

**NON-PERFORMING LOAN AND ITS IMPACT ON
PROFITABILITY OF NEPALESE COMMERCIAL BANKS**

A Thesis

Submitted By:

Rashmi Maharjan

Shanker Dev Campus

Campus Roll No.: 693/072

T.U. Regd. No.: 7-2-422-149-2012

2nd Year Exam Roll No.: 391551

Submitted To:

Office of the Dean

Faculty of Management

Tribhuvan University

*In partial fulfillment of the requirement for the degree of
Master of Business Studies (MBS)*

Kathmandu, Nepal

July, 2024

RECOMMENDATION

This is to certify that the thesis

Submitted by:

Rashmi Maharjan

Entitled:

**NON-PERFORMING LOAN AND ITS IMPACT ON
PROFITABILITY OF NEPALESE COMMERCIAL BANKS**

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

.....
Dr. Pitri Raj Adhikari
(Thesis Supervisor)

.....
Asso. Prof. Dr. Sajeep Kumar Shrestha
(Head, Research Department)

.....
Asso. Prof. Dr. Krishna Prasad Acharya
(Campus Chief)

VIVA-VOCE SHEET

We have conducted the viva – voce of the thesis presented

By:

Rashmi Maharjan

Entitled:

**NON-PERFORMING LOAN AND ITS IMPACT ON PROFITABILITY OF
NEPALESE COMMERCIAL BANKS**

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

Viva-Voce Committee

Head, Research Department

Member (Thesis Supervisor)

Member (External Expert)

DECLARATION

I hereby declare that this thesis work entitled **NON-PERFORMING LOAN AND ITS IMPACT ON PROFITABILITY OF NEPALESE COMMERCIAL BANKS** submitted to Office of the Dean, Faculty of Management, Tribhuvan University, is my original work done in the form of partial fulfillment of the requirement for the degree of Masters of Business Studies which is prepared under the supervision of respected supervisor Dr. Pitri Raj Adhikari of Shanker Dev Campus, T.U.

.....

Rashmi Maharjan

Shanker Dev Campus

Campus Roll No.: 693/072

2nd Year Exam Roll No.: 391551

T.U. Regd. No.: 7-2-422-149-2012

ACKNOWLEDGEMENTS

This entitled thesis **NON-PERFORMING LOAN AND ITS IMPACT ON PROFITABILITY OF NEPALESE COMMERCIAL BANKS** has been prepared in partial fulfillment for the Degree of Master of Business Studies under the Faculty of Management, Tribhuvan University is based on research models involving the use of quantitative aspect of finance.

I have great pleasure to express my appreciation and sincerity to my thesis supervisor Dr. Pitri Raj Adhikari of Shanker Dev Campus, TU for his excellent and effective guidance and supervision. I will remain thankful for his valuable direction, useful suggestion and comments during the course of preparing this thesis. Without his help this work would not have come in this form.

My special thanks goes to Asso. Prof. Dr. Sajeeb Kumar Shrestha, Head of Research Department of Shanker Dev Campus for his suggestion and cooperation. I would like to thank Asso. Prof. Dr. Krishna Prasad Acharya, Campus Chief of Shanker Dev Campus and all the others campus staffs for his valuable supports and assistance to complete my overall thesis work.

Similarly, I would like to express my sincere to my friends for his support, encouragement and help for this study work.

Researcher

Rashmi Maharjan

TABLE OF CONTENTS

	Page No.
<i>Recommendation</i>	<i>ii</i>
<i>Viva Voce Sheet</i>	<i>iii</i>
<i>Declaration</i>	<i>iv</i>
<i>Acknowledgement</i>	<i>v</i>
<i>Table of Contents</i>	<i>vi</i>
<i>List of Tables</i>	<i>viii</i>
<i>Abbreviations</i>	<i>ix</i>
CHAPTER – I INTRODUCTION	1
1.1 Background of the Study	1
1.2 Statement of the Problem	2
1.3 Objectives of the Study	4
1.4 Significance of the Study	4
1.5 Limitations of the Study	4
1.6 Organization of the Study	5
CHAPTER – II REVIEW OF LITERATURE	6
2.1 Conceptual Review	6
2.1.1 Loan and Advances	9
2.1.2 Loan Classification	10
2.1.3 Performing Assets/Loans	10
2.1.4 Non-Performing Assets/Loans (NPAs/NPL)	10
2.1.6 Loan Loss Provision	12
2.1.7 Non-Performing Loans in Nepalese Banking Sector	12
2.2 Review of Related Studies	19
2.2.1 Review of Journals and Articles	19
2.2.2 Review of Related Thesis	36
2.3 Research Gap	39
CHAPTER – III RESEARCH METHODOLOGY	41
3.1 Research Design	41
3.2 Population and Sample	41
3.3 Nature and Sources of Data	41
3.4 Method of Data Analysis	42

3.4.1 Financial Tools	42
3.4.2 Statistical Tools	45
3.5 Research Frameworks and Definition of Variables	48
CHAPTER – IV DATA PRESENTATION AND ANALYSIS	51
4.1 Ratio Analysis	51
4.1.1 Non-Performing Loans to Loan and Advances Ratio	51
4.1.1 Loans and Advance to Total Deposit Ratio	52
4.1.4 Loan Loss Provision to Non-Performing Loan Ratio	53
4.1.5 Cash Reserve ratio	54
4.1.6 Capital Adequacy Ratio	55
4.2 Statistical Analysis	56
4.2.1 Correlation between ROA, ROE, CRR, NPLR, CAR, CAR and LLPR	56
4.3 Regression Analysis	58
4.3.1 Impact of LLPR, CAR, CRR, NPLR and CDR on ROE	58
4.3.2 Impact of LLPR, CAR, CRR, NPLR and CDR on ROA	60
4.3 Major Findings	61
CHAPTER- V SUMMARY, CONCLUSION AND RECOMMENDATION	65
5.1 Summary	65
5.2 Conclusion	66
5.3 Recommendations	67
References	
Appendix	

LIST OF TABLES

	Page No.
Table 1 Loan Loss Provision	16
Table 2 Provisioning Against Priority Sector Credit	18
Table 3 Summary of Review of Journal and Articles	31
Table 4 Non-Performing Loans to Loan and Advance Ratio	52
Table 5 Loan and Advance to Total Deposit Ratio	53
Table 6 Loan Loss Provision to Non-performing Loan Ratio	54
Table 7 Cash Reserve ratio	55
Table 8 Capital Adequacy Ratio	56
Table 9 Correlation between ROA, ROE, CRR, NPLR, CAR, CAR and LLPR	57
Table 10 Model Summary of ROE	58
Table 11 ANOVA Table	59
Table 12 Regression Coefficients	59
Table 13 Model Summary of ROA	60
Table 14 ANOVA Table	60
Table 15 Regression Coefficients	61

ABBREVIATIONS

ATM	:	Automatic Teller Machine
BS	:	Bikram Sambat
CBS	:	Commercial Banks
CEO	:	Chief Executives Officer
CIB	:	Credit Information Bureau
CRM	:	Credit Risk Management
CV	:	Coefficient of Variation
FY	:	Fiscal Year
GIBL	:	Global IME Bank Limited
i.e.	:	That is
JVB	:	Joint Venture Banks
Ktm.	:	Kathmandu
LLP	:	Loan Loss Provision
Ltd.	:	Limited
MBS	:	Masters of Business Studies
NBL	:	Nepal Bank Limited
NEPSE	:	Nepal Stock Exchange
NIMB	:	Nepal Investment Mega Bank Limited
NPA	:	Non-Performing Assets
NPL	:	Non-Performing Loan
NRB	:	Nepal Rastra Bank
P.E.	:	Probable Error
SD	:	Standard Deviation
TU	:	Tribhuvan University

CHAPTER - I

INTRODUCTION

1.1 Background of the Study

A reliable indicator of a financial institution's performance is the amount of NPA it covers. As credit and advances are the bank's primary sources of revenue, an increase in non-performing assets could put the bank at risk of failure (NRB, 2017).

Loans and advances that have been unpaid for at least three months should be considered NPL, according to the guidelines of Nepal Rastra Bank. The review's meaning thus pertains to the banking sector. The absence of income from NPL has a significant effect. The credit hasn't been used. As past due developing over multi month, half year and one year requires 25%, half and 100% course of action for cash, which is essentially sure to decrease the advantage. Borrowing costs associated with NPL-locked resources and opportunity loss due to funds not being recycled are additional effects. It additionally raises costs for lawful portrayal, recuperation, and organization. A portion of the unmistakable effect includes an impact on representative assurance and direction, a lower bank's image and rating, a lower financial backer, and unfamiliar guide organization confidence (NRB, 2017).

The financial area has been found to have a low degree of capital asset, an elevated degree of non-performing credits, unfortunate gamble the board abilities, and shortcomings in the public authority. As a result, the banking sector has received more attention in the government's strategies paper on financial sector reforms as the most significant component of the overall strategy for financial sector reforms in Nepal. However, this does not imply that other regions have been overlooked. The other district, for instance, insurance region, assurances market and corporate region are moreover being supports one close to the next the public power.

The expression "non-performing advance" (NPL) alludes to credits on the books of monetary establishments that are either in default or behind on their planned installments of interest or head. In general, a debt is considered non-performing if payments on it have not been made for 90 days. According to Bindani (2003), the standard time frame for debt

to be considered nonperforming is 90 days; however, the terms and conditions of each loan may make the time frame shorter or longer.

Out of the 27 business banks in Nepal, 21 have reported a decrease in Non-Performing Credit (NPL) for the fiscal year 2077/78 BS. Five banks have reported an increase in NPL in a similar vein. The average NPL has decreased from 1.74 percent at Ashad's end in 2077 BS to 1.36 percent by Ashad's end in 2078 BS, according to the unaudited report distributed by the specific banks. Each year's NPL was used in this study to calculate the NPL levels for the three distinct example banks.

Accordingly, this study analyzes the connection between non-performing advance proportion, advance misfortune arrangement proportion, credit store proportion, return on resources and return on value. Additionally investigate the effect of non-performing advance proportion, advance misfortune arrangement proportion and credit store proportion on return on resources and return on value.

1.2 Statement of the Problem

The problem of non-performing credits, also known as NPAs or non-performing resources, is a major one in the Nepalese financial sector. In the ongoing monetary circumstance, NPA is generally more headaches for the monetary region. In the grand scheme of things, a non-performing asset is just advances that do not bring in money. As a result, it refers to inefficient company resources that cannot be converted into cash within a clear deadline. NPA occurs if the banks' and financial institutions' credit turns out to be bad. The NPA percentage in the bank's assets portfolio indicates its health. The country's economic expansion is driven by bank credit, so the high rate of non-performing assets (NPA) is a major concern for the bank and the general public. The country faces a difficult financial climate because of the quick ascent in NPA levels. To have a dependable presence keeping watch, specialists ought to have adequate watchfulness to control the NPA inside a reasonable limit (Bindani; 2003).

The majority of the loan was in default since a long time ago, when economic growth was at a higher level. Even during that time, they have not paid the bank in accordance with the agreement, which is not a good track record. The rule of business is that the business

person has unlimited authority over the business' benefits and misfortunes, if any. If there will be a relentless setback in the business, or any symptoms of mishaps are imagine then the borrower should either change the business or movement to control further hardships. This is because the borrower must use its own assets to cover the commitment of losses. In such a case, the borrower should offer their resources to pay obligation administration. The expanding NPA does serious damage to the economy of the nation. Additionally, this bank is responsible for the majority of NPA. So the primary driver of NPA should be taken apart. This study focuses specifically on these issues because it is necessary to investigate the impact of NPA on the bank's profitability (Singh, 1999).

None of the financial institutions in the nation are expanding rapidly. The level of competition among these financial institutions is rising as a result of each one's growing presence in the market. In this rigid environment, GIBL, NIMB, and NBL remain powerless financially in relation to NPA. The administration in GIBL, NIMB, and NBL is unfamiliar, and the review cycle is extremely sluggish. The bank committed a major error by giving out credits without doing what's necessary exploration. For sure, even the bank solid areas for have manual, the NPA level of this bank are still high assessment with various banks in Nepal. No association can secure perfectly without generally around directed advance portfolio. As a result, research has used NPA in GIBL, NIMB, and NBL as a starting point in an effort to establish a clear picture of NPA in this bank.

