

**NON-PERFORMING LOAN MANAGEMENT: A CASE STUDY OF NABIL  
BANK LIMITED**

**A THESIS**

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## RECOMMENDATION

This is to certify that the thesis

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Entitled:

### **NON - PERFORMING LOAN MANAGEMENT: A CASE STUDY OF NABIL BANK LIMITED**

*Has been prepared as approved by this department in the prescribed format of the Faculty of Management. This thesis is forwarded for examination.*

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# VIVA VOCE SHEET

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## **DECLARATION**

I hereby declare that the work reported in the thesis entitled, “**Non-Performing Loan Management: A Case Study of Nabil Bank Limited**” submitted to the Office of the Dean, Faculty of Management, Tribhuvan University, is my original work-carried out for the partial fulfillment of the requirements of Master of Business Studies(MBS) under the supervision of Prof. Snehalata Kafle and Pitri Raj Adhikari of Shanker Dev Campus, Putalisadak, Kathmandu.

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## ABBREVIATIONS

AMC	Assets Management Company
ATM	Automatic Teller Machine
BFS	Board for Financial Supervision
BIS	Bank of International supervision
B.S	Bikram sambat
CAGR	Compound Annual Growth Rater
CD	Credit deposit
CEO	Chief Executives Officer
CO	Company
CPG	Credit Policies Guidelines
CRM	Credit Risk Management
CV	Coefficient of Variation
CZBL	Citizen International Bank Ltd
FY	Fiscal year
GBL	Global Bank Ltd.
GDP	Gross Domestic Product
i.e.	that is
IMF	International Monetary Fund
KBL	Kumari Bank Ltd.
Ktm.	Kathmandu
LLP	Loan loss provision
Ltd.	Limited
MBL	Machhapuchre Bank Ltd
MBS	Masters' of Business Studies
MPS	Market Price of Share
NABIL	Nabil Bank Limited
NBL	Nepal Bangladesh Bank
NEPSE	Nepal Stock Exchange
NPA	Non performing Asset
NPL	Non Performing Loan
NRB	Nepal Rastra Bank

PBL	Prime Bank Ltd.
P.E	Probable Error
ROI	Return on Investment
SBL	Siddhartha Bank Ltd.
SCBL	Standard Chartered Bank Ltd.
SCBNL	Standard Chartered Bank Nepal Ltd
S.D	Standard deviation
SDC	Shanker Dev Campus
SRM	State Resolution Mapping
T.U.	Tribhuvan University
%	Percentage
&	And

# CHAPTER– I

## INTRODUCTION

### 1.1 Background of the study

Extension of credit is one of the major activities of banks and financial institutions. Credit represents a major segment of the assets portfolio of bank and financial institution. However, increasing NPLs have a direct impact on banks profitability as banks are barred to book income on such accounts and at the same time banks are forced to make provision on such assets as per the Central Bank guidelines. Also, with increasing deposits made by the public in the banking system, the banking industry cannot afford defaults by borrowers since NPLs affects the repayment capacity of banks. Further, central Bank successfully creates excess liquidity in the system through various rate cuts and banks fail to utilize this benefit to its advantage due to the fear of burgeoning non-performing loans.

The primary function of a bank is to lend funds as loans to various sectors such as agriculture, industry, personal loans, housing loans, etc. In recent times, banks have become very cautious in extending loans, due to mounting non-performing loans. An NPL is defined as a loan asset, which has ceased to generate any income for a bank whether in the form of interest or principal repayment. As per the prudential norms suggested by the Nepal Rastra Bank, a bank cannot book interest on an NPL on accrual basis. In other words, such interest income can be booked only when it has been actually received.

NPL account not only reduces profitability of banks by provisioning in the profit and loss account, but their carrying cost is also increased which results in excess and avoidable management attention. Apart from this, a high level of NPL also puts strain on a bank's net worth because banks are under pressure to maintain a desired level of capital adequacy; and in the absence of comfortable profit level, banks eventually look towards their internal financial strength to fulfill the norms thereby slowly eroding the net worth.

The commercial banks' shares dominate the stock market of Nepal. However, there is need to analyze commercial banks' performance before investment in their stocks. In Nepalese banking sector that Nepal Development Bank liquidated depositors had almost lost their hard earned savings. A number of financial institutions including Capital Merchant Banking and Finance Company Ltd. and Vibor Bikash Bank got into trouble. Nonperforming investment

on the real estate has been cited as the major cause of the downfall of the bank. There are lessons to learn from the recession of 2007-08 that was mainly caused by realty crash following the heavy investment in this unproductive sector. The level of nonperforming Loans (NPLs) of commercial banks is increasing in recent times. The downturn in realty and housing sector has been ascribed to the augmentation in NPL of the commercial banks. NPLs are a vital yardstick to gauge the quality of loans for any bank or financial institution. It all showed the need to check Nepalese banks' health in terms of whether their loans are truly performing or not. The structure of financial assets/ liabilities shows that the commercial bank alone holds more than 80 percent of the total assets and liabilities of the country's financial system.

There is an increased need for the banks to become very cautious in extending loans so as to keep their Non-performing loans (NPLs) at the minimum. NPLs reflect the health of the financial system affecting the profitability. A non-performing loan is any obligation in which interest and the principal payments are more than 90 days overdue, more than 90 days worth of interest has been refinanced, capitalized or delayed by agreement or if payments are less than 90 days overdue (IMF, 2009). Non-performing loans refers to that portion of loans of a financial institution which have been defaulted in payment of interest thereupon and the principal amount within specified time limit. It is the loans made by a bank or financial company on which interest payments and principal repayments are not being made on time. If the credit allowed by banks and financial institutions turns bad, it creates NPL. NPL percentage in assets portfolio shows health of a bank. The performance of any financial institution is greatly measured with the coverage of NPL in that particular institution. Since the prime sources of income for the bank are generated through income from loan and advances, increase in non-performing loans may lead bank in the verge of collapse. The loan and advances which is overdue for 3 months or more should be treated as NPL.

The purpose of loans is to support the financial needs of the borrowers according to their proposed businesses or specific needs. If the bank doesn't see any fruitful investment in the proposed plan, they will only simply reject it. However, due to the personal greediness, the individuals draw assumptions and deceive the banks. On the other hand, the bank is incapacitated to extend its investigation to ensure that all the information they receive are true and legal.

## **1.2 Introduction to Nabil Bank Ltd.**

Established as a first joint venture bank on 12th July 1984, with the key objective of extending international standard of banking services to all sectors of the society, Nabil Bank has successfully completed 29 years of operations with tremendous growth in business volume, profits and geographical reach.

The bank became very popular within very short period of time. It is providing modern banking services to its customer. Its service is claimed to be of international standard. It has helped general people to know about the banking system. It plays significant role in the development of Nepalese economy. Nabil bank is highly success to create banking habit among the Nepalese people. The bank not only holds its capital but also holds the deposits of millions of people, which make responsible to the society. This bank became the bank of the year (2004) it is no more joint venture bank since Dubai Bank Limited has already withdrawn its share.

It is fully equipped with modern technology which includes ATMs, credit cards, state-of-art, world-renowned software from Infosys Technologies System (FINACLE), Internet banking system and Tele-banking system. Currently, Nabil has its corporate office at Teendhara, Kathmandu and all its branches are integrated into the corporate office. Nabil serves all from the grassroots to colossal corporate bodies, covering all the stratum of society through its 750 permanent employees and deals with over 170 correspondent banks across the globe. Bank has provide uninterrupted services through their 51 points of representations, network of 79 ATMs service outlets and 24 hours of a day and 365 days of a year through extended banking counters. Bank is serving and care for its customers residing in different locations from Far East to Far West (Mechi to Mahakali) covering diverse socioeconomic and multiethnic communities.

Following is the glimpse of what Nabil has achieved over the years:

**Table: 1.1****Financial data of Nabil Bank (Figures in millions Nepalese rupees)***(Rs. in Million)*

Major Indicators	As at Mid July				
	1991	1996	2001	2006	2013
Net Worth	129.20	605.54	1,140.95	1,874.99	7,662.17
Deposits	1,338.42	7,089.47	15,839.01	19,347.40	58,996.07
Loans & Advances	862.10	4,316.49	8,324.44	13,278.78	45,455.45
Investments	217.75	2,760.98	8,226.86	7,915.56	18,698.21
Total Asset	1,678.46	8,587.68	18,808.89	22,329.97	72,409.02
Profit After Tax	28.91	173.91	291.38	635.26	1,112.32
Capital Adequacy Ratio	11.60%	11.00%	10.46%	12.31%	13.17%
Points of Representation	6.00	13.00	17.00	18.00	51.00
Cash Dividend(Cumulative)	20.00	167.80	698.00	1,952.16	

*Source: Annual Reports***1.3 Statement of Problem**

Like any other business, success of banking is based on profit and quality of asset it possesses. Even though bank serves social objective through its priority sector lending, mass branch networks and employment generation, maintaining asset quality and profitability is critical for banks survival and growth. As we know bank collects deposit from the general public and invests in the same funds in the different sectors of the society. It also plays prominent role in the development of the nation. By mobilizing the resources it creates employment opportunities in the country. Ultimately the overall success of the bank is highly rely/depend on the mobilization of the resources and which aims to generate the profit. Moreover, the it pays revenues to the government as well. Since some years back Nabil Bank Limited is paying the highest tax to the government. On the other hand, if the bank fails to manage the liquidity it will have adverse effect on the overall performance of the bank. Consequently, it will reduce the net profit of the bank by putting the same loan in the bad debts. At this juncture, this research work is trying to find the major causes and effects of

NPAs. A major threat to banking sector is prevalence of Non-Performing Loans (NPLs). NPL represent bad loans, the borrowers of which failed to satisfy their repayment obligations.

NPLs not only stop the banks from generating income but also require them to allocate funds as a provision that reduces the profit. Overdue ageing more than three months, six months and one year requires provisioning of 25 percent, 50 percent and 100 percent of the outstanding loans and advances respectively as per the NRB directives. Similarly, borrowing cost of resources locked in NPL and opportunity loss due in none recycling of funds are other effects. It also increases the administrative and recovery costs and legal cost as well. Effect on employee morale and decision-making, lower image and rating of bank and reduced investors confidence are some of the main effects. The evaluation of the banks' performance is essential to understand their performance. In this connection, this study attempts to address the following issues:

- ) What is the exposure of nonperforming loans of Nabil Bank?
- ) How are the nonperforming loans related with the total assets and loans?
- ) Is there any relationships between total loans and net profits of the bank?
- ) Has the bank sufficiently been provisioning against its nonperforming loans?
- ) What would be the future scenarios of the bank it terms of loans, profits, NPLs, provisions etc?

#### **1.4 Objective of the Study**

The major objective of the study is to analyze the nonperforming loans of Nabil Bank Limited and figure out the possible causes behind it. Besides, the study also attempts to fulfill the following objectives:

- ) To analyze the level of non-performing loans of Nabil Bank Ltd.
- ) To make an assessment of loan loss provision made against the NPL by Nabil Bank Ltd.
- ) To examine the relationships between the NPL and profitability, assets and business turnover of the bank.
- ) To evaluate the impact of non-performing loans in the performance in Nabil Bank.
- ) To provide recommendation on reducing the level of NPA cased on analysis and findings of the study.

## **1.5 Significant of the Study**

This study mainly focused on issues related to non-performing loans of Nabil Bank Ltd. Several ratios like loans and advances to total assets, loan and advances to total deposit, non-performing loans to loans and advances, provision held against non-performing loans were used for performance evaluation. It also shows the effects on profitability of Nabil bank and related NRB directives, concerning towards the rendering loan and loan loss provision. A study like this can attempt to guide the future of the selected bank and the industry based on current trends. The outcomes analyzed from this would be beneficial to various sections such as:

- ) Banks: This study definitely benefits the bank in a way that directs it as to which sector should be given priority for lending money.
- ) Further Researchers: The major beneficiaries from the project would be the researchers themselves as this study would enhance their knowledge about the topic. They get an insight of the present scenario of this industry as this is the emerging industry in the financial sector of the economy.
- ) Student: To get the understanding of NPL and the ways used by bank to manage it.

## **1.6 Limitation of the Study**

This study is base on secondary data such as published financial reports, books, unpublished reports, and public documents. The relevant data collected from interview, observation and questionnaire may not represent the actual population. As it is not possible to cover all the banks of Nepalese Banking sector, the selection of the bank has been done arbitrarily. The suggestions made after the study may or may not be replicated in other organizations of such type. This research has the following limitations:

- ) Only Nabil Bank is considered for the study.
- ) As the research is focused only towards Non-performing loans, it does not cover other aspects of the bank.
- ) The study is based on historical data, the findings will be in accordance of the data besides that personal judgement and sampling were forwarded.

## **1.7 Organization of the study**

The present study was organized in such way that the stated objectives can easily be fulfilled. The structure of the study tried to analyze the study in a systematic way. The study report was designed in five chapters.

## **Chapter – I: Introduction**

This chapter describes the background of the study, introduction to Nabil Bank Ltd., statement of the problems, objectives, significance and limitations of the study. It would help orient readers by focusing the perspective they need to understand the detailed information about the subsequent chapters.

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

The second chapter of the study contained the subject matters required to make readers research works carried in similar areas. This chapter included conceptual review, review of related study, different thesis, and review of journals, articles and research studies published by various author.

## **Chapter – III: Research Methodology**

Research methodology refers to the various sequential steps adopted by researcher in studying a problem with certain objectives in view. It described various source of data related with the study and various tools techniques such as statistical and financial employed for presenting the data. This chapter included research design, data collection, methods and analysis and research variables.

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

This chapter is the main part of the research. This chapter analyzed the data related with study and presents the finding of the study. Data processing, analysis and interpretation are presented in this chapter.

## **Chapter – V: Summary, Conclusions and Recommendations**

The last chapter contained the findings of whole study after which major conclusions and recommendations provided. It also contained important suggestions to the concerned organization for the better improvement.

## **CHAPTER – II**

### **REVIEW OF LITERATURE**

#### **2.1 Conceptual Review**

The Nepalese economy has been much affected due to high fiscal deficit, poor infrastructure facilities, weaker legal system, cutting of exposures to emerging markets by banks. Under such a situation, banks are no exception and are bound to face the heat of a global downturn. It's a known fact that the banks in Nepal face the problem of swelling non-performing loans (NPLs) and the issue shall be unmanageable if it is properly handled at the earliest. The accumulation of huge non-performing loans in banks has raised the credit risk management an important phenomenon in Nepalese banking. Bankers have realized that unless the level of NPLs is kept at the lowest, they will find it difficult to survive.

Non-performing loan may be defined as a loan that is not earning income or full payment of principal and interest is no longer anticipated, principal or interest is 90 days or more delinquent, or the maturity date has passed and payment in full has not been made. It is a loan of which the borrower has failed to make the agreed upon scheduled payments based on the loan agreement. In simple terms, a loan that is nearing a default or is already defaulted is referred to as a non-performing loan. After the loan reaches the non-performing state, the probability of its repayment reduces significantly. Though it depends on the terms of the contract, a loan classified as non-performing when the interest payment as well as principal payments are overdue by more than 90 days.

The issue of non-performing loans (NPLs) has gained increasing attentions in the last few decades. The ultimate consequence of large amount of NPLs in the banking system is bank failure. Many researches on the cause of bank failures find that asset quality is a statistically significant predictor of insolvency and that failing banking institutions always have high level of non-performing loans prior to failure.

It is argued that the non-performing loans are one of the major causes of the economic stagnation problems. Each non-performing loan in the financial sector is viewed as an obverse mirror image of an ailing unprofitable enterprise. From this point of view, the

avoidance of non-performing loans is a necessary condition to improve the economic status. With high level of non-performing loans, the resources are locked up in unprofitable sectors; thus, hindering the economic growth and impairing the economic efficiency. Institutions holding non-performing loans in their portfolios may choose to sell them to other investors in order to get rid of risky assets and clean up their balance sheets. Sales of nonperforming loans must be carefully considered since they can have numerous financial implications, including affecting the company's profit and loss, and tax situations.

According to the International Monetary Fund (IMF), a non-performing loan is any loan in which interest and principal payments are more than 90 days overdue; or more than 90 days' worth of interest has been refinanced, capitalized, or delayed by agreement; or payments are less than 90 days overdue but are no longer anticipated. Another definition of a non-performing loan is one in which the maturity date has passed but at least part of the loan is still outstanding.

There is no global standard to define non-performing loans at the practical level. Variations exist in terms of the classification system, the scope, and contents. Such problem potentially adds to disorder and uncertainty in the NPL issues. For example, as described by Se-Hark Park (2003), during 1990s, there were three different methods of defining non-performing loans in Japan: the 1993 method based on banking laws; the “Bank’s Self-Valuation” in March 1996; and the “Financial Revival Laws-Based Debt Disclosure” in 1999. These measurements have gradually broadened the scope and scales of the risk-management method. Similar to the trend in Japan, more countries, regulators, and banks are moving towards adopting and adapting better and more consensus practices. For example, in the U.S., Federal Reserve regulated banks are required to use the five-tier non-performing loan classification system according to BIS: Pass, Special Mention, Substandard, Doubtful, and Loss. Presently, the five-tier system is the most popular risk classification method, or, in some cases, a dual system of reporting according to their domestic policy guidelines as well as the five-tier system. According to Bank of International Supervision (BIS), the standard loan classifications are defined as follows:

- ) **Pass:** All loans & advances the principal or interest of which are not past due or past due for a period up to three months are included in this category (Unified NRB directives 2069). The banks should make a loan loss provisioning of minimum 1% on outstanding loan for this category of loan;

- ) **Special Mention:** Loans to enterprises which may pose some collection difficulties, for instance, because of continuing business losses;
- ) **Substandard:** Loans whose interest or principal payments are longer than three months in arrears of lending conditions are eased. The banks make provision for the unsecured portion of the loans classified as substandard;
- ) **Doubtful:** Full liquidation of outstanding debts appears doubtful and the accounts suggest that there will be a loss, the exact amount of which cannot be determined as yet. Banks make 50% provision for doubtful loans;
- ) **Virtual Loss and Loss (Unrecoverable):** Outstanding debts are regarded as not collectable, usually loans to firms which applied for legal resolution and protection under bankruptcy laws. Banks make 100% provision for loss loans.

Non-performing loans comprise the loans in the latter three categories, and are further differentiated according to the degree of collection difficulties.

In addition to the standardized system, efforts have been made to improve the classification of loans. For example, more countries are shortening the period when unpaid loans become past due, intending to put loans on lenders' timetable sooner and require them to address these loans before losses start to escalate. The International Accounting Standard 39 revised in 2003 focuses on recognition and measurement of financial instruments and, most importantly, defines and establishes the measurement and evaluation of impaired loans. As lenders usually make little or no loss provision for impaired loans, they are at risk to be suddenly forced to reclassify such loans as a loss and take a full write-down if the borrowers go bankrupt. The initiation of this standard is to prevent lenders from being caught off-guard. In addition, many global economists, rating agencies, and organizations such as the World Bank and the Asian Development Bank have begun to evaluate the effects of NPLs on GDP growth. They reduce growth estimates to reflect the time and cost of resolving large non-performing loan issues.

