similarly, NIBL has increasing till 2007 and reduce in 2008. BOK is also able to maintain the NPL in lower amount with decreasing trend in study period.

Table 11: Mean, S.D. and C.V. of Non performing loan

Year	NBL	NABIL	NIBL	BOK
Mean	4874.67	201.58	306.47	278.45

S.D.	3801.42	53.86	94.29	77.82
C.V.	77.98	26.72	30.77	27.95

Above table shows that mean NPL of NBL is higher than remaining banks with 46874.67 millions. NABIL has 201.58 millions, NIBL has 306.47 millions and BOK has 278.45 millions of NPL in the study period.

Standard deviation of NBL is 3801.42 which shows that NBL has NPL deviated by 3801.42 millions. Standard deviation of NABIL was found 201.58 and it shows the NPL of NABIL is deviated by 201.58 millions. Standard deviation of NIBL was found 306.47; it shows the income of NIBL is deviated by 306.47 millions. Standard deviation of BOK was found 77.82 and it shows the income of BOK is deviated by 77.82 millions in the study period. Among the banks NBL has higher standard deviation which denotes higher fluctuation in NPL in the study period. NABIL has lesser standard deviation which resembles less fluctuation in the study period.

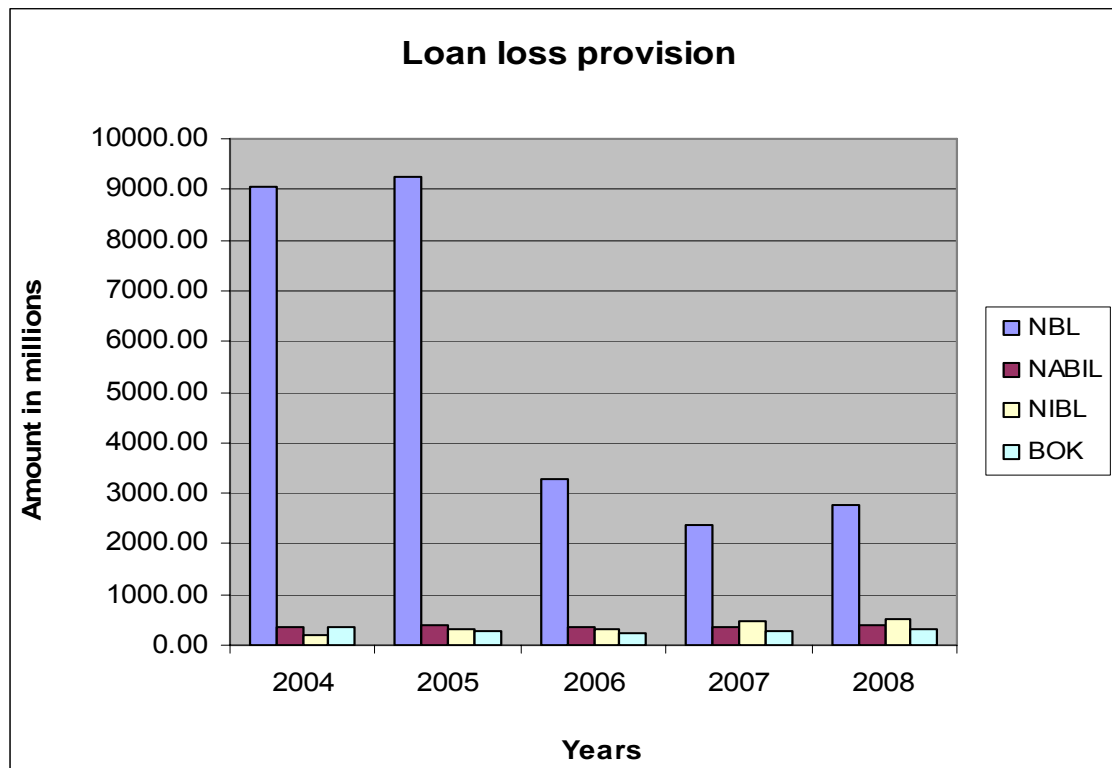
Coefficient of variation of NBL is 77.98% it means the variation in NPL is 77.98% for NBL. NABIL has CV of 26.72% so its NPL is varied with 26.72%. NIBL has CV of 30.77% so its NPL is varied with 30.77% and BOK has CV of 27.95% which shows that the NPL of BOK has 27.49% variation in study period.

f. Loan Loss Provision

Loan and advances are the major sources of income of a bank and it is the major portion of its assets too. Therefore management should be always conscious to maintain a high yield and low risky loan portfolio so that it regularly generate the income for the bank and reduces

possible losses due to non payment of principle. When these floated loans are not collected back within prescribed period they become NPL. Banks have to allocate the provisions as directed by NRB for the loans known as Loan Loss Provision (LLP).

Figure 6: Status of Loan Loss Provision



Above chart shows that NBL has higher Loan Loss Provision. NBL reduces its LLP in 2006 extremely. But, it was hovering around same amount in remaining period. NABIL maintains its Provision in lower amount and has control over it. Similarly, NIBL has increasing LLP. And BOK is also able to maintain the NPL in lower amount in study period.

Table 12: Mean S.D. and C.V. of Loan loss provision

Year	NBL	NABIL	NIBL	BOK
Mean	5342.96	370.54	374.78	297.08
S.D.	3493.10	20.09	131.99	49.77
C.V.	65.38	5.42	35.22	16.75

Above table shows that mean LLP of NBL is higher of all the banks with 5342.96 millions. NABIL has 370.54 millions, NIBL has 374.78 millions and BOK has 297.08 millions of LLP in the study period.

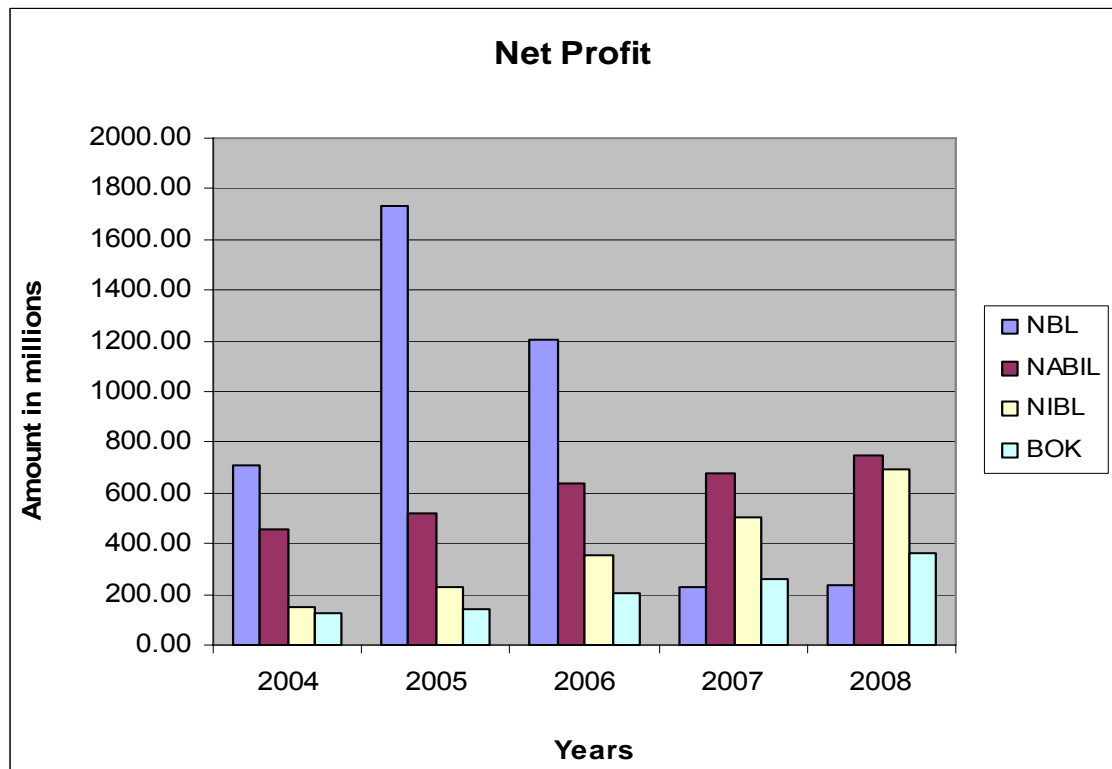
Standard deviation of NBL is 3493.10 which shows that NBL has NPL deviated by 3493.10 millions. Standard deviation of NABIL was found 20.09 and it shows the NPL of NABIL is deviated by 20.09 millions. Standard deviation of NIBL was found 131.99 and it shows the income of NIBL is deviated by 131.99 millions. Standard deviation of BOK was found 49.77 and it shows the income of BOK is deviated by 49.77 millions in the study period. Among the banks NBL has higher standard deviation which denotes higher fluctuation in LLP in the study period. NABIL has lesser standard deviation which resembles less fluctuation in the study period.

Coefficient of variation of NBL is 65.38% it means the variation in NPL is 65.38% for NBL. NABIL has CV of 5.42% so its NPL is varied 5.42%. NIBL has CV of 35.22% so its NPL is varied by 35.22% and BOK has CV of 16.75% which shows that the NPL of BOK has 16.75% variation in study period.

g. Net Profit

After all types of deduction such as bonus to employees, taxes and provision the remaining figure Net profit has been used in this analysis. The volume of Net profit measures the success of a firm in every aspect of its operation and strategy.

Figure 7: Status of Net Profit



Above chart shows that NBL has increasing trend till 2006 and have higher Net profit till 2006 then reduces extremely. NABIL consistently increasing its Profit throughout the study period and is highest among the banks in 2007 and 2008. NIBL also has increasing net profit. Similarly, BOK has increasing the net profit.

Table 13: Mean, S.D. and C.V. of Net profit

Year	NBL	NABIL	NIBL	BOK
Mean	822.64	605.96	386.70	218.68
S.D.	647.86	117.89	217.51	96.38
C.V.	78.75	19.46	56.25	44.07

Above table reflects that mean Net profit of NBL is higher of all the banks with 822.64 millions. NABIL has 605.96millions, NIBL has 386.70millions and 218.68 has 297.08millions of LLP in the study period.

Standard deviation of NBL is 647.86 which shows that NBL has Net profit deviated by 647.86 millions. Standard deviation of NABIL was found 117.89 and it shows the Net profit of NABIL is deviated by 117.89 millions. Standard deviation of NIBL is 217.51 and it shows the income of NIBL is deviated by 217.51millions. Standard deviation of BOK was found 96.38 and it shows the income of BOK is deviated by 96.38 millions in the study period. Among the banks NBL has higher standard deviation with 647.86 which denotes higher fluctuation in Net profit in the study period. NABIL has lesser standard deviation which resembles less fluctuation in the study period.

Coefficient of variation of NBL is 65.38% it means the variation in Net profit is 65.38% for NBL. NABIL has CV of 5.42% so its NPL is varied 5.42%. NIBL has CV of 35.22% so its Net profit is varied by 35.22% and BOK has CV of 16.75% which shows that the Net profit of BOK has 16.75% variation in study period.