The following examination issues have been brought up for the review:

- i. What is actual level of credit deposit ratio, capital adequacy ratio, cash reserve ratio, non-performing loan ratio and loan loss provision ratio of Nepalese commercial banks?
- ii. What is the relationship between credit deposit ratio, capital adequacy ratio, cash reserve ratio, non-performing loan ratio and loan loss provision ratio, return on assets and return on equity of Nepalese commercial banks?
- iii. What is the impact of credit deposit ratio, capital adequacy ratio, cash reserve ratio, non-performing loan ratio and loan loss provision ratio on return on assets and return on equity of Nepalese commercial banks?

1.3 Objectives of the Study

The primary objective of this investigation is to examine GIBL, NIMB, and NBL's ineffective advance administration. The specific objectives are:

- i. To assess the level of credit deposit ratio, capital adequacy ratio, cash reserve ratio, non-performing loan ratio, loan loss provision ratio, return on assets and return on equity of Nepalese commercial banks.
- ii. To examine the relationship between credit deposit ratio, capital adequacy ratio, cash reserve ratio, non-performing loan ratio, loan loss provision ratio on return on assets and return on equity of Nepalese commercial banks.
- iii. To analyze the impact of credit deposit ratio, capital adequacy ratio, cash reserve ratio, non-performing loan ratio and loan loss provision ratio on return on assets and return on equity of Nepalese commercial banks.

1.4 Significance of the Study

The current issues associated with non-performing loans are the focus of this study. In any case, the NPL status and its effects will be examined in a variety of important bank activities, including credit lending, store selection, and others. This study gives the board data about their holes and last details, which can be fixed and used to foster new approaches and procedures. For their own benefit, the discoveries may be useful to the pariah, such as contributors, account holders, financial backers, competitors, and market producers. They can use it however they see fit, for instance, regardless of whether they take credit? Experts, students, and teachers who need to know about business banks' advance management will benefit from this study. Finally, it will be of assistance to the upcoming researcher in presenting their findings.

1.5 Limitations of the Study

The following are the study's limitations:

- Among 20 commercial banks this study is based on only three commercial bank named Global IME Bank Limited, Nepal Investment Mega Bank Limited and Nepal Bank Limited.
- This study is concerned with only non-performing loan management of Global IME Bank Limited, Nepal Investment Mega Bank Limited and Nepal Bank Limited.

- This study covers 10 years' time period from 2013/14 to 2022/23.
- This study depends on secondary data taken from annual financial report of sample bank.
- Only selected financial and statistical tools are used in this study.

1.6 Organization of the Study

There are five chapters to the research work. These are the main ones:

Chapter - I: Introduction

The chief part consolidates various pieces of this study like groundwork of the survey, clarification of issue, objective of the audit, importance of the audit, furthest reaches of the audit and relationship of the survey.

Chapter - II: Review of Literature

A survey of writing can be found in the second section of the review. The meaning of non-performing loans (NPLs), the banking industry in Nepal, and the history and concept of commercial banks are some of the subjects covered in this chapter's reviews of books, journals, and other relevant sources. This section also remembers the research hole.

Chapter - III: Research Methodology

The third section covers the research procedure, which includes the configuration of the examination, sources of information, the population, and the test, as well as the various monetary and measurable tools used in this review.

Chapter - IV: Data Presentation and Analysis

Information and the way things are introduced are remembered for the fourth part. These data are analyzed using financial and statistical methods to make some inferences. Critical revelations of the survey are also associated with this part.

Chapter - V: Summary, Conclusion and Recommendations

The final section is the fifth part, and it includes a summary, a conclusion, and ideas about the subject. At the conclusion of this investigation, a catalog, addendums, and examination proposition are presented.

At the end of this investigation, references and appendices are presented.

CHAPTER - II

REVIEW OF LITERATURE

In order to clarify the concept of non-performing resources, as well as to review the hypotheses and previous analyses conducted by various analysts, this section includes an audit of various books and research studies.

2.1 Conceptual Review

Non-performing assets include any asset that does not generate income, is not anticipated to pay all of its principal and interest, is 90 days or more behind on payments, or has not been paid in full by the maturity date. As per the particulars of the credit, it alludes to a credit for which the borrower has neglected to make the planned installments as settled upon. A non-performing credit is simply a credit that is in the process of defaulting or is already in default. When a loan reaches the non-performing status, there is a significant drop in the likelihood that it will be repaid. Anyway it depends upon the states of the understanding, a credit named non-performing when the interest portion as well as head portions are late by north of 90 days.

On the off chance that the borrower neglects to pay head and interest, the resource is viewed as a non-performing resource. The first step in defining NPA is to comprehend the meaning of assets. Assets are the assets of an individual or business. This indicates that the company's possessions are its sources of wealth. A credit that isn't performing implies that neither the head nor the interest on it are taken care of. In case of the bank, the credits and advances are the assets as the banks stream progresses from the resources delivered through financial backers esteem, cash put away by people and resource having through the getting. As a result, advances and credit that are not performing well are referred to as NPA. Therefore, all incorrect loans and advances can be converted into non-performing loans (NPAs) (Singh, 1999).

The issue of non-performing propels (NPLs) has gained growing contemplations over the latest several numerous years. Bank failure is unquestionably a direct result of a large number of non-performing loans in the financial system. Numerous studies on the factors that lead to bank failures, according to Mundat (2006), have shown that asset quality is a

statistically significant predictor of insolvency and that failing banks always have a high level of non-performing loans prior to failure.

A raised level of non-performing assets appeared differently in relation to practically identical credit experts may be a sign of issues' may an unforeseen augmentation. Nevertheless, this needs to be taken into account in relation to the kind of lending that is being offered. A few banks loan to clients who are more hazardous than others, and thus, they normally have a higher extent of nonperforming obligation. Notwithstanding, to compensate for this, these banks will charge borrowers higher loan fees, which will increment spreads. Even if it must eventually write off the non-performing loans, a credit card specialist will almost certainly have higher spreads and make a larger profit on the same assets than a mortgage lender. However, a credit card specialist will almost certainly have higher non-performing assets than a mortgage lender. As per Bindani (2003), non-performing resources (NPAs) can possibly hurt a bank's productivity in two ways: they can bring about a deficiency of premium pay and cause the chief credit add up to be discounted completely.

A norm for any business, including the financial area, is to perform well regarding benefit. However, increasing NPA has a direct impact on a bank's profitability, and banks are prohibited by law from simultaneously recording income and making provision for NPA assets.

Despite remaining far behind developed markets, Nepalese financial institutions have made significant progress over the past ten years. Despite having excellent risk management—focusing on collateral rather than projects—credit culture is a new aspect for investors and businesses alike. They won't ever arrive at their objectives except if we develop a credit culture. How to perceive a respectable bank? Huge stores, high innovation, solid marketing, a wide network, and so on? The point assortment of advances is the last step; confidential area banks by and large have lower non-performing resources (NPAs) than public area banks. Credits that can't or have not been reimbursed are alluded to as NPAs. This actually hurts banks owned by the government, which are forced to lend money to various priority sectors at the whim of their political masters and then forget about it forever (Baidya, 1999).

A bank is evaluated based on its capital, asset quality, management, ease of doing business, liquidity, and sensitivity to market risk (CAMELS). Every government bank is losing money nearly everywhere. Despite the fact that practically all confidential area banks are bringing in cash, utilizing the CAMELS strategy to assess them makes it extremely difficult to say that they are sound. Some banks have stacked up Non-Performing Resources (NPAs) and a very low capital sufficiency proportion (Vehicle). Similar to this, banks' market-risk management systems are inadequate. If the suspicions are correct, it will be extremely costly for depositors, creditors, and the economy as a whole if some banks' credit classification and provisioning are accurate. It would be sensible to appeal NRB to thoroughly do it's actually show request so various banks dismiss the fate of NABIL, RBB and NIDC.

A crucial aspect of the bank's lending strategy is the preparation for credit reimbursement. Credit reimbursement is usually decided before the advance grows, and it should take into account a reasonable assessment of the client's ability to pay. The objective is to get paid back by liquidating the transaction that paid for the pledged security rather than forcing the security to be sold. Therefore, the idea of exchange type of credit and the time of advance have a significant impact on the term and state of advance reimbursement (Baidhya, 1999).

Credits that reimburse the manage an account with the income they create are alluded to as "performing resources." In spite of the way that a bank burns through a large portion of its assets making credits and advances, advances and unsafe resources are as yet accessible. Expecting a solitary bank has around 10% non-performing assets/credit (NPAs), it sounds the characteristic of the finish of that bank *ceteris paribus*. Sound loan policy aims to keep banks in good financial shape, which in turn increases shareholder returns and ensures the safety of depositor funds. Each credit conveys innate gamble since it is an unsafe resource. However, the bank should not take on more risk than a certain threshold, regardless of the likelihood of returns (Panday, 2000).

A credit check is not a luxury; rather, it is a requirement for a successful bank loan program. It helps management identify loan issues more quickly and monitors whether loan officers are adhering to the bank's loan policy. As a result, and in order to improve objectivity in the credit audit process, many of the largest banks separate their advance

survey person from the bank's advance division and top management when evaluating the bank's general openness to risk and its potential need for additional capital in the future. Singh (1999) says that a separate loan review division also helps find mistakes or bad influences in the lending process.

2.1.1 Loan and Advances

The primary function of commercial banks is to collect deposits or funds and distribute them to investors in the form of loans and advances. This loan and advances account for the majority of income. Any bank's resources side of the asset report is overwhelmed by credits and advances. The same is true for a significant portion of the bank's pay announcement, which is made up of purchases made from advances and credits. This asset makes pay to the bank. Thusly, it likewise decides banks' benefit. On loans and advances given to customers, interest is paid. This interest is a significant source of revenue for banks. Overdraft cash credits and direct credits are acceptable forms of advance. A credit is conceded by a bank based on guarantee. Before granting credit to financial backers or business endeavors, banks conduct careful evaluation (Pradhan, 1994).

The loan and advances that the bank makes are its most profitable assets. This resource contains essential forms of bank revenue. The primary capability of a business bank is credit creation from acquired assets. Thusly, the bank changes its responsibility into a functioning resource. The resource side of a bank's monetary record is dominated by credit and advances. They are moreover the most un-liquid kind of asset of the bank. Loans and advances can be made in a variety of ways and against a variety of securities. Giving credits and advances generally involves some gamble.

Any bank's resource side of the monetary record is overwhelmed by credit and advance pay, which takes up a critical part of the pay proclamation. The decline in the value of credit and advances accounts for the majority of the bank's global disappointment. As a result, credit is regarded as a risky resource. The possibility of defaulting on a loan is referred to as credit risk. Existing capital is almost certainly eliminated by performing credit. If advance is given to down to earth adventure banks and borrowers as well as the whole society gets benefit anyway society hardships meager capital in the occasion credit is given to project which isn't sensible (Rajda, 1998).

2.1.2 Loan Classification

The technique by which banks survey their advance portfolio and relegate credits to grades in view of the apparent gamble and other important qualities of the credit and as per national bank rules is alluded to as advance arrangement. The bank is able to keep an eye on the quality of their loan portfolios and take steps to reduce risk thanks to the process's ongoing review and classification of loans. Utilizing authority allowed by sub segment 1 of area 23 of the NRB Act 2012 (reconsidered) and segment 19 (ka) of the Business Bank Act (updated), Nepal Rastra Bank has given the accompanying mandates to the grouping of credits and advances as well as its misfortune arrangement determined to limit conceivable gamble in the bank's loaning with regards to Nepal. The NRB classifies advances into the accompanying five classifications:

- a) Pass loan
- b) Watch List
- c) Substandard loan
- d) Doubtful loan
- e) Bad Loan

2.1.3 Performing Assets/Loans

A performing loan is one in which the principal and interest are paid back to the bank on time using the money they generate. To put it another way, performing loans are the productive assets that contribute to some profits. Advances have a predetermined amount of time to return their rule with their advantage. If anyone repays credit with its benefit on time is known as the performing advance. It is the most profitable asset for the bank. In this fast-paced, competitive age, it helps the banking industry grow quickly. Better loan performance is a symbol of the bank's success. In the end, it helps the economy grow and develop. In this manner, these advances are essential for the nations in general turn of events and thriving. Nevertheless, many banks are experiencing advance sum non-reimbursement.