### **2.1.1 Causes for rise in NPLs**

The origin of the problem of rising NPLs lies in the quality of managing credit risk by the banks. The banking sector has been facing the serious problems of the rising NPLs. The reasons for NPA are classified differently; into systematic and situational causes into overhand component and incremental component into internal and external factors. Aggarwal and Mittal (2012) pointed out that the major reasons for NPA includes improper selection of borrowers activities, weak credit appraisal system, industrial problem; inefficient management, slackness in credit management and monitoring lack of proper follow-up, recessions and natural calamities and other uncertainties. Ollins N.J and Wanjau, k. (2011) explained a direct relationship between interest rate and NPA. The study noted that interest rate spread affect performing assets in banks as it increases the cost of loans charged on the borrowers, regulations on interest rates have far-reaching effects on assets nonperformance, for such regulations determine the interest rate spread in banks and help mitigate moral hazards incidental to NPAs. The NPLs in the Banking sectors are growing due to external as well as internal factors.

#### **) External Factors**

The major external factors which lead to increase in NPLs and non-controllable by Banks are ineffective recovery tribunal, willful Defaults, natural calamities, industrial sickness, lack of demand, change in Government Policies like socio political pressure, change in industry environment, diversion of funds, time/ cost overrun, labor problems, business failure, inefficient management and technology/product obsolescence.

#### **) Internal Factors**

The major internal factors which lead to increase/rise in NPLs and being internal in nature and controllable by the Banks are defective lending process/poor lending decision like non execution of Principles of Safety, Principle of Liquidity and Principles of Profitability; inappropriate technology; improper SWOT analysis; poor credit appraisal system; managerial deficiencies; absence of regular industrial visits; re-lending process; non-compliance to lending norms; lack of post credit supervision; and non-transparent accounting policy.

### 2.1.2 Loan Loss Provision

There is certain level of associated risk in every loan. To minimize the risk from possible losses, bank has to spare its profits as loan loss provision. Loan loss provision is the accumulated funds that are provided as a safeguard to cover possible losses upon classification of risk inherited by individual loans. The level of provisioning is depended upon the level of NPLs and their quality. In other words higher the NPL, higher the provision as downgraded loans need more provision. 1% provision of total credit is minimum requirement as every pass/good loan has to provision by 1%. However, the ratio of provision may differ from nation to nation. In Nepal, NRB has prescribed:

<b>Loan Classification</b>	<b>Pass</b>	<b>Substandard</b>	<b>Doubtful</b>	<b>Loss</b>
Loan Loss Provision	1%	25%	50%	100%

*(NRB Directive no 2)*

### 2.1.3 Problems created due to NPLs

The major problems arising due to NPLs are:

- ) Banks redistribute losses to other borrowers by charging higher interest rates/lower deposit rates, which re-strain saving and financial market and obstruct economic growth;
- ) Non-performing loans symbolize bad investment. They misallocate credit from good projects, which do not receive funding, to failed projects and ends up by wasting capital, labor and natural resources.
- ) Interest income cannot be booked on the loan declared as an NPL, and so profits get affected. Further, provisioning against assets creates more losses.
- ) For an example if a bank possesses 30% NPL, then it will have 70% of its assets to meet its expenses and make a profit. It will have a tendency to go for more risky ventures.

### 2.1.4 NPL and Credit Risk Management (CRM)

NPLs are the result of past action whose effects are realized in the present, that is, they represent credit risk that has already materialized and default has already taken place.

CRM is a much more forward-looking approach and is mainly concerned with managing the quality of credit portfolio before default takes place. An attempt is made to avoid possible default by properly managing credit risk.

Considering the current global recession and unreliable information in financial statements, there is high credit risk in the banking and lending business. To create a defense against such uncertainty, bankers are expected to develop an effective internal credit risk models for the purpose of CRM.

### **2.1.5 Impact of NPLs**

The most important business implication of the NPAs is that it leads to the credit risk management assuming priority over other aspects of bank's functioning. the bank's whole machinery would thus be pre-occupied with recovery procedures rather than concentration on expanding business. Higher NPA engage banking staff on NPA recovery measures that includes filing suits to recover loan amount instead of devoting time for planning to mobilization funds. thus NPA affects the performance and profitability of banks. The most notable impact of NPA is change in banker's sentiments, which may hinder credit expansion to productive purpose. Banks may incline towards more risk-free investments to avoid and reduce riskiness, which is not conducive for the growth of economy.

Bloem (2001) remarked that issues relating to NPA affect all sectors (in particular, if parallel issues with defaulting trade credit are also considered). The most serious impact, however is on the financial institutions, which tend to own large portfolios, indirectly; the customers of these financial intermediaries are also implicated; deposit holders, shareholders and so forth. Add to this NPA is not only affecting the banks and its intermediaries, it is having impact on the development of the nation as well. For a bank, NPA means unsettled loan, for which they have to incur financial losses The cost for recovering NPA is as well considerable. There are banking failures on account of the mounting NPA since it is affecting the profitability and long run survival of the bank.

The impact of non-performing loans can be seen in the following areas:

- ) NPL not only affects current profit but also future stream of profit, which may lead to loss of some long-term beneficial opportunity. Another impact of reduction in profitability is low ROI, which adversely affect current earning of bank.

- ) Money is getting blocked, decreased profit lead to lack of enough cash at hand which lead to borrowing money for shortest period of time and it results to additional cost to the company.
- ) Time and efforts of management is another indirect cost which bank has to bear due to NPL.
- ) Bank facing the problem of NPL adversely affect the value of bank in terms of market credibility. It will lose its goodwill and brand image and credibility which have negative impact to the people who are putting their money in the banks.
- ) The increase in non-performing loans tends to follow by decrease in estimated cost efficiency. A possible explanation for this relationship is that non performing loans are more costly for banks to service than the other loans.

### **2.1.6 Symptoms of recognizing a performing loan turning into NPL**

The symptoms to recognize a performing loan turning into a non-performing one are:

- ) Non-payment of the very first installment;
- ) Bouncing of cheque due to insufficient balance in the accounts;
- ) Irregularity in installment;
- ) Unpaid overdue bills;
- ) Declining Current Ratio;
- ) Payment which does not cover the interest and principal amount of that installment;
- ) While monitoring the accounts it is found that partial amount is diverted to sister/parent Company.
- ) Borrower has either initiated the process of winding up or are not doing the business;
- ) Overdue receivables;
- ) Stock statement not submitted on time;
- ) External non-controllable factor like natural calamities where borrower conduct his business;
- ) Frequent changes in plan;
- ) Non-payment of wages.
- ) Use for personal comfort, stocks and shares by borrower;
- ) Avoidance of contact with bank;
- ) Problem between partners.
- ) Changes in Government policies;

- ) Death of borrower
- ) Competition in the market.

### **2.1.7 Preventive Measures for NPL**

Bankers could pursue following preventive measures to protect their bank from non-performing loans:

- ) Identifying borrowers with genuine intent from those who are non-serious with no commitment or stake in revival is a challenge confronting bankers.
- ) Longer the delay in response, greater the injury to the account and the asset.
- ) While financing, appraisal of credit requirements, funds flow analysis in conjunction with the cash flow analysis should be done, rather than only concentrating on funds flow analysis.
- ) The general perception among borrower is that it is lack of finance that leads to sickness and NPLs. However, management effectiveness in tackling adverse business conditions is a very important aspect that affects a borrowing unit's fortunes.
- ) During the exercise for assessment of viability and restructuring, a practical and integrated approach by all the lending banks/ FIs as also sharing of all relevant information on the borrower would go a long way toward overall success of rehabilitation exercise, given the probability of success/failure.

### **2.1.8 Methods for Reducing NPL**

Following are the methods that can be considered for reducing NPLs:

- ) All accounts where interest has not been collected should be reviewed at periodical intervals by appropriate authorities. In order to recover the amount, one can adopt any way like persuasion, pressurization, frequent interaction, showing sympathy etc.
- ) Repayment of a term loan depends on income generating capacity of the borrowing unit. Therefore, it is necessary to fix repayment program for a term loan according to the income generating capacity of the unit.
- ) After the classification of unit as sick, bank can make a decision to offer a rehabilitation package. In that case, bank has to have a sympathetic and positive approach and provide the relief package on time.

- ) Merger is the process under which a sick unit is merged with a healthy unit, or sometimes, a healthy unit acquires a sick unit. A part of the consideration paid to the sick unit by the healthy unit is used to liquidate the NPL, wholly or partly.
- ) Recovery of advances through compromise settlement is accepted as an effective non-legal remedy. Under this borrower agrees to pay certain amount of the bank after getting certain concessions.
- ) If all attempts of converting an NPL into a performing asset fail, the bank is left with no other option but to recall the advance and resort to legal action by filing of recovery suits in the court or Debt Recovery Tribunals.

## **2.2 Review of Related Studies**

### **2.2.1 Review of Related Articles, Journals and Books**

Over the last few years the literature that examines non-performing loans has expanded in line with the interest afforded to understanding the factors responsible for financial vulnerability. This situation may be attributed to the fact that impaired assets plays a critical role in financial exposure as evidenced by the strong association between NPLs and banking/financial crises during the 1990s.

Sinkey and Greenwalt (1991), using a simple log-linear regression model and data of large commercial banks in the United States from 1984 to 1987, investigate the loan loss-experience of large commercial banks in the US and argue that both internal and external factors explain the loan-loss rate (defined as net loan charge offs plus NPLs divided by total loans plus net charge-offs) of these banks. A significant positive relationship between the loan-loss rate and internal factors such as high interest rates, excessive lending, and volatile funds were found in the study. Sinkey and Greenwalt (1991) report that depressed regional economic conditions also explain the loss-rate of the commercial banks.

Keeton and Morris (1987) present one of the earliest studies to examine the causes of loan losses. The authors examined the losses of 2,470 insured commercial banks in the United States (US) over the 1979-85. Using NPLs net of charge-offs as the primary measure of loan losses, the study shows that local economic conditions along with the poor performance of certain sectors explain the variation in loan losses recorded by the banks. The study also reports that commercial banks with greater risk appetite tend to record higher losses. Several

studies which followed the publication of Keeton and Morris (1987) have since proposed similar and other explanations for problem loans in the US.

Keeton (1999) uses data from 1982 to 1996 and a vector auto regression model to analyze the impact of credit growth and loan delinquencies in the US. It reports evidence of a strong relationship between credit growth and impaired assets. Keeton (1999) shows that rapid credit growth, which was associated with lower credit standards, contributed to higher loan losses in certain states in the US. In this study loan delinquency was defined as loans which are overdue for more than 90 days or does not accrue interest.

Studies that examined other financial systems also provide similar results to those in the US. Bercoff et al. (2002) examine the fragility of the Argentinean Banking system over the 1993-1996 period; they argue that NPLs are affected by both bank specific factors and macroeconomic factors. To separate the impact of bank specific and macroeconomic factors, the survival analysis was employed. Using a dynamic model and a panel dataset covering the period 1985-1997 to investigate the determinants of problem loans of Spanish commercial and saving banks, Salas and Saurina (2002) reveal that real growth in GDP, rapid credit expansion, bank size, capital ratio and market power explain variation in NPLs. Furthermore, Jimenez and Saurina (2005) examine the Spanish banking sector from 1984 to 2003; they provide evidence that NPLs are determined by GDP growth, high real interest rates and lenient credit terms. This study attributes the latter to disaster myopia, group behavior and agency problems that may entice bank managers to lend excessively during boom periods.

Meanwhile, Rajan and Dhal (2003) utilize panel regression analysis to report that favorable macroeconomic conditions (measured by GDP growth) and financial factors such as maturity, cost and terms of credit, banks size, and credit orientation impact significantly on the NPLs of commercial banks in India. Using a pseudo panel-based model for several Sub-Saharan African countries, Fofack (2005) finds evidence that economic growth, real exchange rate appreciation, the real interest rate, net interest margins, and inter-bank loans are significant determinants of NPLs. The study argues that there exists a strong association between the macroeconomic factors and non-performing loans to the undiversified nature of some African economies. More recently Hu et al. (2006) analyze the relationship between NPLs and ownership structure of commercial banks in Taiwan with a panel dataset covering the period 1996-1999. The study shows that banks with higher government ownership recorded lower

non-performing loans. The study also shows that bank size is negatively related to NPLs while diversification may not be a determinant.

The non-performing loans of developing countries (IMF 2009) showed that NPL's of developing countries were more when compared to developed countries. The non-performing loans of developing countries were highest for Thailand followed by Philippines and Malaysia. Reddy (2002) studied the experiences of Asian countries in handling NPL's and suggested mechanisms to handle the problem by drawing experiences from other countries. Maggi (2010) modeled the effect of the non-performing loans on the cost structure of the commercial banking system and proposed a measure based on the costs for managing and monitoring the loans. Geretto (2009) examined the main characteristics of the Chinese banking industry and analyzed the main performance indicators of the system with reference to non-performing loans (NPL).

Lampros (2004) on the dynamics in Asian non-performing loans mainly dealt with the management of NPL and identified the reasons for the same. Batra (2004) studied the factors contributing for NPL's in India and suggested for control of NPL's. Puri (2004) studied the factors for successful resolution of NPA in Asian markets which include Assets Management Company (AMC), enforcement of creditors rights with minimum intervention of courts and foreign ownership of AMC. Sheik (2004) focused the situation of NPL's, desired situation and strategies to reach the desired situation. Naik (2003) opined that RBI feels that the banks have been neglecting their primary function of credit creation in favor of "narrow banking" for short-term gains. While this could be appropriate in times of easy liquidity, the macroeconomic performance of the banking system in the long term would hinge on its ability to fund industrial and other enterprises.

Das, (2002) performed a research on Managing the Risk of Non Performing Assets in the Small Scale Industries in India. In this article the researcher tries to seek a solution to the problem of NPA in the small scale industries under the present circumstances of banking and insurance working together under the same roof. What is stressed in this article is the pressing need of the small-scale entrepreneur for becoming aware and educated in modern business management holding a professional attitude toward rational decision-making and banks have to facilitate that process as a part of the credit policy sold by them.

Reddy, (2002), in his research paper on the topic, “A comparative study of Non-performing Assets in India in the Global context” examined the similarities and dissimilarities, remedial measures. Financial sector reform in India has progressed rapidly on aspects like interest rate deregulation, reduction in reserve requirements, barriers to entry, prudential norms and risk-based supervision. The study reveals that the sheltering of weak institutions while liberalizing operational rules of the game is making implementation of operational changes difficult and ineffective. Changes required to tackle the NPA problem would have to span the entire gamut of judiciary, polity and the bureaucracy to be truly effective. This paper deals with the experiences of other Asian countries in handling of NPAs. It further looks into the effect of the reforms on the level of NPAs and suggests mechanisms to handle the problem by drawing on experiences from other countries.

Joshi, (2003) conducted a survey on " Analysis of Non-Performing Assets of IFCI Ltd". The study found that Profitability and Viability of Development Financial Institutions are directly affected by quality and performance of advances. The basic element of Sound NPA Management System is quick identification of Non-performing advances their containment at minimum levels and ensuring that their impingement on the financials is at low level. Excessive reliance on Collaterals has led institutions to long drawn litigations and hence it should not be sole criteria for sanction. Banks should manage their exposure limit to few borrower(s) and linkage should be placed with net owned funds for developing control over high leverages of borrower level. Study also revealed that exchange of credit information among banks would be immense help to them to avoid possible NPAs. Management Information system and Market intelligence should be utilized to their full potential.

Chandrashekhara and Ray (2005) show that public sector banks have increasingly opted for investment in risk-free returns of government securities, their share in total earning assets rising from 26 to 33 percent during the 1990s. This trend has been reversed in the 21st century. But there is no doubt that enforcement of stringent prudential norms, capital adequacy stipulations, setting up of the Board for Financial Supervision (BFS) and pressure to reduce NPAs have made banks so risk-averse that they have reduced their exposure to private loans with even a modest risk of non-recovery.

Datta (2005) examined the "Resolution Strategies for Maximizing Value of Non-Performing Assets (NPAs)". The article indicates that declining capital adequacy adversely affects shareholder value and restricts the ability of the bank/institution to access the capital market for additional equity to enhance capital adequacy. So, if a resolution strategy for recovery of dues from NPAs is not put in place quickly and efficiently, these assets would deteriorate in value over time and little value would be realized at the end except may be its scrap value. The purpose of this paper is to indicate the various considerations that one has to bear in mind before zeroing on a resolution strategy and provides a State Resolution Mapping (SRM) framework. However, the paper has not specifically discussed about the various resolution strategies that could be put in place for recovery from NPAs, and in particular, in which situation which type of strategy should be adopted.

Otchere, (2005), conducted a study on the performance of privatized banks in middle-and low-income countries shows mixed results by "Competitive and Value Effects of Bank Privatization in Developed Countries". The paper observed that private banks in developed countries have experienced significant improvements in operating performance. The improvement in performance remains significant after controlling for persistence in bank performance. A comparison of the performance of privatized banks in developed and developing countries suggests that privatization has encouraged excessive risk taking among privatized banks in developing countries, with the consequence that those banks carry large non-performing assets than their counterparts in the developed countries. They also observe that consistent with the competitive effects hypothesis, investors view privatization announcements as foreshadowing bad news for rival banks.

Sathya (2005) examined the effect of privatization of banks on performance and efficiency. The data taken was for five years (1998-2002) and it was analyzed by using difference of means test. The banking sector in India includes domestic banks (privately owned, partially privatized banks, fully PSBs as well as foreign banks, and objective of this study is to study the impact of privatization on the banking firms. It was concluded that partially privatized banks have performed better as compared to fully PSB's in respect of financial performance and efficiency. Partially privatized banks have continued to show improved performance and efficiency in the year after privatization.

Ferguson, (2007), conducted a research on “Observations on the Securitization of Non-Performing Loans in Russia”. Asset securitization is a burgeoning trend in Russia as companies burdened by poor credit ratings seek access to capital at lower costs than they would be allowed in traditional equity or debt markets. Study indicates that securitization of these bad loans has not occurred in Russia at the levels one might expect. This has been due to both relatively small amount of loans that under- perform as well as legal and regulatory impediments that have discouraged investors and lenders alike. The study has been conducted to examine the expansion of consumer credit in Russia and the circumstances under which it is occurring indicate that the level of non- performing loans is due to rapidly increase and as the rationale for maintaining the impediments that stand in the way of securitizing these loans is being re-examined, those impediments are being scaled back to make way for market participants to engage in such securitizations. Thus, this article anticipates a significant rise in the level of non-performing loans, which will be logically paired with an increased interest of Russian lenders in securitizing these assets.

Arora, and Bansal, (2009), in the research on “An Analytical Study of Growth of Credit Schemes of Selected Banks” analyzed and compared the performance (in terms of loan disbursement and non- performing assets) of credit schemes of selected banks for the last five years. This paper is divided into two parts. In the first part, bank-wise as well as year-wise comparisons are done with the help of Compound Annual Growth Rate (CAGR), mean and standard deviation; and in the second part, a positive relationship is found between total loan disbursement and total NPA outstanding of selected banks with the help of a correlation technique. The study found a positive relationship between total loan disbursement and total Non-Performing Assets outstanding of selected banks.

Non-performing Loans (NPLs) or credit risk encapsulates the potential loss in the event of credit deterioration or default of a borrower (Elaine, 2007). Thus a sound credit appraisal of loans is very important to the creditor. As argued by Dorfman (1998), bankers required an understanding of credit standards, the process by which credit worthiness and credit structure are analyzed, decision-making techniques, negotiation, follow-up and problem resolution, in order to effectively manage credit risk. Abolo (1999) supported Dorfman's assertion and presented his own principles of lending under three headings, that is, safety, suitability and profitability of credit, which equally compel bankers to follow the lending rules. Although credit depends on good faith, and no matter the amount of confidence that parties have on

each other, it does not reduce the importance of scrutiny of these loan portfolios where good faith has been violated either deliberately or inadvertently. Thus, the lenders must search for and avoid dishonest borrowers. This involves sound credit analysis, which Nwankwo (1991) describes as the process of assessing the risk of lending to a business or individual against the benefits to accrue from such investment. The benefits can be direct, such as interest earnings and possibly deposit balances required as a condition of the loan or indirect, such as initiation or maintenance of a relationship with the borrower, which may provide the bank with increased deposits and with demand for a variety of bank services. He argues further that credit risk assessment has two aspects. One is qualitative, and generally the more difficult; and the other quantitative. To evaluate the qualitative risk, the loan officer has to gather and appraise information on the borrower's record of financial responsibility, determine his true or correct need for borrowing, identify the risks facing the borrower's business under current and prospective economic and political situations, and estimate the degree of his commitment regarding the repayment.