4.1.2 Ratio Analysis

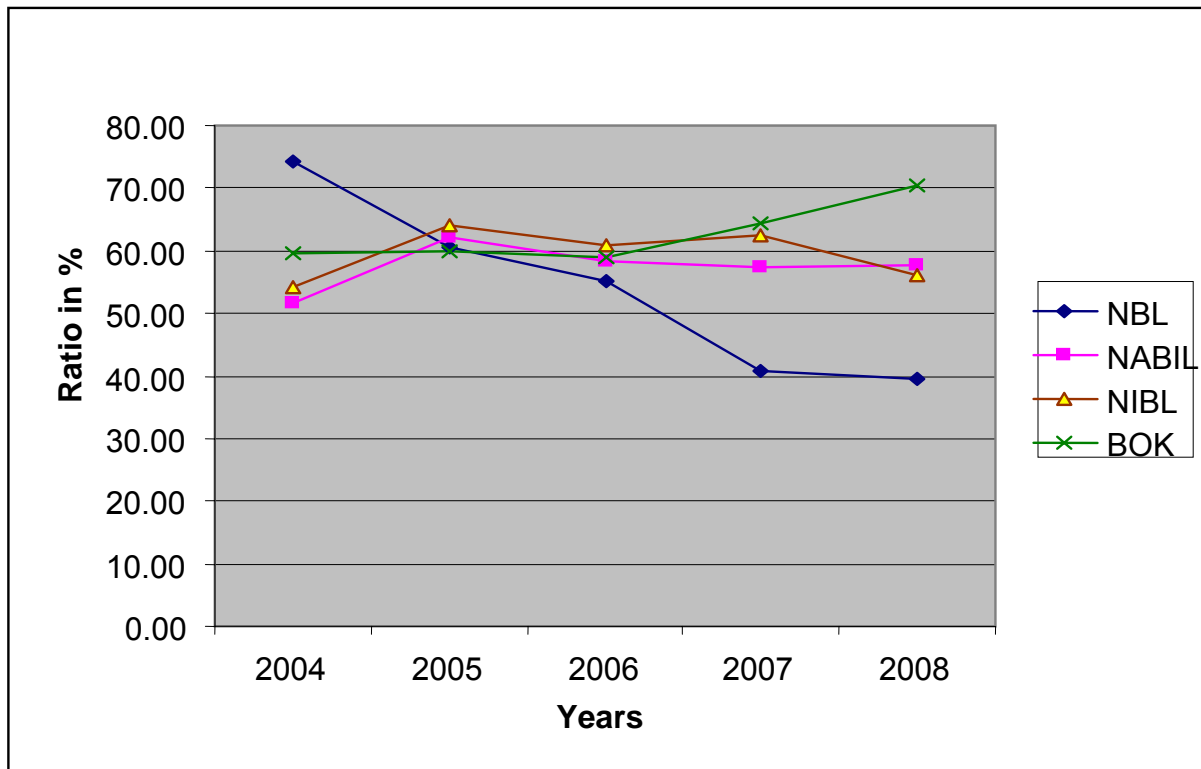
Various financial ratios related to the lending are presented and discussed to evaluate and analyze the performance of the Banks: NBL, NABIL, NIBL and BOK. The ratio's are designed and calculated to highlight the relationship between financial items and figures. It is a kind of mathematical relationship and procedure dividing one item by another. All these calculations are based on financial statements of concerned banks. The important and needed financial ratios, which are to be calculated for the purpose of the studies, are mentioned below.

a. Loan and Advances to Total Assets Ratio

Loans and Advances of any Commercial Banks represent the major portion in the volume of Total Assets. The ratio of Loans and Advances to Total Assets ratio measures the volume of Loans and Advances in the structure of Total Assets. The high degree of this ratio indicates the good performance of the banks in mobilizing its funds by lending function. However, in its reverse side, the high degree of this ration is representative of low liquidity ratio either. Granting the Loans and advances always carries a certain degree of risk. Thus this asset of banking business is regarded as risk assets. This ratio measures the management attitudes toward risk assets. The low ratio is indicative of low productivity and high degree of safety in liquidity and vice versa. The interaction between risk and return determines this ratio.

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

Figure 8: Loan and Advances to Total Assets Ratio



Above chart shows the Loan and advances to Total Assets ratio of the banks. NBL has decreasing ratio. NBL has higher loan and advances ratio in beginning of study period and lowest in 2008. NABIL has nearly constant ratio with lower ratio at 2004 and nearly constant in remaining period. Similarly, NIBL has constant ratio throughout the study period. And BOK has constant ratio till 2006 and increased in later period.

Table 14: Loan and advances to Total Assets Ratio

Year	NBL	NABIL	NIBL	BOK
2004	74.26	51.57	54.12	59.46
2005	60.46	62.18	64.09	59.98
2006	55.14	58.31	60.98	59.12
2007	40.94	57.45	62.55	64.51
2008	39.40	57.54	56.12	70.32
Mean	54.04	57.41	59.57	62.68
S.D.	14.47	3.80	4.27	4.80
C.V.	26.77	6.61	7.17	7.65

Above table shows that NBL has mean Loan and advances to Total Assets Ratio 54.04%, standard deviation 14.47 and coefficient of variation is 26.77%. It shows that the ratio is fluctuated by 14.47 from mean and there is 26.77% variation in the ratio. Similarly, NABIL has mean ratio 57.41%, standard deviation 3.8% and coefficient of variation is 3.8%. It shows that the ratio is fluctuated by 3.8 from mean and there is 6.61% variation in the ratio. NIBL has mean ratio 59.57%, standard deviation 4.27 and coefficient of variation is 7.17%. It shows that the ratio is fluctuated by 4.27 from mean and there is 7.17% variation in the ratio. BOK has mean ratio 62.68%, standard deviation 4.80 and coefficient of variation is 7.65%. It shows that the ratio is fluctuated by 4.80 from mean and there is 7.65% variation in the ratio.

b. Investment to Total Assets Ratio

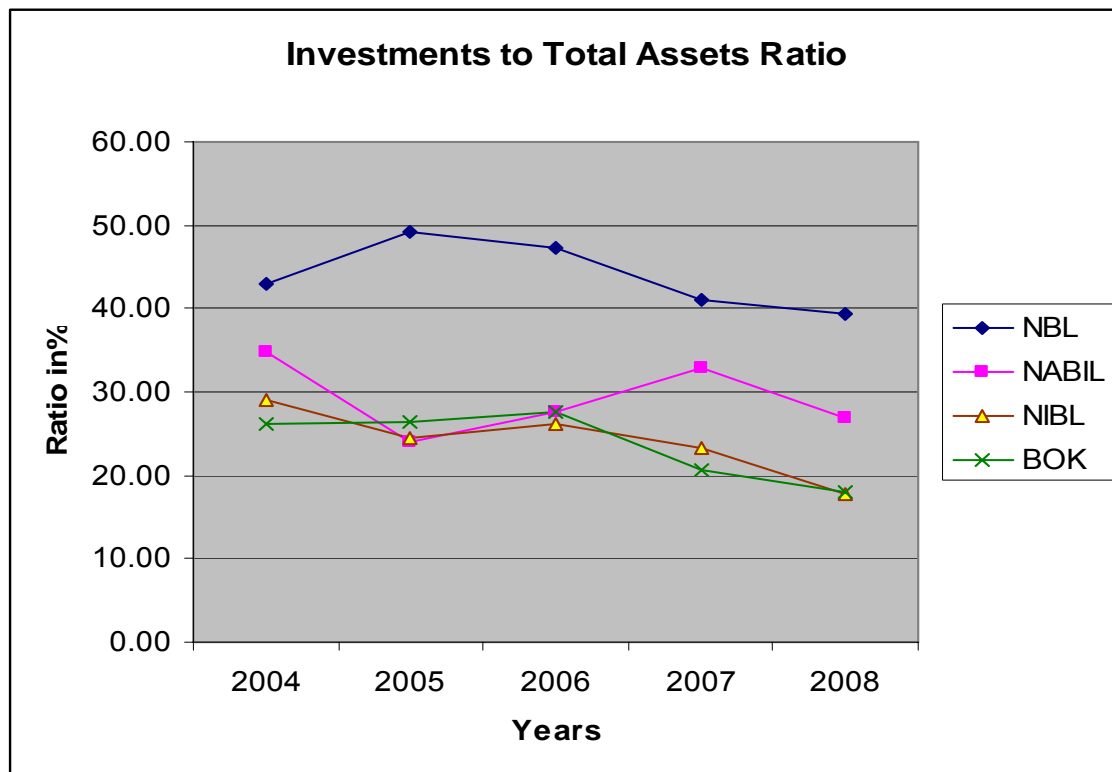
Loan and Advances and investments are the major fund mobilization of commercial banks. Loan and advances is the first type of application of funds, which has more risk as compare to investments and gives more returns. Investment is cushion against the liquidity

risk and at the same time gives return. The investing activity of banks has low level of risk and low level of return. However the bank should focus on higher profit always so the proper management of using fund in Loan and advances and investment is important to the commercial banks. Higher ratio shows that the bank is bearing low risk which reflects lower return vice-versa.

Investment includes investment on government securities, shares, bonds, debentures, etc.

$$\text{Investments to Total Assets Ratio} = \frac{\text{Investments}}{\text{Total assets}}$$

Figure 9: Investments to Total Assets Ratio



Above chart shows the Investments to Total Assets ratio of the banks. NBL has increased the ratio till 2005 and decreased onwards. NBL has fluctuating ratio over the study period. NABIL has

decreasing ratio in 2005 and then increased till 2007 and finally decreases in 2008. NIBL has decreasing ratio. BOK has slightly increasing ratio till 2006 and decreased afterwards.

NBL has higher ratio among the banks, it seems that NBL is utilizing its fund for investment activity.

Table 15: Investments to Total Assets Ratio

Year	NBL	NABIL	NIBL	BOK
2004	42.84	34.85	29.14	26.09
2005	49.18	23.97	24.49	26.36
2006	47.37	27.67	26.27	27.49
2007	40.94	32.82	23.28	20.54
2008	39.40	26.77	17.68	18.08
Mean	43.95	29.22	24.17	23.71
S.D.	4.18	4.49	4.25	4.14
C.V.	9.52	15.37	17.57	17.48

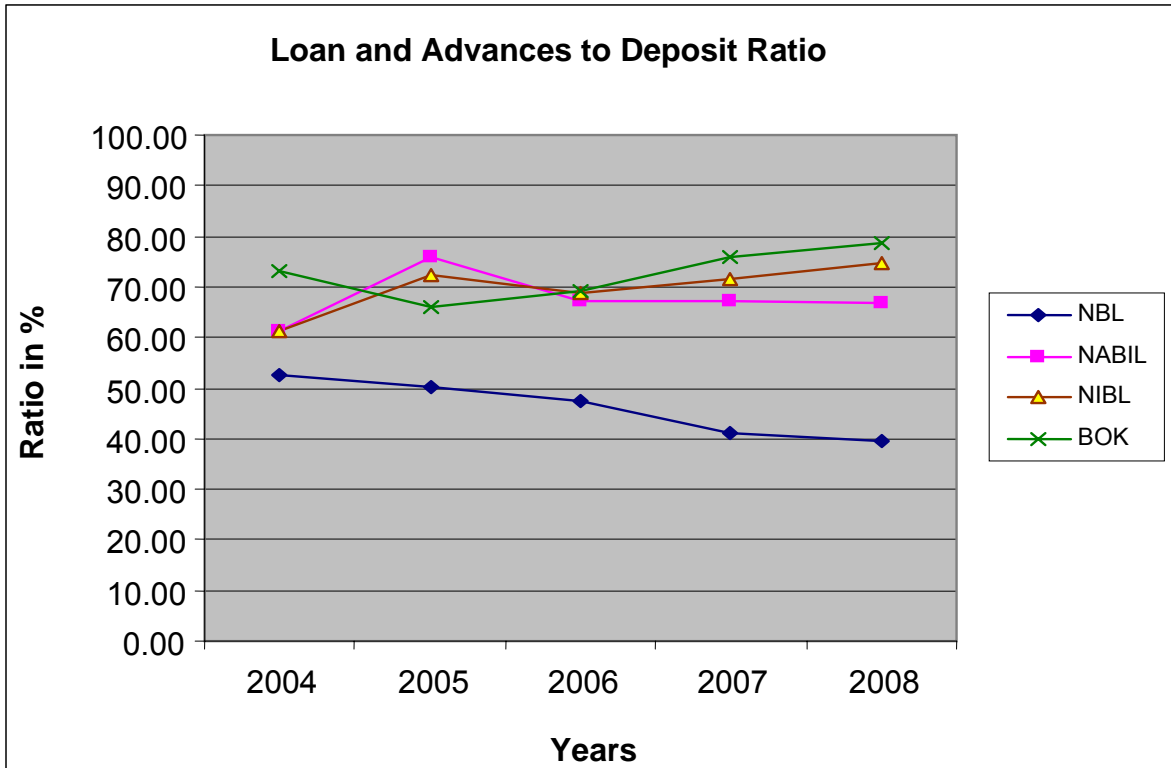
Above table shows that NBL has mean Investments to Total Assets Ratio 43.95%, standard deviation 4.18 and coefficient of variation is 9.52%. It shows that the ratio is fluctuated by 4.18 from mean and there is 9.52 % variation in the ratio. Similarly, NABIL has mean ratio 29.22%, standard deviation 4.49 and coefficient of variation is 15.37%. It shows that the ratio is fluctuated by 4.49 from mean and there is 15.37% variation in the ratio. NIBL has mean ratio 24.17%, standard deviation 4.25 and coefficient of variation is 17.57%. It shows that the ratio is fluctuated by 4.25 from mean and there is 17.57% variation in the ratio. BOK has mean ratio 23.71%, standard deviation 4.14 and coefficient of variation is 17.48%. It shows that the ratio is fluctuated by 4.14 from mean and there is 17.48% variation in the ratio.