2.1.4 Non-Performing Assets/Loans (NPAs/NPL)

Credit, all things considered, is assigned non-performing propels exclusively after it has been neglected obligations somewhere near 90 days. Since every country has laid out its

own norm as per the necessities of its own financial framework, the particulars and grouping models for non-performing credits might vary from one country to another. The multi-month overdue rule has been implemented in Nepal. Understanding the terms non-performing credits (NPL) and non-performing resources (NPA) will be essential. Generally, non-performing assets associates with non-performing financial assets. In this particular circumstance, non-performing assets are portrayed as commitment instrument whose obligors can't deliver their liabilities as they become due. Debt instruments include loans as well as bonds. According to Mundat (2006), non-performing assets make up a larger portion of an asset portfolio than non-performing loans, which are considered distressed loans by central bank regulations.

NPAs are awful obligation. Nonetheless, in the financial business, nonperforming resources (NPA) are credits and advances that are not performing great and are probably going to turn out to be terrible advances. One of the most recent challenges facing commercial banks is the management of loans and non-performing assets. In this way, banks should practice alert while thinking about such a credit. Before providing a loan, the project, investor, or company should be thoroughly evaluated.

NPA can be described as the non-valuable assets of the banks. Accordingly, it is the credit or awful commitment and dubious commitments that doesn't repay helpful. In general, non-performing credit refers to an advance that does not reimburse within 90 days. Non-performing assets (NPAs) include loan amounts that are not covered by collateral upon sale and suspend interest. The interest becomes payable. Unutilized assets and those adventures which produce no cash or wages to the bank are similarly non-performing assets (NPAs). The correct management of assets to generate income is management of non-performing sets (Shrestha, 2004).

NPAs have different meanings in different countries. In some nations, it indicates that the loan is in trouble. It shows that an installment is expected in certain nations, however the quantity of days an installment should be falling behind financially before it is viewed as past due changes essentially from one country to another (Shrestha, 2004).

The banks need to plan for bad and suspicious obligations, as shown by the current financial demonstration. Resulting to deducting the horrendous and fantastical

commitments from the non-performing assets, net non-playing out a can be achieved. According to the NRB, central banks classify loans and advances as NPAs based on the nature of their overdue timing. To diminish risk, the NRB has requested that credit misfortune arrangement be kept up with on a maturing premise. The loan provision for LT must be maintained by debiting the profit account. In this manner as the idea of credit corrupts the extent of advance disaster course of action is extended affecting the advantage of the banks.

2.1.6 Loan Loss Provision

The asset store that is provided as a safeguard to cover potential losses arising from individual advances is known as a credit misfortune arrangement. There is inherent risk in every loan. As a result, provisioning reflects the actual resource of the bank and serves as a cushion against unforeseen events. Regarding Nepal, the Nepal Rastra Bank (NRB) has recently established a base provisioning requirement that must be approved by the relevant bank on a required basis. However, the concerned bank ought to increase provisioning in circumstances where recovery is extremely uncertain. As indicated by Baidya (1999), credit misfortune arrangement is expected to cover any potential harm brought about by the nonperforming advance.

In the event that there are more than two outcomes, there is risk. Each advance is fraught with danger. Loan loss provision refers to the accumulated fund that is divided to protect against potential losses. This suggests that it is a provisioning fund that has been built up to serve as a safety net to cover potential losses in the future. It is the asset for expected arrangement. The degree of non-performing resources (NPAs), patterns in advance reimbursement, and the country's monetary condition all impact the provisioning sum. The first rate advance requires low disaster plan, however awful credit requires high credit incident course of action. According to Timilsina (1997), "specific loan loss provisioning" refers to loan loss provisioning for non-performing loans, while "general loan loss provision" refers to loan loss provisioning for performing loans.

2.1.7 Non-Performing Loans in Nepalese Banking Sector

Commercial banks' non-performing loans (NPL) showed a slight increase in the first quarter of the current fiscal year 2017/18 when compared to the same time period in FY 2016/17. The average NPL for the first quarter of 2016/17 was 1.77 percent, up from 1.64

percent for the same period last year, according to the unaudited financial results of 27 commercial banks.

The NPL of banks has decreased despite concerns that the rapid rise in lending rates experienced by BFIs in recent months could cause many borrowers to default.

In the midst of a lack of lendable assets, BFIs have been raising store rates to attract stores, which has also caused loan rates to soar. There were concerns that a large number of borrowers' credit reimbursement limits might be breached as a result of an unexpected rise in loan rates, leading to an increase in advance defaults. In any case, the decrease in NPL demonstrates that the flood of interest rates on loans has not fundamentally agitated BFIs.

The NPL ratio of banks continues to decrease annually into the first quarter. The average annual NPL to total loan ratio of commercial banks decreased by almost half in FY 2016/17, reaching 1.67 percent. In comparison to the annual average of 3.46 percent in FY 2014/15, the NPL proportion of business banks was 3.16 percent in FY 2015/16.

The consolidation of the then-Terrific Bank Ltd, who's NPL was an astounding 36.2 percent, was one of the essential elements in the critical drop in the NPL proportion in FY 2016/17.

In FY 2016/17, the consolidation between Fantastic Bank Ltd. also, Prabhu Bank Ltd. was finished. Bankers, on the other hand, assert that prudent lending practices were a factor in the recent decline in NPL. The reduction in non-performing advances of banks shows that the monetary business is moving in the right bearing. As part of fair lending practices, banks have become more cautious when making drifting advances.

Nepal SBI Bank has the most negligible NPL of 0.13 percent in the principal quarter followed by Sanima Bank Ltd (0.14 percent), Standard Authorized Bank Nepal Ltd (0.18 percent), Everest Bank Ltd (0.26 percent) and NIC Asia Bank Ltd (0.29 percent). The NPL at Common Bank Ltd. is the highest (4.69 percent). Nepal Credit and Business Bank Ltd (4.29%) and Prabhu Bank Ltd (4.23%) both have NPL levels above 4%.

Standard on the spot and off-site noticing and examining of Nepal Rastra Bank (NRB) have moreover helped sets aside cash with keeping their dreadful commitments on check. A rule issued by the NRB mandates that a bank keep NPLs below 5% of total credits. If the NPL rises above 5%, the central bank will take prompt corrective action. One proportion of a bank's presentation is the quantity of non-performing credits. Profits suffer as a result of the requirement for banks to make provision for loan losses.

Some bankers say that improved macroeconomic indicators have also helped banks lower their NPL levels. Economic expansion has continued to be robust ever since load shedding has ended. One of the factors that contributed to the reduction of NPL was this. Another factor contributing to the rise in loan quality is the diversification of bank loan portfolios.

Provision of NRB Directives

The Nepal Rastra Bank issues books and mandates for the purposes of establishing guidelines and monitoring financial and banking institutions. In connection with the Characterization of Credit and Advances and Advance Misfortune Arrangement, Mandate No. 2 of Brought Together Order 2077.

Directive No. 2 Classification of Loan and Advance and Loan Loss Provision.

1) Pass Loan:

Those credits and Advances whose part (repayment) are not due or due up to 90 days are designated pass credit. These loans are referred to as "performing loans."

2) Watch List:

Those credit and advances fall under pass advance, and the watch list should include the following highlights.

- i. Over a month is expected to pass between head and interest payments.
- ii. Although not completed on time, the development period was brief and the current moment and working capital advanced.
- iii. Other monetary establishments have characterized the borrower's credit as a non-performing credit. (To an identical Borrower)
- iv. Working Capital Loans, also known as short-term loans, are conventional loans given to companies and other corporate entities whose net worth has consistently

been negative for the past two years. In any case, it reject being worked on projects.

- v. Tasks that require multi-bank support but have not yet been moved to Consortium Funding in accordance with Section 33 of Mandatory 2
- vi. Those Credit and Advances with poor income during the Bank's investigation and request to be classified as a Watch Rundown.

3) Sub-Standard Loan:

Unsatisfactory credits are advances and advances with portion (reimbursement) due dates of over 90 days however under a half year.

4) Doubtful Loan:

The expression "suspicious credit" alludes to advances and advances whose portions (reimbursement) are expected for over a half year however short of what one year.

5) Bad Loan (Loss):

Those credits and Advances whose piece (repayment) are normal for north of one year ought to be assigned terrible development (incident).

Directive No. 2 (2): Additional Conditions for “Pass Loan”

The loans and advances that follow are called pass loans.

- a) Loan gave against the security of fixed store receipt.
- b) A loan that is secured by securities issued by the Nepal Rastra Bank or the Government of Nepal. However, the credit provided as additional security for a fixed store receipt, Administration of Nepal Protections, or NRB Bonds ought to be referred to as Section (1) of Mandate No. 2.

Directive No. 2 (3): Additional Conditions for “Bad Loan (Loss)”

A bad loan has the following irregularities: the installment (repayment) is late or not due.

- a) The borrower has declared bankruptcy or filed for it.
- b) The borrower is now far away.
- c) Waste of cash. Presently
- d) Project not achievable for action or not worked.

- e) The letter of credit, assurance, and other potential liabilities have not been settled within roughly 90 days of the force advance's transformation.
- f) Loan gave to boycotted individual, firm.
- g) A advance that is gotten by unsatisfactory security (guarantee whose market esteem is lower than how much the credit that is as yet exceptional)
- h) Bills that were purchased or discounted are not paid for within ninety days of the due date.
- i) The borrower has submitted a different financial report for the same fiscal year.

Directive No. 2 (4): Additional Agreement in Respect of “Term” Loan

In regard of term credits, the characterization will be made against the whole exceptional advance based on the past due time of late portion.

Loan Loss Provision

Based on the outstanding loans, advances, and bills purchased as defined by these directives, the loan loss provisioning will be as follows:

Table 1

Loan Loss Provision

S.N.	Classification of loan	Loan loss provision
1.	Pass	1.5%
2.	Watch List	5%
3.	Sub-standard	25%
4.	Doubtful	50%
5.	Loss	100%

(Source: NRB Directives; 2080)

"General Loan Loss Provision" refers to the loan loss reserve for performing loans, while "specific Loan Loss Provision" refers to the loan loss reserve for non-performing loans.

Where the banks accommodate credit misfortune provisioning in abundance of the relative expected under the mandates of NRB, the entire measure of such extra

provisioning might be remembered for General Advance Arrangement under the advantageous capital.

Directive No. 2-9 (5): Additional Provisioning in the case of Personal & Corporate Guarantee Loan

A amount that can't be asserted by any other individual should be gotten when the credit is given exclusively against the individual assurance or corporate assurance's resources, which are identical to the individual assurance. These advances will be referred to as such, and in cases where the credits fall into the categories of pass, unacceptable, or dubious, in addition to the typical advance misfortune arrangement that is appropriate for the classification, an additional arrangement of twenty percent point will be provided. These loan advances require their own distinct classification. The personal/Corporate guarantee loan's loan loss provision will therefore be 21%, 45%, and 70% for the pass, substandard, and doubtful categories, respectively.

Directive No. 2 (8): Rescheduling and Restructuring of Loan

Banks can reschedule or rebuild credits that fall into the unsatisfactory, questionable, or misfortune classification on the off chance that they get a composed arrangement of group from the borrower referring to the accompanying reasons:

- a. The quality of the loan is being affected by both internal and external factors.
- b. The reduced risk that is inherent to the/not set in stone by analyzing the company's asset report, profit and loss account, and other financial data to assess current financial lows and potential future ones, as well as late incomes and potential future ones, and to examine economic conditions.
- c. Proof that there is adequate credit documentation
- d. An evaluation of the management of the borrower or venture, with a focus on competence, accountability, and higher business ethics expectations.

Directive No. 2- 9(2): Loan Loss Provisioning in Respect of Rescheduled, Restructured

- a. Credit misfortune provisioning will be given at least 12.5%, with the exception of need area, in the event that a wide range of reschedule or rebuilt falls under the pass class mandated by the NRB.

- b. In case of rescheduling or remaking or exchanging of shielded or dependable need region credit, the development hardship provisioning will be given at one fourth of the rate referred to in stipulation (a).
- c. A loan loss provision that places the swapped loans in the same category as before must be included by the bank accepting the loans. The swapping bank accepting the loan requires the certification of the current classification from the relevant financial institution.

Directive No. 2 -9 (3): Provisioning Against Priority Sector Credit

Priority and deprived sector loans that are not insured must be fully provisioned for each normal loan loss; insured loans, on the other hand, must be provisioned at a rate equal to 25% of the percentage normal loan loss provisioning. On account of safeguarded need or denied area credit, the accompanying provisioning is required:

Table 2

Provisioning Against Priority Sector Credit

Pass	0.25%
Watch List	1%
Sub standard	5%
Doubtful	12.5%
Loss	25%

(Source: NRB Directives; 2080)

The advance misfortune arrangement would be 25% of 12.5% in case of rescheduling, rebuilding, or trading of safeguarded or surefire need area credit.