To estimate the financial viability of a portfolio, banks should not only limit their analysis to project evaluation techniques alone, but also by evaluating all credit risks that could become threats to the overall performance of such a portfolio. Schall and Halley (1980) outlined the key indicators for loan analysis as capacity, collateral, capital, condition and character. He concludes that lending involves the creation and management of risk assets and is an important task of bank management. While being the highest earning asset, the loan portfolio is also the most illiquid and most risky of banks' operation.

Non-performing Loans (NPLs) are the most common causes of bank failures. This has made all regulatory institutions to prescribe minimum standards for credit risk management. The basis of sound credit risk management is the identification of the existing and potential risks inherent in lending activities. Measures to counteract these risks normally comprise clearly defined policies that express the bank's credit risk management philosophy and the parameters within which credit risk is to be controlled. DeServigny and Renault (2004) opined that specific credit risk management measures typically include three kinds of policies. One set of policies include those aimed to limit or reduce credit risk, such as policies on concentration and large exposure, adequate diversification, lending to connected parties, or over-exposure. The second set includes policies of asset classification which expose a bank to credit risk. The third set include policies of loss provisioning or the making of allowances

at a level adequate to absorb anticipated loss-not only on the loan portfolio, but also on all other assets that are sensitive to losses.

Murinde and Yaseen (2012), in his article "Management of NPA" on management of NPA made it clear that the traditional approaches to bank regulation are not conducive for management of NPA. These approaches emphasized the view that the existence of capital adequacy regulation plays a crucial role in the long-term financing and solvency position of banks, especially in helping the banks to avoid bankruptcies and their negative externalities on the financial system. In general, capital or net worth serves as a buffer against losses and hence failure. Rather than accommodating measures to combat the NPA issues, the traditional measures tried to protect the interest of deposits through maintaining adequate capital in liquid form. This has affected the availability of funds for productive purpose since banks were not able to lend it, rather forced to keep as reserves. Strengthening financial systems has been one of the central issues facing emerging markets and developing economies. This is because sound financial systems serve as an important channel for achieving economic growth through the mobilization of financial savings, putting them to productive use and transforming various risks. He emphasized that the essential components of sound NPA management are as follows.

- ) Quick identification of NPAs,
- ) Their containment at a minimum level and
- ) Ensuring minimum impact of NPA on the financials.

In January 2012, the Governor of the Reserve Bank of Zimbabwe, Dr Gideon Gono noted with concern the gradual deterioration in asset quality as reflected by the level of non-performing loans (MPS, 2012). He highlighted that asset quality challenges can potentially heighten liquidity risks given the current operating environment where credit is largely financed by volatile short term deposits. In this regard, he urged banking institutions to enhance their credit risk management systems with special emphasis on credit assessment, origination, administration, monitoring and control standards. Fofack (2005) argues that when left unsolved, nonperforming loans can compound into financial crisis, the moment these loans exceed bank capital in a relatively large number of banks. Recently, Interfin Bank Limited was placed under recuperative curatorship on 11 June 2012 (Mid-Term MPS, 2012). The Governor of RBZ issued a press statement advising of the closure of Royal Bank Limited

after the directors of the bank resolved to surrender their license on 27 July 2012 (RBZ Press Statement, 2012). Nonperforming loans were cited as the major common problem that was faced by Interfin Bank Limited. This is the second time within a period of eight years that Royal Bank Limited has failed (Mid-Term MPS, 2012 and RBZ Press Statement, 2012). Apparently in both cases the issue of non-performing loans was mentioned. Demirgüç-Kunt et al (1989), cited in Berger and De Young (1997), indicate that failing banks have huge proportions of bad loans prior to failure and that asset quality is a statistically significant predictor of insolvency.

Montecillo, (2013), in his article "Banks' nonperforming loans down in June". Bad loans held by major banks decreased in June despite the continued rise in lending to support the country's growing economy, data released this week showed. In a statement, the Bangko Sentral ng Pilipinas said nonperforming loans (NPL) held by universal and commercial banks declined at the end of June from the May level. "The latest NPL figures indicate the banks' continued efforts to adhere to sound credit risk management systems and maintain high loan quality," the BSP said, commenting on the data. The NPLs-to-total loans ratio at the end of June declined to 2.68 percent from 2.75 percent in May and 3.01 percent in June 2012.

The BSP said local banks were able to resist the temptation of relaxing their lending standards and lend excessively to the public to increase profits. The BSP said bank lending standards remained high despite the availability of ample liquidity in the system. "These are essential to sustaining the viability of banks and to maintaining the overall stability of the domestic financial system," the BSP said. "This enabled the banks to keep their gross NPL ratio at or below 3 percent for the 10th straight month," the BSP said Wednesday.

The decline in NPLs as a percentage of total loans came amid the year-on-year drop in gross NPLs to P100.91 billion from P102.1 billion. Banks' total loans were up to a record high of P3.76 trillion in June from P3.39 trillion in the same month in 2012. Apart from keeping NPLs at manageable levels, the BSP said local banks also increased their reserves for potential write-offs. In June, banks' total loan loss reserves reached P131.29 billion, or 130 percent of total NPLs.

Universal and commercial banks also saw soured loans decrease across all sectors of the economy, the BSP said. This was evident in the financial intermediation, real estate,

manufacturing, and wholesale and retail trade sectors. These collectively made up about 63 percent of total loans extended by major banks

### **Nepalese Financial Sector and NPLs**

Nepal remained fortunate enough not to facing any major financial crisis, especially, from the influence of the East Asian Financial Crisis of 1997. However, at the beginning of the crisis, Nepalese currency depreciated by 11.2% against US dollar within a short span of time. Though, this was not so big deal as compared to problems encountered by the East Asian Nations.

Manandhar, (2055) opines that the prime reasons behind these less effects are (i) not opening up capital account and portfolio investment; and (ii) enough foreign currency reserve in the economy. Nevertheless, some sort of financial problems especially, in the banking sector have been noticed for the last few years. In this regard, Basyal (2059), in a broader term, states that the large intermediation cost and inefficiencies in the financial system have remained major drawbacks of the Nepalese financial structure. He further emphasizes the challenges and complexities of the Nepalese financial system as below:

- ) Negative net worth and large accumulated losses of the government owned commercial banks.
- ) High interest rate differentials between formal and informal financial sector.
- ) Large interest spread in the formal financial sector.
- ) Operational inefficiencies, managerial deficiencies and least improvements in financial dealings.
- ) Active participation of government in the financial system.
- ) Lack of internationally recognized accounting and auditing practice in the system
- ) Higher proportion of non-performing assets.

Dungana (2058) in his article titled "Why Assets Management Co. is considered the best to solve the non-performing loan problem" has tried to highlight one of the approach mainly Assets Management Company (AMC) for resolving the problem of NPL. As per him, AMC is specialize financial intermediary to manage the non-performing and distress loans of banks and financial institutions who buy the NPL from financial institution and take necessary steps to recover the maximum value from the acquired assets. As per his view, if NPLs are

not resolved in time there would be inherent direct or indirect costs to the economy. As stated by him NPL may arise due to the external factors like decrease in market value of collateral deterioration borrower's repayment capacity, economic slowdown, borrower's misconduct, improper credit appraisal system, lack of risk management practice, ineffective credit monitoring and supervision system. Hence he suggested that, NPL should be kept at minimum level and the specialized institution such as AMC should manage the distressed loans.

The above discussion says that both traditional approach and AMC are available to deal with NPL problem. Under traditional approach, bank handles the NPLs in its own way especially through recovery unit who focus on continuing negotiation with the borrower and give top priority to the loan recovery. As opined by the writer, this approach is useful in dealing with small business loans where personal touch is adopted but for big loan this approach does not work. "AMCs seem as the only realistic option when the financial sector recovery is the underlying objective in financial system where the institution fails to resolve the NPL problem through their own efforts." (Dungana, 2058:125).

Nepalese Financial System is largely dominated by the banking sector. The banking sector is severely affected by the NPL problem, it is estimated that the NPL of the Nepalese Banking system is around 16%. Therefore there is no doubt that it has serious implication on the economic performance of the country. It will be the eclipse in the development of financial soundness in the economy, if not controlled in time. However, traditional or AMC route can be practiced to get recovery from this sickness of the financial system, the AMC route may be more effective approach to be quick recovery as it has been experience around the world."

Paudel (2059) adds some other factors like unnecessary influences of the employees' union, weak corporate governance (lack of transparency, accountability, laws and bye-laws), lack of effective regulation and supervision caused to worsening the financial system. From the analysis above, it can be said that weak legal and regulatory framework are the responsible factors for weakening the Nepalese financial system, which is, to some extent, similar to the factors that caused to worsen the East Asian financial sector in the late 1990s. Obviously, a distress financial system adversely hits the quality of the assets in the system. As such, the non-performing loans as a percentage of total loans in the banking sector was 14.3% in 2000

while it increased by over cent percentage point to 29.3% in 2001 and to 30.1% in 2002. However in the mid of Jan, 2003, NPLs declined marginally to 29.9% of total loans.

The basic reasons as reported by Pradhan (2058) for deteriorating assets quality are:

- ) The use of banking sector as instrument of policy lending under populist schemes.
- ) Projects financed in the pre-reform era, with high gearing, low promoters stake, with viability based on high tariffs and fiscal concessions.
- ) Large corporate mis-utilize the credits and delayed payments.
- ) Lack of vision in appraisal of loan proposals while sanctioning, reviewing or enhancing credits limits.
- ) Absence of risk management policies.
- ) Concentration of credits on few groups or sectors
- ) Lack of initiatives to take timely action against willful defaulters.
- ) Labor oriented small sized old technology operations.
- ) Non- transparent accounting policies and poor auditing practices.
- ) Political patronage and pressure when sanctioning loans
- ) Aggressive lending.

Besides these, the reasons behind the rise in NPLs could be outlined as the inferior mortgages against the loans, lack of financial information of the borrower, extension of bank branches in the least feasible geographical areas, over staffing in the banks and so on.

Rawal (2003), in "Measures adopted to overcome the problem of financial sector and the NPLs" addressed that financial sector reform measures to help reduce NPLs. He has broadly grouped the reform under three heads: (i) restructuring of large two state-owned banks (ii) reengineering of the central banks and (iii) capacity building in the financial sector. Sapkota (2004) has written an article titled "portion of NPL in commercial Banks – High in Public, Low in Private" which was published in Rajdhani on 19th May 2004. In this article, Sapkota has stated that the problem of NPL is seen less in private banks in comparison to public banks. The NPL of two big nationalized banks being about 60% of the total loans are very serious situation. He further mentioned that in order to improve this situation and to make healthy banking environment, financial reform program has been brought as its consequences, the management of two big banks was handed to foreign company on a

contract but the ratio of NPL was not reduced. Even most of the privately owned banks have NPL within international standard; some privately owned bank's NPL is higher than international standard. As per international standard 5% NPL is acceptable. Nepal's total NPL of banking sector is 30%, which is very high. (Shapkota, 2004:5)

Adhikari (2062) "Non-performing Loan and its Management" states that one of the main function of commercial bank is the management of non-performing loan. Main function of commercial bank and financial institution is accepting deposit and provide loan. In underdeveloped country like Nepal providing Loan and interest income generating through loan is the main source of income for bank and financial institution. If provided loan become non-performing loan, the bank and financial institution suffer from big financial scarcity. Unrecovered interest cannot make income and on the other hand loan that is converted in NPL make huge effect in financial condition of bank. So management of NPL is crucial factor any bank and financial institution. The articles envisages that lack of proper analysis, lack of specific loan policy, lack of supervision, slump on aggregate economy, monopoly on corporate loan and its unsuccessful, weak in consortium loan, less responsibility of borrower, inadequate internal control and audit and inadequate supervision of central bank as the possible causes of nonperforming loans.

In every banking system, there is some level of non-performing loan. However, it should be managed efficiently. Bank manages their loan and credit if nonperforming loan are acceptable level. But if bank's NPL are more than acceptable levels then it impacts on aggregate financial position of bank and market as worse. In this case bank should manage and treat its NPL differently. A single unit with expert should be assign for proper and appropriate management of huge amount of non-performing loan. For better management of nonperforming loan asset Management Company or corporation (AMC) is required. Proper management of nonperforming loan and recapitalization, these two important improvements are required for the betterment every banking system (Adhikari, 2062: 39-43).

In the article by Regmi, (2063) titled "Non-Performing Assets Management" the writer stated about the management of NPAs in the commercial banks. He writes, the NPAs includes the non-performing loan, non-banking assets, remaining non-performing loan, suspend interest and unutilized assets. The increasing NPA are the emerging problem in commercial banks, which is the main factor for failure of the banks.

NPAs caused by investment of assets in non-productive sectors, lack of future prediction, lack of proper supervision, monitor, control lack of information and failure of recovery of loan and their interest on time. He also added, the low quality of collateral of loans, failure of projects, and lack of appropriate rules and regulations to punish the bad borrowers. He shows the following NPAs in commercial banks: He added that increasing NPAs directly affects to the banks, investors and human resources. Not only that but also it affects the customer, economy of country, and business activities. Increasing NPA has two types of impact on banks: internal impact and external impact. In internal, it affects directly on profitability and human resources and in external, it affects to customers, investors, management and country's economy. (Regmi, 2062:75)

Himalayan times (2012) article in titled 'Rising NPA lowers profit' The article says, The amount of non-performing assets (NPA) with commercial banks has gone up by almost 20 percent, in the third quarter, pulling down their overall profit. The average ratio of NPA to the performing loans to total loans in the third quarter of current fiscal year of the 16 commercial banks has reached 2.21 per cent which was 1.81 per cent in the corresponding quarter of previous fiscal year, according to their unaudited financial figures of the third quarter of current fiscal year. Among the unaudited financial statements released by 16 commercial banks, Nepal Investment Bank, Standard Chartered Bank, Everest Bank, Bank of Kathmandu, NCC Bank, NIC Bank, NMB Bank, Citizens Bank International and Sanima Bank saw their bad loans going up this quarter in comparison to that of the corresponding quarter in the previous fiscal year. Likewise, Nabil Bank, Nepal SBI Bank, Grand Bank, Lumbini Bank, Global Bank and Agricultural Development Bank seem to have reduced NPA in review period. The difficulty in recovering loans lent to real estate sector due to the slowdown of the realty sector has weighed in on the debt repayment capacity of the borrowers. NPAs for banks are nothing but loans gone sour that cannot be recovered from customers within the stipulated time.

NPA does not yield any income for the banks in the form of principal and interest payments. NPAs eat into the income of the financial institutions as the primary source of income of financial institutions is the interest payments made by the borrowers. Moreover, the banks need to provision certain portion of their profit to balance the NPAs so that higher NPAs

translate as lower profit. With the growing bad loans of the bank, loan loss provisioning has also scaled up by almost eight per cent, this quarter. The average loan loss provisioning has reached Rs 3.7 billion which stood at Rs 3.4 billion last quarter. The larger loan loss provisioning for the loans gone bad has eaten up the profit of the banks. The operating profit of the 16 commercial banks has dropped by 18 per cent. The average operating profit stood at Rs 494 billion in the third quarter while in the corresponding period last fiscal year, banks were enjoying more than Rs 606 million as operating profit. The mounting number of bad loans, high cost of fund but lowered interest spread has marred the bank's income. On the other hand, lack of viable projects to finance has led to banks' investment and lending remaining limited to low yielding investment. Despite all the problems, Standard Chartered Bank, Nabil Bank and Everest Bank have successfully reaped an operating profit higher than Rs one billion, this quarter.

Nepali stock market blog (2013) article in titled 'Rising provision, NPA threaten to cast shadow over banks' profits Though' the article says, profits posted by most commercial banks for FY 2069/70 came as great news for the entire banking sector, the scenario might not be as rosy as it seems. Most of the banks have set aside huge amount of provision for nonperforming assets (NPA) to make up for bad loans. NPAs of KIST Bank (6.59%), ADBNL (5.72%) and RBB (5.31%) are above the acceptable level of 5%. The figures still signaled improvement for ADBNL and RBB from FY 2068/69, when the two banks had posted NPAs at a threatening 8.98% and 7.27%, respectively. But in case of KIST, which had reported an NPA at 3.94% in the previous fiscal, the situation has gone worse. Again, though the NPAs of other commercial banks are below the alarming 5% level, the fact most banks have posted an increase in their NPA compared to the fiscal year 2068/69 can become a source of concern. Sanima Bank, Janta Bank, NSBI, Century Bank, Civil Bank, Everest Bank, Standard Chartered and Lumbini Bank have managed to maintain their NPAs at below 1 percent.

Nepalnews.com (2013) article in titled 'NPA level of commercial banks increases twice' The article says, The level of Non-Performing Assets (NPA) of commercial banks have increased by almost twice in the second quarter of the current fiscal year, media reports said. The average ratio of NPA to the performing loans in the second quarter of the current fiscal year is at 0.88 per cent which was 0.48 per cent in the corresponding quarter of the previous fiscal

year, according to the unaudited financial figures of the second quarter of the current fiscal year. The downturn in realty and housing sector has been ascribed to the augmentation in NPA of the commercial banks this season.

Among the unaudited financial statements released by the twelve commercial banks Bank of Asia Nepal (BOAN), Kumari Bank Ltd (KBL), Kist Bank Ltd (KIST), Siddhartha Bank Ltd (SBL), Global Bank Ltd (GBL), Laxmi Bank Ltd (LBL), Citizens International Bank Ltd (CZBL) and Prime Bank Ltd (PBL) are the commercial banks expected to report an increased NPA for the second quarter in comparison to that of corresponding quarter in the previous fiscal year, it is reported. On the other hand, Standard Chartered Bank (SCBL), Nepal SBI Bank (SBI) and DCBL Bank Ltd (DCBL) are expected to witness a decline in NPA. NPAs are a vital yardstick gauge the financial status of any bank or financial institution.

The Kathmandu Post (2013) article titled "Fincos' NPL worsens, reaches 16.1pc worsen" the article says, non-performing loans (NPL) of finance companies have surged by more than six percent points over one year due to crisis facing some of the finance companies and non-recovery of real estate loans. According to Nepal Rastra Bank, their non-performing loan (NPL) reached 16.1 percent as of mid-August up from 10 percent in mid-August 2012. The NPL refers to the size of defaulted loans and anything over the size of 5 percent is considered problematic. Loans worth Rs 10.5 billion out of the total loan size of Rs 65.25 billion disbursed by the finance companies as of mid-August is considered bad. Officials of both the central bank and finance companies have been laying blame on troublesome finance companies and non-recovery of real estate loans for the ballooning NPL.

Samjhana Finance, Nepal Share Market and Finance, Crystal, Kuber, Himalaya, Capital Merchant and Finance, World Merchant Banking and Finance and General Finance have been declared crisis-ridden. A senior official at the NRB said that all eight finance companies which have been declared crisis-ridden have 50-80 percent NPL, surging the size of the NPL. "There are about a dozen finance companies whose NPL level is below 5 percent but a majority of the finance companies have NPL level of 10-15 percent," said the NRB official. A total of 57 finance companies are currently in operation in the country. He lamented that loans disbursed without adequate collateral are difficult to recover. A majority of finance companies that lent massively into the real estate sector in the past when the sector was booming are now struggling to recover their loans.