c. Loan and Advances to Total Deposit Ratio

This ratio helps us showing the relationship between loans and advances supplied and the total deposited collected by the Bank. A high ratio indicates enhanced mobilization of collected deposit and vice-versa. It should be noted that high ratio may not be better from liquidity point of view. This ratio is calculated dividing loan and advances by total deposits.

$$\text{Loan \& advances to total deposit ratio} = \frac{\text{Loan \& advances}}{\text{Total deposit}}$$

Figure 10: Loan and Advances to Deposit Ratio



Above chart shows the Loan and advances to Total deposit ratio of the banks. NBL has decreased the ratio throughout the study period.

NABIL has increased ratio in 2005 and then flat in the rest of the period. NIBL has increases the ratio in 2005 and decrease in 2006 and then again increase till 2008. BOK has decreasing ratio in 2005 and then increases constantly.

Among the banks BOK has higher ratio while NBL has low ratio.

Table 16: Loan and advances to Deposit Ratio

Year	NBL	NABIL	NIBL	BOK
2004	52.66	61.25	61.29	72.94
2005	50.24	75.95	72.22	66.12
2006	47.59	67.30	68.72	69.23
2007	41.20	67.08	71.39	75.87
2008	39.62	66.94	74.60	78.71
Mean	46.26	67.70	69.64	72.57
S.D.	5.66	5.26	5.12	5.04
C.V.	12.24	7.77	7.35	6.94

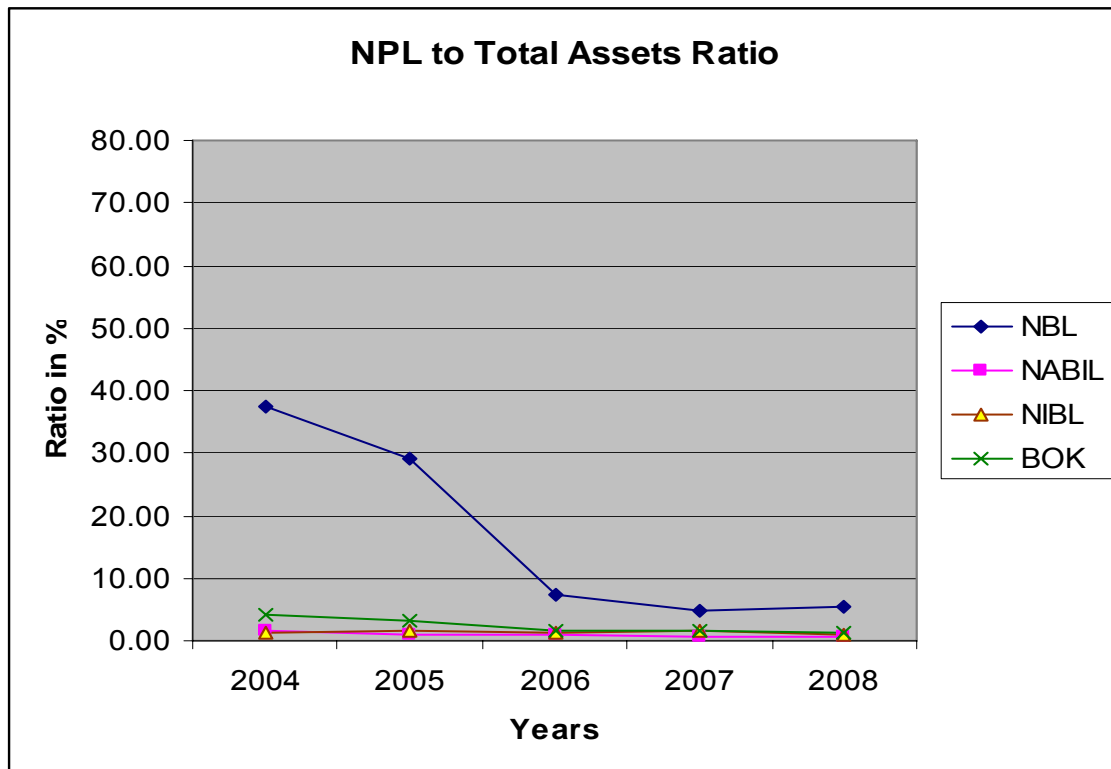
Above table shows that NBL has mean Investments to Total Assets Ratio 43.95%, standard deviation 4.18 and coefficient of variation is 9.52%. It shows that the ratio is fluctuated by 4.18 from mean and there is 9.52 % variation in the ratio. Similarly, NABIL has mean ratio 29.22%, standard deviation 4.49 and coefficient of variation is 15.37%. It shows that the ratio is fluctuated by 4.49 from mean and there is 15.37% variation in the ratio. NIBL has mean ratio 24.17%, standard deviation 4.25 and coefficient of variation is 17.57%. It shows that the ratio is fluctuated by 4.25 from mean and there is 17.57% variation in the ratio. BOK has mean ratio 23.71%, standard deviation 4.14 and coefficient of variation is 17.48%. It shows that the ratio is fluctuated by 4.14 from mean and there is 17.48% variation in the ratio.

d. Non Performing Loan to Total assets Ratio

NRB has directed the commercial banks to classify their loan portfolio in two categories, performing loan and non performing loan. NPL to Total Assets ratio is calculated by dividing NPL from net asset of bank. This ratio helps us showing the relationship between NPL available in Total assets of the bank. Higher ratio is indicative of the riskier credit strategy in the bank.

$$\text{NPL to Total Assets ratio} = \frac{\text{Non Performing Loan (NPL)}}{\text{Total Assets}}$$

Figure 11: NPL to Total Assets Ratio



Above chart shows the ratio of NPL to Total Assets of the banks. NBL has decreases the ratio slightly from 2004 to 2006 and flattens in the rest of the study period. NABIL has nearly flat ratio and decreasing till 2008. NIBL has also flat ratio in the study period. BOK has decreasing the ratio from starting year of the study period.

Above chart shows that all the banks has decreasing ratio in study period. NBL has higher ratio and NABIL, NIBL, BOK has lower ratio through out the study period.

Table 17: Non Performing Loan to Total Assets Ratio

Non performing Loan to Total Assets Ratio				
Year	NBL	NABIL	NIBL	BOK
2004	37.47	1.71	1.37	4.21
2005	29.00	0.81	1.75	3.13
2006	7.40	0.82	1.28	1.66
2007	4.73	0.65	1.51	1.67
2008	5.33	0.58	0.97	1.34
Mean	16.78	0.92	1.37	2.40
S.D.	15.34	0.46	0.29	1.23
C.V.	91.41	49.92	21.04	51.12

The above table shows the ratio of NPL to Total Assets, standard deviation and coefficient of variation of the banks. NBL has mean ratio 16.78%, standard deviation 15.34 and coefficient of variation is 91.41%. It shows that the ratio is fluctuated by 15.34 from mean and there is 91.41% variation in the ratio. Similarly, NABIL has mean ratio 0.92%, standard deviation 0.46 and coefficient of variation is 49.92%. It shows that the ratio is fluctuated by 0.46 from mean and there is 49.92% variation in the ratio. NIBL has mean ratio 1.37%, standard deviation 0.29 and coefficient of variation is 21.04%. It shows that the

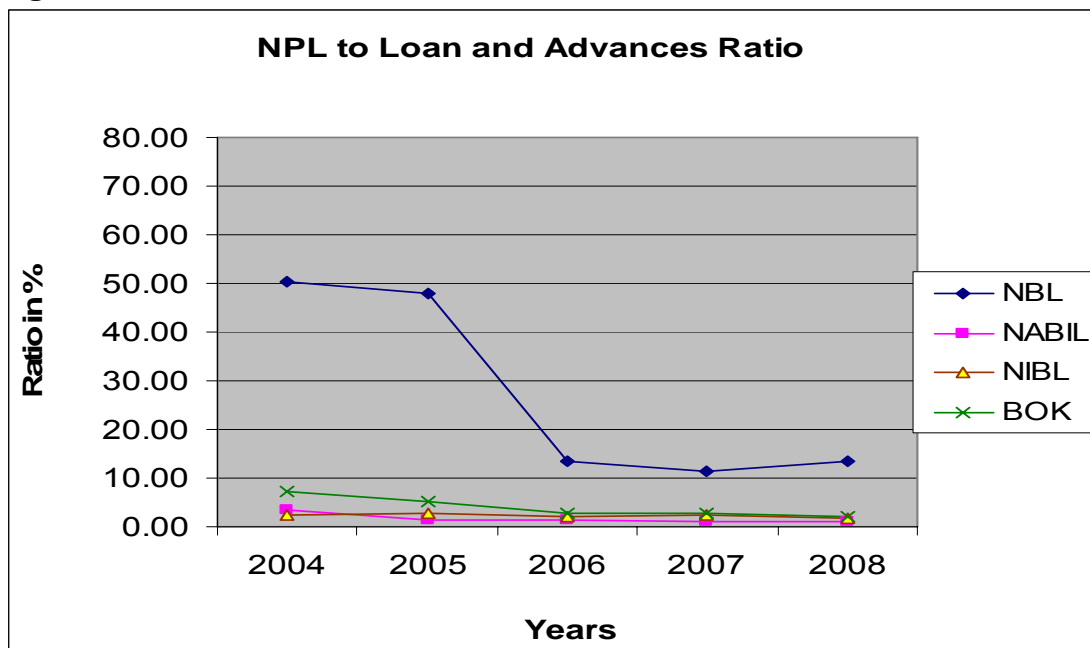
ratio is fluctuated by 4.25 from mean and there is 17.57% variation in the ratio. BOK has mean ratio 23.71%, standard deviation 4.14 and coefficient of variation is 17.48%. It shows that the ratio is fluctuated by 4.14 from mean and there is 17.48% variation in the ratio.

e. Non Performing Loan to Loan and Advances Ratio

NRB has directed the commercial banks to classify their loan portfolio in two category, performing loan and non performing loan. NPL to loan and advances ratio determines the portion of NPL in total loan portfolio. Higher ratio implies the bad quality of assets of banks in the form of loan an lower return from portfolio and lower ratio implies good quality of loan. Hence lower NPL to total loan ratio is preferred. This ratio is calculated as:

$$\text{NPL to Loan and Advances ratio} = \frac{\text{Non Performing Loan}}{\text{Total Loan and Advances}}$$

Figure 12 : NPL to Loan and Advances Ratio



Above chart shows the ratio of NPL to Total Loan and advances of the banks. NBL has decreasing ratio in 2005 and decreases sharply in 2006. From 2006 it starts increasing in slower pace. NABIL has decreasing the ratio from 2004. NIBL has also decreasing ratio in the study period. BOK has higher decreasing ratio from starting year of the study period.