Non Performing Asset suggests an asset or record of borrower, which has been portrayed by a bank or financial foundation as unsatisfactory, questionable or setback asset, according to the headings or rules interfacing with asset portrayal gave by NRB. At the point when a credit office balance isn't settled completely in no less than 30 days of the due date, it is thought of "past due." As a result of the improvement in the portion and settlement structures, recovery climate, up level of development in the monetary system, etc, it was decided to dispose of 'past due' thought, with influence from Walk 31, 2017. As a result, on that date, a non-performing asset (NPA) would be considered an advance if:

- a. Payments that are late for more than 180 days on either the principal or the interest on a term loan
- b. Regarding an overdraft cash credit (OD/CC), the record remains "messed up" for more than 180 days.
- c. The bill has been unpaid for more than 180 days in the case of discounted bills.
- d. Interest and/or principal payments on an agricultural advance can be late for no more than two harvest seasons and no more than two and a half years.
- e. Any amount to be gotten stays past due for a period of north of 180 days in respect of various records.

In order to move in the direction of international best practice and guarantee greater transparency, it has been decided to adopt the "90 days overdue" standard for the identification of NPAs for the year that ended March 31, 2017. A non-performing resource (NPA) will be a credit or development as needed with effect from Walk 31, 2017:

- a. On account of a term credit, premium or potentially head installments are late for over 90 days.
- b. The record stays 'screwed up' for a period of more than 90 days, in respect of an overdraft cash Credit (OD/CC),
- c. On account of bills bought and limited, the bill is late for over 90 days,
- d. Interest and/or principal payments on an agricultural advance can be late for no more than two harvest seasons and no more than two and a half years.
- e. Any amount to be gotten remains late for a period of north of 90 days in respect of various records.

2.2 Review of Related Studies

A portion of the diaries, articles and past examination works that are looked into during this study are as per the following:

2.2.1 Review of Journals and Articles

Mirza et al. (2023) conducted a research on the impact of green lending on banking performance: Evidence from SME credit portfolios in the BRIC. In order to facilitate sustainable development, emerging markets must see the development of green financing.

The financial channels can give the fundamental subsidies that can cultivate the progress to eco-accommodating business processes. This job is more basic on account of SMEs who face subsidizing requirements however can assume a critical part to accomplish net zero emanations. This paper aims to fill a void in the existing body of research on the connection between sustainable bank financing and SMEs. The review utilize a thorough dataset of improvement banks in the BRIC for a long time. Our outcomes show a positive connection between green SME loaning and net interest edge. We likewise notice a negative connection between economical loaning to little firms and the default chance of the banks. That's what these discoveries show on the off chance that banks extend their practical SME loaning, they are probably going to get main concern support from progress in net revenue edge and a decrease in default risk. These perceptions recommend that there are monetary motivations for the banks to stretch out supportable credit to SMEs and improvement banks can add to manageability objectives by tapping these potential open doors.

Jiajia et al. (2023) conducted a research on the effect of the disposal of loan loss provision and non-performing loans on interbank liquidity risk in China: A cash flow network-based analysis. The size of non-performing advances (NPLs) straightforwardly influences the credit chance of improvement banks, and a huge scope of credit defaults will likewise prompt the liquidity emergency. Additionally, the interbank network will facilitate the transmission of liquidity risk to other banks. A sensible removal method of NPLs isn't just of incredible importance to improvement banks themselves, but on the other hand is connected with the liquidity hazard of the entire financial framework. A dynamic bank-centered multi-agent model (DBMM) is built in this paper to investigate how the disposal of non-performing loans (NPLs) affects interbank liquidity risk based on the interbank cash flow network. It takes into account all aspects of China's banking system. The outcomes demonstrate that the expansion in the quantity of little and medium-sized advancement banks further develop the entire financial framework strength, notwithstanding, the expansion in NPLs from low-pay borrowers expands the liquidity risk. The stock-plus-loan mode can lessen liquidity risk in China than the entrusted settlement mode, and the disposal of NPLs contributes significantly to the stability of interbank networks. Adjusting development banks' liquidation repayment ratio is a good way to avoid liquidity risk because it has the greatest impact on China's interbank network. In addition, because they are established with capital injections from the

Chinese government, large development banks are better able to resist liquidity risk than small development banks.

Msomi (2022) conducted a research on factors affecting non-performing loans in financial institutions of selected West African countries. This paper looks at the full scale financial and bank-explicit variables influencing non-performing advances being developed banks. For the time period from 2008 to 2019, a fixed and random effect model was used with 47 listed development banks from six countries, including 19 banks from Nigeria, 14 banks from Benin, 3 banks from Burkina Faso, 3 banks from Gambia, 3 banks from Guinea, and 5 banks from Liberia. The estimation revealed that non-performing loans are significantly influenced by the liquidity ratio, capital adequacy ratio, and inflation rate, with the Hausman test favoring the fixed effect model. Thus, it is prompted that banks depend not just on their capacity to accomplish the capital sufficiency proportion, yet additionally ensure that credits are entirely investigated prior to being given to recipients. Managers of banks should make sure that bank employees aren't just giving loans to keep their jobs by getting LLPs from customers at the cost of the bank's long-term stake. Moreover, the economies of West Africa ought to keep their expansion rates low so reimbursement of advances on time is modest and reasonable.

Yeasin (2022) conducted a research on impact of credit risk management on financial performance: A study of commercial banks in Bangladesh. As credit risk is influencing the financial business of Bangladesh, the review means to dissect the effect of credit risk the executives on monetary execution of business banks. Using a panel regression analysis model and a deductive research design, the study focused on six commercial banks in Bangladesh with data spanning ten years from 2010 to 2019. We selected and examined four factors that have an impact on the financial performance of commercial banks in Bangladesh. Non-Performing Loan (NPL), Capital Adequacy ratio (CAR), and loan to LLP ratio (LDR) are utilized as indicators of credit risk in the study. Return on asset (ROA) is used as a tool for measuring bank performance. The panel data regression analysis revealed that the Capital Adequacy Ratio (CAR) for Non-Performing Loans (NPL) had a negative and statistically significant effect on commercial banks' financial performance. While Advance to LLP proportion (LDR) fundamentally affected monetary execution of business banks. As a result, commercial banks' financial performance is being harmed by credit risk.

Agaba and Eton (2022) conducted a research credit risk management practices and loan performance of commercial banks in Uganda. The review analyzed the connection between Credit Chance Administration Practices and Advance Execution of Business Banks in Mbarara City. 19 commercial banks were included in the study. In a few of the city's commercial banks, a correlational design was used to determine how Loan Performance related to various credit risk management practices. A structured questionnaire was used to collect numerical data from 19 commercial bank credit staff and management. Connection and relapse tests to dissect the connections and impacts of Credit risk the board and Advance Execution of business banks in Mbarara city. The review found a critical connection between credit risk distinguishing proof and credit execution; credit risk evaluation and credit execution; credit risk checking and advance execution; and credit risk control and advance execution. The investigation additionally discovered that a few business banks didn't have specialists to precisely foresee credit gambles nor assess the outcomes of the choices taken by advance officials.

Suyanto (2021) conducted a study on the effect of bad credit and liquidity on bank performance in Indonesia. With the assistance of capital adequacy, the purpose of this study is to investigate how liquidity and bad credit influence bank performance. From 2011 to 2019, data were provided by banks that were listed on the Indonesia Stock Exchange. The examination strategy was PLS-SEM upheld by an application named Twists 6.0. The consequences of the exploration show that the impact of awful credit and liquidity on bank execution isn't critical. An elevated degree of terrible acknowledge is related for a low degree of bank execution. Low profitability and declining bank earnings are both factors. Because banks can still cover some bad credit through capital availability, this relationship is not significant. As an intervening variable, capital adequacy has partially mediated the impact of liquidity and bad credit on bank performance. Additionally, capital sufficiency has a significant impact on credit distribution. Organization hypothesis says that the proprietor of the asset (the savers of saving record, current record and LLP account) is called head while the bank as the confided in foundation to deal with the asset is called a specialist. In the event that clients satisfy their obligation, terrible credit won't ever occur.

Jati (2021) has examined the study on the effect of non-performing loan and capital adequacy ratio on return on assets in bank Victoria international, Tbk Period 2009-2018. The purpose of this research is to ascertain how Non-Performing Loans and the Capital Adequacy Ratio affect PT's Return on Assets. Bank Victoria Global, Tbk. 2009-2018 period. Explanatory research was used as the approach. The investigation procedure utilizes factual examination with relapse testing, relationship, assurance, and speculation testing. According to the findings of this research, non-performing loans have a significant impact on equity return. Non-Performing Credit and Capital Sufficiency Proportion all the while essentially affect Return on Value.

Birhanu et al. (2021) examined a study on determinants of commercial bank loan and advance disbursement: the case of private Ethiopian commercial banks. The purpose of this paper was to investigate the factors that influence loans and advances from commercial banks to private commercial banks in Ethiopia. The concentrate arbitrarily chosen seven business banks to address the populace defined on their resource, LLP and settled up capital sums. The review used an uneven board information model as each bank began activity at an alternate timeframe and considered the period 1995-2016 for optional subtleties. The discoveries showed that the LLP size, credit risk, portfolio speculation, normal loaning rate, genuine total national output (Gross domestic product) and expansion rate meaningfully affected the loaning and headway of private business banks. On the other hand, private commercial bank loans and advances were significantly adversely affected by the liquidity ratio. At last, the review sent a plausible suggestion for concerned organs to zero in on LLP size, credit risk, portfolio speculation, normal loaning rate, genuine Gross domestic product, expansion rate and liquidity proportion.

Ari (2020) conducted a study on COVID-19 and non-performing loans: lessons from past crises. The study wants to know if there are more loans that can't be paid back during times of crisis. What can be learned from previous crises regarding the resolution of non-performing loans following COVID-19? In this article it utilizes another data set covering non-performing credits (NPLs) in 88 financial emergencies starting around 1990 to find out. The information show that managing NPLs is basic to monetary recuperation. This time, the COVID-19 crisis was not preceded by a credit boom, the forward-looking IFRS 9 accounting standards can assist in NPL recognition, and banks have higher capital levels than in the 2008 crisis. In any case, different variables could make NPL goal really

testing: government obligation is considerably higher, banks are less beneficial, and corporate accounting reports are frequently frail.

Bhattarai (2020) has examined the study on effect of non-performing loan on profitability of commercial banks in Nepal. The review manages the Non-performing advance (NPL) and its serious issue in financial industry. It has assume significant part for creating gain and bank achievement or disappointment. The review has look at the impacts of non-performing advance on benefit of business banks in Nepal with board information gathered from twelve business banks of a long time from 2013-2014 to 2017-2018 period with the complete perceptions sixty. The various relapse model has been utilized to examination of the information. Profitability has been examined using the pooled ordinary least square model, fixed effect model, and random effect model. The NPL, CAR, and LIQ were found to have significant and negative correlations with ROE in three distinct models. Likewise, the SIZE has huge and positive partner with ROE. With ROE, the INF, CD results are positive but not significant. The study came to the conclusion that NPL, CAR, LIQ, and SIZE play a significant role in determining profitability. The INF affects Productivity. However, the nonperforming loan has a significant impact on profitability. Over the past ninety days, the bankers have sincerely accepted the dues. It has reasonable impact of public economy too.

Jha (2020) published an article on analysis of non-performing assets (NPAs) among SBI bank and ICICI bank for operating 2011-2018. According to the study, banks currently view NPAs as a significant issue. The tricky NPAs in the Indian banks are the preeminent and the imposing hazardous that has shocked the entire financial industry. The review is led to break down the non-performing resources (NPAs) among state bank of India (SBI) and ICICI for which the auxiliary information is utilized. In ICICI bank, we likewise have noticed negative relationship between's Net NPA and Net Benefit and Net NPA and Net Benefit however at that point it was not critical as in SBI. Complete arrangement proportion was fundamentally higher in ICICI bank when contrasted with SBI bank. Be that as it may, Investor's gamble proportion was equivalent among both ICICI bank and PNB bank. In addition, the outstanding balance in ICICI bank was significantly lower than in PNB bank. Anyway arrangement consequently (of absolute resources) was tantamount among SBI bank and ICICI bank. According to the study, SBI bank's NPAs are growing faster than those of ICICI banks. SBI Bank has a larger number of non-

performing loans than ICICI Bank. SBI bank needs to offer consideration on their powerful attempting to contend with ICICI banks. In this manner, SBI banks need to proficiently to manage their NPAs with the motivation behind increment their benefit.