Lending to the real estate sector was so rampant that even loans categorized under different headings were found to be disbursed in the sector, according to Rajendra Man Shakya, President of Finance Companies Association of Nepal. “As the recession hit the sector, loan recovery has become a big challenge,” he said. “With many companies with small size of capital lending massively to the sector, the NPL level has only worsened.” In the recent years, finance companies faced the biggest trust deficit from the depositors after problem appeared in one after another company. So, institutional depositors like Army Welfare Fund and Citizen Investment Trust ceased to deposit in finance companies lately. According to Shakya, the Valley based finance companies which had aggressively lent out to the real estate sector are in deeper trouble than those outside. The real estate sector has seen a growth in transaction lately, with the Department of Land Reform and Management reporting to have exceeded its revenue collection target by 27.57 percent in the last fiscal year 2012-13.

However, real estate traders maintain that only small amount of land and properties have been sold in the recent days. “As such only small scale loans to the real estate sector are being recovered but not big scale ones,” said the NRB official.

It concludes that it is like a cancer of banks. Thus, it is necessary to control this cancer on time; otherwise, it becomes a big issue for bankruptcy. NPA need microanalysis to protect the banks, investors, customers, human resources and country's economy. For that, a clear 'Road Map' is required. To success the laws and policies, all the stakeholders should take responsibilities.

### **2.2.2 Review of the previous Thesis**

Pandey, (2002) has carried out study on 'Nepal Rastra Bank- Directives Their Implementation and Impact on the commercial Banks- A Case Study of Himalayan Bank Limited', an unpublished master level thesis with the objectives to find out the impact of change in NRB directives on the performance of the commercial banks, and find out whether the directives were implemented or not.

The directives if not properly addressed have potential to wreck the financial system of the country as they are the only tool of the NRB to supervise and monitor the financial institution. The directives in themselves aren't that important unless properly implemented, the implementation part depends upon the commercial banks. In case commercial banks are

making such huge profit with full compliance of NRB directives, then the commercial banks would deserve votes of praise because they would be instrumental in the economic development of the country. The result of or directives on bank performance are as followings:

- ) Increase in operational procedure of the bank, which increase the operational cost of the bank.
- ) A short term decreases in profitability, which result to lesser dividends to shareholder and lesser bonus to the employees.
- ) Reduction in the loan exposure of the bank decreases the interest income but increase the protection of the depositors' money.
- ) Increase protection to the money of the depositors' through increased capital adequacy ratios and more stringent loan related documents.

Shrestha (2004) in ‘a comparative study of Non-Performing Loan and Loan Loss Provisioning of Commercial Banks for Nepal Bank Ltd, NABIL Bank ltd. and Standard Chartered Bank Nepal ltd.’, has made an attempt to analyze the various aspects of non-performing loan in the Nepalese commercial banks. The study concludes that non-performing directly affects the income flow of the bank. It has been found that NBL has very high portion of non-performing loan than other selected banks. Hence, the bank has the investment in the most income generating assets i.e. loan and advances has been failing to generate income. Even the private sector bank like NABIL has higher non-performing loan and as a result higher provision. NABIL's average proportion on non-performing loan during the study period is higher than the acceptable. However, in last two years of study, NABIL’s non-performing loan has shown significant decrement and provision has also decreased as a consequence. Among the three banks, SCBNL has the least non-performing loans and thus the least loan provision. From these indicators it can be said that SCBNL is the best among the three banks. However, SCBNL seems adopting stringent procedures and disclosure while lending. Hence, the lower percentage of NPL and provisioning of SCBNL in not only due to proper lending function but also due to relatively lower investment in loans and advances.

Ineffective credit policy, political pressure to lend to untrustworthy borrowers, overvaluation of collateral are the major cause of mounting non-performing assets in government owed banks like NBL. Other factors leading to accumulation of NPLs are weak loan sanctioning

process, ineffective credit monitoring and supervision system, economic slowdown, borrower's misconduct etc. The study observes the following factors leading to nonperforming loans:

- ) Improper credit appraisal system,
- ) Ineffective credit monitoring and supervision system
- ) Negligence in taking information from Credit Information Bureau may also lead to bad debts.

The study has recommended that the banks to initiate training and development program for the employees to make them efficient and professional in credit appraisal, monitoring and proper risk management. More specifically, the study recommends the banks to be more cautious and realistic while granting loans and advances. After advancing loans there should be regular supervision and follow up for proper utilization of loan. The regulation regarding loan classification and provisioning is stringent and tighter than the previous. Hence, NRB should not only impose directives but also create supportive environment for the commercial banks. NRB is recommended to strength Credit Information Bureau (CIB) so that banks can get required credit information about the borrowers on time.

Ghimire (2005) entitled with "Non performing Assets of commercial Banks: causes and effects" the main objective of this study are as follows:

- ) To analyze the cause and effects of nonperforming assets in commercial bank
- ) To evaluate the impacts of NPA on the profitability of commercial bank
- ) To analyze the level of NPA selected commercial banks.

Major finding of this study are as follows:

- ) Non-performing assets and overall profitability of the banks tend to have inverse relationship.
- ) Profitability of the bank tends to have inverse relationship between credit extend and increment on nonperforming assets and it may be significant in case of aggressive credit expansion.

Findings showed that Non Banking Assets is credited due to having non-performing assets.

Shrestha (2009) in a study entitled "A study on the credit risk management of Nepalese Commercial Banks" aims at the following objective taking Kumari Bank Ltd (KBL) and Machhapuchre Bank Ltd (MBL) as sample banks:

- ) To examine the credit risk position of the selected commercial banks in Nepal
- ) To analyze the credit risk management system and practices of KBL and MBL
- ) To evaluate the organizational structure of KBL and MBL to manage the credit risk.

Major finding of this study are as follows :

- ) The concentration risk is the main source of credit risk for both KBL and MBL. Similarly, lack of systematic and thorough credit processing is also the major source of credit risk in these banks.
- ) The problems in credit processing include lack of thorough credit assessment, absence of testing and validation of new lending techniques, subjective decision-making by senior management, lack of effective credit review process, failure to monitor borrowers or collateral values, and failure of banks to take sufficient account of business cycle effects etc.
- ) The market-sensitive and Liquidity-sensitive exposures also increase the credit risk of these banks. Similarly, it is found that both banks have their own rating system of the credit client and the sectors.

The study concludes that the major banking risks are credit risk, market risk (i.e. liquidity risk, interest risk, operation risk etc). Among these risks, credit risk has the major impact on banking (i.e. more than 60 %). Because of the credit risk, the non performing loan (NPL) of bank will increase. With the increase in NPL, the loan loss provisioning will also increase simultaneously leading to decrease in profit. The decrease in profit results in low dividend to shareholder and bonus to employees.

For proper management of the credit risk, both banks have their own set of policies and practices, which is in consistence with NRB guidelines. For credit risk management, both banks have Credit Policies Guidelines (CPG). Similarly, NPL is regularly monitored by both the banks on regular basis and provisioning is made on quarterly basis by categorizing the loan as per NRB guidelines. Similarly, sector wise and security wise lending is being analyzed by these banks on monthly basis. Organizational structure of these banks is frequently restructured for proper credit risk management as per requirement. Despite these arrangements, the major problem is a high amount of lending in manufacturing sector,

lending without collateral, non-performing loan & organizational structure for handling credit risk in MBL; whereas the increase in total loan, and NPL is major concern for KBL.

Thapa (2010) conducted a research entitled “A study of Non-Performance Assets of Nepalese Commercial Banks in Nepal” of the period from FY 2002 to FY 2008 with the objectives to highlight loans and Advances trend in commercial banks and point out the amount of NPAs in Nepalese commercial banks.

The major findings of this study are as follows:

- ) The status of non-performing loan of commercial banks is improving gradually.
- ) In the current fiscal year, deposit mobilization of commercial bank marginally increased by 15.88 percent compared to 15.39 percent growth in the previous year.
- ) Liquid funds increased by 14.45 percent and reached to Rs.44089.7 million in mid July, 2006 from Rs.38842.1 million in mid July 2005.

Khadka (2011), entitled with "Non-performing Assets of Nepalese commercial Banks" the main objective of this study are as follows:

- ) To analyze the non performing assets of the commercial banks.
- ) To examine the level of NPAs in total assets, total deposits and lending of commercial banks.
- ) To examine whether the Nepalese commercial banks are following the NRB directives regarding nonperforming assets or not.

The major findings of this study are as follows:

- ) The level of NPA of Nepal Bangladesh Bank limited seemed greater than all of the other banks under the study. Similarly, Nepal SBI Banks and Bank of Kathmandu stand at second and third position respectively.
- ) The position of NABIL Bank Limited seemed to be quite satisfactory because the bank has been reducing its NPA every year and NPA of Nepal Investment Bank has been reducing it at minimum than that of all the other banks and it is found that none of the banks have been following the directives of NRB regarding the loan loss provision.

Neupane (2012), conducted a research entitled "Non-performing Assets and Profitability of Commercial Banks in Nepal" the main objective of this study are to access the non-performing assets of the commercial banks under the study. The other specific objectives of the present study are as follows:

- ) To study the trend and composition of non-performing assets of commercial banks.
- ) To analysis the major profitability indicators of commercial banks.
- ) To access the relationship between the profitability and the non performing assets of the commercial banks.
- ) To recommend for the improvement of the management of NPA based on the findings of the study.

Major finding of this study are as follows:

- ) NPA of NABIL is increasing trend except the fiscal year 2064/065 and the total loan & advance is in increasing trend over the study period. The percentages of NPA is increasing over the study period except the year 064/065. The average NPA ratio of the bank is 1.18% and standard deviation is 0.44% over the study period.
- ) The NPAT of NABIL, SCBNL & HBL is in increasing every year but the net profit of HBL is decreasing in the fiscal year 066/067 than previous year. similarly, the NPAT of NBB is negative in the fiscal year 2063/064 and then it is highly increasing in the fiscal year 064/065 and 065/066.
- ) The net profit margin of NABIL is decreasing in each year, ROTA ratio is fluctuating trend and ROLA ratio is fluctuating trend over the study period.
- ) The net profit margin of SCBNL is fluctuating in each year, ROTA ratio is fluctuating trend and the ROLA ratio is also fluctuating trend over the study period.
- ) The trend analysis found that the increasing trend of NPA of NABIL, decreasing trend of SCBNL, increasing trend of NPA of HBL and decreasing trend of NPA of NBB.

### **2.3 Research Gap**

As there is no doubt that the research conducted by various researchers have contributed a lot in the understanding of the non performing loans of the banking sectors, but still they are somehow unable to portray the relationship between the non performing loans and the profitability of the banks. As a result, this study will be focusing on the impact of non-

performing loans on profitability. Although the past researches have used ratio analysis as the major tool, various ratios are systematically analyzed and generalized to suit the banking institutions. The ratios were not categorized according to their nature only but also to their area as well. The data of six fiscal years (2007/08 to 2012/013) have been used. This study made analysis of non-performing loans by applying and analyzing various financial tools as well as different statistical tools like coefficient of correlation and trend analysis unlike research of past researchers.

# **CHAPTER – III**

## **RESEARCH METHODOLOGY**

Research is an art of scientific investigation. The Advanced Learner's Dictionary of Current English lays down the meaning of research as "a careful investigation or inquiry especially through search for new facts in any branch of knowledge." Krelinger (1986) define research as a "Research is a systematic controlled, empirical and critical investigation of hypothetical propositions about the presumed relations among the natural phenomena" It is actually a voyage of discovery. We all possess the vital instinct of inquisitiveness for, when the unknown confronts us, we wonder and our inquisitiveness makes us probe and attain full and fuller understanding of the unknown. This inquisitiveness is the mother of all knowledge and the method, which man employs for obtaining the knowledge of whatever the unknown, can be termed as research.

It is the pursuit of truth with the help of study, observation, comparison and experiment. In short, the search for knowledge through objective and systematic method of finding solution to a problem is research. The systematic approach concerning generalization and the formulation of a theory is also research. As such the term 'research' refers to the systematic method consisting of enunciating the problem, formulating a hypothesis, collecting the facts or data, analyzing the facts and reaching certain conclusions either in the form of solutions(s) towards the concerned problem or in certain generalizations for some theoretical formulation.

### **3.1 Research Design**

Research design means an overall framework for the activities to be taken during the course of a research study. It enables the way of research providing the tools & techniques for the data collection & analysis & sampling plan to be followed. Generally research design describes the general plan for collecting analyzing & evaluating data after identifying. It is an integrated system that guides the researcher in formulating, implementing & controlling the study conceived so as to obtain answers to research questions & to control variance. Both analytical & descriptive research designs have been used to attain the overall objectives. Firstly, it specifies the sources & type of information relevant to research questions, secondly it specifies the data. Thus, a research design specifies various methods & procedures for acquiring the information including from which sources & by what procedure it is obtained.

### **3.2 Sources of data**

The study uses the secondary data to fulfill its objectives. Secondary data are those data that are collected by someone else or used already & made available to other in the form of published statistics such as annual reports, periodicals, newspapers, magazines etc. Once a primary data is used, it loses its originality & becomes secondary. This study is mainly depends on the use of secondary data that consists of annual reports of the concerned bank. Besides the annual reports various other sources of data have also been used for the purpose of the study plan documents, newspaper, magazine, economic journals, NRB reports etc.

### **3.3 Population and Sample**

Population or universe refers to the industries of the same-nature of its service & product. It is the collection or the aggregate of objects or the set of results of an operation. On the other hand sample means the representative parts of population selected from it with the objectives of investigating its properties. Thus, a sample is just a portion of the population selected with a view to draw conclusions about the population under study.

It is not possible to study all data related with thirty one commercial banks of Nepal. Hence only Nabil Bank has been taken as sample from the whole population.

### **3.4 Data processing procedure**

In order to make the raw data collected meaningful, the data are analyzed with the help of various financial and statistical tools. Further, bar diagrams, pie charts and graphs are also used to represent the data.

### **3.5 Data Analysis Techniques**

#### **3.5.1 Financial Tools**

Understanding organization's financial health is a fundamental aspect of responding to today's increasingly stringent financial reporting requirements. To avoid risks, organizations must quickly identify financial ratios and trends across liabilities and assets, analyze and adjust planned and forecasted amounts and act to provide regulatory statements as needed. Thus, financial analysis refers to the assessment of a business to deal with the planning, budgeting, monitoring, forecasting, and improving of all financial details within an organization.

### **3.5.1.1 Ratio Analysis**

Ratio Analysis is a tool used by individuals to conduct a quantitative analysis of information in a company's financial statements. Ratios are calculated from current year numbers and are then compared to previous years, other companies, the industry, or even the economy to judge the performance of the company. Ratio analysis is predominately used by proponents of fundamental analysis. There are many ratios that can be calculated from the financial statements pertaining to a company's performance, activity, financing and liquidity but in this research only those ratios have been calculated which are related to the subject matter.

#### **i. Loans & Advances to Total Assets Ratio**

The loans and advances to total Assets ratio measure the amount of loans and advances in total loans.

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

#### **ii. Loans and Advances to Total Deposit Ratio:**

It shows how much fund of deposit is provided as loans and advances.

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

#### **iii. Non-Performing Loans to total Loans and Advances Ratio:**

This ratio determines the non-performing loans in the total loans and advances portfolio.

$$\text{NPL to Total loans and Advances Ratio} = \frac{\text{Total non performing loans}}{\text{Total loans \& advances}}$$

#### **iv. Provision Held to Non-Performing Loans Ratio:**

This ratio measures up to what extent of risk inherent in NPL is covered by the total loans provision.

$$\text{Provision held to NPL} = \frac{\text{Total Provision}}{\text{Non Performing Loans}}$$

## v. Non-Performing Loans to Total Assets

This ratio indicates the ratio between the non-performing loans and total assets.

$$\text{NPL to Total Assets} = \frac{\text{Total Non performing Loan}}{\text{Total Assets}}$$

## vi. Return on loans and Advances

This ratio indicates the proportion of the return over total loans and advances. It describes how efficiently the bank has employed its resources in the form of loans and advances of the bank.

$$\text{Return on Loans and Advances} = \frac{\text{Net Profit}}{\text{Total loans \& advances}}$$

### 3.6.2 Statistical Tools

It is the mathematical technique used to facilitate the interpretation and analysis of the data. It also helps to present the data, show the relations and deviations or differences of variables of organizations. In this study, the following statistical tools are used:

#### i. Arithmetic Means (average):

Arithmetic mean is also called 'the mean' or 'average' as most popular and widely used measure of central tendency. Arithmetic Mean is statistical constants which enables us to comprehend in a single effort of the whole. Arithmetic mean represents the entire data by a single value. It provides the gist and gives the birds' eye view of the huge mass of a widely numerical data. It is calculated as:

$$\bar{X} = \frac{1}{n} \sum_{i=1}^n X_i$$

Where:

$\bar{X}$  = Average or arithmetic mean

$\sum_{i=1}^n X_i$  = sum of the observation

n = number of observation

## ii. Standard Deviation:

The standard deviation is the absolute measure of dispersion in which the drawback present in other measure of dispersion as it satisfied most of the requisites of a good measure of dispersion. (Bajaracharya, 1996:177). Standard deviation is defined as the positive square root of the mean of square of the deviation take from the arithmetic mean. It indicates the ranger and size of deviance from the middle or mean. It measures the absolute dispersion. Higher the standard deviation higher will be the variability and vice versa.

Dispersion measures the variation of the data from the central value. In other words, it helps to analyze the quality of data regarding its variability.

## iii. Correlation Coefficient (r):

Correlation may be defined as the degree of linear relationship existing between two or more variables. These variables are said to be correlated when the change in the value of one results change in another variable. Correlation is categorized three types. They are Simple, Partial and Multiple correlations. Correlation may be positive, negative or zero. Correlation can be classified as linear or non- linear. Here, we study simple correlation only.

### Formula

$$r_{x_1x_2} = \frac{N \sum X_1X_2 - (\sum X_1)(\sum X_2)}{\sqrt{[N \sum X_1^2 - (\sum X_1)^2]} \sqrt{[N \sum X_2^2 - (\sum X_2)^2]}}$$

Whereas,

$r_{x_1x_2}$  = Correlation between  $X_1$  and  $X_2$

$N \sum X_1X_2$  = No. of Product observation and Sum of product  $X_1$  and  $X_2$

$\sum X_1 \sum X_2$  = Sum of Product  $X_1$  and sum of Product  $X_2$

The Karl Pearson coefficient of correlation always falls between -1 to +1. The value of correlation of coefficient in -1 signifies the negative correlation and in +1 signifies the positive correlation coefficient.

If  $r = 0$ , there is no relationship between the variables.

If  $r < 0$  there is negative relationship between the variable

If  $r > 0$  there is positive relationship between the variable

If  $r = -1$  the relationship is perfectly negative between the variable.

If  $r = +1$  the relationship is perfectly positive between the variable

#### **iv. Coefficient of Variation (c.v.):**

The coefficient of variation is measures the relative measures of dispersion, hence capable to compare two variables independently in term of variability.

$$\text{c. v.} = \frac{s}{x} | 100$$

= Standard deviation

$x$  = Average or Arithmetic Mean

#### **v. Probable Error:**

The probable error of the coefficient of correlation helps in interpreting its value. With the help of probable error, it is possible to determine the reliability of the value of the coefficient in so far as it depends on the conditions of random sampling. The probable error of the coefficient of correlation is obtained as follows:

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

Here,  $r$  = Correlation coefficient

$N$  = Number of pairs of observations

If the value of 'r' is less than the probable error, there is no evidence of correlation, i.e., the value of 'r' is not at all significant. Then, if the value of 'r' is more than six times of the probable error, the coefficient of correlation is practically certain, i.e., the value of 'r' is significant.