Above chart shows that all the banks has decreasing NPL to Total Loan and advances ratio. NBL has sharply decreases the ratio in 2006 and NABIL, NIBL, BOK has flat decreasing ratio through out the study period.

Table 18 :Non performing Loan to Loan and advances Ratio

Non performing Loan to Loan and advances Ratio				
Year	NBL	NABIL	NIBL	BOK
2004	50.45	3.32	2.53	7.08
2005	47.96	1.30	2.73	5.22
2006	13.41	1.40	2.09	2.81
2007	11.55	1.14	2.41	2.59
2008	13.54	1.01	1.72	1.90
Mean	27.38	1.63	2.30	3.92
S.D.	19.96	0.95	0.40	2.17
C.V.	72.88	58.40	17.29	55.24

Above table shows the ratio of NPL to Loan and Advances and mean standard deviation and coefficient of variation of the banks. Above table shows the ratio between NPL and to Total Assets Ratio. NBL has mean ratio 27.38%, standard deviation 19.96 and coefficient of variation is 72.88%. It shows that the ratio of NBL is fluctuated by 19.96 from mean and there is 72.88% variation in the ratio. Similarly, NABIL has mean ratio 1.63%, standard deviation 0.95 and coefficient

of variation is 58.40%. It shows that the ratio is fluctuated by 0.46 from mean and there is 49.92% variation in the ratio. NIBL has mean ratio 2.30%, standard deviation 0.40 and coefficient of variation is 17.29%. It shows that the ratio is fluctuated by 0.40 from mean and there is 17.29% variation in the ratio. BOK has mean ratio 3.92%, standard deviation 2.17 and coefficient of variation is 55.24%. It shows that the ratio is fluctuated by 2.17 from mean and there is 55.24% variation in the ratio.

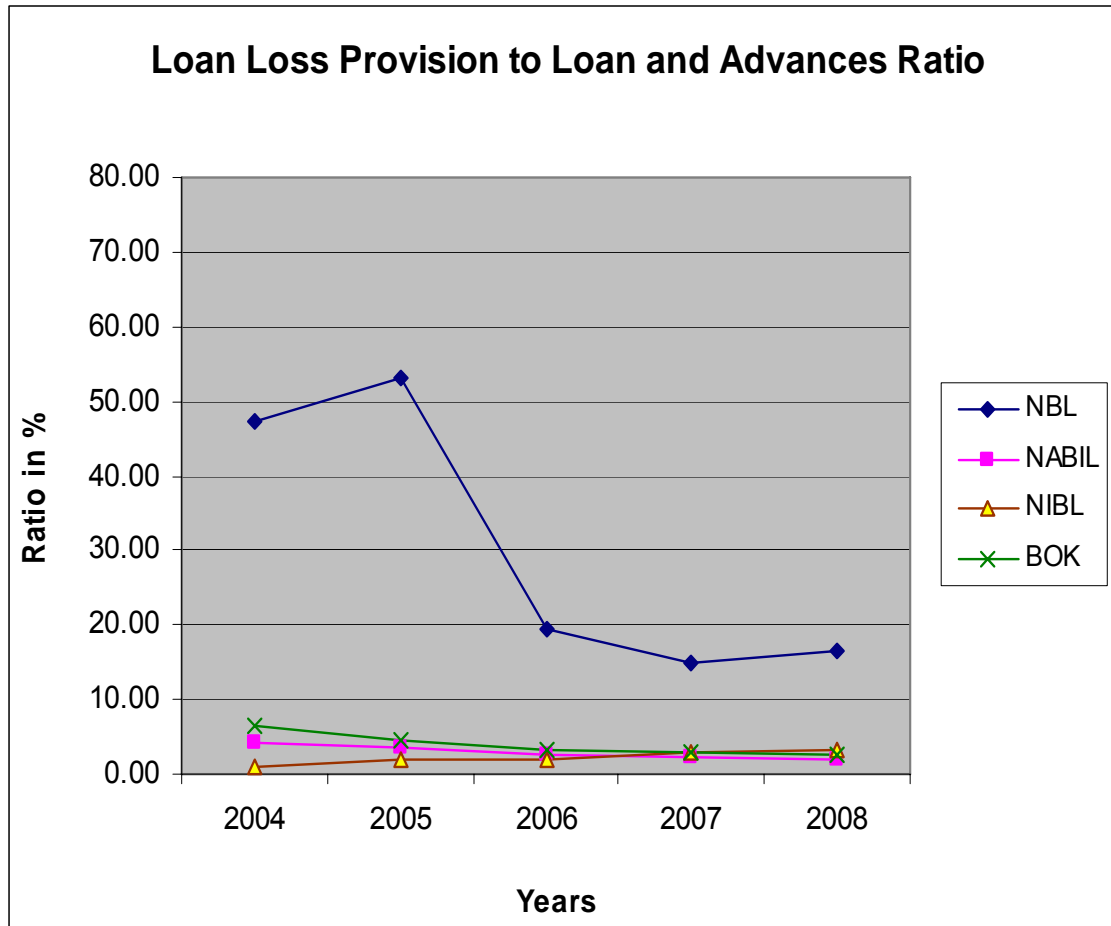
f. Loan Loss Provision to Loan and Advances Ratio

Loan Loss Provision to Loan and Advances shows percentage of loan is covered against the possible future loss due to non payment of loan. Since there is risk inherent in loan and advances, NRB has directed commercial banks to classify its loan and advances into different category and accordingly to make provision for possible losses. Loan Loss Provision signifies the cushion against the future contingencies created by the default of the borrower in payment of loan and ensures the continuous solvency of the bank. Since high provision has to make for Non Performing Loan, higher provision for loan loss reflects increasing Non Performing loan in volume of total loan.

The low ratio signifies the good quality assets in the volume of total loan. It indicates how efficiently the bank manages loan and advances and make effort to cope with probable loan loss. Higher ratio implies higher portion of NPL in the total loan portfolio.

$$LLP \text{ to Loan and Advances ratio} = \frac{\text{Loan Loss Provision (LLP)}}{\text{Total Loan and Advances}}$$

Figure 13: Loan Loss Provision to Loan Advances Ratio



Above chart shows the ratio of LLP to Total Loan and advances of the banks. NBL has ratio increasing in 2005 and decreases sharply in 2006. From 2006 it starts fluctuating passively. NABIL has faintly decreasing ratio from starting and follows same to the end of 2008. NIBL has also increasing ratio in the study period. BOK has higher decreasing ratio from starting year of the study period.

Above chart shows that all the banks has decreasing LLP to Total Loan and advances ratio. NBL has sharply decreases the ratio in 2006 and NABIL, BOK has flat decreasing ratio through out the study period. And NIBL has faintly increasing trend.

Table 19: Loan Loss Provision to Loan and advances Ratio

Year	NBL	NABIL	NIBL	BOK
2004	47.39	4.15	1.08	6.40
2005	52.99	3.54	1.86	4.56
2006	19.38	2.71	1.94	3.25
2007	14.79	2.28	3.00	3.05
2008	16.67	1.84	3.21	2.66
Mean	30.24	2.90	2.22	3.98
S.D.	18.39	0.94	0.88	1.53
C.V.	60.80	32.29	39.67	38.34

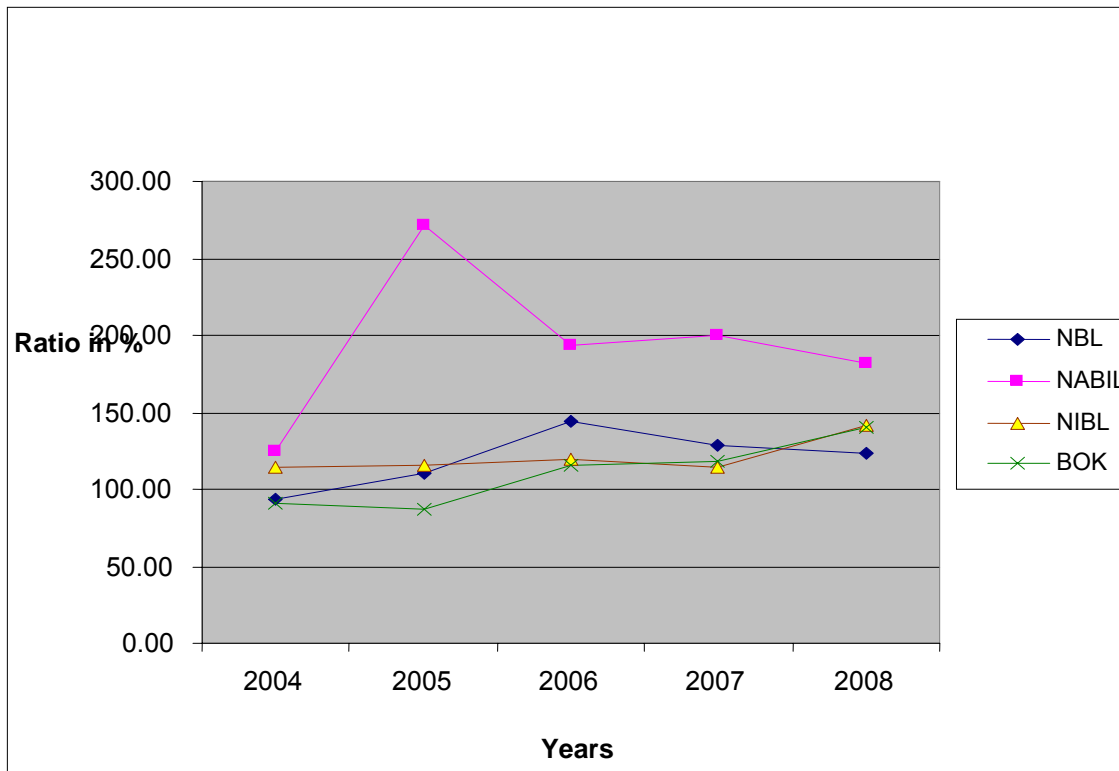
Above table shows the ratio of LLP to Loan and Advances and mean standard deviation and coefficient of variation of the banks. Above table shows the ratio between LLP and to Loan and Advances. NBL has mean ratio 30.24%, standard deviation 18.39 and coefficient of variation is 60.80%. It shows that the ratio of NBL is fluctuated by 18.39 from mean and there is 60.80% variation in the ratio. Similarly, NABIL has mean ratio 2.90%, standard deviation 0.94 and coefficient of variation is 32.29%. It shows that the ratio is fluctuated by 0.94 from mean and there is 32.29% variation in the ratio. NIBL has mean ratio 2.22%, standard deviation 0.88 and coefficient of variation is 39.67%. It shows that the ratio is fluctuated by 0.88 from mean and there is 39.67% variation in the ratio. BOK has mean ratio 3.98%, standard deviation 1.53 and coefficient of variation is 38.34%. It shows that the ratio is fluctuated by 1.53 from mean and there is 38.34% variation in the ratio. Among the banks, NBL has higher mean, S.D. and C.V. while NIBL has lesser mean and S.D and NABIL has lesser CV, which shows less variation than other banks, if occur.

g. Total Provision to Non Performing Loan Ratio

This ratio determines provision held to NPL. NRB has directed all commercial banks to provide provision for all types of loan and advances. This ratio measures up to what extend of risk is inherent in NPL is covered by total LLP. More than 100% ratio signifies that the bank is safeguard against future contingencies that may create due to bad loan where as lower than 100% may crate huge provisions in coming years due to requirement of high provision to sub-standard loan and advances.

$$LLP \text{ to NPL ratio} = \frac{\text{Loan Loss Provision}}{\text{Non Performing Loan}}$$

Figure 14: Loan Loss Provision to Non Performing Loan Ratio



Above chart shows the ratio of LLP to Non Performing Loan of the banks. NBL has ratio increasing till 2006 and decreases after 2006. NABIL has fluctuating ratio in the study with increased in 2005 and decreases later gently. NIBL has increasing ratio in the study period with slower growth. BOK has higher decreasing ratio from starting year of the study period.