Saleh, Afifa and Murray (2020) conducted a research on the effect of credit risk, liquidity risk and bank capital on bank profitability: Evidence from an emerging market. This study planned to explore the impact of credit risk, liquidity hazard, and bank capital on productivity proxied by ROAA, ROEA and NIM, utilizing experimental proof from a developing business sector. The ongoing review covered the board information from business banks in a developing business sector (Jordan) in the years after the last worldwide monetary emergency (2008-09), that is, somewhere in the range of 2010 and 2018. A fixed-effects regression model was used to estimate the model. Furthermore, GMMs were utilized as the unique board information assessors for the framework. Additional perceptions of causality between profitability and the aforementioned bank-specific variables—credit risk, liquidity risk, and bank capital—were provided by the outcomes. In addition, the banks ought to have more capital and liquidity in order to deal with any upcoming circumstances that might affect their profitability. On the other hand, the results show that profitability measurements and bank-specific variables have different effects. These outcomes had significant ramifications for various banks, directors and partners as they could help them in making and keeping an effective monetary framework and market.

Sushmitha (2020) conducted a study on non-performing assets management in the cooperative banks in India: a descriptive analysis. According to the study, the banking sector in India operates in a dynamic and competitive environment. Lately banks are presented to different monetary emergencies or difficulties because of the exceptionally aggressive nature of the market. The bank's performance suffers as a result of these financial crises. The bank faces a number of significant difficulties as a result of the growing number of non-performing assets. Loans and advances with a 90-day overdue principal or interest payment are considered non-performing assets. The bank's financial health is indicated by its non-performing assets. The current review made an endeavor to look at the presentation of Co-employable banks by dissecting the patterns of Non-performing resources for the period 2008-2018. The information investigation was finished by utilizing factual instruments like classification and line charts. In contrast to

the DCCBs, PACs, SCARDBS, and PCARDBS, the study finds that the management of non-performing assets has significantly improved at the UCBs and St. CBs.

Partovi (2019) examined on bank efficiency and non-performing loans: evidence from Turkey. This study examinations specialized and allocative efficiencies in Turkish banks from December 2002 to December 2017, under the supposition of consistent re-visitations of scale. We apply a changed rendition of the Information Envelopment Examination (DEA) approach presented by Aparico et al. (2015), which utilizes a directional distance model to give evaluations of productivity, with an emphasis on Non-Performing Credits (NPLs) as a bothersome result. Furthermore, we inspect the determinants of productivity by applying quartile relapses to board information. The outcomes got support the postulation that NPLs apply an adverse consequence as far as specialized effectiveness, which affirms the "terrible administration" speculation in the financial area. Research additionally find that the degree of proficiency of Turkish banks varies, contingent upon the possession structure set up. This study has demonstrated how NPLs, in addition to a number of other efficiency determinants (such as ROA, NIM, and ownership), affect levels of efficiency in a banking system, with a particular focus on Turkey, a nation whose history has resulted in the creation of a distinct banking system, making it particularly useful and intriguing to investigate. This concentrate likewise gives significant data to policymakers, given the receptiveness of the Turkish financial framework to new banks. Further examination that utilizes various methodologies would assist with crossing approve the discoveries of this paper.

Rizvi (2019) conducted a study on a hierarchical model of the determinants of non-performing assets in banks: an ISM and MICMAC approach. This study features the cooperations and transaction among the determinants of NPAs in the Indian financial area. The various leveled model created utilizing ISM/TISM system represents the driving and reliance connections among various elements. By identifying various factors and their interactions and interrelationships, the study will add to the body of knowledge regarding how the Indian banking industry will develop in the coming years. The broad economic and political environment, as defined succinctly by this framework, is the primary driver of NPAs, enhancing factors such as the adoption of international best practices and influencing the ownership pattern, among others. Additionally, it identifies three essential paths that must be emphasized. Since the urgent job of banks in

channelizing capital from the families (or leasers) to the financial backers will stay unchallenged, it is basic that later on, the NPA issue is pre-vented from appearing as an emergency. The review has likewise contributed by representing the utilization of systems utilized in tasks research in breaking down a certifiable issue that might be utilized by different scientists. As a result, it can be regarded as a significant contribution to research on the most pressing issue facing the Indian banking industry at the moment.

Shah (2019) published an article on credit risk management and profitability: commercial bank. The primary point of the review is to examine the effect of credit risk the board on bank productivity in Nepalese business banks. Return on assets is a dependent variable, whereas the non-performing loan ratio, leverage ratio, capital adequacy ratio, loan loss provision, and credit interest to credit facilities are independent variables. Information has been gathered from the Yearly Reports of chosen business banks, Banking and Monetary Insights and Bank Oversight Report distributed by Nepal Rastra Bank. The review depends on 25 examples mentioning 250 observable facts. The free review is finished utilizing a mix of Autonomous t-test, Pearson's Rectification, investigation of change (ANOVA), various relapse examination. The outcome demonstrates that the dependent variable return on assets has a negative relationship with the capital adequacy ratio, leverage ratio, non-performing loan ratio, and loan loss provision ratio. Similarly, credit interest to credit offices is decidedly connected with return on resources.

Neupane (2018) had conducted a thesis entitled on non-performing assets and profitability of commercial banks in Nepal. The review needed to look at the pattern and organization of non-performing resources of business banks. To investigation the significant benefit marks of business banks. To get to the connection between the productivity and the non-performing resources of the business banks. to investigate how non-performing assets affect commercial banks' profits. In this article, quantitative examination configuration has been utilized to accomplish the exploration goals. The investigation discovered that the NPA of NABIL is expanding pattern aside from the financial year 2012/13 and the credit and advance and advance is in expanding pattern over the review period. The rates of NPA is expanding over the review period with the exception of the year 1011/12. The typical NPA proportion of the bank is 1.18% and standard deviation is 0.44% over the review period. The net revenue of NABIL is diminishing in every year, ROTA proportion is fluctuating tend and ROLA proportion is

fluctuating pattern over the review period. The net revenue of SCBNL is fluctuating in every year, ROTA proportion is fluctuating pattern and the ROLA proportion is likewise fluctuating pattern over the review period.

Serwadda (2018) conducted the impact of credit risk management systems on the financial performance of commercial banks in Uganda. The paper is set to examine the effect of credit risk the board on the monetary execution of business banks in Uganda for a time of 2006-2015 involving board information for an example of 20 business banks. The African Development Bank, the Ugandan central bank, and the Bank scope database serve as sources for the secondary data. The review utilizes graphic measurements, relapses and relationship examination. Credit risk management's impact on Uganda's commercial banks' performance is to be estimated using regression models. The review uncovered that credit risk the executives influences on the presentation of Ugandan business banks. The outcomes depicted that banks' presentation was conversely affected by non performing advances which might open them to enormous sizes of illiquidity and monetary emergency. In this way given such outcomes, the scientist prescribes that banks need to upgrade their credit risk the board strategies not exclusively to procure more benefits yet in addition to keep a subjective resource portfolio and consideration be given to non performing credits, credit misfortune arrangement to advance and advances and development in revenue profit that were viewed as critical.

Bhattarai (2017) examined the effect of non-performing loan on the profitability of commercial banks in Nepal. This study has inspected the impact of non-performing advance on the benefit of Nepalese business bank. The regression model and pooled data from fourteen commercial banks, totaling 77 observations from 2010 to 2015, are used for the analysis. This study comes to the conclusion that the non-performing loan ratio and other covariates, such as bank size, cost per loan asset, and the rate of growth in gross domestic product, have an impact on the profitability of Nepalese commercial banks.

Kjosevski and Petkovski (2017) conducted a study on non-performing loans in Baltic States: Determinates and macroeconomic effects. Using two complementary approaches, this study examines the connections between macroeconomic and bank-specific determinants of non-performing loans (NPLs) and their impact on macroeconomic performance in the Baltic States. To begin with, we inspect the macroeconomic and bank-

explicit determinants of NPLs for a board of 27 banks from the Baltics involving yearly information for the period 2005-2014. The main macroeconomic elements are Gross domestic product development, expansion and homegrown credit to the confidential area. With respect to the bank-explicit determinants, It is tracked down that the value to add up to resources proportion, return on resources, the profit from value and the development of net advances were of significance. Second, we investigate how NPLs and their macroeconomic determinants interact in a feedback loop. The outcomes recommend that the genuine economy answers NPLs and that there are solid input impacts from macroeconomic circumstances like homegrown credit to private area, Gross domestic product development, joblessness and expansion to NPLs. Discoveries have a few ramifications regarding guideline and strategy.

This study's findings could be used by regulators to identify banks that may experience an increase in non-performing loans. In addition, in order to avert future financial instability, regulators ought to place a greater emphasis on the risk management procedures and systems that banks employ. Simultaneously, they need to smooth out banks to more readily oversee risk, considering individual qualities of individual banks. Naturally, the banking system will not be able to completely eliminate credit risk because risk is a part of every profitable activity, particularly risk caused by changes in macroeconomic conditions. However, a better comprehension of the specific factors that make some banks more resilient to adverse economic trends than others can prevent an increase in credit risk and, as a result, lessen the amount of negative feedback that occurs between the financial sector and the real economy.

Siraj and Pillai (2016) in this article management of NPAs in Indian SCBs examined the performance of NPL in Indian banking during post-millennium period. The authors used bank-group-wise performance statistics from the post-millennium period until December 31, 2011, in order to achieve the stated goals. Utilizing different measurable devices, for example, AAG rate, relationship and relapse study, the review perceived that NPL stays a significant danger and the gradual part cleared up through increases for NPL suggests an extraordinary conversation starter mark on the productivity of credit risk the executives practices of banks in India.

Bhattarai (2016) published an article on determinants of non-performing loans: perception of Nepali bankers argues that energy crisis; lack of timely budgetary expenditure by the government and instable political environment increases the non-performing loan. Bankers also believe that better monitoring and evaluation of the loan, as well as borrowers' honesty in disclosing information, have a significant negative impact on non-performing loans. However, the banker's perspective reveals that macroeconomic factors like the unemployment rate, inflation rate, exchange rate, and interest rate have little impact on Nepal's commercial banks' non-performing loans. The financiers likewise see that the expansion in Gross domestic product development rate decline the non-performing advance of business banks in Nepal.

Basnet (2016) had conducted a thesis entitled on non-performing assets of Nepalese commercial banks. The principal goals were to break down the non-performing resources of the business banks. To analyze the degree of NPAs in absolute resources, LLPs and loaning of business banks. To look at whether the Nepalese business banks are following the NRB mandates in regards to nonperforming resources or not. This study employed panel data comparative analysis between two variables. Nepal Bangladesh Bank Limited appeared to have a higher NPA level than all of the other banks in the study. In a similar vein, Nepal SBI Banks and Bank of Kathmandu come in at number two and three, respectively. It was discovered that none of the banks have been adhering to the NRB's directives regarding the loan loss provision, so the position of NABIL Bank Limited appeared to be quite satisfactory. Nepal Investment Bank, on the other hand, has been reducing its NPA at a minimum level than that of all of the other banks.

Narula and Singla (2015) had written an article on empirical study on non-performing assets of bank evaluate the non – performing assets of Punjab National Bank and its impact on profitability and to see the relation between total advances, Net Profits, Gross & Net NPA. The review involves the yearly reports of Punjab Public Bank for the time of a long time from 2007 - 08 to 2012-13. These papers infer that there is a positive connection between Net Benefits and NPA of PNB. This is because of the bank's poor management.

Arora and Ostwal (2014) conducted an article on unearthing the epidemic of non-performing assets: A study of public and private sector banks which deals with the concept of Non-performing assets and analyze the classification of loan assets of public and private sector banks. It also looks at how loan assets of public and private banks are different. The review reasoned that private areas working on because of decrease in NPAs proportion contrast with Public area banks because of recuperation the board done in NPAs and propose that there is need to check the NPAs of public area banks so Indian financial framework becomes productive.