#### **vi. Times Series Analysis (Trend Analysis)**

Time series is used to measure the change of financial, economical as well as commercial data. The least square method to trend analysis has been used in measuring the trend analysis. This method is widely used in practice. The straight line trend of a series of data is represented by the following formula.

$$Y = a + bX$$

Here,

Y is the dependent variable, 'a' is Y intercept or value of Y when  $x = 0$ , 'b' is the slope of the trend line or amount of change that comes in Y for a unit change in X.

Where,

Y = Trend value

a = Y intercept

b = slope of trend line of the amount of change in y variable that is an associate with change in 1 unit in X variable.

X = Time variable

### **vii. Diagrammatic and Graphical Representation:**

It is also one of the tools used in this research as it helps to interpret the data and present the findings of the study. The various bars, charts, and graphs are used to present the data and data analysis in this study.

## **CHAPTER – IV**

### **DATA PRESENTATION AND ANALYSIS**

This chapter is devoted to presentation and analysis of the selected data of Nabil Bank Ltd collected to fulfill the set objectives of the study. Under this chapter various financial ratios are used to analyze the non-performing loans and its relationships with other measures of bank performance. The financial indicator of the bank is compared with the help of ratio analysis, as well as statistical tools.

#### **4.1 Ratio Analysis**

A ratio simply means one number expressed in terms of another. A ratio is a statistical yardstick by means of which relationship between two or various figures can be compared or measured. Ratios can be found out by dividing one number by another number. Ratios show how one number is related to another to derive meaning to the figures. Following are the ratios used:

- ) Loans and Advances to Total Assets Ratio
- ) Loans and Advances to Total Deposit Ratio
- ) Non- Performing Loans to Total Loans and Advances
- ) Total Provision to Non-Performing Loans Ratio
- ) Non-Performing loans to Total Assets Ratio
- ) Return on Total Loans and Advances.

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

The loans and advances to total assets ratio measures the amount of loans and advances in relation to total assets. It means that it shows the proportion of loans and advances to total assets. High proportion of loans and advances indicates the good position of the organization indicating good mobilization of deposits of funds. Low proportion of loan indicates no use of fund properly. Loan is the risky assets. Thus, higher loans and advances to total assets ratio also shows high risk and inversely low loans and advances to total assets ratio shows low risk. The following table shows loan & advances to total assets is as follows.

**Table 4.1**  
**Ratio of Loans and Advances to Total Assets**  
(Rs. Million)

<b>Fiscal Year</b>	<b>Loans and Advances</b>	<b>Total Assets</b>	<b>Ratio</b>
2007/08	21,365	37,133	0.58
2008/09	27,590	43,867	0.63
2009/10	32,269	52,080	0.62
2010/11	38,034	58,100	0.65
2011/12	42,868	64,480	0.66
2012/13	47,646	74,531	0.64
<b>Total</b>	209,771	330,191	3.78
<b>Mean</b>	34,962	55,032	0.64
S.D			0.03
C.V			0.00

*Source: Annual Reports*

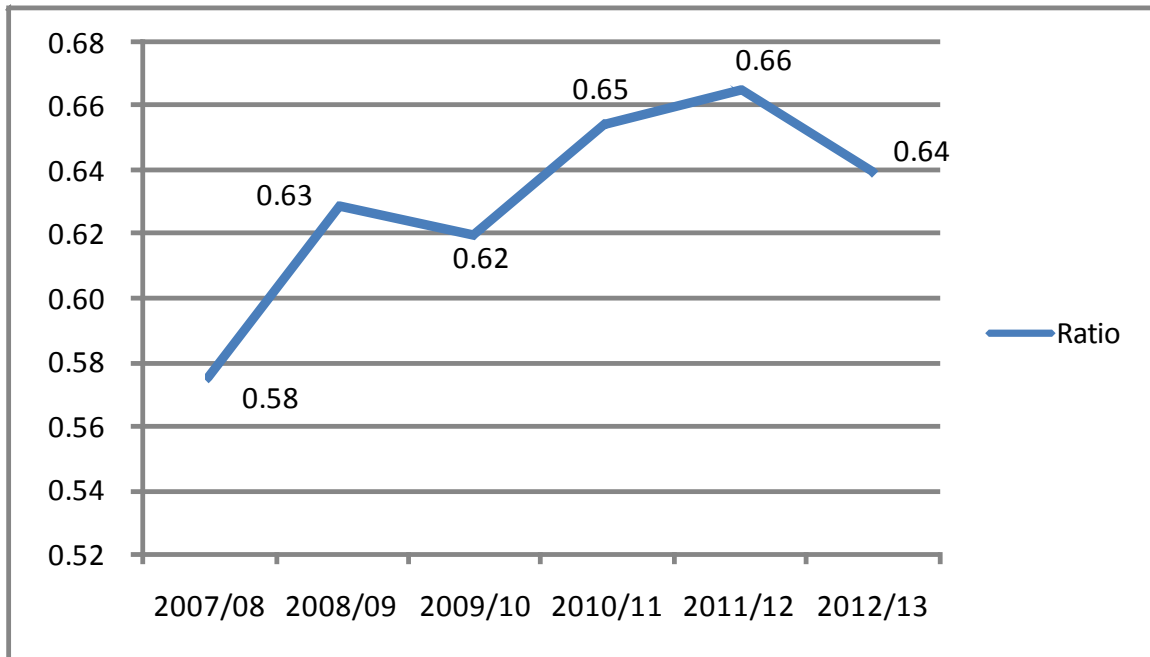
Table 4.1 shows the loans and advances to total assets ratio of the bank for six years. The loan & advances to total assets ratio is primarily upward moving during the study period. While observing its ratio the bank is better mobilizing of fund as loans and advances and it seems quite successful in generating higher ratio in each year.

The highest ratio is 66.00% in the year 2011/12 and the lowest ratio is 58.04% year 2007/08. The mean is 64.46%. It reveals that in total assets, the bank has high proportion of loans and advances. It has utilized its total assets more efficiently in the form of loan & advances. S.D. and C.V. is 0.03 & 0.00 respectively.

The above loans and advances to total assets ratio can be presented in a diagram also which is as follows

**Figure: 4.1**

**Ratio of Loans and Advances to Total Assets**



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

The loans and advances to total deposit ratio is also known as credit deposit ratio (CD ratio). This ratio actually measures the extent to which the banks are successful to mobilize the total deposit on loan & advances for the purpose of profit generation. It is the proportion between the total loan lanching and the total deposit in the banks. It can be calculated by dividing the total loans and advances by the total deposit amount. This ratio shows how successfully the banks are utilizing their deposited funds as credit or loan for profit generating purpose as loans and advances yield high rate of return. Greater CD ratio implies that better utilization of total deposit of banks and higher earnings from that loans and advances with the higher risk. A higher ratio of loan & advances indicates better mobilization of deposit and vice-versa. But it should be noted that too high ratio might not be better from its liquidity point of view. Following Table 4.2 shows the loan & advances to total deposit ratio.

**Table 4.2**  
**Ratio of Loans and Advances to Total Deposits**  
(Rs. Million)

<b>Fiscal Year</b>	<b>Loans and Advances</b>	<b>Total Deposits</b>	<b>Ratio</b>
2007/08	21,365	31,915	0.67
2008/09	27,590	37,348	0.74
2009/10	32,269	46,341	0.70
2010/11	38,034	49,608	0.77
2011/12	42,868	55,024	0.78
2012/13	47,646	63,610	0.75
<b>Total</b>	209,771	283,846	4.40
<b>Mean</b>	34,962	47,308	0.74
S.D			0.04
C.V			0.00

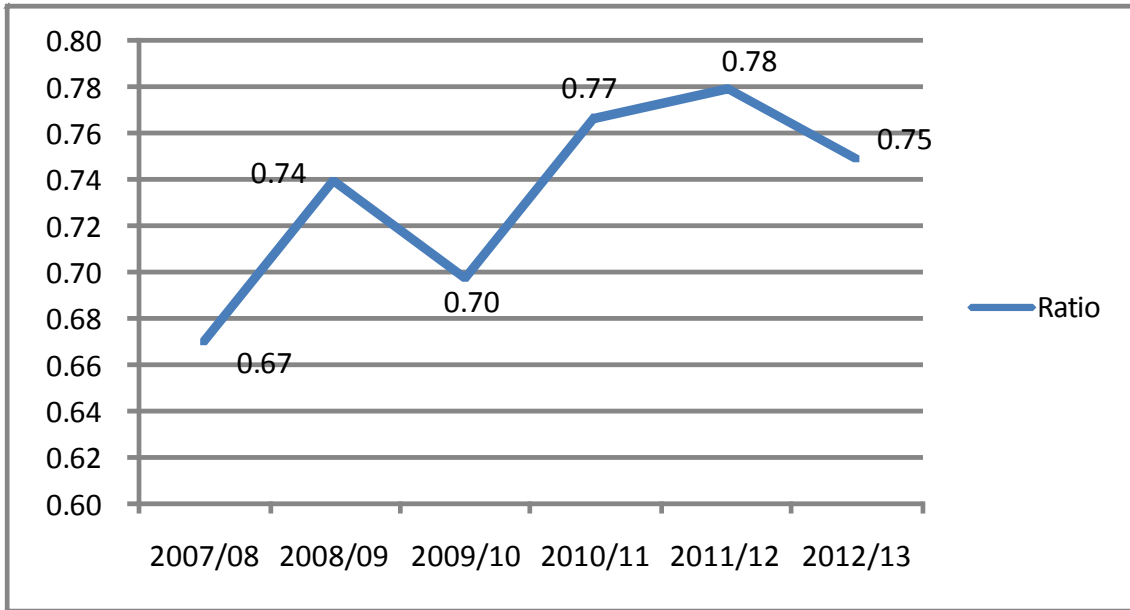
*Source: Annual Reports*

Table 4.2 shows that the loan & advances to total deposit ratio is in fluctuating trends. The Bank has higher ratio in each year and mean too. It indicates the better mobilization of deposit. The mean is 74.00%. The highest ratio is 78.00% in 2011/12 and lowest ratio is 67.79% in Fiscal year 2007/08. It reveals that the deposit is quickly converted into loans and advances to earn income. The greater ratio mean, signifies that the bank lend higher amount in the form of loans and advances to earn better returns. The S.D. and C.V is 0.04 and 0.00 respectively which signifies the less deviation.

The above loans and advances to total deposit ratio can be presented in a diagram also which is as follows.

**Figure: 4.2**

**Loans and Advances to Total Deposit Ratio**



**4.1.3 Non- Performing Loans to Total Loans and Advances**

This ratio determines the proportion of non-performing Loans in the total loans and advances portfolio. As per NRB directives, the loan falling under category of substandard, doubtful and loss are regarded as non-performing assets or loan. The higher ratio implies the bad quality of loan or assets of banks in the form of loans and advances where as lower ratio implies the better quality of assets of banks in the form of loans and advances. Hence, lower ratio is preferable as per international standard only 5% NPLs is allowed.

Table presented below, exhibits the ratio of non-performing loans to loans and advances from six consecutive years.

**Table 4.3**  
**Ratio of Non Performing Loans to Total Loan and Advances**  
(Rs. Million)

<b>Fiscal Year</b>	<b>Non Performing Loans</b>	<b>Loan and Advances</b>	<b>Ratio</b>
2007/08	178	21,365	0.008
2008/09	171	27,590	0.006
2009/10	225	32,269	0.007
2010/11	486	38,034	0.013
2011/12	969	42,868	0.023
2012/13	1,015	47,646	0.021
<b>Total</b>	<b>3,044</b>	<b>209,771</b>	<b>0.078</b>
<b>Mean</b>	<b>507</b>	<b>34,962</b>	<b>0.015</b>
S.D			0.007
C.V			0.001

*Source: Annual Reports*

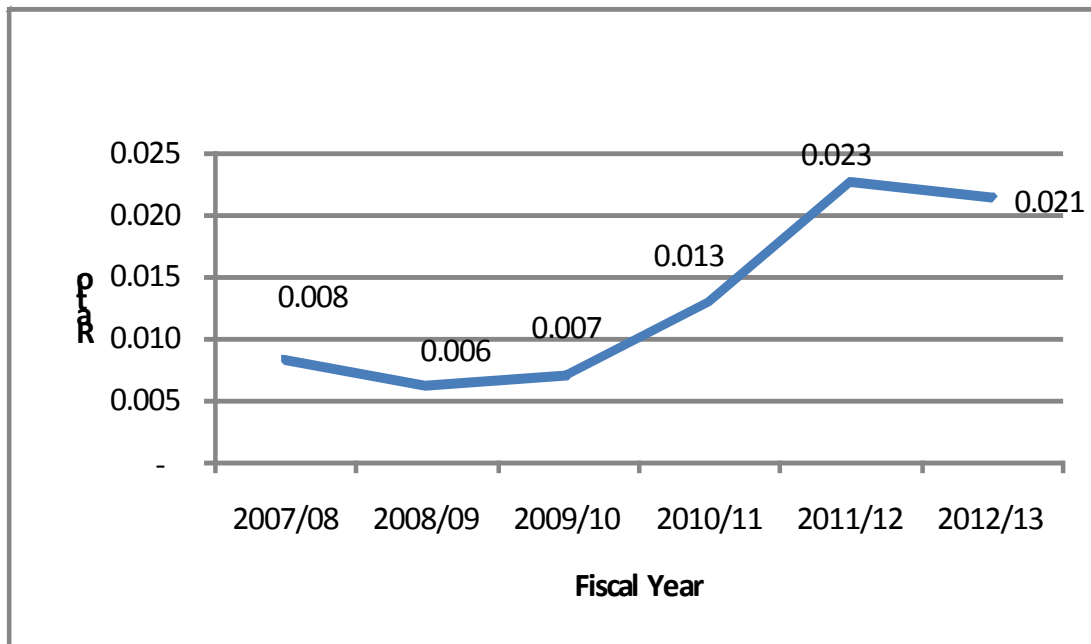
Table 4.3 shows that the bank has the fewer ratios during period. Mean ratio is 0.015 . The highest ratio is 2.30 % in 2011/12 and lowest ratio is 0.80 % in 2007/08.

The lower ratio indicates better quality of assets of banks in the form of loans and advances. It can be said that they are performing well or maintaining their NPLs perfectly. The higher ratio implies the bad quality of loan or assets of banks in the form of loans and advances. Among all NPL is the one of the main cause, which decreases the profit and fund would allocate for provision and it cause to become bank failure. Thus, the banks have to pay attention towards these matters.

The above non-performing assets to loans and advances ratio can be presented in bar diagram also which is as follows;

**Figure: 4.3**

**Non-performing Loans to Total Loans and Advances**



**4.1.4 Total Provision to Non-Performing Loans Ratio**

The provision held to non-performing loans ratio shows the proportion of loan loss provision to non-performing loans of the bank. Every bank should have to make provision for the loan to minimize the risk of not recovering the loan from the customer on time. Thus, this ratio measures up to what extent of risk inherent in NPL is covered by the total loan loss provision. From this ratio it can be concluded that which banks make safeguard for the future contingencies. Higher ratio indicates that the banks are safeguard against future contingencies that may create due to non-performing loan. Thus, higher ratio shows better financial position of banks and lower ratio shows weak in financial position.

**Table 4.4**  
**Ratio of Provision Held to Non Performing Loan**

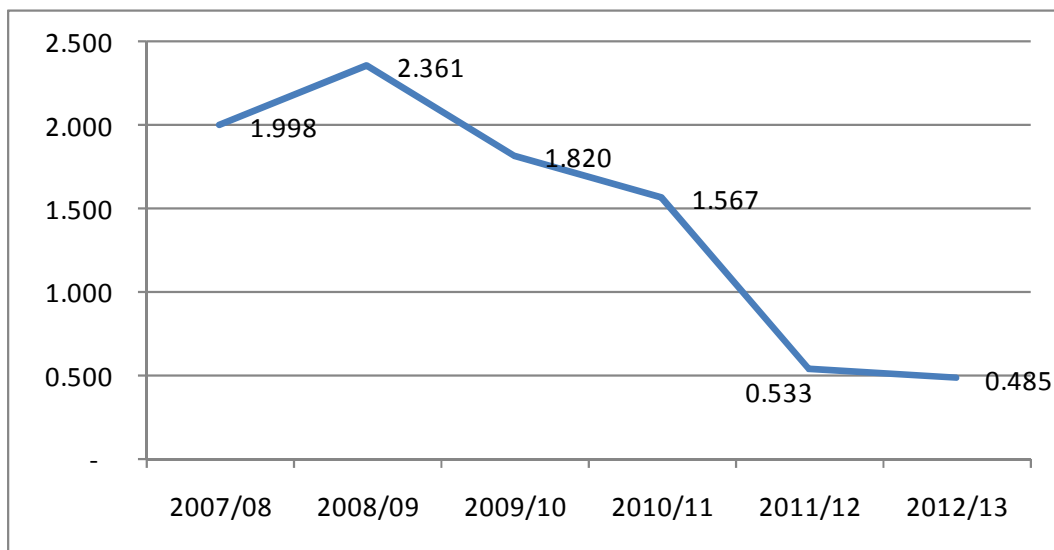
Fiscal Year	Total Provision	Non Performing Loans	Ratio
2007/08	356	178	1.998
2008/09	405	171	2.361
2009/10	409	225	1.820
2010/11	762	486	1.567
2011/12	517	969	0.533
2012/13	493	1,015	0.485
<b>Total</b>	<b>2,941</b>	<b>3,044</b>	<b>8.765</b>
<b>Mean</b>	<b>490</b>	<b>507</b>	<b>0.966</b>
S.D			0.781
C.V			0.159

*Source: Annual Reports*

Table 4.4 presents the ratio of provision held to total non-performing loans for 6 consecutive years. The mean ratio is 96.60%. The highest provision i.e. ratio is 236.10% in 2008/09 and lowest ratio is 48.50% in 2012/13. The S.D is 0.7810 and coefficient of variation is 0.1590, which indicate that the Bank has appropriate provision for non-performing assets.