Above chart shows that all the banks has decreasing LLP to NPL. NBL has sharply decreases the ratio in 2006 and NABIL, BOK has flat decreasing ratio through out the study period. And NIBL has faintly increasing trend.

Table 20: Loan Loss Provision to Non Performing Loan Ratio

Year	NBL	NABIL	NIBL	BOK
2004	93.94	125.11	113.70	90.41
2005	110.49	271.26	115.77	87.42
2006	144.53	193.26	120.04	116.00
2007	128.03	199.83	114.39	117.76
2008	123.18	182.05	141.81	139.89
Mean	120.03	194.30	121.14	110.30
S.D.	19.01	52.18	11.81	21.70
C.V.	15.84	26.86	9.75	19.67

Above table shows the ratio of LLP to NPL and mean, standard deviation and coefficient of variation of the banks. NBL has mean ratio 120.03%, standard deviation 19.01 and coefficient of variation is 15.84%. It shows that the ratio of NBL is fluctuated by 19.01 from mean and there is 15.84% variation in the ratio. Similarly, NABIL has mean ratio 194.30%, standard deviation 52.18 and coefficient of variation is 26.86%. It shows that the ratio is fluctuated by 52.18 % from mean and there is 26.86% variation in the ratio. NIBL has mean ratio 121.14%, standard deviation 11.81 and coefficient of variation is

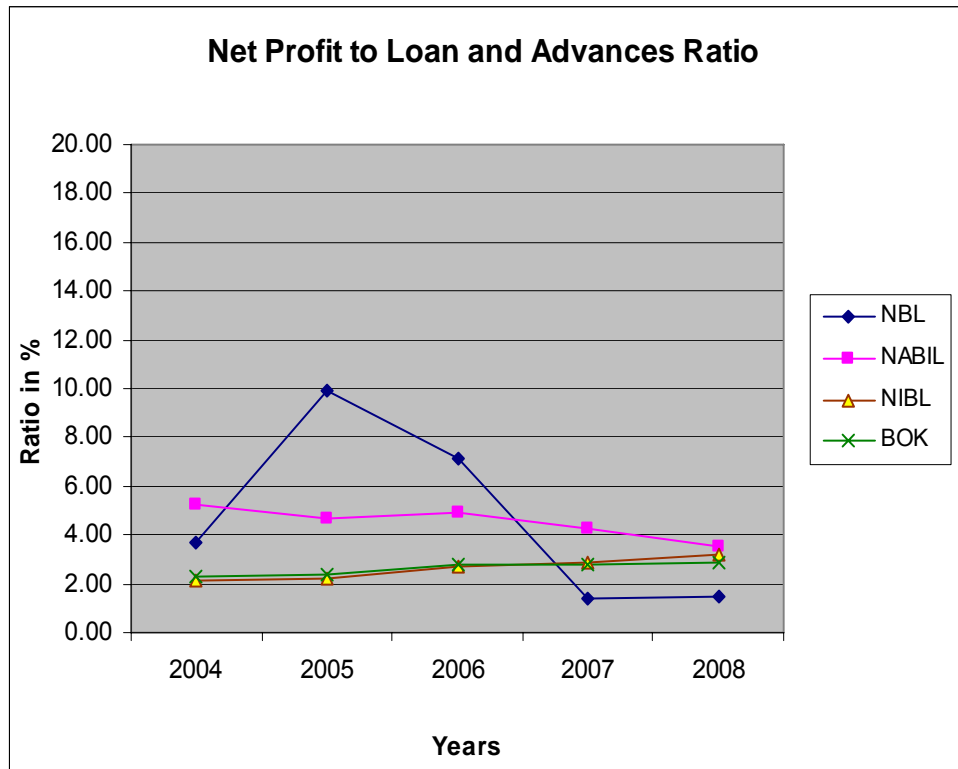
9.75%. It shows that the ratio is fluctuated by 11.81 from mean and there is 9.75% variation in the ratio. BOK has mean ratio 110.30%, standard deviation 21.70 and coefficient of variation is 19.67%. It shows that the ratio is fluctuated by 21.70 from mean and there is 19.67% variation in the ratio. Among the banks, NABIL has higher mean, S.D. and C.V. and BOK, NIBL and NBL has lesser mean, S.D. and C.V.

h. Return on Loan and Advances Ratio

Return on loan and advances ratio shows how efficiency of the Banks and finance companies have utilized their resources to earn good return from provided loan and advances. This ratio is computed to divide net profit or loss by the total amount of loan and advances. It can be mentioned as:

$$\text{Return on loan \& advances} = \frac{\text{Net profit or loss}}{\text{Loan \& advances}}$$

Figure 15: Net Profit to Loan and Advances Ratio



Above chart shows the ratio of Net profit Loan and Advances of the banks. NBL has fluctuating ratio with increasing till 2005 and decreases after 2006 and flatter in 2007 and 2008. NABIL has gentle decreasing ratio in the study. NIBL has increasing ratio in the study period with slower growth. BOK has also gentle increasing ratio in the study period.

Above chart shows that NBL and NABIL has decreasing Net profit to loan and advances ratio while NIBL and BOK has increasing ratio in study period.

Table 21: Net Profit to Loan and advances Ratio

Year	NBL	NABIL	NIBL	BOK
2004	3.72	5.27	2.13	2.26
2005	9.91	4.68	2.25	2.36
2006	7.16	4.88	2.69	2.79
2007	1.41	4.30	2.87	2.79
2008	1.44	3.49	3.19	2.90
Mean	4.73	4.52	2.63	2.62
S.D.	3.73	0.68	0.44	0.29
C.V.	78.86	14.94	16.70	11.02

Above table shows the ratio of Net profit to Loan and Advances and mean standard deviation and coefficient of variation of the banks. NBL has mean ratio 30.24%, standard deviation 18.39 and coefficient of variation is 60.80%. It shows that the ratio of NBL is fluctuated by 18.39 from mean and there is 60.80% variation in the ratio. Similarly, NABIL has mean ratio 2.90%, standard deviation 0.94 and coefficient of variation is 32.29%. It shows that the ratio is fluctuated by 0.94 from mean and there is 32.29% variation in the ratio. NIBL has mean ratio 2.22%, standard deviation 0.88 and coefficient of variation is 39.67%. It shows that the ratio is fluctuated by 0.88 from mean and there is 39.67% variation in the ratio. BOK has mean ratio 3.98%, standard deviation 1.53 and coefficient of variation is 38.34%. It shows that the ratio is fluctuated by 1.53 from mean and there is 38.34% variation in the ratio. Among the banks, NBL has higher mean, S.D. and C.V. while NIBL has lesser mean and S.D and NABIL has lesser CV, which shows less variation than other banks, if occur.

4.2 Statistical Tools

4.2.1 Coefficient of Correlation Analysis

Correlation analysis is the relationship between dependent variables so it is called constant variable also. Correlation is denoted by 'r' and ranges from +1.0 indicating perfect positive correlation to -1.0, indicating perfect negative perfect correlation. If the correlation coefficient is zero, then the factors are independent or un-correlated.

In this chapter, correlation between deposit & total investment, deposit and loan & advances and outside assets & net profit have been calculated. Then results have analyzed and interpreted and then significance of correlation has been tested using Karl Pearson's correlation of co-efficient.

Interpretation of correlation co-efficient

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

Probable error

- If $r < 6 \text{ P.E}$, then the value of 'r' is not significant.
- If $r > 6 \text{ P.E}$, then the value of 'r' is definitely significant.
- If the other situations happen, nothing can be concluded with certainty.

i) Correlation between total deposit and loan and advances

This relationship shows the likely pattern of deposit if Loan and advances changes. In another word correlation of deposit and Loan and Advances indicates the degree of linear relationship between these two variables which helps us to take decision regarding loan and advances. Following table exhibits the correlation between deposit and Loan and Advances.

Table 22: Correlation between Deposit and Loan and Advances

Bank	r	r²	P.Er.	6 P.Er.
NBL	-0.49	0.24	0.23	1.38
NABIL	0.99	0.98	0.01	0.06
NIBL	1.00	1.00	0.00	0.00
BOK	0.99	0.98	0.01	0.06

From above table, all of the value of correlation (r) during the study period is positive except for NBL. NIBL has perfect positive correlation i.e. 1.00 that means total deposit collected by NIBL and loan & advances made by it have movement on same direction. Since the 'r' is greater than 6 P.Er, it is significant. Accordingly NABIL and BOK have also high degree positive correlation between deposit and loan and

advances. And for NBL there is low degree negative correlation between deposit & loan advances i.e. -0.49.

Here, value of co-efficient of determination r^2 of NBL, NABIL, NIBL and BOK are 24%, 98%, 100% and 98% respectively

ii) Correlation between Loan and Advances and NPL

This relationship shows the likely pattern of NPL if loan and advances changes. In another word correlation of NPL and Loan and Advances indicates the degree of linear relationship between these two variables which helps us to take decision and forecasting NPL with reference to the loan and advances. Following table exhibits the correlation between Loan and Advances and Non Performing Loan.

Table 23: Correlation between Loan and Advances and NPL

Bank	r	r^2	P.Er.	6 P.Er.
NBL	0.89	0.79	0.06	0.36
NABIL	-0.20	0.04	0.29	1.74
NIBL	0.88	0.77	0.07	0.42
BOK	-0.60	0.36	0.19	1.14

From above table, NBL. NIBL has highly positive correlation i.e. 0.89 and 0.88 that means immersion of NPL could highly expected as the increment in loan and advances. i.e. Loan and advances and NPL have movement on same direction. Since the 'r' is greater than 6 P.Er, it is significant. NABIL have low degree of negative correlation and BOK have moderate degree of negative correlation between loan and advances and NPL. As the 'r' is lesser than 6 P.Er, it is in Here, value of

co-efficient of determination r^2 of NBL, NABIL, NIBL and BOK are 79%, 4%, 77% and 36% respectively significant for both NABIL and BOK.

iii) Correlation between Loan Loss Provision and Non Performing Loan

This relationship shows the degree of linear relationship between the Non Performing Loan and Loan Loss Provision. Following table exhibits the correlation between Loan Loss Provision and Non Performing Loan.

Table 24: Correlation between Loan Loss Provision and NPL

Bank	r	r^2	P.Er.	6 P.Er.
NBL	0.99	0.98	0.01	0.06
NABIL	-0.29	0.08	0.28	1.68
NIBL	0.95	0.90	0.03	0.18
BOK	0.68	0.46	0.16	0.96

Above table shows NBL. NIBL has highly positive correlation i.e. 0.99 and 0.95 that means provision made by these banks highly directed by NPL. BOK has moderately positive correlation between the variable and since the 'r' is greater than 6 P.Er, it is significant for all of them. NABIL have low degree of negative correlation and BOK has moderate degree of negative correlation between loan Here, value of co-efficient of determination r^2 of NBL, NABIL, NIBL and BOK are 98%, 8%, 90% and 46% respectively and advances and NPL. As the 'r' is lesser than 6 P.Er, it is insignificant for BOK.

iv) Correlation between Loan and advances to Net Profit

This relationship shows the likely pattern of net profit while changing occurs in loan and advances. In another word correlation of Loan and Advances to net profit indicates the degree of linear relationship between these two variables which helps us to take decision regarding loan and advances. Following table exhibits the correlation between Loan and Advances tom Net profit.

Table 25: Correlation between Loan and Advances to Net Profit

Bank	r	r ²	P.Er.	6 P.Er.
NBL	0.31	0.10	0.27	1.62
NABIL	0.95	0.90	0.03	0.18
NIBL	1.00	1.00	0.00	0.00
BOK	1.00	1.00	0.00	0.00

Above table shows, NIBL and Bok have perfectly positive correlation i.e. 1.00 that means loan and advances and net profit have movement in same direction. So if loan and advances is increase then it reflects highly on net profit for these banks. BOK has highly positive correlation between the variable and since the 'r' is greater than 6 P.Er, for these three banks it is significant for all of them. NBL have low degree of positive correlation and the 'r' is lesser than 6 P.Er, so it is insignificant for BOK.