Table 3

Summary of Review of Journal and Articles

Author (s)	Variables	Methodology	Major Findings
Mirza (2023)	lending and net interest margin, Size	Regression analysis with OLS methods has been used	Green SME lending is positively correlated with net interest margin, according to the findings. We likewise notice a negative connection between practical loaning to little firms and the default chance of the banks.
Jiajia et al. (2023)	Liquidity risk, non-performing loan, deposits	Used secondary data through inferential statistics	The findings show that while the stability of the banking system as a whole is improved by an increase in the number of small and medium-sized development banks, the liquidity risk is increased by an increase in non-performing loans from low-income debtors.
Msomi (2022)	Capital adequacy ratio, non-performing loan	Fixed and random effect model was used. The Hausman test favored the selection of fixed effect model.	It is recommended that banks rely not only on their capacity to achieve the capital adequacy ratio, but also on their ability to guarantee that loans are thoroughly examined prior to being distributed to recipients.
Yeasin	Non-performing	Data spanning ten	The panel data regression analysis

(2022)	Loan (NPL), Capital Adequacy Ratio (CAR) and financial performance	years from 2010 to 2019 with secondary data by employing panel regression analysis model.	revealed that the Capital Adequacy Ratio (CAR) for Non-Performing Loans (NPL) had a negative and statistically significant effect on commercial banks' financial performance. The Loan to LLP ratio (LDR), on the other hand, had a positive and statistically significant effect on commercial banks' financial performance.
Agaba and Eton (2022)	credit risk identification, credit risk assessment, credit risk control	The study used a structured questionnaire to collect numerical data. Correlation and regression also used to analyze those data.	There was a strong correlation between credit risk control and loan performance, as well as between credit risk identification and performance, credit risk assessment and performance, and credit risk monitoring and performance.
Suyant o (2021)	Credit, earnings, profitability and liquidity	The analysis technique was PLS-SEM supported by an application named Warps 6.0	The consequences of the exploration show that the impact of awful credit and liquidity on bank execution isn't critical. An elevated degree of terrible acknowledge is related for a low degree of bank execution. Low profitability and declining bank earnings are both factors.
Birhani (2021)	LLP size, credit risk, portfolio investment, average lending rate, real gross domestic product (GDP)	The study randomly selected seven commercial banks from the period of 1995-2016	The results demonstrated that the LLP size, credit risk, portfolio investment, average lending rate, real GDP (GDP), and inflation rate had significant and positive effects on private commercial banks' lending and growth.

and inflation rate

Jati (2021)	Non Performing Loans, Return on Equity, Capital Adequacy Ratio and Return on Assets	The method used is explanatory research. The analysis technique uses statistical analysis with regression testing, correlation, determination, and hypothesis testing	The consequences of this review that Non Performing Credits altogether affect Return on Value by 60.4%, speculation testing is acquired $t_{count} > t_{table}$ or $(3.496 > 2.306)$. Capital Sufficiency Proportion altogether affects Return on Resources of 2.8%, speculation testing acquired $t_{count} < t_{table}$ or $(-0.477 < 2.306)$.
Bhattarai (2020)	NPL, CAR, LIQ, ROE, Size, Inflation, CD	The multiple regression model has been used to analysis of the data. The Pooled ordinary least square model, fixed effect model and random effect model has been employed to analyzed profitability	The NPL, CAR, and LIQ were found to have significant and negative correlations with ROE in three distinct models. Likewise, the SIZE has huge and positive partner with ROE. With ROE, the INF, CD results are positive but not significant.
Jha (2020)	Loan and advances ratio, Gross NPAs/ Total assets, Net advances ratio and Net Total assets	Gross NPAs / Gross advances ratio, Gross NPAs/ Total assets ratio; Net NPAs/Net advances ratio and Net NPAs/ Total assets ratio were used	According to the study, SBI bank's NPAs are growing faster than those of ICICI banks. SBI Bank has a larger number of non-performing loans than ICICI Bank. If SBI Bank wants to compete with ICICI Bank, they need to focus on how well they work.
Sushmita (2020)	Non-performing assets, profitability	The data analysis was done by using statistical tools like tabulation and line graphs.	The review sees that the UCBs and StCBs have shown a huge improvement in the administration of Non-performing resources in contrast with the DCCBs, PACs, SCARDBS, and PCARDBS.
Ari (2020)	NPL, credit risk	Database covering NPLs in 88 banking crises since 1990.	Bank capital is higher this time around, the forward-looking IFRS 9 accounting standards can help with

			NPL recognition, and the covid-19 crisis was not preceded by a credit boom, all of which favor NPL resolution.
Rizvi (2019)	Operational Risk, liquidity risk, profitability	The hierarchical model developed using ISM/TISM methodology illustrates the driving and dependence relationships among different factors.	By identifying various factors and their interactions and relationships, the study will add to the body of knowledge about how the Indian banking industry will develop in the coming years.
Shah and Vongbun (2019)	capital adequacy ratio, leverage ratio, non-performing loan ratio, loan loss provision ratio, return on assets	The independent study is completed using a blend of Independent t-test, Pearson's Correction, analysis of variance (ANOVA), multiple regression analysis	The outcome demonstrates that the dependent variable return on assets has a negative relationship with the capital adequacy ratio, leverage ratio, non-performing loan ratio, and loan loss provision ratio. Similarly, credit interest to credit offices is decidedly connected with return on resources.
Partovi (2019)	ROA, NIM, and ownership	Data Envelopment Analysis (DEA) approach	The ownership structure of Turkish banks has an impact on how efficient they are. This study has demonstrated how efficiency levels in a banking system are affected by NPLs and other efficiency determinants like ROA, NIM, and ownership.
Serwada (2018)	Liquidity, non-performing loans	The study employs descriptive statistics, regressions and correlation analysis	According to the findings, nonperforming loans had a negative impact on banks' performance, putting them at risk for a significant amount of illiquidity and a financial crisis.

Neupane (2018)	loan & advance, NPA, profitability	Quantitative research design has been employed to achieve the research objectives	The study found that, with the exception of the fiscal year 2012/13, NABIL's non-performing assets (NPA) are rising, as are the total loans and advances over the study period. The rates of NPA is expanding over the review period with the exception of the year 1011/12.
Kjosevski and Petkovski (2017)	NPL, GDP growth, unemployment and inflation	a panel of 27 banks from the Baltics using annual data for the period 2005–2014.	The findings suggest that NPLs have an effect on the real economy and that macroeconomic conditions like domestic credit to the private sector, GDP growth, unemployment, and inflation have a significant impact on NPLs.
Siraj and Pillai (2016)	NPA, credit risk	Using various statistical tools such as AAG rate, correlation and regression study	The review perceived that NPA stays a significant danger and the gradual part made sense of through increases for NPA suggests an extraordinary conversation starter mark on the effectiveness of credit risk the board practices of banks in India.
Bhattarai (2016)	GDP, non-performing loan	the banker's perception shows that the macroeconomic variables like unemployment rate, inflation rate, exchange rate and interest rate are not much important variables to influence non-performing loan of the commercial banks of Nepal	The financiers likewise see that the expansion in Gross domestic product development rate decline the non-performing advance of business banks in Nepal.
Basnet (2016)	NPA, profitability	NPL, Comparative analysis with pannel data	Nepal Bangladesh Bank Limited appeared to have a higher NPA level

		between two variables	than all of the other banks in the study. In a similar vein, Nepal SBI Banks and Bank of Kathmandu come in at number two and three, respectively.
Narula and Singla (2015)	NPA, net profits	The study uses the annual reports of Punjab National Bank for the period of six years from 2007 -08 to 2012-13.	These papers infer that there is a positive connection between Net Benefits and NPA of PNB. This is because of the bank's poor management.
Arora and Ostwal (2014)	Loan and advances, total deposit, non-performing loan and net profits	descriptive study design	The significant discoveries of the review were, the credit and advances to add up to store proportion is in fluctuating patterns. The bank has a higher mean and ratio each year. It indicates that deposit is better mobilized.

2.2.2 Review of Related Thesis

Shakya (2022) had conducted a thesis entitled on a study on the non-performing assets management of Nepalese commercial banks (With Reference to Kumari Bank Ltd. and Machhapuchre Bank Ltd.). The principal goals were to analyze the credit risk position of the chose business banks in Nepal. to investigate KBL and MBL's credit risk management procedures and systems. To assess the authoritative construction of KBL and MBL to deal with the credit risk. According to the study, KBL and MBL's primary credit risk comes from concentration risk. Additionally, absence of deliberate and exhaustive credit handling is likewise the significant wellspring of credit risk in these banks. Poor credit assessment, a lack of testing and validation of new lending methods, senior management's subjective decision-making, a poor credit review process, a failure to monitor borrowers or collateral values, banks' failure to adequately account for business cycle effects, and other issues plague credit processing. The market-delicate and Liquidity-touchy openings additionally increment the credit hazard of these banks. Also, it is found that the two banks have their own rating arrangement of the credit client and the areas.

Kharel (2021) had conducted a thesis entitled on Non-performing Assets and Profitability of Commercial Banks in Nepal. The review plans to track down the pattern and creation of non-performing resources of business banks. To investigation the significant benefit marks of business banks. To get to the connection between the productivity and the non-performing resources of the business banks. to investigate how non-performing assets affect commercial banks' profits. Except for the fiscal year 2013/14, NABIL's non-performing assets (NPA) are rising, and the total loan and advance are rising throughout the study period. With the exception of 2013/14, the percentage of NPA has increased throughout the study period. The typical NPA proportion of the bank is 1.18% and standard deviation is 0.44% over the review period. The net revenue of NABIL is diminishing in every year, ROTA proportion is fluctuating tend and ROLA proportion is fluctuating pattern over the review period. Over the course of the investigation, the ROLA ratio, the ROTA ratio, and the net profit margin of GIBL all show signs of fluctuation.

G.C. (2020) conducted a research entitled on a study on the non-performing loan management of Nepalese commercial banks (With Reference to Kumari Bank Ltd. and Machhapuchre Bank Ltd.). The goals of the review were to break down the degree of NPL and LLP of test banks. to investigate the selected Nepali commercial banks' risk profiles. to investigate KBL and MBL's risk management procedures and systems. Shrestha used statistical and financial tools like mean, SD, CV, correlation & regression, liquidity, assets management, and risk ratios to analyze the data from the sample study of Nepal's commercial bank. These tools are useful for all stakeholders and academic proposals. The focus risk is the principal wellspring of credit risk for both KBL and MBL. Additionally, absence of deliberate and exhaustive credit handling is likewise the significant wellspring of credit risk in these banks. Poor credit assessment, a lack of testing and validation of new lending methods, senior management's subjective decision-making, a poor credit review process, a failure to monitor borrowers or collateral values, banks' failure to adequately account for business cycle effects, and other issues plague credit processing. The market-delicate and Liquidity-touchy openings additionally increment the credit hazard of these banks. Also, it is found that the two banks have their own rating arrangement of the credit client and the areas.

Shrestha (2019) conducted a research entitled on non-performing assets and profitability of commercial banks in Nepal with the objectives of trend and composition analysis of non-performing assets of commercial banks. to examine the major commercial bank profitability indicators. To get to the connection between the productivity and the non-performing resources of the business banks. To dissect the information from the example investigation of business bank in Nepal Shrestha utilized mean, SD, CV, Relationship relapse (pattern line) as a measurable devices For examine the optional information he got the information of business banks' financial year 2013/14 to 2016/17. The different monetary proportions and scientific instruments by Shrestha. Liquidity, asset management, and debt ratios are the most commonly used ratios, and he has completed his research and discovered significant facts. The principal findings of this study are that, with the exception of fiscal year 2015/16, NABIL's non-performing assets (NPA) are rising, and that the total loan and advance are rising throughout the study period. The NPAT of NABIL, SCBNL is in expanding consistently however the net benefit of HBL is fluctuating pattern. The net revenue of NABIL is diminishing in every year, ROTA proportion is fluctuating pattern and ROLA proportion is fluctuating pattern over the review period.

Khadka (2019) conducted a research entitled on study of non-performing assets – with special Reference to Nepal Bank Limited and Rastriya Banijya Bank Limited with the following objectives: to study the general reason for assets becoming NPA in NBL and RBB, to point out the level of NPA in NBL and RBB after financial sector reform program and find out the problems of banks due to NPA and to make recommendation to overcome the problem of two banks regarding NPA. Khadka conducted his study using a sample of NBL and RBB, and every research requires a methodology for data analysis and comprehension. In his research, he utilized statistical tools like the Mean, Standard Deviation, and Coefficient of Variance. As an administration research this study follows the different monetary proportions and logical instruments by Khadka. For the most part utilized proportions are liquidity, resources the executives and obligation proportions and he complete his examination and tracks down significant realities from the optional information from 2013/14 to 2015/16. The study's main finding was that roughly half of the banking sector's assets and liabilities are held by RBB and NBL. Even though these banks have been managed by experts in international finance, their performance, especially in terms of lowering the amount of non-performing loans, is not satisfactory.