The above provision held to non-performing assets ratio can be presented in a diagram also, which is as follows;

**Figure: 4.4**  
**Provision Held to Non-Performing Assets Ratio**



#### 4.1.5 Non-Performing loans to Total Assets Ratio

This ratio represents the proportion between the non-performing loans and total assets of banks. It shows the how many loans are non-performing or idle in the total assets of banks. Higher NPL, to total assets ratio indicates the works performance, which reduces the profitability of the banks. Lower ratio indicates the better performance and higher profitability of the banks. Thus, lower NPL to total assets ratio is better for the banks that exhibits the better profitability

Table 4.5 presented below, exhibits the non-performing loans to total assets ratio for six consecutive periods. The ratio has been continuously decreasing indicates that bank has proper utilized and invests the assets. However, the ratio in the FY 2009/10 has increased slightly. The S.D is 0.4920 and coefficient of variation is 0.0970 The lowest and decreasing ratio all over the period indicates the greater profitability and the better performance to recover the loan and its interest during the study period

**Table 4.5**  
**Ratio of Non Performing Loan to Total Assets**

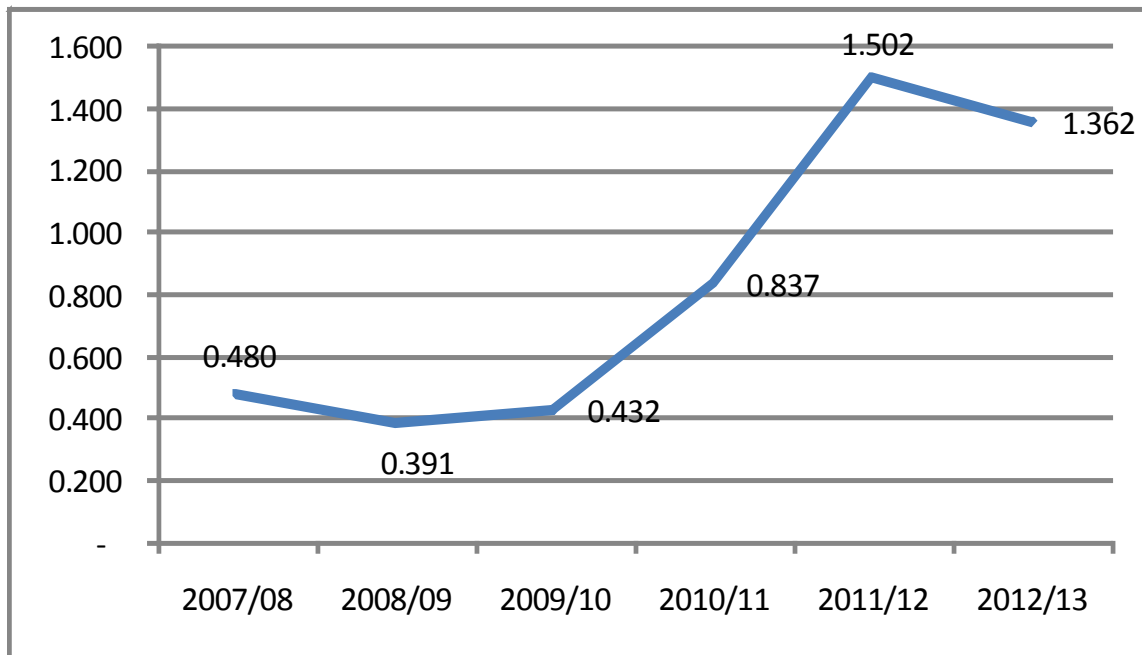
<b>Fiscal Year</b>	<b>Non Performing Loans</b>	<b>Total Assets</b>	<b>Ratio %</b>
2007/08	178	37,133	0.480
2008/09	171	43,867	0.391
2009/10	225	52,080	0.432
2010/11	486	58,100	0.837
2011/12	969	64,480	1.502
2012/13	1,015	74,531	1.362
<b>Total</b>	<b>3,044</b>	<b>330,191</b>	<b>0.922</b>
<b>Mean</b>	<b>507</b>	<b>55,032</b>	<b>0.009</b>
S.D			0.492
C.V			0.097

*Source: Annual Reports*

Thus, the bank has the lowest ratio all over the period which indicates the greater profitability and the better performance to recover the loan and its interest during the study period. The above non-performing assets to total assets ratio can be presented in diagram as;

**Figure: 4.5**

**Non-performing Loans to Total Assets Ratio**



**4.1.6 Return on Total Loans and Advances.**

This ratio indicates how efficiently the bank has employed its resources in the form of loans and advances. This ratio is calculated by dividing the net profit of the bank by total loans and advances. Net profit refers to that profit, which is obtained after all types of deduction like employees bonus, tax provision etc. Hence, this ratio measures bank's profitability with respect to loans and advances, higher the ratios better the performance.

Table 4.6 below represents that the bank has the highest ratio throughout the study period. The highest ratio is 150.02% in 2011/12 and lowest ratio is 39.10% in 2008/09. The average mean ratio is 0.90 percent. The S.D is 0.4920 and coefficient of variation is 0.0970.

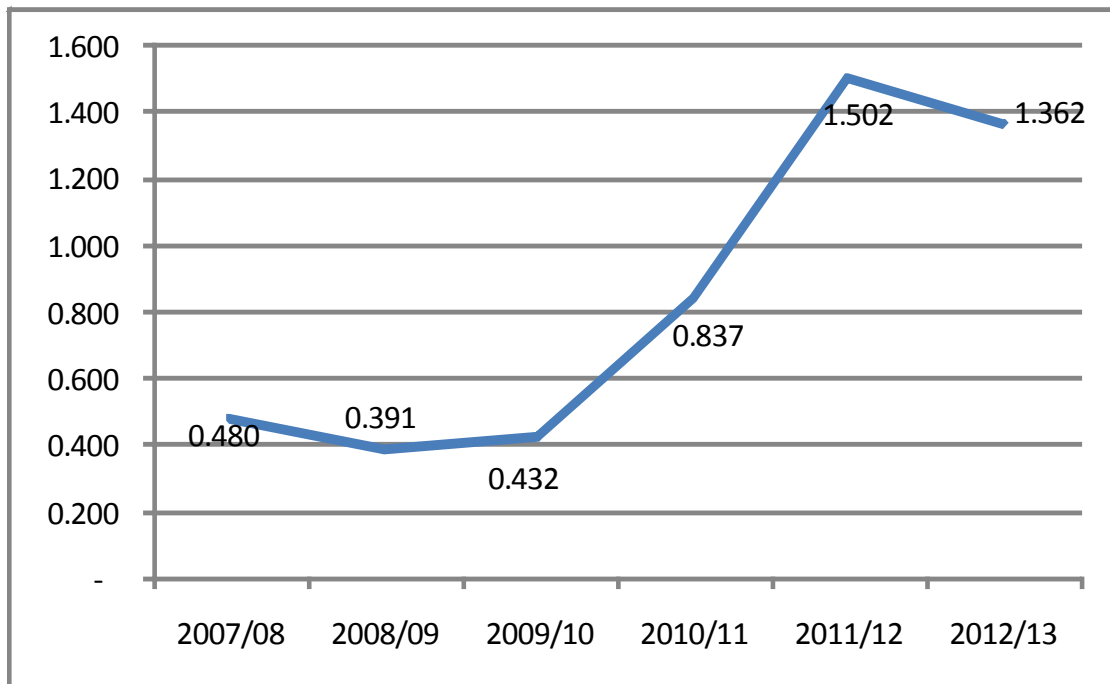
**Table 4.6**  
**Ratio of Return on Total Loans and Advances**

<b>Fiscal Year</b>	<b>Non Performing Loans</b>	<b>Total Assets</b>	<b>Ratio %</b>
2007/08	178	37,133	0.480
2008/09	171	43,867	0.391
2009/10	225	52,080	0.432
2010/11	486	58,100	0.837
2011/12	969	64,480	1.502
2012/13	1,015	74,531	1.362
<b>Total</b>	<b>3,044</b>	<b>330,191</b>	<b>0.922</b>
<b>Mean</b>	<b>507</b>	<b>55,032</b>	<b>0.009</b>
S.D			0.492
C.V			0.097

*Source: Annual Reports*

The above return on total loans and advances ratio can be presented in diagram as under;

**Figure: 4.6**  
**Return to Total Loans and Advances**



As from the figure 4.6, it is concluded that the net profit to total assets ratio is in decreasing trend during the study period. It can be asserted that the loans and advances in total assets seem to record diminishing income over the study period.

## 4.2 Correlation Analysis

### 4.2.1 Coefficient of Correlation between Total Deposit and Loans and Advances

Deposit have played very important role in performance of a commercial banks and similarly loan & advances are very important to mobilize the collected deposits. Co-efficient of correlation between deposit and loan & advances measures the degree of relationship between these two variables. In this analysis, deposit is independent variable (X) and loan & advances are dependent variable (Y). The main objectives of computing 'r' between these two variables is to justify whether deposit are significantly used as loan and advances in proper way or not.

**Table: 4.7**  
**Correlation between Deposit and Loan & Advances**

Name of Bank	Evaluation Criteria			
	r	R <sup>2</sup>	P.Er.	6 P.Er.
NABIL	0.9925	0.9851	0.0041	0.0246

*Source: Annual Reports*

From the above table 4.7 it is found that coefficient of correlation between deposits and loan & advances is 0.9925. It is shows the significant positive relationship between these two variables. It refers that deposit and loan & advances move together very closely. The value of coefficient of determination is 0.9851 which refers that 98.51% variance in loan & advances are affected by total deposit. The coefficient of determination of the bank is significant because the correlation coefficient is greater than the relative value of 6 P.Er. In other words, there is significant relationship between deposits and loan & advances.

### 4.2.2 Co-efficient of Correlation between Loans and Advances and Net Profit

Co-efficient of correlation between total assets and net profit is used to measure the degree of relationship between two variable i.e. loans and advances and net profit during the study period. Where loans and advances are independent variable (X) and net profit is dependent

variable (Y). The main objective of calculating this ratio is to determine the degree of relationship whether there the net profit is significantly correlated or not and the variation of net profit to loans and advances through the coefficient of determination. The following table shows the 'r', R<sup>2</sup>, P.Er. and 6 P. Er. between the variables of the bank for the study period.

**Table: 4.8**  
**Correlation between Loans and Advances and Net profit**

Name of Banks	Evaluation Criteria			
	R	R <sup>2</sup>	P.Er.	6 P.Er.
NABIL	0.9866	0.9734	0.0074	0.0441

*Source: Annual Reports*

Table 4.8 shows correlation coefficient between, loans and advances and net profit. There is a significant positive correlation i.e. 0.9866 between loans and advances and net profit. The coefficient of determination R<sup>2</sup> is 0.9734 which indicates that 97.34% variability in net profit is explained by loans and advances. Correlation coefficient greater than 6 times the P.Er. implies that the relationship between loans and advances and net profit is significant. In conclusion, the bank can generate more and more net profit with increasing loans and advances.

#### 4.2.3 Correlation between Loan Loss Provision and Loan & Advances

The correlation between loan loss provision (LLP) and loan & advances show the degree of relationship between these two items. How a unit increment in loans and advances affect the loan loss provision is measured by this correlation. Here, loan & advances is independent variable and loan loss provision is dependent variable

**Table: 4.9**  
**Correlation between Loan loss Provision and Loans and Advances**

Name of Banks	Evaluation Criteria			
	R	R <sup>2</sup>	P.Er.	6 P.Er.
NABIL	0.7326	0.5367	0.1276	0.7653

*Source: Annual Reports*

Table 4.9 shows correlation coefficient between, loan loss provision and loans and advances. It has positive correlation i.e. 0.7326 between loan loss provisions and loans and advances. The coefficient of determination  $R^2$  is 0.5367, which indicates that 53.67% variability in provision is explained by loans and advances. The bank has correlation coefficient lower than 6P.Er. and implies that the relationship between loan loss provision and loans and advances is insignificant. In other words, this relationship indicates that the higher the loans and advances, the higher the loan loss provision.

#### 4.2.4 Correlation between Loan Loss Provision and NPL

The correlation between LLP and NPL shows the relationship of them. How a unit of LLP effect the NPL is exhibited by this correlation. In this case, NPL is the independent variable and LLP is the dependent variable. As earlier mentioned NPLs are the loan falling on the category of substandard, doubtful and loss loan and the respectively provisioning requirement is 25%, 50% and 100% respectively. Higher the NPL higher will be the provisioning amount.

**Table: 4.10**

#### Correlation between Loan Loss Provision and Non-Performing Loans

Name of Bank	Evaluation Criteria			
	R	$R^2$	P.Er.	6 P.Er.
NABIL	0.9741	0.9488	0.0141	0.0846

*Source: Annual Reports*

Table 4.10 shows the relationship between LLP & NPL. There is positive correlation i.e. 0.9741 between loan loss provision and non-performing loans. The coefficient of determination  $R^2$  is 0.9488 which indicates that 94.88% variability in provision is explained by non-performing loans. Since the coefficient of correlation is greater than 6P.Er., the relationship between loan loss provision and non-performing loans is significant.

#### 4.2.5 Correlation between Non-Performing Loans and Loans and Advances

This correlation coefficient shows the degree of relationship between the NPL and loan & advance. The NPL is independent variable(X) and loan & advance is dependent (Y) variable. It shows how a unit of change of loan & advance effects to the NPL and what is the relation of them. It means how is effected the NPL due to the change (increase or decrease) of loans and advances of banks.

**Table: 4.11**

**Correlation between Non-Performing Loans and Loans and Advances**

Name of Bank	Evaluation Criterions			
	R	R <sup>2</sup>	P.Er.	6 P.Er.
NABIL	0.7744	0.5992	0.1104	0.6621

*Source: Annual Reports*

Table 4.11 shows correlation between non-performing loans and loans and advances. There is positive correlation i.e. 0.7744 between non-performing loans and loans and advances. The coefficient of determination R<sup>2</sup> is 0.5992, which indicates that 59.92% variability in non-performing loans is explained by loans and advances. The relationship is significant because the coefficient of correlation is little less than 6 P.Er .i.e. 0.7744 > 0.6621. As a whole there are significant correlation coefficient of bank between non-performing loans and loans and advances during the study.

**4.2.6 Correlation between Non-Performing Loans (NPL) and Total Assets**

The correlation coefficient shows the degree of relationship between the NPL and total assets for the study period. In this correlation coefficient, NPL is an independent variable and a total asset is dependent variable. It shows how units of change in total assets affect the NPL

**Table: 4.12**

**Correlation between Non-Performing Loans and Total Assets**

Name of Banks	Evaluation Criterions			
	R	R <sup>2</sup>	P.Er.	6 P.Er.
NABIL	0.7437	0.5531	0.1231	0.7383

*Source: Annual Reports*

Table 4.12 shows the relationship between the non-performing loans and total assets. There is positive correlation i.e. 0.7437 between the non-performing loans and total assets. The coefficient of determination R<sup>2</sup> is 0.5531 which indicates that 55.31% of non-performing loans is explained by total assets. The coefficient of correlation is marginally greater than 6P.Er. So the relationship between non-performing loans and total assets is significant.

### 4.3 Trend Analysis

Trend analysis is the statistical tools for the analyzing the data of selected bank in suitable manners. It helps to forecast the future value of bank of future expectation of different variables. It shows the behavior of different variables. It shows the behavior of the variables. It is based on the assumption that past tendencies continues in the future. In this study, data are presented for further eight years and forecast is done on the basis of these trend lines.

#### 4.3.1 Trend Analysis of Loan & Advances

Loans are the major source of income for a bank. If it defaults, it is the loan portfolio which may lead to the insolvency of the bank. Here the effort has been made to calculate the trend values of loans and advances of the Bank for further four years from 2013/14 to 2016/17 on the basis past data from 2005/06 to 2012/13.

$$Y = a + bX$$

Where,

Y= dependent variable, a=Y-intercept, b=slope of trend line or annual growth rate,

X = deviation from some convenient time periods.

Let trend line be

$$Y = a + b X \dots\dots\dots (I)$$

Here,

$$a = 6426.26$$

$$b = 5198.54$$

(See Annexure 3 for calculation)

$$Y = 6426.26 + 5198.54X .$$

**Table: 4.13**

**Trend line of Total Loans and Advances.**

*(Rs in Millions)*

<b>Fiscal year(X)</b>	<b>Loans and Advances (Y)</b>
2005/06	12,923
2006/07	15,546
2007/08	21,365
2008/09	27,590
2009/10	32,269
2010/11	38,034
2011/12	42,816
2012/13	48,015
2013/14	53,213
2014/15	58,412
2015/16	63,610
2016/17	68,809

*Source: Annual Reports*

**Figure: 4.8**

**Trend line of total Loans and Advances**

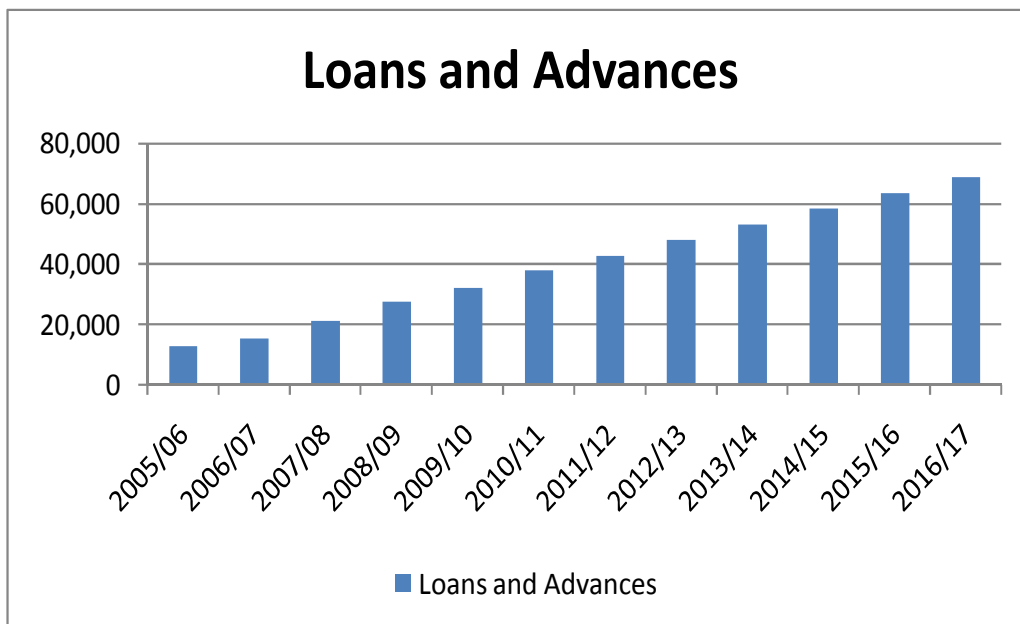


Table 4.13 depicts that loan & advances of the bank is in increasing trend. The trend projected for further four year 2013/14 to 2016/17. From the above analysis, it is clear that the bank is mobilizing its collected deposits and other funds in the form of loan and advances

in a very systematic way. The expected future value of loan will be Rs. 68,809 million in fiscal year 2016/17.

### 4.3.3 Trend Analysis of Net Profit

Under this topic, the trend values of net profit for 8 years from 2005/06 to 2012/13 is calculated and forecasted for next 4 years 2013/14 to 2016/17.

$$Y = a + bX$$

Where,

Y= dependent variable, a=Y-intercept, b=slope of trend line or annual growth rate,

X = deviation from some convenient time periods.