Here, value of co-efficient of determination r² of NBL, NABIL, NIBL and BOK are 10%, 90%, 100% and 100% respectively.

v) Correlation between NPL to Net profit

This relationship shows the pattern of Net profit while changing occurs in NPL. In another word correlation of Net profit to NPL indicates the degree of linear relationship between these two variables which helps us to take decision regarding NPL and Net profit by the banks. Following table exhibits the correlation between NPL to Net profit.

Table 26: Correlation between NPL and Net Profit

Bank	r	r ²	P.Er.	6 P.Er.
NBL	0.50	0.25	0.23	1.38
NABIL	-0.31	0.10	0.27	1.62
NIBL	0.84	0.71	0.09	0.54
BOK	-0.66	0.44	0.17	1.02

From the above table NBL has moderate degree positive correlation. NABIL has low degree negative correlation, NIBL has high degree positive correlation and BOK has low degree of negative correlation between NPL and Net profit.

Here, value of co-efficient of determination r² of NBL, NABIL, NIBL and BOK are 25%, 10%, 71% and 44% respectively. The value of 6 P.Er is greater than 'r' of NIBL, so it is insignificant. Other banks have lesser 6 P.Er than 'r', so there is insignificant relation between them.

4.3 Primary Data Analysis

In this table, questionnaires were given to the concerned persons and the received information are tabulated with coding. The data are processed through the use of SPSS programme.

a. Internal Factors that Causes NPL

Table 27: Internal Factors that Cause NPL

Factors	Frequency	Percent	Valid Percent	Cumulative Percent
Credit Policy	9	18.0	18.0	18.0
Bad Intention of Borrower	13	26.0	26.0	44.0
Weak Monitoring	9	18.0	18.0	62.0
Credit Concentration	4	8.0	8.0	70.0
Lack of Portfolio Analysis	4	8.0	8.0	78.0
Weak Valuation of Collateral	11	22.0	22.0	100.0
Total	50	100.0	100.0	

Above table shows that respondent express their view that major internal factor that causing NPL is the bad intention of borrower. 26% of total valid respondent express their view on this cause. Then 22% express for weak valuation, 18% for credit policy and weak monitoring. Last preferred factor are lack of portfolio analysis and credit concentration with 8% of total respondent for each factor.

b. External Factors that Cause NPL

Table 28: External Factors that Cause NPL

Factors	Frequency	Percent	Valid Percent	Cumulative Percent
Law and Order Situation of Country	9	18.0	18.0	18.0
Weak Monitoring of NRB	9	18.0	18.0	36.0
Economic Recession	6	12.0	12.0	48.0
Weak & Weedy Loan Recovery Process	12	24.0	24.0	72.0
Weak Legal Provision	7	14.0	14.0	86.0
External Pressure to Float Loan	7	14.0	14.0	100.0
Total	50	100.0	100.0	

Above table reveals that weak and weedy loan recovery process is the main external factor that causes NPL. Here, 24% of total respondent expressed that it is the main cause. 18% expressed in weak monitoring of NRB and law and order situation of country. 14% expressed in weak legal provision and external pressure to float loan. And least preferred factor is economic recession, which 12% of total respondent expressed.

c. Behaviours that Effect NPL

Table 29: Behaviours that Effect NPL

Factors	Frequency	Percent	Valid Percent	Cumulative Percent
Reduced Attention to the Borrower	5	10.0	10.0	10.0
Increasing Loan Size Increasing Risk	8	16.0	16.0	26.0
Lack Plans to deal with risk	12	24.0	24.0	50.0
Unwillingness to Collect Loan	5	10.0	10.0	60.0
Lack of Good Models	4	8.0	8.0	68.0
Loan Sanctioned with Corruption	3	6.0	6.0	74.0
Weak follow-up weaken the system	13	26.0	26.0	100.0
Total	50	100.0	100.0	

Above table shows the behaviors that effect NPL. Among them 26% respondent expressed that weak and follow up weaken the system. 24% respondent expressed on lack plans to deal with risk and 16% in increasing loan size increase in risk. And 10% of respondent expressed in both reduced attentions to borrowers and for unwillingness to collect by lender. Least respondent i.e. 6% of total respondent express for lack of good models effect NPL.

d. Strategies to Reduced NPL

Table 30: Strategies to Reduced NPL

Factors	Frequency	Percent	Valid Percent	Cumulative Percent
Adopt effective credit policy	6	12.0	12.0	12.0
Effective monitoring & supervision by NRB	6	12.0	12.0	24.0
Forcing Prominent Legal Action to the defaulters	9	18.0	18.0	42.0
Isolating the defaulters socially	11	22.0	22.0	64.0
strictly following the BASEL II accord	10	20.0	20.0	84.0
Minimizing the credit concentration	8	16.0	16.0	100.0
Total	50	100.0	100.0	

Above table shows the strategies that can be followed for reducing NPL. Most of the respondent, 22% of total respondent expressed that isolating the defaulters can be solution for reducing NPL. And similarly, 20% expressed for strict following of Basel-II accord, 18% expressed for forcing prominent legal action to the defaulters, 16% expressed for minimizing the credit concentration and 12% expressed for adopt effective credit policy and for effective monitoring and supervision by NRB.

4.4 Major Findings of the Study

A. Findings from Secondary Data Analysis

i) Relative lending strength measurement of the banks

- All the banks has increasing the deposit collection. The mean deposit collection of NBL stands highest among the banks with 37464.24 millions and then comes NABIL, NIBL and BOK respectively. Variation in deposit is highest in NIBL with 36.57% and lowest ing NBL with 7.82%.
- Except NBL all banks increases the loan and advances. The mean Loan and advances of NIBL is highest with 13955.10 millions and having variation of 41.55% and BOK has lowest with 8136.07 millions and variation of 34.89%.
- Except BOK all banks increases the investments. The mean investments NBL is highest with 14471.23 millions and having variation of 15.03% and BOK has lowest with 2929.38 millions and variation of 13.13%.
- All the banks increase its income from loan and advances but NBL has decreasing since 2006. The mean income from Loan and advances of NIBL still stands highest with 1158.70 millions and variation of 12.66% and BOK has lowest with 611.08 millions and variation of 27.49%.
- NBL has highest NPL outstanding. Beside it all have lower NPL. The mean NPL of NBL is 4874.67 millions with variation of 77.96% and NABIL has lowest NPL 201.58 millions with variation of 26.72%.

- NBL is allocating higher LLP among the banks and rest banks have very little LLP comparing with NBL. Mean LLP of NBL is 5342.96 millions with 65.38% variation and BOK has lowest with 297.08 millions and 16.75% variation.
- NBL has higher net profit till 2006 and then decrease while remaining banks are increasing its profit. Mean net profit of NBL is 822.64 millions which has highest among the banks with variation of 78.75% and BOK has lowest with 218.68 millions with variation of 44.07%.

ii) Ratio Analysis

- Among the four Banks, NBL has decreasing the loan and advances to total assets ratio while remaining has increased from starting year. Mean ratio of NBL stands at 54.04 lowest ratio with 26.77% of variation and BOK stands at 62.68 highest with variation of 7.65%
- All the Banks are decreasing the investments to total assets ratio. And still NBL has higher percentage of this ratio with mean 43.95 and variation of 9.52%. Similarly remaining banks stands in the range of 20% to 30%, and BOK has lowest with 23.71 and variation of 17.48%.
- Except NBL all the banks increases the loan and advances to total deposit ratio. BOK has highest ratio with 72.57 and variation of 6.94% and NBL has 46.26 lowest among the banks with variation of 12.24%.
- NPL to total assets ratio of NBL sharply declines from 2005 but still highest among the banks with mean of 16.78 and variation of 91.41%. Similarly, NABIL maintains lower ratio of 0.92 and variation of 49.92%
- NPL to loan and advances ratio of NBL sharply declines from 2005 but still highest among the banks with mean of 27.38 and variation

of 72.88%. Similarly, NABIL maintains lower ratio of 1.63 and variation of 58.40%

- Three banks maintain very low LLP to loan and advances ratio while NBL has higher ratio with mean of 30.24 and variation of 60.80%. NIBL has lower ratio with 2.22 and variation of 39.67%.
- NABIL seems to be able in safeguarding for future risks on loan and advances with allocating higher provision for loan loss with mean ratio 194.30% and variation of 26.86%. Similarly BOK has lowest mean ratio with 110.30 and variation of 19.67%.
- NABIL and NBL have decreasing return on loan and advances ratio while other two have increased. The mean ratio of NBL is highest with 4.73% and variation of 78.86%. Similarly BOK has lowest ratio with 2.62 and variation of 11.02%.

iii) Co-efficient of correlation analysis

- The main objective of computing correlation between deposit and loan and advances is to find out whether deposit is significantly used as lending purpose or not. All the Banks have high degree positive correlation but NBL has low degree negative correlation. The value of 6P.Er. is greater than 'r' of NBL so it is insignificant and Other banks have lesser 6 P.Er. than 'r' so there is significant relation between deposit and loan and advances.
- Correlation between loan and advances with NPL shows the likely movement of NPL with disbursement of loan. Here, NBL and NIBL have high degree positive correlation with significant relation and NABIL had low degree negative correlation and BOK has moderate degree negative correlation and the relation is insignificant for them as r is lesser than 6 P.Er.
- The purpose of computing coefficient of correlation between Loan loss provision and Non performing loan is to find out whether LLP is

significantly correlated with respective NPL or not. From the analysis NBL and NIBL has higher degree positive correlation and others BOK has low degree positive correlation and NABIL has low degree negative correlation. r is greater than 6P.E. for NBL and NIBL so it has significant relationship and r is lesser than 6P.E. for NABIL and BOK so it has insignificant.

- The purpose of computing coefficient of correlation between Loan and advances to Net profit is to find out whether Loan and advances is significantly correlated with respective Net profit or not. From the analysis all the banks have high degree positive correlation except NBL which has low degree positive correlation. r is greater than 6P.E. for NABIL, NIBL and BOK so it has significant relationship and r is lesser than 6P.E. for NBL so it has insignificant relationship.
- NBL and NIBL has positive correlation and NABIL and BOK has negative correlation.

B. Findings from Primary Data Analysis

- Major internal factor causing the NPL is the bad intention of the borrower and least preferred cause is credit concentration and lack of portfolio analysis.
- Major external factor causing the NPL is the weak and weedy loan recovery process and least preferred is economic recession.
- Lack plans to deal with risk is the major behavior that effect NPL and loan sanctioned with corruption is least preferred.
- NPL can be reduced by isolating the defaulters socially while effective monitoring by NRB and effective credit policy are not major strategies that can reduce NPL.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter is the important chapter for the research because this chapter is the extracts of all the previously discussed chapters. This chapter consists of mainly three parts: Summary, conclusion and recommendation. In summary part, revision or summary of all four chapters is made. In conclusion part, the result from the research is summed up and in recommendation part, suggestion and recommendation is made based on the result and experience of thesis. Recommendation is made for improving the present situation to the concerned parties as well as for further research.

5.1 Summary

Nepal is orienting towards the development. Natural resources of the country remain unused and unutilized due to the lack of financing and technical know-how. In order to mobilize the limited capital, the government of Nepal adopted the liberalization policy. But the areas of investment are unlimited. Investment is not the end of story; the invested funds are needed to be settled in a timely fashion so that the fund again gets its way to be flooded down in the economic process either by re-investment or by immediate consumption.

Financial intermediaries mobilize the fund by collecting the scattered resources from the savers and provide the collected funds to the users. The intermediaries of financial systems sustain by lending the

fund and getting interest. It means that such organization survive by making profit through the interest paid by the borrower. But when these interests as well as the principal are not collected the institution may return to vague. So every institution is aware for getting timely return of the fund invested. At this context this thesis comprises the study of different variables effecting the loan and Non performing loan. of the organization

Up to the study period there are 25 commercial banks, 58 development banks, 78 finance companies, 12 micro credit development banks, 16 saving and credit co-operatives, and other 46 non-government financial organizations established within the financial system of Nepal.