The goal for the management teams was to reduce NPA to 5%. The net benefit pattern of NBL and RBB is exceptionally bad in initial three monetary years however presently NBL and RBB is acquiring benefit from most recent two years. The store isn't associated with this two banks credit and advance. This is a very serious issue and the primary reason for excessive liquidity. Circumstance of store preparation is poor in NBL and RBB. Instead of concentrating on loan volume, NBL and RBB are not considering loan equity.

Sharma (2018) conducted a research entitled on non-performing assets of Nepalese commercial banks. The primary goals of the review were to break down the non-performing resources of the business banks. The next step is to determine whether the Nepalese commercial banks are adhering to the NRB's directives regarding nonperforming assets by examining the level of NPAs in total assets, total deposits, and lending. Different monetary proportions and logical instruments are utilized by Sharma. Liquidity, assets management, and debt ratios are the most frequently used ratios. For statistical calculations, the researcher used the average, standard deviation, CV, correlation coefficient, and regression analysis for forecasting. He got the data for ten years, from 2004-2005 to 2014-2015. He concludes his research and discovers significant facts. The main findings of this study are as follows: Nepal Bangladesh Bank Limited appeared to have a higher NPA level than any of the other banks in the study. In a similar vein, Nepal SBI Banks and Bank of Kathmandu come in at number two and three, respectively. The place of NABIL Bank Restricted appeared to be very acceptable on the grounds that the bank has been diminishing its NPA consistently and NPA of Nepal Speculation Uber Bank has been decreasing it at least than that of the multitude of different banks and it is found that none of the banks have been following the orders of NRB with respect to the advance misfortune arrangement. The sample banks have a very low average ratio of non-performing loans to total assets. However the proportion is fluctuating. This shows that banks have appropriately dealt with its credits and advances.

2.3 Research Gap

The term "research gap" refers to the gap that exists between the current study and previous studies. Various students, professionals, and researchers have conducted a few studies on non-performing assets. Since those review (for example the previously

mentioned examinations) offer restricted discoveries, greater testing, and change of important factors are required in arranged to be more decisive about the non-performing resources. The motivation behind the examination work is very unique in relation to the investigations made by the past specialists.

An exploration hole is an inquiry or an issue that has not been replied by any of the current examinations or examination inside this field. When a new idea or concept hasn't been studied at all, there may be a research gap. If all of the existing research is out of date and requires new or updated research, you may occasionally discover a research gap. There are a number of gaps in the sample bank, first fiscal years, and between this study and previous studies. This study is totally worry about Worldwide IME Bank Restricted, Nepal Bank Restricted and Nepal Speculation Uber Bank Restricted as far as non-performing credits. In the past exploration, there is no obvious estimation and there was not appropriate information examination devices like this exploration use to find the outcome which are notice in the part third for example research procedure. The concept of bank non-performing loans could not be accurately represented by previous studies. The articles in this collection come from journals and illustrate the main idea about non-performing loans and assets in a variety of ways, which helps to clarify the subject matter of this study. This study tires to demonstrate the viability of credit strategy of concerned bank through investigation of non-performing advance. This study is a continuation of previous work in the area of liquidity and profitability, providing up-to-date, comprehensive data on the sample bank's liquidity and profitability position. It will act as wellspring of reference for comparative field in future.

CHAPTER - III

RESEARCH METHODOLOGY

Research philosophy is the efficient strategy for finding answer for an issue for example deliberate assortment, recording, examination, translation and revealing of data about different realities of a peculiarity under study. The methods and procedures used throughout the study are described in this study's research methodology. This part portrays research plan, populace and test, wellsprings of information and technique for information examination.

3.1 Research Design

Research configuration alludes to the general procedure used to do investigate that characterizes a brief and legitimate arrangement to handle laid out research inquiries through the assortment, translation, examination, and conversation of information. The overall strategy used to integrate the various study components in a coherent and logical manner is referred to as the research design. This ensures that the research problem will be effectively addressed. The non-performing loans of Global IME Bank Ltd., Nepal Bank Ltd., and Nepal Investment Mega Bank Ltd. were analyzed using descriptive and causal comparative research in order to accomplish the specific goal of the study.

3.2 Population and Sample

With the consolidation there are 20 recorded business banks, which are as of now working in Nepal from the mid May 2024 (www.nrb.org). The population is made up of them. Global IME Bank Ltd., Nepal Bank Ltd., and Nepal Investment Mega Bank Ltd. are among those chosen for the study's sample based on profit and 2023's highest home loan giver. This study employs the method of purposeful sampling. This study examines GIBL, NBL, and NIMB data for the previous ten fiscal years, from 2013/14 to 2022/23.

3.3 Nature and Sources of Data

The study achieves its goals by utilizing secondary data. Secondary data are information that someone else has already gathered or used and made available to others in the form

of statistics that are published in periodicals, annual reports, newspapers, and other publications. When an essential information is utilized, it loses its inventiveness and becomes optional. The use of annual reports from Nepal Investment Mega Bank Ltd., Global IME Bank Ltd., and Nepal Bank Ltd. is the primary source of secondary data for this study. Other than the yearly reports different wellsprings of information have additionally been utilized with the end goal of the review plan records, paper, magazine, financial diaries, NRB reports and so on.

3.4 Method of Data Analysis

This study makes use of both financial and statistical tools. The available data pattern will serve as the basis for the data analysis. As a result of restricted time and sources, basic scientific factual instruments, for example, mean, standard deviation, Karl Pearson's co-effective of relationship and relapse examination are embraced in this review. Financial analysis has also made use of powerful instruments like ratio analysis. Tabulated under various headings are the various calculated results that were obtained using financial and statistical tools. The results are then interpreted by comparing them to one another.

3.4.1 Financial Tools

By correctly establishing a relationship between the item of the balance sheet and the profit and loss account, financial analysis is the process of determining the financial strength and weakness of the company. A ratio serves as a benchmark for evaluating a company's financial position and performance when it adopts financial tools. The use of financial statements to evaluate a company's current and future financial performance is known as financial analysis.

Ratio Analysis

The most efficient method of financial analysis is ratio analysis. It is the broadly involved device in monetary examination. The relationship between the two variables or between them is shown using a ratio simplify. It presents the overall qualities and shortcoming of any firm or association. Additionally, it demonstrates the organizations' financial performance and expansion. It outlines the monetary figures and make quantitative judgment about the monetary exhibitions and positions. Financial ratio refers to the mathematical expression of the relationship between two accounting figures. To create

investigation we can utilize different proportions. Yet, just those proportions have been determined which are connected with the exploration subject.

Non-Performing Loans to Loan and Advances Ratio

According to the NRB's policy, all commercial banks are required to maintain adequate loan loss provision against non-performing loans. This proportion helps in limiting the non-performing credits and assists with controlling the dubious advances and awful obligations.

$$\text{Non-performing Loans to Loan and advance Ratio} = \frac{\text{Non-performing Loans}}{\text{Loan and advances}} \times 100$$

Loans and advance to Total Deposit Ratio

The principal kinds of revenue of bank is revenue which is come from best loaning strategy and that asset is relies upon the different store assortment from the clients. This proportion is determined to figure out how effectively the banks are using their stores on credits and advances for benefit creating exercises. A higher ratio indicates a better use of all deposits.

$$\text{Loans and advance to Total Deposit Ratio} = \frac{\text{Loan and Advance}}{\text{Total Deposit}} \times 100$$

Loan Loss Provision to Non-Performing Loan Ratio

Bad loans should be a concern for every commercial bank. Banks sometimes fail despite their best efforts. As a result, they took a provision out of their profit at the time. The compulsion factor in lending practices is loan loss provision, and the evil factor in banks is the non-performing loan. This proportion estimates the piece of provisioned advance with non-performing Credit. This is the compulsion component because provision can only be made with all loans. Maybe the distinction part as contrast with Non-Performing credit isn't all that great to result a sound benefit.

$$\text{Loan Loss provision to Non-Performing Loan} = \frac{\text{Loan Loss Provision}}{\text{Non - performing Loan}} \times 100$$

Non – performing Loan to Total Assets Ratio

The ratio of banks' total assets to non-performing loans is shown by this ratio. It shows the number of credits that are non-performing or inactive in the all-out resources of

banks. A higher ratio of NPL to total assets indicates poor work performance, which hurts banks' profitability. Banks with a lower ratio are more profitable and have better performance. Hence, lower NPL to add up to resources proportion is better for the banks that displays the better productivity. The proportion is determined utilizing following recipe;

$$\text{NPL to Total Assets Ratio} = \frac{\text{Non-Performing Loan}}{\text{Total Assets}} \times 100$$

Cash Reserve Ratio (CRR)

The cash reserve ratio, or CRR, is the proportion of a bank's total deposits that must be kept in liquid cash. This is a prerequisite of the Nepal Rastra Bank, and the NRB, the national bank, holds the money save. The Nepal Rastra Bank keeps this liquid cash, which cannot be used for investment or lending and is not subject to interest income.

Capital Adequacy Ratio (CAR)

A bank's accessible capital is estimated and communicated as a level of its gamble weighted credit openness by the capital sufficiency proportion, or Vehicle. Capital adequacy refers to the amount of capital that a financial regulator requires for a bank or other financial institution to be held. This makes it more straightforward to ensure that associations aren't holding or partaking in speculations that raise the default risk. Additionally, to guarantee that banks have adequate money to cover working misfortunes and interaction withdrawals.

Return on Equity (ROE)

This proportion estimates the capacity of a firm to produce benefit by using its all out value. The owners of commercial banks want a reasonable return in addition to making a profit. Complete investor's value comprises of inclination share capital, normal offer capital, share premium, hold and excess and less aggregated misfortunes. This proportion can be processed as Net benefit after charge (NPAT) separated by normal absolute investors' value.

Return on Assets (ROA)

A bank's return on assets (ROA) is a measure of how effectively it uses its assets. It measures a company's profitability in relation to its total assets. ROA, which addresses

the bank the executives' readiness to face challenges to accomplish a good measure of benefit per unit of complete assets. By looking at the ROA number, an analyst, investor, or manager can figure out how well the management of a bank uses its assets to make money.

3.4.2 Statistical Tools

The study's important aspects, which make it more reliable and yield more significant results, are identified using a variety of statistical tools. It is a mathematical method that makes it easier to analyze and make sense of organizations' performances. It likewise assists with introducing the information, show the connection and deviations or contrasts of factors of associations. The data from the various sources are evaluated in this study with the help of the following statistical tools:

Arithmetic Mean

In measurements, the Math Mean (AP) or called normal is the proportion, everything being equal, to the absolute number of perceptions. Outside of statistics, the arithmetic mean can also serve as a model or guide. From the mean of an informational index, we can imagine the typical distance the information focuses are from the mean as standard deviation. It is the worth, which address to the entire gathering... implies is the math normal of a variable. A series' arithmetic mean can be found by:

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

Where,

\bar{X} = Sum of the variables 'x'

N = No. of Observation

Standard Deviation

The amount of variation or dispersion in a set of values is measured by the standard deviation in statistics. A low standard deviation means that the values tend to be close to the set's mean, which is also known as the expected value, while a high standard deviation means that the values are spread out over a larger range. The data's deviation from the mean is known as dispersion. To put it another way, it makes it easier to look at the variability in the quality of the data. Calculated as follows:

$$\text{Standard Deviation (SD)} = \sqrt{\frac{\sum(X - \bar{X})^2}{n}}$$

Co-efficient of Variation

The absolute measure of dispersion is called the standard deviation. The measurement of the coefficient of standard deviation is the relative measure of dispersing based on the standard deviation. The term "co-efficient of variation" refers to the percentage of the measure of the co-efficient of so. Consistency and uniformity increase with less CV, and vice versa. While CV is able to independently compare two variables in terms of their variability, standard deviation alone is not appropriate for comparing two pairs of variables. It is figured as follows:

$$\text{Coefficient of Variation (CV)} = \frac{\text{S.D.}}{\text{Mean}} \times 100$$

Correlation

Connection is a term that is a proportion of the strength of a direct connection between two quantitative factors. Positive and negative correlations will be defined in this article. It is a technique for deciding the connection between these two factors. In the event that the two factors are so related change in the worth of autonomous variable reason the adjustment of the worth of ward variable then having relationship coefficient is said.