Let trend line be

$$Y = a + b x \dots\dots\dots (I)$$

Here,

$$a = 405.66$$

$$b = 149.29$$

(See Annexure 4 for calculation)

$$Y = 405.66 + 149.29X$$

**Table: 4.14**  
**Trend Analysis of Net Profit**

*(Rs in Millions)*

<b>Fiscal year(X)</b>	<b>Net Profit (Y)</b>
2005/06	635
2006/07	674
2007/08	746
2008/09	1,031
2009/10	1,139
2010/11	1,344
2011/12	1,451
2012/13	1,600
2013/14	1,749
2014/15	1,899
2015/16	2,048
2016/17	2,197

*Source: Annual Reports*

**Figure: 4.9**  
**Trend Analysis of Net Profit**

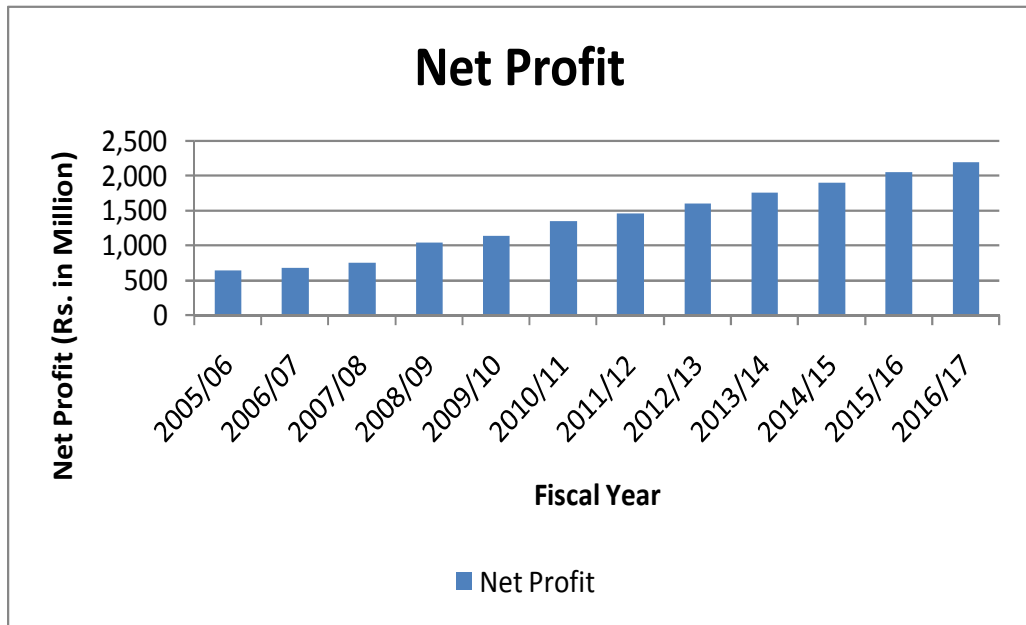


Table 4.14 reveals the trend of Net profit which shows that the bank has inconsistent net profit throughout the study period. It has earned Rs 635 million in the year 2005/06 and increased over the study period with Rs. 1,344 million in the year 2007/08. Towards the end of the study period, Nabil Bank has posted the maximum profit. It is forecasted that the bank will have increasing trend of net profit.

#### **4.3.4 Trend Analysis of Non- Performing Loans**

Here, the trend values of non-performing loans have been calculated for 8 years FY 2005/06 to FY 2012/13 and forecasting for the next four year till FY 2016/17.

$$Y = a + bX$$

Where,

Y= dependent variable, a=Y-intercept, b=slope of trend line or annual growth rate,

X = deviation from some convenient time periods.

Let trend line be,

$$Y = a + bX \dots \dots \dots (I)$$

Here,

$$a = 48.48$$

b = 52.23 (See Annex 5 for calculation)

$$Y = 48.48 + 52.23 X$$

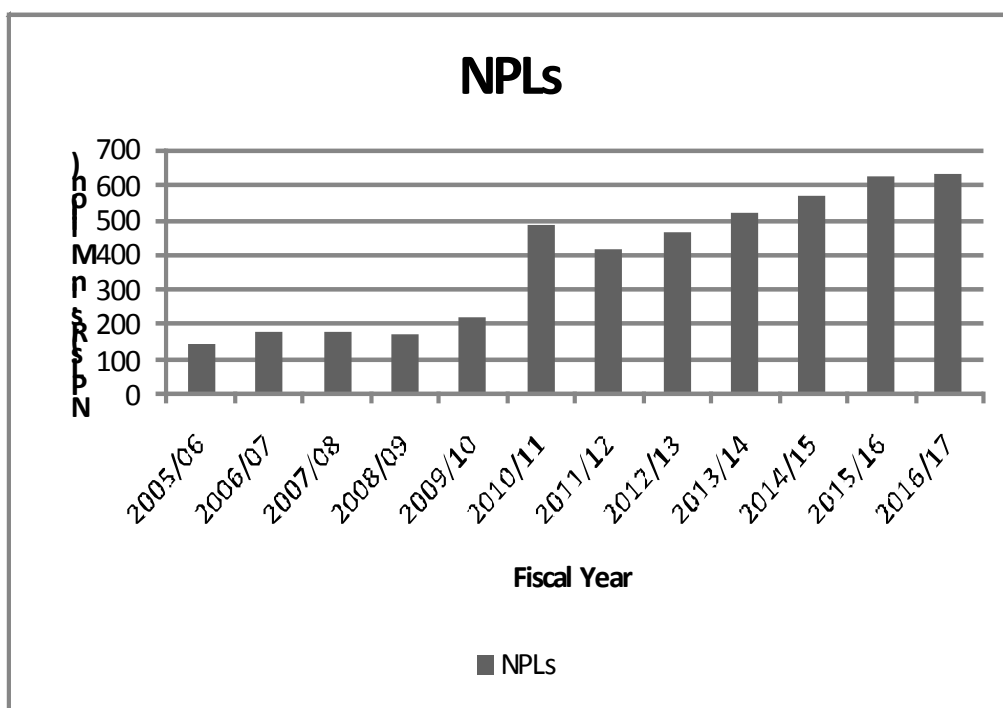
**Table: 4.15**  
**Trend Analysis of Non-Performing Loans**

*(Rs in Millions)*

Fiscal year(x)	Non Performing Loans
2005/06	144.51
2006/07	182.6
2007/08	178.3
2008/09	171.4
2009/10	224.8
2010/11	486.2
2011/12	414.09
2012/13	466.32
2013/14	518.55
2014/15	570.78
2015/16	623.01
2016/17	627.24

Source: Annual Reports

**Figure: 4.10**  
**Trend Analysis of Nonperforming Loans**



The above table reveals the trend of non-performing loans. The trend of non-performing loans is estimated in increasing trend.

### 4.3.5 Trend Analysis of Loan Loss Provision

Here, the trend values of loss loan provision have been calculated for 8 years FY 2005/06 to FY 2012/13 and forecasting for the next 4 years till FY 2016/17.

$$Y = a + bX$$

Where,

Y = dependent variable, a = Y-intercept, b = slope of trend line or annual growth rate,

X = deviation from some convenient time periods.

Let trend line be

$$Y = a + bX \dots \dots \dots (I)$$

Here,

$$a = 230.75, \quad b = 61.07 \text{ (See Annex 5 for calculation)}$$

$$Y = 230.75 + 61.07 X$$

**Table: 4.16**  
**Trend Analysis of Loss Loan Provision**

*(Rs. In Millions)*

Fiscal year(X)	Loan Loss Provision (Y)
2005/06	392
2006/07	352.9
2007/08	356.3
2008/09	404.6
2009/10	409.1
2010/11	762.1
2011/12	658.24
2012/13	719.31
2013/14	780.38
2014/15	841.45
2015/16	902.52
2016/17	963.59

*Source: Annual Reports*

**Figure: 4.11**  
**Trend Analysis of Loan Loss Provision**

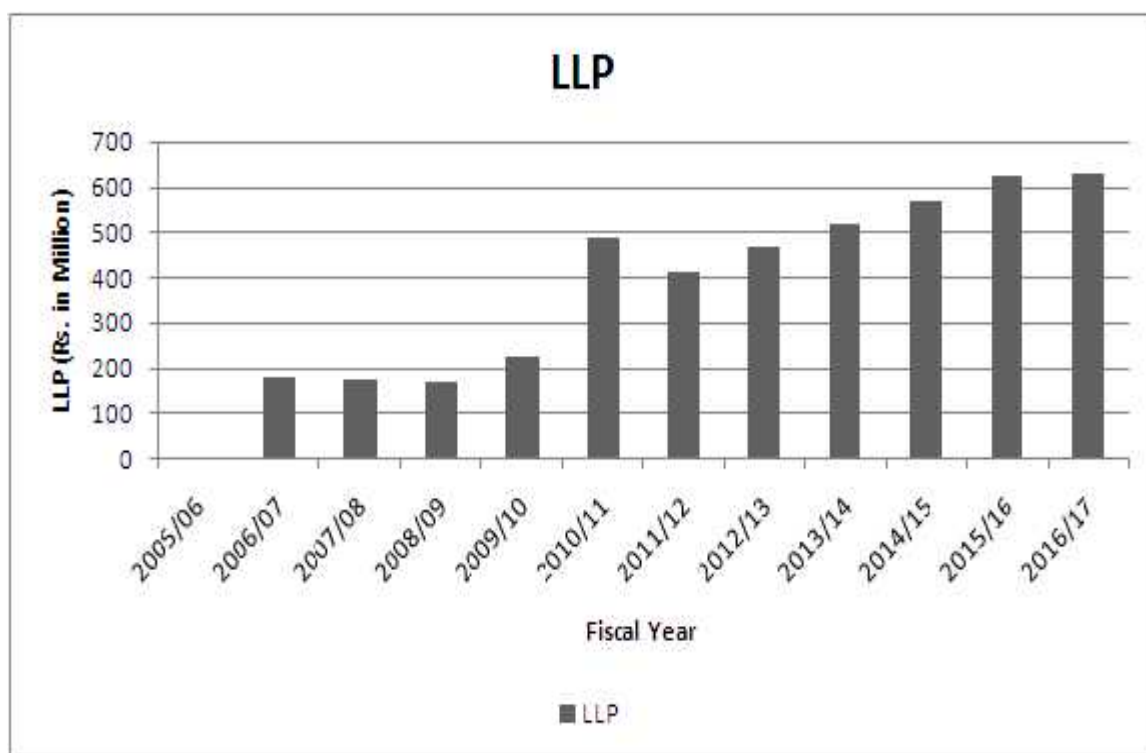


Table 4.16 reveals the trend of loan loss provision and is forecasted in increasing trend. The trend of increasing value is higher and aggressive. It is suggested to decrease the NPL to minimize loan loss provision.

#### 4.4 Major Findings

The following major findings are drawn from the above analysis:

- ) The loans and advances to total assets ratio is in fluctuating trend during the study period. The mean ratio is 64.046%. The proportion of loans out of total assets has declined in F.Y. 2009/2010 and increased thereafter. The bank seems mobilizing loans and advances in relation to the total assets to a larger extent and generating higher ratio in each fiscal year.
- ) The loans and advances to total deposit ratio is also in the fluctuating trend. The mean is 74.00% which indicates the average efficiency of the bank in utilization of its deposits. The S.D. is 4.00% and C.V is 0.00%. It signifies less deviation and more consistency in advancing loans out of deposits.

- J The average mean ratio of non-performing loans to total loans and advances is 1.50 %, which is considered to be a strong side of the bank in managing NPLs. The S.D is 0.70% and C.V is 0.00%. It can be said that the bank controlling its NPLs efficiently.
- J The ratio of provision held to total non-performing loans is sufficiently high. The average mean is 96.60%. The standard deviation is 78.10% and C.V. is 15.90%. It indicates that the bank has sufficiently provisioned against non-performing loans. The higher the ratio of NPL provisioned against loans, the better the cushion against the risk of actual loan loss.
- J The average ratio of non-performing loan to total asset is 0.90%. The ratio is continuously decreasing. This indicates that banks have properly managed its loans and advances. The S.D is 49.20% and C.V. is 9.70% respectively.
- J The ratio of net income to total loans and advances shows how efficiently bank has through its lending activities. The average ratio is 0.90%. The S.D of the ration is 49.00% and C. V. is 9.70% respectively. The lower S.D. and higher the C.V. indicates greater the stability in income generation.
- J The correlation between deposits and loans and advances is positive and significant. The coefficient of correlation between loans and deposits is 0.9925. The coefficient of determination is 0.9851. The correlation is significant because the correlation coefficient is greater than the relative value of 6 P.Er.
- J The coefficient of correlation between loans and advances and net profit is 0.9866 shows that the correlation between the two variables is significantly positive. The coefficient of determination is 0.9734, which indicates that 97.34% percent variability in net profit is explained by loans and advances. The relationship between Loans and advances and net profit is significant because the correlation coefficient is greater than 6P.Er. It can be concluded that the bank can increase its net income by increasing its loans advances.
- J The correlation coefficient between, loan loss provision and loans and advances is 0.7326. It refers that there is positive correlation between these two variables. Here, 53.67% variability in provision is explained by loans and advances. Since the bank has more correlation coefficient than 6P.Er., , the relationship between Loans loss Provision and Loans and advances is insignificant.
- J The relationship between LLP and NPL is in positive direction. The relationship between LLP and NPL is significant. It has positive correlation i.e. 0.9741. The coefficient of

determination is 0.9488. Since the coefficient of correlation is greater than 6P.Er. the relationship between Loan loss Provision and Loans and advances is significant.

- ) The correlation coefficient between, non-performing loans and loans and advances is 0.7744. It refers that there is positive correlation between these two variables. Here, 59.92% of non-performing loans is contributed by loans and advances. The relationship is significant because the coefficient of correlation is higher than 6 P.Er.
- ) The bank's assets and nonperforming loans are positively correlated. The correlation coefficient between the non-performing loan and total assets is 0.7437. There is 59.34% percent of non-performing loan explained by total asset. The coefficient of correlation is marginally greater than 6P.Er. So the relationship between non-performing loan and total assets is still significant.
- ) The trend line of loans and advances is in increasing trend. The increasing trend of total loans is considered to be good symptom of potential performance efficiency. The trend of profit reveals that the bank's profits have consistently growing throughout the projected period. It signifies that the future profitability of the bank is high.
- ) The trend of non-performing loans is estimated in increasing trend. It has been caused by the increasing potential loans and advances and the positive relationship between NPL and total loans.
- ) The trend of Loss loan provision is forecasted to be in increasing trend. Since the provision is set aside against the NPL, the increasing NPL has been the major source of the increasing loan loss provision. However, a decreased volume of provision in 2011/12 than its previous Fiscal year is projected.

## **CHAPTER - V**

### **SUMMARY, CONCLUSION AND RECOMMENDATION**

#### **5.1 Summary**

Today's financial market is unpredictable and loaded with risk. Nonperforming loans are loans that have defaulted or are in danger of defaulting when payments are no longer able to be made. Typically, loans that have not received payments for three months are considered to be non performing loans, though specific contract terms may differ occasionally.

The level of NPL in Nepalese banking sector is very alarming and the issue is becoming more and more unruly day by day. It is well known from different financial reports. The total NPL in Nepalese banking system is approx.Rs.18, 548.20 million.

This research is focused on studying the non-performing loans of Nabil Bank. For this purpose, descriptive and analytical research designs have been adopted. To conduct this research mostly secondary data were used. Besides this, newspaper, relevant thesis, journals, articles, related website etc. were also taken. The data collected from various sources were recorded systematically and presented in appropriate forms of table and charts and appropriate mathematical, statistical, financial and graphical tools were applied to analyze the collected data in suitable manner. The data of six consecutive years were analyzed to meet the objective of the study. The empirical analysis evaluates as to how the bank's profitability is affected by the non-performing loans during the study period with the help of various ratios.

#### **5.2 Conclusions**

One of the major components of bank's assets is loans and advances, and the effective management of such loan portfolio has been a challenging to bankers. The failure of many banks is not because of their inability to mobilize adequate deposits from the surplus sector, but mainly because their lending portfolios have been poorly managed. The banking sector is seen to have an important role to play in the economic development of the country. This is mostly pronounced in the realm of financial intermediation. However, previous studies on the sector showed that little success was recorded in this regard. Some banks find it difficult to

meet their obligations to their customers and owners due to fault or weakness in managing their lending portfolio and the shortcomings which could render them either illiquid or insolvent.

Non-Performing Loans (NPLs) reduces the liquidity of banks, credit expansion, growth of the economic activities as a whole with direct consequences on the performance of banks.

It can be concluded that the credit as well as the nonperforming loans of Nabil bank have been bettered managed. Although the quantum of nonperforming loans is projected to be increasing in future, the extent of the nonperforming loans in relation to the total loans is still low. Similarly, the provision against the nonperforming loans made by the bank during the study period has been found to be extremely high, indicating that the potential uncollectible loans cannot adversely impact the bank's profitability in future.

### **5.3 Recommendations**

Following are some of the recommendations based on the above analysis:

- ) To be a successful banker a bank must utilize depositors' money as loan and advances. Loan and advances is the largest item of the bank in the asset side of balance sheet which is risky but a source of profitability. Since the bank seems strong in carrying large extent of loans as performing loans, it is recommended to extend more credits by adopting the liberal lending policy to increase its total loan and advances in order to earn more profit.
- ) The bank has already maintained adequate provisions for non-performing loans so as not to distort the true presentation of the bank's financial position in their balance sheets. It is recommended to continue the existing practice of provisioning sufficient amount against the nonperforming loans to create a cushion against the bank failure due to credit default.
- ) The bank is advised to review its current policies regarding its sectoral credit exposure so that it can accommodate current changing scenario in the economy and still maintain its higher profits. Large exposure on big corporate or single project in the single sector should be avoided and an optimal portfolio of loans should be formed.

- J One of the main causes of default loans and increasing the NPLs could be insufficient collateral mortgaged by borrower. Therefore, it should make ensure that enough collateral has been taken. This act further accelerates the timely recovery of principal interest amount even in the event of loan default.

## **BIBLIOGRAPHY**

### **Books:**

- Abolo, E. M. (1999), "General Leading Principles and Policies" First Bank of Nigeria Monthly Business and Economic Report, September.
- Arora, V. and Bansl. (2009), An Analytical Study of Growth of Credit Schemes of Selected Banks. The Icfai University Journal of Services Marketing, Vol. VII, No. 1, pp. 51-65.
- Barr, R. L. Seiford & T. Siems. (1994), "Forecasting Banking Failure: A Non-Parametric Frontier estimation Approach", *Researches Economiques de Lovain* (60), 417-429
- Batra, S. (2004), *Developin"g the Asian Markets for Non-performing assets-Development in India*" OECD.
- Bercoff, J J., Giovanni J.D., Grimard, F. (2002), "Argentinean Banks, Credit Growth and the Tequila Crisis: A Duration Analysis" (Unpublished).
- Das, R. (2002), "Managing the Risk of Non Performing Assets in the Small Scale Industries in India."
- Datta, C.T. (2005), "Resolution Strategies for Maximising Value of Non-Performing Assets (NPAs)."
- Dorfman, P. M. (1998), "A Lenders' Guide to Lending Excellence (part 1) Credit Risk and Lenders" *Deskmate*. Vol No. 3. June-August. (Lagos: Capital).
- Elaine, D. (2007), *Risk Management: Bringing the Middle Officer to the Front*. Zenith Economic Quarterly. Vol. 2, No. 10, April-June. (Lagos).
- Ferguson, T.P. (2007), "Observations on the Securitization of Non-Performing Loans in Russia". *Bucerius Law Journal*, Bucerius Law School, Hamburg, Germany.
- Frاند, W. (2003), "The credit Crunch: A Comparison of Germany and Japan", *CSEifo Forum* 2003 No.1.