After the data reveal in past shows the larger amount of NPL exist in the financial institution, NRB and Nepal government has taken vigorous action to overcome it by restructuring the banks, giving most up-to-date directives in this issue and even takeover management by NRB itself. Along this the recent economic crisis started from US shows that every financial institution, supervising agent and government should watch-over consistently on Nepalese financial sector. In this sense, the focal point of the study is to identify the status of Non Performing Loan (NPL), the major reasons of non performing loan, specific areas where loan deflections are common place and some ways non performing loans, its causes, consequences and some learning to control it in present economic structure.

For this purpose brief introduction about Non performing loan, sample organizations, statement of problem, rationale of the study, research

methodology, and so on are made in the first chapter of this dissertation.

In second chapter, theoretical review as well as review of previous research has been made. Different views about lending, Non performing loan and present scenario in global context are reviewed on that chapter. For examining the effect on NPL various theories developed by experts are explained; some of them are Hawthorne effect, Petroski effect, Jurassic park effect and so on.

Research design used is mainly analytical. Out of the total financial system, four commercial banks are chosen for sample purpose; secondary as well as primary data were used for the analysis. These all are made on third chapter.

Lastly on the fourth chapter, collected data are presented in tabular and graphic form and analyzed using various financial tools like ratio analysis and statistical tools like mean, standard deviation, correlation coefficient.

5.2 Conclusion

From the presentation and analysis of data; using different financial tools and statistical tools and from major findings of the study the conclusions of the study can be listed as follows:

- ❖ Deposit collections of the banks are increasing year by year and NBL has higher mean collection during the study period among

them. And in utilizing aspect of the deposit by turning them to the credit NBL stands at last while NABIL and NIBL are the best and then comes BOK

- ❖ NBL has highest amount used for investment shows the tendency of escaping from the higher income generating credit option. NABIL and NIBL are increasing the fund in investments but simultaneously they are increasing loan and advances, so it could be said that they are implementing better credit policy. And BOK is conformist in using fund in investments.
- ❖ As NABIL, NIBL and BOK are increasing its fund in loan and advances it is reflecting higher income from it but NBL has lower.
- ❖ Beside the increasing credit by the banks they are able to reduce NPL by substantial amount but still NBL has higher NPL among them which should be minimized to the tolerable standard. And with NPL outstanding the LLP is also decreasing in whole market; here all the banks have safeguard for future risk by providing higher LLP but NBL has contrary. With higher LLP, NBL has low profit and beside it all the banks are increasing net profit.
- ❖ Ratio of loan and advances to total assets and loan and advances to deposit both are increasing for the banks but it is adverse for NBL. In total volume of asset the part of loan and advances are increasing which is shown by the increasing its ratio but NBL has difference and the banks are decreasing its investment part.
- ❖ NPL to total Assets ratio and NPL to loan and advances ratio both are in decreasing trend for all the banks. NBL has massively decreased this ration in 2006 but still stand higher among other.

- ❖ With decreasing NPL, all the banks has decreasing LLP to loan and advances ratio. Similarly as NPL decreased, NBL is able to decrease this ratio massively in 2006
- ❖ Data reveals NABIL is highly safeguard with future risk with higher LLP to NPL ratio and other stand lower than it with NBL in lowest.
- ❖ Due to higher provision required for NPL, NBL has low Net profit to loan and advances ratio which was sharply decline from 2005
- ❖ The correlation between deposit with loan and advances is found to be high positive correlation and significant for all the banks except for NBL which has insignificance relation. So with the increase in deposit there is increment in loan and advances
- ❖ Correlation between loan and advances is found high degree positive correlation which is significant so as the loan and advances increase there is increment in NPL.
- ❖ There is high degree positive correlation between LLP and NPL so as the NPL is increased there is highly increment in LLP.
- ❖ NBL and NIBL have positive correlation and NABIL and BOK has negative correlation of NPL and Net profit.
- ❖ Major internal factor causing the NPL is the bad intention of the borrower and least preferred cause is credit concentration and lack of portfolio analysis.
- ❖ Major external factor causing the NPL is the weak and weedy loan recovery process and least preferred is economic recession.
- ❖ Lack plans to deal with risk is the major behavior that effect NPL and loan sanctioned with corruption is least preferred.
- ❖ NPL can be reduced by isolating the defaulters socially while effective monitoring by NRB and effective credit policy are not major strategies that can reduce NPL.

5.3 Recommendations

Based on the analysis, interpretation & conclusions, certain recommendation can be made here so that the concerned authorities, future researchers, academicians, bankers can get some insights on the present conditions on above topics. It is considered that this research will fruitful for them to improve the present condition as well as for further research. The major recommendations after this study are:

- ❖ Main function of the commercial bank is the creation of credit through the deposit collected from savers, which enhance in development of country by generating capital so with the deposit collected by the banks it should maximize in disbursement in loan & advances and in above four banks NBL should focus in it beside which, it has increasing investments.
- ❖ Non performing loan eat away the profit of bank through several provisions required to tackle future risk. So before sanctioning the loan several factors shall be analyze to safeguard in future risk.
- ❖ Bad intention of borrower causes NPL so the bank should examine the details of borrower and there should be sufficient amount of collateral and it should be managed properly with the regular check of the value, ownership, physical condition and other legal status to fulfill in the case of default.
- ❖ Government has established Debt Recovery Tribunal (DRT) for assessing NPA. But with volume of the NPA outstanding timely read out of the decisions is always challenged which disintegrate the effective legal action; these should be overcome by Government and DRT.

- ❖ NRB is the supervising agent for the Commercial Bank in Nepal. NRB shall direct latest modified regulation with global reviews in solution for NPL. And stand in dogwatch position to minimize it.
- ❖ Isolation of defaulters by different means such as restriction in public post, etc as well as prominent legal action will help on overcoming NPL as reducing it
- ❖ Credit risk which includes default risk, exposure risk, concentration risk, transaction risk and migration risk can be overcome by maintaining standardized policy by the banks according to Basel II accord, and carryout Prompt Corrective Action (PCA) which will help on overcoming NPL.

ANNEX-3

Calculation of Correlation Coefficient (r)

Correlation between Non Performing Loan and Total Loan and Advances of NBL

Fiscal Year	Loan and Advances (X)	NPL (Y)	x=X-	x=X-	x ²	y ²	xy
2004	19108.00	9640.08	1893.20	4765.41	3584206.24	22709113.41	9021870.43
2005	17456.00	8372.00	241.20	3497.33	58177.44	12231303.14	843555.51
2006	16867.00	2262.18	-347.80	-2612.49	120964.84	6825114.45	908624.72
2007	16072.20	1856.00	-1142.60	-3018.67	1305534.76	9112380.64	3449134.63
2008	16570.80	2243.10	-33785.60	-2631.57	1141466767.36	6925171.19	88909238.96
Total	86074.00	24373.36			1146535650.64	57803082.83	103132424.25
Mean	17214.80	4874.67					
Correlation Coefficient	0.89						

Correlation between Non Performing Loan and Total Loan and Advances of NABIL

Fiscal Year	Loan and Advances (X)	NPL (Y)	x=X-	x=X-	x ²	y ²	xy
2004	8635.10	286.68	-5316.21	85.10	28262088.76	7242.35	-452420.10
2005	11078.00	144.51	-2873.31	-57.07	8255910.36	3256.76	163974.06
2006	13021.30	182.60	-930.01	-18.98	864918.60	360.16	17649.73
2007	15657.10	178.30	1705.79	-23.28	2909719.52	541.87	-39707.38
2008	21365.05	215.80	-35316.36	14.22	1247245283.65	202.27	-502269.27
Total	69756.55	1007.89			1287537920.89	11603.40	-812772.97
Mean	13951.31	201.58					
Correlation Coefficient	-0.20						

Correlation between Non Performing Loan and Total Loan and Advances of NIBL

Fiscal Year	Loan and Advances (X)	NPL (Y)	x=X-	x=X-	x ²	y ²	xy
2004	7174.40	181.44	-6780.70	-125.03	45977892.49	15633.50	847818.04
2005	10295.40	280.87	-3659.70	-25.60	13393404.09	655.56	93702.96
2006	13007.20	272.49	-947.90	-33.98	898514.41	1154.91	32213.43

2007	17482.00	421.97	3526.90	115.50	12439023.61	13339.33	407342.84
2008	21816.50	375.60	-35771.60	69.13	1279607366.56	4778.40	-2472747.62
Total	69775.50	1532.37			1352316201.16	35561.71	-1091670.34
Mean	13955.10	306.47					
Correlation Coefficient	0.88						

Correlation between Non Performing Loan and Total Loan and Advances of BOK

Fiscal Year	Loan and Advances (X)	NPL (Y)	x=X-	x=X-	x ²	y ²	xy
2004	5646.70	399.94	-2489.37	121.49	6196943.08	14758.85	-302423.12
2005	5912.58	308.51	-2223.49	30.06	4943889.99	903.36	-66829.10
2006	7259.08	203.62	-876.99	-74.83	769104.44	5600.13	65628.37
2007	9399.33	243.30	1263.26	-35.15	1595835.93	1235.80	-44408.78
2008	12462.64	236.90	-20598.71	-41.55	424306688.87	1726.73	855958.63
Total	40680.33	1392.27			437812462.33	24224.88	507926.00
Mean	8136.07	278.45					
Correlation Coefficient	-0.60						

Correlation between Non Performing Loan and Net Profit of NBL

Fiscal Year	Net Profit (X)	NPL (Y)	x=X-	x=X-	x ²	y ²	xy
2004	710.00	9640.08	-112.64	4765.41	12687.77	22709113.41	-536775.56
2005	1730.00	8372.00	907.36	3497.33	823302.17	12231303.14	3173335.53
2006	1207.00	2262.18	384.36	-2612.49	147732.61	6825114.45	-1004137.43
2007	227.00	1856.00	-595.64	-3018.67	354787.01	9112380.64	1798041.79
2008	239.20	2243.10	-1061.84	-2631.57	1127504.19	6925171.19	2794308.41
Total	4113.20	24373.36			2466013.74	57803082.83	6224772.75
Mean	822.64	4874.67					
Correlation Coefficient	0.50						

Correlation between Non Performing Loan and Net Profit of NABIL

Fiscal Year	Net Profit (X)	NPL (Y)	x=X-	x=X-	x ²	y ²	xy
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2004	455.31	286.68	-150.65	85.10	22696.63	7242.35	-12820.96
2005	518.64	144.51	-87.32	-57.07	7625.48	3256.76	4983.41
2006	635.26	182.60	29.30	-18.98	858.26	360.16	-555.98
2007	673.96	178.30	68.00	-23.28	4623.46	541.87	-1582.81
2008	746.65	215.80	-1352.61	14.22	1829564.63	202.27	-19236.88
Total	3029.82	1007.89			1865368.45	11603.40	-29213.22
Mean	605.96	201.58					
Correlation Coefficient	-0.31						

Correlation between Non Performing Loan and Net Profit of NIBL

Fiscal Year	Net Profit (X)	NPL (Y)	x=X-	x=X-	x ²	y ²	xy
2004	152.67	181.44	-234.03	-125.03	54769.10	15633.50	29261.46
2005	232.15	280.87	-154.55	-25.60	23885.08	655.56	3957.05
2006	350.54	272.49	-36.16	-33.98	1307.40	1154.91	1228.79
2007	501.40	421.97	114.70	115.50	13156.55	13339.33	13247.62
2008	696.73	375.60	-1083.43	69.13	1173816.23	4778.40	-74893.04
Total	1933.49	1532.37			1266934.37	35561.71	-27198.12
Mean	386.70	306.47					
Correlation Coefficient	0.84						