- Geretto, E. & Pauluzzo, A.E.R. (2009), "The Chinese Banking System: Economic Performance and Prospects for Future Development" Springer-Verlag.
- Guida, B.M-M. (2010), "Modelling non-performing loans probability in the commercial banking system: efficiency and effectiveness related to credit risk in Italy" Springer-Verlag.
- Hu, J.Y.L. and Chiu, Y.H. (2006), "Ownership and Non-performing Loans: Evidence from Taiwan's Banks." *Developing Economies*, (Forthcoming).
- Jimenez, G. and Saurina, J. (2005), "Credit cycles, credit risk, and prudential regulation." Banco de Espana.
- Joshi, Dr. A. (2003), "Analysis of Non-Performing Assets of IFCI Ltd" India.
- Keeton, W. and Morris, c.s. (1987), "Why Do Banks' Loan Losses Differ?" Federal Reserve Bank of Kansas City, *Economic Review*, May, pp. 3-21
- Keeton, W. R. (1999), "Does Faster Loan Growth Lead to Higher Loan Losses?" Federal Reserve Bank of Kansas City, *Economic Review*, Second Quarter 1999.
- Krueger, A.O. & Tornell, A. (1999), "The Role of Bank Restructuring in the Recovery from Crises: Mexico 1996 – 98", NBER Working Paper No. 7042.
- Lampros, V. (2004), "The Dynamics in Asian Non-performing Loans" OECD.
- Naik, S.D. (2003), Business line internet edition.
- Nwankwo, G.O. (1991), "Risk Analysis and Management, Principles and Practice". Malt House Press Ltd. Lagos.
- Otchere, I.K. (2005), "Competitive and Value Effects of Bank Privatization in Developed Countries."
- Pant, P.R. (2009). *Social Science Research and Thesis Writing*.
- Puri, A. (2004), "Developing the Asian Markets for non-performing assets" OECD.
- Rajan, R. and Dhal, S.C. (2003), "Non-performing Loans and Terms of Credit of Public Sector Banks in India: An Empirical Assessment." *Occasional Papers*, 24:3, pp. 81-121, Reserve Bank of India.

- Reddy, P. K. (2002), "A Comparative Study of Non-performing Assets in India in the Global Context-Similarities and dissimilarities, remedial measures, The Indian Institute of Management, Ahmedabad, India.
- Redman, L.V. and Mory, A.V.H. (1923), *The Romance of Research* , p.10.
- Salas, V. and Saurina, J. (2002), "Credit Risk in Two Institutional Regimes: Spanish Commercial and Savings Banks." *Journal of Financial services Research*, 22:3, pp. 203-224.
- Sathya, M. (2005), *Privatization, Performance, and Efficiency: A study of Indian Banks*. Vikalpa, (1):23-28.
- Sheikh, S.A. (2004), "Value Maximization of non-performing loans and distressed assets: Pakistani's experience" OECD.
- Sinkey, J. F. and Greenwalt, M.B. (1991), "Loan-Loss Experience and Risk- Taking Behavior at Large Commercial Banks." *Journal of Financial Services Research*, 5, pp.43-59.
- Ved, P. & Malik N.S. (2007), "A Multivariate Analysis of the financial characteristics of Commercial Banks in India." *The Icfai Journal of Bank Management* .VI (3).
- Villanueva, C.L. (2004), "Philippine Trends in addressing distressed assets and vehicles for maximizing value" OECD.

**Unpublished Master level Thesis:**

- Ghimire, G. (2005), A Study on 'Non-Performing Assets of Commercial Banks Causes and Effect'. An unpublished Master Degree Thesis, Submitted to Shanker Dev Campus Faculty of Management T.U.
- Khadka, B. (2011). A Study on 'Non-performing Assets of Nepalese Commercial Bank'. An unpublished Master Degree Thesis, Submitted to Shanker Dev Campus Faculty of Management T.U.
- Neupane, L. (2012). A Study on 'Non-performing Assets and Profitability of Commercial Bank' An unpublished Master Degree Thesis, Submitted to Shanker Dev Campus Faculty of Management. T.U.

- Pandey, B. (2002), Nepal Rastra Bank – Directives, their Implementation and Impact on the commercial Banks – A Case Study of Himalayan Bank Limited, an unpublished master level thesis submitted to Nepal Commerce Campus, Faculty of Management, T.U., Kathmandu
- Shrestha, D. (2009), A Study on the credit risk management of Nepalese Commercial Banks, an unpublished master level thesis submitted to Shankar Dev Campus, Faculty of Management, T.U., Kathmandu
- Shrestha, S. (2004), A Study on Non-Performing Loan and Loan Loss Provisioning of Commercial Banks, an unpublished master level thesis submitted to Shankar Dev Campus, Faculty of Management, T.U., Kathmandu
- Thapa, S. (2010), A Study of Non-Performing Assets of Nepalese Commercial Banks, an unpublished master level thesis submitted to Shankar Dev Campus, Faculty of Management, T.U., Kathmandu

#### **Periodicals and Journals:**

- Adhikari, K. (2062), Non-Performing Loan and its Management, New Business Age, 3 (12):22-23, Kathmandu
- Annual Report. (2007/08 to 2012/013), Nabil Bank Limited, Kathmandu
- Dhungana, P. (2058), Why Assets Management Co. is considered the best to solve non-performing loan problem, New Business Age, 2 (10):37-39, Kathmandu
- Montecillo, P. G. (2013), "Banks' nonperforming loans down in June", Business Enquirer.
- Murinde, P. and Yaseen, J. (2012), Management of NPA, international journal of reseach in commerce, economics and management volume no.1(2012), issue no.1.
- News (2013), "Fincos' NPL worsens, reaches 16.1pc", Kathmandu post.
- Paudel, S. (2059), Lending Operation of Commercial Banks of Nepal and its impact on GDP, The Business Voice of Nepal, The special issue of Banijya Samachar, T.U., Kirtipur

Rawal, T. (2003), Measures adopted to overcome the problem of financial sector and the NPLs, New Business Age, 3 (15):42-43, Kathmandu

Regmi, Y. (2063), Non-Performing Assets Management, New Business Age, Vol. 2, (16):30-37, Kathmandu

Sapkota, R. (2004), Portion of NPA in Commercial Banks – High in Public, Low in Private, New Business Age, 2 (16):31-35, Kathmandu

## **websites**

<http://www.nabilbank.com.np>

<http://www.google.com>

<http://www.nrb.org.np>

[www.wikipedia.com](http://www.wikipedia.com)

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

[www.nepalnews.com](http://www.nepalnews.com)

[www.fincialnepal.com](http://www.fincialnepal.com)

## Annexrure 1

<b>Consolidated Balance Sheet of Nabil Bank Limited.</b>	<b>Rs. "Million"</b>					
<b>Capital &amp; Liabilities</b>	<b>2007/08</b>	<b>2008/09</b>	<b>2009/10</b>	<b>2010/11</b>	<b>2011/12</b>	<b>2012/13</b>
1. Share Capital	689	966	2,029	2,030	2,436	3,046
2. Reserves and Surplus	1,748	2,164	1,805	2,542	3,018	3,661
3. Non-Controlling Interest	-	-	-	29	30	33
4. Debentures & Bonds	240	300	300	300	300	300
5. Borrowings	1,360	1,681	75	1,651	311	-
6. Deposits	31,915	37,348	46,341	49,608	54,906	63,506
7. Bills Payable	238	463	425	416	179	530
8. Proposed Dividend	437	361	435	609	812	975
9. Income Tax Liabilities	39	80	25	47	51	67
10. Other Liabilities	466	503	645	868	1,208	1,226
<b>Total</b>	<b><u>37,133</u></b>	<b><u>43,867</u></b>	<b><u>52,080</u></b>	<b><u>58,100</u></b>	<b><u>63,250</u></b>	<b><u>73,344</u></b>
<b>Assets</b>						
<b>Assets</b>	<b>2007/08</b>	<b>2008/09</b>	<b>2009/10</b>	<b>2010/11</b>	<b>2011/12</b>	<b>2012/13</b>
1. Cash Balance	511	674	636	745	1,051	1,140
2. Balance with Nepal Rastra Bank	1,829	2,649	549	1,474	3,682	4,789
3. Balance with Banks/Financial Institutions	330	50	215	240	(439)	(32)
4. Money at Call and Short Notice	1,952	553	3,118	2,453	826	1,634
5. Investment	9,940	10,826	13,601	13,003	14,070	16,344
6. Loans, Advances and Bills Purchased	21,365	27,590	32,269	38,034	41,606	46,370
7. Fixed Assets	598	661	781	941	894	878
8. Non Banking Assets	-	-	-	-	-	-
9. Other Assets	606	865	910	1,210	1,560	2,219
<b>Total</b>	<b><u>37,133</u></b>	<b><u>43,867</u></b>	<b><u>52,080</u></b>	<b><u>58,100</u></b>	<b><u>63,250</u></b>	<b><u>73,344</u></b>

Income Statement of Nabil Bank Limited	Annexure 2					
Particulars	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
1. Interest Income	1,979	2,798	4,048	5,258	6,139	5,721
2. Interest Expense	758	1,153	1,960	2,947	3,153	2,186
Net Interest Income	1,220	1,645	2,088	2,312	2,986	3,535
3. Commission and Discount	156	180	215	291	368	405
4. Other Operating Income	97	144	170	183	207	222
5. Exchange Income	196	252	291	276	447	489
Total Operating Income	1,670	2,221	2,764	3,062	4,008	4,652
6. Staff Expense	263	340	367	456	505	652
7. Other Operating Expense	221	265	335	404	433	476
8. Exchange Loss	-	-	-	-	-	-
Operating Profit before Provision for Possible Losses	1,187	1,616	2,062	2,202	3,070	3,523
9. Provision for Possible Losses	64	46	356	109	414	27
Operating Profit	1,123	1,570	1,706	2,093	2,656	3,496
10. Non Operating Income /(Exp	24	2	6	7	10	6
11. Provision for Possible Losses Write Back	11	11	40	7	-	25
Profit from Regular Activities	1,158	1,583	1,753	2,107	2,666	3,527
12. Income/(Expense) from Extra-ordinary Activities	40	44	34	3	(3)	(17)
Profit from All Activities	1,198	1,627	1,787	2,110	2,663	3,509
13. Provision for Staff Bonus	109	148	163	192	243	319
14. Provision for Income Tax	343	448	486	572	724	958
Current Tax	342	471	473	571	732	955
Prior Period Tax	0	1	1	0	-	6
Deferred Tax	-	-24	12	1	(8)	(2)
15. Share of Non-Controlling Interest in the Profit of Subsidiary	-	-	-	2	3	5
Net Profit/(Loss)	746	1,031	1,139	1,344	1,693	2,227

### Annexure 3

#### Trend analysis of Loans and Advances

Estimation of Loans and Advances for the year 2013/14 to 2016/17.

(Rs. in millions)

Year	Loans and Advances (Y)	Year (X)	XY	X <sup>2</sup>
2005/06	12,923	1	12,923	1
2006/07	15,546	2	31,092	4
2007/08	21,365	3	64,095	9
2008/09	27,590	4	110,360	16
2009/10	32,269	5	161,345	25
2010/11	38,034	6	228,204	36
2011/12	42,816	7	299,712	49
2012/13	48,015	8	384,120	64
<b>sum</b>	<b>238,558</b>	<b>36</b>	<b>1,291,851</b>	<b>204</b>

Here, the actual equation of linear trend is  $Y = a + bX$

Two normal equations are

$$\sum Y = na + b \sum x$$

$$\sum XY = a \sum X + b \sum X^2$$

Putting the values on normal equations from the above table

$$238558 = 8a + 36b \dots \dots \dots (I)$$

$$1291851 = 36a + 204b \dots \dots \dots (II)$$

By solving equation, we get,

$$8588088 = 288a + 1296b$$

$$10334808 = 288a + 1632b$$

$$\begin{array}{r} - \\ - \\ \hline - \end{array}$$

$$-1746720 = -336b$$

$$b = 5198.54$$

Substituting the value of 'b' in equation (I), we get

$$238558 = 8a + 36 * 5198.54$$

$$a = 6426.28$$

Thus, the required trend is

$$Y = 6426.26 + 5198.54 X$$

Forecasting the loans and advances for the upcoming next 4 years

$$Y_{2013/14} = 6426.26 + 5198.54 * 9 = 53213.12$$

$$Y_{2014/15} = 6426.26 + 5198.54 * 10 = 58411.66$$

$$Y_{2015/16} = 6426.26 + 5198.54 * 11 = 63610.2$$

$$Y_{2016/17} = 6426.26 + 5198.54 * 12 = 68808.74$$

## Annexure 4

### Trend analysis of Net Profit

Estimation of Net Profit for the year 2013/14 to 2016/17. (Rs. in millions)

Year	Net Profit (Y)	Year (X)	XY	X <sup>2</sup>
2005/06	635	1	635	1
2006/07	674	2	1348	4
2007/08	746	3	2238	9
2008/09	1031	4	4124	16
2009/10	1139	5	5695	25
2010/11	1344	6	8064	36
2011/12	1451	7	10157	49
2012/13	1600	8	12800	64
<b>sum</b>	<b>8620</b>	<b>36</b>	<b>45061</b>	<b>204</b>

Here, the actual equation of linear trend is  $Y = a + bX$

Two normal equations are

$$\sum Y = na + b \sum x$$

$$\sum XY = a \sum X + b \sum X^2$$

Putting the values on normal equations from the above table

$$8620 = 8a + 36b \dots\dots\dots (I)$$

$$45061 = 36a + 204b \dots\dots\dots (II)$$

By solving equation, we get,

$$310320 = 288a + 1296b$$

$$44208 = 288a + 1632b$$

$$\begin{array}{r} - \\ - \\ \hline -50168 = -336b \end{array}$$

$$b=149.29$$

Substituting the value of 'a' in equation (II), we get

$$45061 = 36a + 204 * 149.29$$

$$a=405.66$$

Thus, the required trend is

$$Y = 405.66 + 149.29 X$$

Forecasting the net profit for the upcoming next 4 years

$$Y_{2013/14} = 405.66 + 149.29 * 9 = 1749.27$$

$$Y_{2014/15} = 405.66 + 149.29 * 10 = 1898.56$$

$$Y_{2015/16} = 405.66 + 149.29 * 11 = 2047.85$$

$$Y_{2016/17} = 405.66 + 149.29 * 12 = 2197.14$$

## Annexure 5

### Trend analysis of Non-performing Loans

Estimation of Non-performing loans for the year 2013/14 to 2016/17.

(Rs. in millions)

Year	NPL (Y)	Year (X)	XY	X <sup>2</sup>
2005/06	144.51	1	144.51	1
2006/07	182.6	2	365.2	4
2007/08	178.3	3	534.9	9
2008/09	171.4	4	685.6	16
2009/10	224.8	5	1124	25
2010/11	486.2	6	2917.2	36
2011/12	414.09	7	2898.63	49
2012/13	466.32	8	3730.56	64
<b>sum</b>	<b>2268.21</b>	<b>36</b>	<b>12400.6</b>	<b>204</b>

Here, the actual equation of linear trend is  $Y = a + bX$

Two normal equations are

$$\sum Y = na + b \sum x$$

$$\sum XY = a \sum X + b \sum X^2$$

Putting the values on normal equations from the above table

$$2268.21 = 8a + 36b \dots \dots \dots (I)$$

$$12400.6 = 36a + 204b \dots \dots \dots (II)$$

By solving equation, we get,

$$81655.56 = 288a + 1296b$$

$$99204.8 = 288a + 1632b$$

$$\begin{array}{r} \underline{\quad\quad\quad} \quad \underline{\quad\quad\quad} \quad \underline{\quad\quad\quad} \\ -17549.21 = -336b \end{array}$$

$$b = 52.23$$

Substituting the value of 'a' in equation (I), we get

$$2268.21 = 8a + 36 * 52.23$$

$$a = 48.48$$

Thus, the required trend is

$$Y = 48.48 + 52.23 X$$

Forecasting the nonperforming loans for the upcoming next 4 years

$$Y_{2013/14} = 48.48 + 52.23 * 9 = 518.55$$

$$Y_{2014/15} = 48.48 + 52.23 * 10 = 570.78$$

$$Y_{2015/16} = 48.48 + 52.23 * 11 = 623.01$$

$$Y_{2016/17} = 48.48 + 52.23 * 12 = 675.24$$

## Annexure 6

### Trend analysis of Loans Loss Provision

Estimation of Non-performing loans for the year 2013/14 to 2016/17.

(Rs. in millions)

Year	LLP (Y)	Year (X)	XY	X <sup>2</sup>
2005/06	392	1	392	1
2006/07	352.9	2	705.8	4
2007/08	356.3	3	1068.9	9
2008/09	404.6	4	1618.4	16
2009/10	409.1	5	2045.5	25
2010/11	762.1	6	4572.6	36
2011/12	658.24	7	4607.68	49
2012/13	719.31	8	5754.48	64
<b>sum</b>	<b>4054.55</b>	<b>36</b>	<b>20765.36</b>	<b>204</b>

Here, the actual equation of linear trend is  $Y = a + bX$

Two normal equations are

$$\sum Y = na + b \sum x$$

$$\sum XY = a \sum X + b \sum X^2$$

Putting the values on normal equations from the above table

$$4054.55 = 8a + 36b \dots\dots\dots (I)$$

$$20765.36 = 36a + 204b \dots\dots\dots (II)$$

By solving equation, we get,

$$145963.8 = 288a + 1296b$$

$$166122.88 = 288a + 1632b$$

$$\begin{array}{r} - \\ \hline -20159.08 = -336b \end{array}$$

$$b = 61.07$$

Substituting the value of 'a' in equation (I), we get

$$4054.55 = 8a + 36 * 61.07$$

$$a = 230.75$$

Thus, the required trend is

$$Y = 230.75 + 61.07 X$$

Forecasting the loan loss provision for the upcoming next 4 years

$$Y_{2013/14} = 230.75 + 61.07 * 9 = 780.38$$

$$Y_{2014/15} = 230.75 + 61.07 * 10 = 841.45$$

$$Y_{2015/16} = 230.75 + 61.07 * 11 = 902.52$$

$$Y_{2016/17} = 230.75 + 61.07 * 12 = 963.59$$

## Annexure 7

### List of Commercial Banks As of July 2013 (Licensed by NRB)

(Rs in Millions)

S. No.	Names	Operation Date (A.D.)	Paid Up Capital
1	Nepal Bank Ltd.	1937/11/15	380.00
2	Rastriya Banijya Bank Ltd.	1966/01/23	1172.30
3	Nabil Bank Ltd	1984/07/16	2029.77
4	Nepal Investment Bank Ltd.	1986/02/27	3012.92
5	Standard Chartered Bank Nepal Ltd.	1987/01/30	1610.17
6	Himalayan Bank Ltd.	1993/01/18	2400.00
7	Nepal SBI Bank Ltd.	1993/07/07	2102.97
8	Nepal Bangladesh Bank Ltd.	1994/06/05	2009.40
9	Everest Bank Ltd	1994/10/18	1391.57
10	Bank of Kathmandu Ltd.	1995/03/12	1604.19
11	Nepal Credit and Commerce Bank Ltd.	1996/10/14	1400.00
12	NIC Asia Bank Limited.	2013/6/30	2311.55
13	Lumbini Bank Ltd.	1998/07/17	1430.00
14	Machhapuchhre Bank Ltd.	2000/10/03	1627.20
15	Kumari Bank Ltd.	2001/04/03	1485.00
16	Laxmi Bank Ltd.	2002/04/03	1613.52
17	Siddhartha Bank Ltd.	2002/12/24	1618.26
18	Agriculture Development Bank Ltd.	1968/01/02	9474.30
19	Global Bank Ltd.	2007/01/02	1601.45
20	Citizens Bank International Ltd.	2007/06/21	2101.84
21	Prime Commercial Bank Ltd	2007/09/24	2245.75
22	Sunrise Bank Ltd.	2007/10/12	2015.00
23	DCBL Bank Ltd.	2008/05/25	2000.00
24	NMB Bank Ltd.	2008/06/05	2000.00
25	Kist Bank Ltd.	2009/05/07	2000.00
26	Janata Bank Nepal Ltd.	2010/04/05	1400.00
27	Mega Bank Nepal Ltd.	2010/07/23	1631.00
28	Commerz & Trust Bank Nepal Ltd.	2010/09/20	1400.00
29	Civil Bank Ltd.	2010/11/26	1200.00
30	Century Commercial Bank Ltd.	2011/03/10	1080.00
31	Sanima Bank Ltd.	2012/02/15	2016.00

Source:NRB