Correlation between Non Performing Loan and Net Profit of BOK

Fiscal Year	Net Profit (X)	NPL (Y)	x=X-	x=X-	x ²	y ²	xy
2004	127.50	399.94	-91.18	121.49	8313.79	14758.85	-11077.09
2005	139.50	308.51	-79.18	30.06	6269.47	903.36	-2379.83
2006	202.50	203.62	-16.18	-74.83	261.79	5600.13	1210.81
2007	262.40	243.30	43.72	-35.15	1911.44	1235.80	-1536.93
2008	361.50	236.90	-580.18	-41.55	336608.83	1726.73	24108.80
Total	1093.40	1392.27			353365.33	24224.88	10325.75
Mean	218.68	278.45					
Correlation Coefficient	-0.66						

Correlation between Non Performing Loan and Loan Loss Provision of NBL

Fiscal Year	Loan Loss Provision (X)	NPL (Y)	x=X-	x=X-	x ²	y ²	xy
2004	9056.00	9640.08	3713.04	4765.41	13786680.89	22709113.41	17694160.05
2005	9249.89	8372.00	3906.93	3497.33	15264117.65	12231303.14	13663822.68
2006	3269.60	2262.18	-2073.36	-2612.49	4298813.40	6825114.45	5416631.19
2007	2376.30	1856.00	-2966.66	-3018.67	8801059.69	9112380.64	8955367.44
2008	2763.00	2243.10	-8105.96	-2631.57	65706555.10	6925171.19	21331412.11
Total	26714.79	24373.36			107857226.73	57803082.83	67061393.46
Mean	5342.96	4874.67					

Correlation Coefficient	0.99					
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Correlation between Non Performing Loan and Loan Loss Provision of NABIL

Fiscal Year	Loan Loss Provision (X)	NPL (Y)	x=X-	x=X-	x ²	y ²	xy
2004	358.66	286.68	-11.88	85.10	141.23	7242.35	-1011.35
2005	392.00	144.51	21.46	-57.07	460.36	3256.76	-1224.45
2006	352.90	182.60	-17.64	-18.98	311.31	360.16	334.85
2007	356.30	178.30	-14.24	-23.28	202.89	541.87	331.57
2008	392.86	215.80	-763.40	14.22	582785.67	202.27	-10857.13
Total	1852.72	1007.89			583901.46	11603.40	-12426.52
Mean	370.54	201.58					
Correlation Coefficient	-0.29						

Correlation between Non Performing Loan and Loan Loss Provision of NIBL

Fiscal Year	Loan Loss Provision (X)	NPL (Y)	x=X-	x=X-	x ²	y ²	xy
2004	206.30	181.44	-168.48	-125.03	28386.86	15633.50	21066.23
2005	325.16	280.87	-49.62	-25.60	2462.54	655.56	1270.57
2006	327.11	272.49	-47.67	-33.98	2272.81	1154.91	1620.15
2007	482.70	421.97	107.92	115.50	11645.86	13339.33	12463.87
2008	532.65	375.60	-907.43	69.13	823436.46	4778.40	-62727.28
Total	1873.92	1532.37			868204.54	35561.71	-26306.46
Mean	374.78	306.47					
Correlation Coefficient	0.95						

Correlation between Non Performing Loan and Loan Loss Provision of BOK

Fiscal Year	Loan Loss Provision (X)	NPL (Y)	x=X-	x=X-	x ²	y ²	xy
2004	361.60	399.94	64.52	121.49	4162.83	14758.85	7838.28
2005	269.70	308.51	-27.38	30.06	749.66	903.36	-822.93
2006	236.20	203.62	-60.88	-74.83	3706.37	5600.13	4555.89
2007	286.50	243.30	-10.58	-35.15	111.94	1235.80	371.93
2008	331.40	236.90	-628.48	-41.55	394987.11	1726.73	26115.86

Total	1485.40	1392.27			403717.92	24224.88	38059.02
Mean	297.08	278.45					
Correlation Coefficient	0.68						

Correlation between Loan and Advances to Deposit of NBL

Fiscal Year	Deposit (X)	Loan and Advances (Y)	x=X-	x=X-	x ²	y ²	xy
2004	36288.50	19108.00	-1175.74	1893.20	1382364.55	3584206.24	-2225910.97
2005	34744.20	17456.00	-2720.04	241.20	7398617.60	58177.44	-656073.65
2006	35444.90	16867.00	-2019.34	-347.80	4077734.04	120964.84	702326.45
2007	39014.20	16072.20	1549.96	-1142.60	2402376.00	1305534.76	-1770984.30
2008	41829.40	16570.80	-79293.64	-644.00	6287481344.45	414736.00	51065104.16
Total	187321.20	86074.00			6302742436.64	5483619.28	47114461.70
Mean	37464.24	17214.80					
Correlation Coefficient	-0.49						

Correlation between Loan and Advances to Deposit of NABIL

Fiscal Year	Deposit (X)	Loan and Advances (Y)	x=X-	x=X-	x ²	y ²	xy
2004	14098.00	8635.10	-6560.13	-5316.21	43035305.62	28262088.76	34875028.71
2005	14586.80	11078.00	-6071.33	-2873.31	36861047.97	8255910.36	17444813.20
2006	19348.40	13021.30	-1309.73	-930.01	1715392.67	864918.60	1218062.00
2007	23342.40	15657.10	2684.27	1705.79	7205305.43	2909719.52	4578800.92
2008	31915.05	21365.05	-52573.18	7413.74	2763939255.31	54963540.79	#####
Total	103290.65	69756.55			2852756307.00	95256178.03	#####
Mean	20658.13	13951.31					
Correlation Coefficient	0.99						

Correlation between Loan and Advances to Deposit of NIBL

Fiscal Year	Deposit (X)	Loan and Advances (Y)	x=X-	x=X-	x ²	y ²	xy
2004	11706.30	7174.40	-8017.86	-6780.70	64286078.98	45977892.49	54366703.30
2005	14254.80	10295.40	-5469.36	-3659.70	29913898.81	13393404.09	20016216.79
2006	18927.30	13007.20	-796.86	-947.90	634985.86	898514.41	755343.59

2007	24488.90	17482.00	4764.74	3526.90	22702747.27	12439023.61	16804761.51
2008	29243.50	21816.50	-48967.66	7861.40	2397831725.88	61801609.96	#####
Total	98620.80	69775.50			2515369436.79	134510444.56	#####
Mean	19724.16	13955.10					
Correlation Coefficient	1.00						

Correlation between Loan and Advances to Deposit of BOK

Fiscal Year	Deposit (X)	Loan and Advances (Y)	x=X-	x=X-	x ²	y ²	xy
2004	7741.65	5646.70	-3336.84	-2489.37	11134474.49	6196943.08	8306606.09
2005	8942.75	5912.58	-2135.74	-2223.49	4561368.26	4943889.99	4748779.10
2006	10485.36	7259.08	-593.13	-876.99	351798.45	769104.44	520163.20
2007	12388.93	9399.33	1310.44	1263.26	1717263.48	1595835.93	1655436.73
2008	15833.74	12462.64	-26912.23	4326.57	724267908.28	18719242.58	#####
Total	55392.43	40680.33			742032812.96	32225016.03	#####
Mean	11078.49	8136.07					
Correlation Coefficient	0.99						

Correlation between Loan and Advances to Net Profit of NBL

Fiscal Year	Loan and Advances (X)	Net Profit (Y)	x=X-	x=X-	x ²	y ²	xy
2004	19108.00	710.00	1893.20	-112.64	3584206.24	12687.77	-213250.05
2005	17456.00	1730.00	241.20	907.36	58177.44	823302.17	218855.23
2006	16867.00	1207.00	-347.80	384.36	120964.84	147732.61	-133680.41
2007	16072.20	227.00	-1142.60	-595.64	1305534.76	354787.01	680578.26
2008	16570.80	239.20	-33785.60	-583.44	1141466767.36	340402.23	19711870.46
Total	86074.00	4113.20			1146535650.64	1678911.79	20264373.50
Mean	17214.80	822.64					
Correlation Coefficient	0.31						

Correlation between Loan and Advances to Net Profit of NABIL

Fiscal Year	Loan and Advances (X)	Net Profit (Y)	x=X-	x=X-	x^2	y^2	xy
2004	8635.10	455.31	-5316.21	-150.65	28262088.76	22696.63	800908.30
2005	11078.00	518.64	-2873.31	-87.32	8255910.36	7625.48	250908.92
2006	13021.30	635.26	-930.01	29.30	864918.60	858.26	-27245.57
2007	15657.10	673.96	1705.79	68.00	2909719.52	4623.46	115986.90
2008	21365.05	746.65	-35316.36	140.69	1247245283.65	19792.55	-4968517.42
Total	69756.55	3029.82			1287537920.89	55596.37	-3827958.88
Mean	13951.31	605.96					
Correlation Coefficient	0.95						

Correlation between Loan and Advances to Net Profit of NIBL

Fiscal Year	Loan and Advances (X)	Net Profit (Y)	x=X-	x=X-	x^2	y^2	xy
2004	7174.40	152.67	-6780.70	-234.03	45977892.49	54769.10	1586873.66
2005	10295.40	232.15	-3659.70	-154.55	13393404.09	23885.08	565599.32
2006	13007.20	350.54	-947.90	-36.16	898514.41	1307.40	34274.17
2007	17482.00	501.40	3526.90	114.70	12439023.61	13156.55	404542.48
2008	21816.50	696.73	-35771.60	310.03	1279607366.56	96119.84	-11090340.69
Total	69775.50	1933.49			1352316201.16	189237.98	-8499051.06
Mean	13955.10	386.70					
Correlation Coefficient	1.00						

Correlation between Loan and Advances to Net Profit of BOK

Fiscal Year	Loan and Advances (X)	Net Profit (Y)	x=X-	x=X-	x^2	y^2	xy
2004	5646.70	127.50	-2489.37	-91.18	6196943.08	8313.79	226980.39
2005	5912.58	139.50	-2223.49	-79.18	4943889.99	6269.47	176055.62
2006	7259.08	202.50	-876.99	-16.18	769104.44	261.79	14189.63
2007	9399.33	262.40	1263.26	43.72	1595835.93	1911.44	55229.90
2008	12462.64	361.50	-20598.71	142.82	424306688.87	20397.55	-2941907.19
Total	40680.33	1093.40			437812462.33	37154.05	-2469451.64
Mean	8136.07	218.68					

Correlation Coefficient	1.00					
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ANNEX - 4
SUPPLEMENTARY QUESTIONNAIRE

Name of the respondent :
Position :
Department :
Date:

What are the internal factors that cause Non Performing Loan (NPL)?

Please tick mark (√) one of the following factors according to their significance in your organization.

Factors	Mark
Lack of Credit policy	
Bad intention of borrower	
Weak monitoring by bank	
Credit concentration	
Lack of portfolio analysis	
Poor system in valuation of collateral	

What are the external factors that cause Non Performing Loan (NPL)?

Please tick mark (√) one of the following factors according to their significance in your organization.

Factors	Mark
Law and order situation of country	
Weak monitoring & supervision of Central bank (NRB)	
Economic and industrial recession	
Weak and weedy loan recovery procedure	
Weak legal provision	
External pressure to float loan	

What may be the behaviours that effect Non Performing Loan (NPL)?

Please tick mark (✓) one of the following factors according to their significance in your organization.

Factors	Mark
Reduced attention to borrower	
Increasing loan size increasing risk	
Lender's lack plans to deal with risk	
Lender is unwilling to collect	
Lack of good models	
Loan sanctioned by corruption	
Weak follow up weaken the system	

What are the strategies by which the Non Performing Loan (NPL) can be reduced?

Please tick mark (✓) one of the following factors according to their significance in your organization.

Factors	Mark
Applying effective credit policy by banks	
Effective monitoring & supervision by Central bank (NRB)	
Forcing prominent legal action to the defaulters	
Isolating the defaulters socially	
Strictly following the Basel-II Accord	
Minimizing the credit concentration	

-----Thank you-----