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

Where,

r = coefficient of correlation

$\sum XY$ = Sum of product of two series.

$\sum X^2$ = Sum of squared in X series

$\sum Y^2$ = Sum of squared in Y series

n = number of years

The worth of this coefficient can never be more than + 1 or not exactly - 1. Accordingly, + 1 and - 1 are the restriction of this coefficient. Positive correlation between variables and vice versa are implied by $r = + 1$. Additionally, zero indicated that there was no correlation.

Coefficient of determination

Coefficient of assurance, is the extent of the difference in the reliant variable that is unsurprising from the autonomous factors. The degree of linear association or correlation between two variables, one of which is an independent variable and the other a dependent variable, is measured by the coefficient of determination. It measures the extent of association between the two variables, or the percentage of total variation in the dependent variables that is explained by the independent variable(s). The coefficient of assurance is characterized by

$$r^2 = \frac{\text{Explained Variation}}{\text{Total Variation}}$$

The coefficient of (multiple) determination has a value between zero and one.

Regression Analysis

Relapse examination is a bunch of measurable techniques utilized for the assessment of connections between a reliant variable and at least one free factors. It very well may be used to survey the strength of the connection among factors and for demonstrating the future connection between them.

It can be express in following Equation:

$$Y = a + bx$$

Where,

Y = Dependent Variables

a = Intercept or Average

b = Coefficient of / Slope of

x = Independent Variables

Multiple Regressions

The multiple regressions model is used to figure out how important each independent variable is in determining profitability. This study led relapse investigation to break down the connection between the banks' benefit and others autonomous factors.

Baseline Model

Dependent variables make up the major profitability ratios (ROE and ROA). These are the independent variables.

Model 1

This model looks at the effect of components on ROE of business banks.

$$ROE = \beta_0 + \beta_1 NPLRatio_{it} + \beta_2 LLPRatio_{it} + \beta_3 CDRatio_{it} + \beta_4 CRR_{it} + \beta_5 CAR_{it} + \dots + e_{it}$$

Model 2

This model inspects the effect of components on ROA of business banks.

$$ROA = \beta_0 + \beta_1 NPLRatio_{it} + \beta_2 LLPRatio_{it} + \beta_3 CDRatio_{it} + \beta_4 CRR_{it} + \beta_5 CAR_{it} + \dots + e_{it}$$

Where,

Dependent Variables

ROE = Return on Equity

ROA = Return on Assets

Independent Variables

NPL Ratio = Non-performing loan to loan and advance ratio

LLP Ratio = Loan loss provision to non-performing loan ratio

CD Ratio = Cash and bank balance to Total Deposit ratio

CRR = Cash Reserve Ratio

CAR = Capital Adequacy Ratio

e_{it} = others /Errors

3.5 Research Frameworks and Definition of Variables

The researcher constructs the following conceptual framework for the study based on the theoretical and empirical literature reviews.

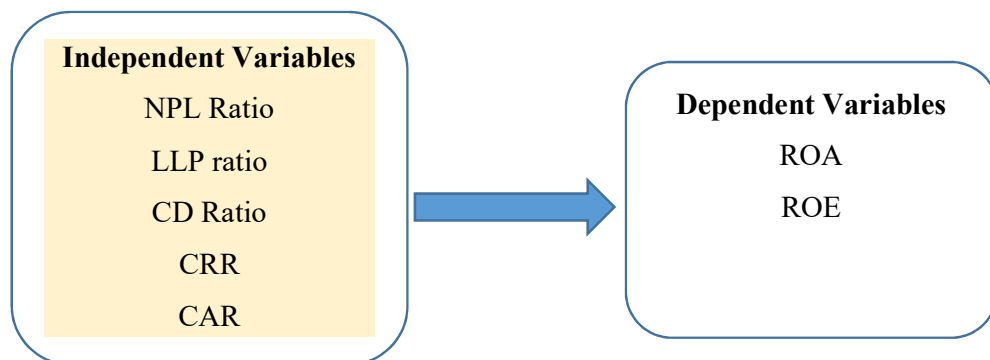


Figure 1

Research Framework

Definition of Variables

Non-Performing Loan Ratio

Non-performing resources, likewise called non-performing advances. It can be described as the bank's non-productive assets. As such, it is the advance or awful obligation and dubious obligations that doesn't reimburse time. The amount of non-performing assets in a loan and advances is shown by the ratio of NPL to total loan Advance. The National Reinvestment Board (NRB) has instructed all commercial banks to set up loan loss provisions to cover bad and uncertain debts. This ratio helps to control credit and reduce the number of non-performing loans.

Loan Loss Provision Ratio (LLPR)

The compulsion factor in lending practices is loan loss provision, and the evil factor in banks is the non-performing loan. If they are high, will this reduce the amount of profit that the bank wants to make? This proportion estimates the piece of provisioned advance with non-performing Credit. This is the compulsion component because provision can only be made with all loans. Maybe the distinction part as contrast with Non-Performing credit isn't all that great to result a sound benefit.

Credit Deposit Ratio (CDR)

Credit and advance comprises of advances, advance, charges buy and bills limited. These are the significant area of asset assembly. Credit deposit ratio, or CD ratio, is a common name for this ratio. The center financial capability is to activate the assets gotten from the investors to borrowers and procure benefit and Cd proportion is the central boundary to determine reserve arrangement productivity of business bank. All in all this proportion is determined to figure out how effectively the banks are using their complete stores on layaway of credits and advances for benefit producing reason as credits and advances yield high pace of return. More noteworthy Compact disc proportion infers the better usage of absolute stores and better procuring, in any case, liquidity necessities additionally needs due thought. Consequently 70%-80% Disc proportion is thought of as proper.

Cash Reserve Ratio (CRR)

The cash reserve ratio, or CRR, is the proportion of a bank's total deposits that must be kept in liquid cash. This is a prerequisite of the Nepal Rastra Bank, and the NRB, the national bank, holds the money save. The Nepal Rastra Bank keeps this liquid cash, which cannot be used for investment or lending and is not subject to interest income.

Capital Adequacy Ratio (CAR)

A bank's accessible capital is estimated and communicated as a level of its gamble weighted credit openness by the capital sufficiency proportion, or Vehicle. Capital adequacy refers to the amount of capital that a financial regulator requires for a bank or other financial institution to be held. This makes it more straightforward to ensure that associations aren't holding or partaking in speculations that raise the default risk. Additionally, to guarantee that banks have adequate money to cover working misfortunes and interaction withdrawals.

Return on Equity (ROE)

This proportion estimates the capacity of a firm to produce benefit by using its all out value. The owners of commercial banks want a reasonable return in addition to making a profit. Complete investor's value comprises of inclination share capital, normal offer capital, share premium, hold and excess and less aggregated misfortunes. This proportion can be processed as Net benefit after charge (NPAT) separated by normal absolute investors' value.

Return on Assets (ROA)

A bank's return on assets (ROA) is a measure of how effectively it uses its assets. It measures a company's profitability in relation to its total assets. ROA, which addresses the bank the executives' readiness to face challenges to accomplish a good measure of benefit per unit of complete assets. By looking at the ROA number, an analyst, investor, or manager can figure out how well the management of a bank uses its assets to make money.

CHAPTER - IV

DATA PRESENTATION AND ANALYSIS

Data collection analysis and presentation are covered in this chapter. The management of commercial bank's non-performing assets has been examined in this chapter. The part Information show and examination is the principal body of the review. After converting unprocessed data into an understandable presentation, the purpose of this chapter is to analyze and clarify the collected data in order to achieve the study's goal. In this course of examination, information assembled from different sources have been embedded in the plain structure and displayed in chart structure. Financial and statistical tools were used to analyze the data. The aftereffects of the calculation have likewise been summed up in appropriated tables. In the preceding chapter, a literature review and a variety of readings were used to attempt an analysis and diagnosis of the most recent Nepalese commercial bank, with particular reference to the Nepali commercial bank. The computation samples for each model are in the appendices. Among the business banks three business banks is taken as test in particular, GIBL, NBL and NIMB. In order to simplify and make the result easier to comprehend, various tables are drawn.

4.1 Ratio Analysis

A ratio is simply the expression of one number in relation to another. A proportion is a factual measuring stick through which connection between two or different figures can measure up or estimated. Proportions can be found out by separating one number by another number. To give the numbers their meaning, ratios show how one number is related to another.

4.1.1 Non-Performing Loans to Loan and Advances Ratio

The National Reinvestment Board (NRB) has instructed all commercial banks to set up loan loss provisions to cover bad and uncertain debts. This ratio helps to control credit and reduce the number of non-performing loans.

Table 4

Non-Performing Loans to Loan and Advance Ratio

(In Percentage)

Fiscal Year	GIBL Ratio	NBL Ratio	NIMB Ratio
2013/14	2.60	5.99	3.42
2014/15	1.68	5.57	1.97
2015/16	2.33	5.40	1.82
2016/17	2.62	4.17	1.27
2017/18	2.29	3.88	0.69
2018/19	1.94	4.03	0.85
2019/20	1.64	3.01	1.38
2020/21	0.78	2.69	2.86
2021/22	0.55	2.52	3.00
2022/23	1.78	2.05	2.46
Mean	1.82	3.93	1.97
SD	0.71	1.38	0.94
CV	38.86	35.02	47.64

(Source: Appendix- I, II & III)

The ratio of GIBL, NBL, and NIMB's non-performing loans to loans and advances is shown in Table 4. The ratio of GIBL varies from 2.62 percent in 2014/15 to 0.55 percent in 2019/20. As a result, NBL has the highest ratio in 2013/14, which is 5.99%, and the lowest ratio in 2020/21, which is 2.05%. Similarly, NIMB has the most elevated proportion of 3.42% in 2013/14 and the least proportion is 0.69% in 2015/16. Since higher NPL always puts a bank in a very risky position, a bank's performance is correlated with its lowest NPL to loan and advance ratio. NSBL shows better for this situation. GIBL, NBL, and NIMB have respective mean ratios of 1.82 percent, 3.93 percent, and 1.97 percent. A lower ratio indicates that banks' assets, which include loans and advances, are of higher quality. The higher ratio indicates that banks' assets—loans and advances—are of poor quality. It is possible to assert that NBL banks maintain the CV more consistently than GIBL and NIMB, despite performing well or maintaining their NPLs with less than 1% during the study period.

4.1.1 Loans and Advance to Total Deposit Ratio

The fundamental wellsprings of bank's loaning rely upon its store. This proportion is determined to figure out how effectively the banks are using their stores on credits and

advances for benefit creating exercises. A higher ratio indicates a better use of all deposits.

Table 5

Loan and Advance to Total Deposit Ratio

(In Percentage)			
Fiscal Year	GIBL Ratio	NBL Ratio	NIMB Ratio
2013/14	82.12	49.37	73.03
2014/15	75.41	56.54	74.32
2015/16	76.84	56.30	70.46
2016/17	79.89	65.35	73.06
2017/18	81.32	65.35	78.67
2018/19	79.29	68.50	83.25
2019/20	77.49	78.43	86.10
2020/21	86.71	80.93	83.54
2021/22	90.79	74.71	82.93
2022/23	87.37	83.18	89.84
Mean	81.72	67.87	79.52
SD	5.06	11.45	6.54
CV	6.19	16.88	8.23

(Source: Appendix- I, II & III)

The Table 5 portrays the example bank's credit and advances to add up to store proportion. Proportion appears to be in fluctuating pattern. GIBL and NBL's most elevated proportion is 90.79% and 83.18% separately in F/Y 2019/20 and 2020/21. NIMB has the most elevated proportion of 89.84% in 2020/21. GIBL, NBL, and NIMB have a mean ratio of 81.72 percent, 67.87 percent, and 79.52%, respectively. One might say that GIBL activated its complete store as credit and advances and procuring high benefit. The CVs of the sample bank are 6.19 percent, 16.88 percent, and 8.23 percent, respectively, indicating that the GIBL appears to be consistent or low risk.

4.1.4 Loan Loss Provision to Non-Performing Loan Ratio

The compulsion factor in lending practices is loan loss provision, and the evil factor in banks is the non-performing loan. The bank's goal is to make a profit, but if they are high, they will be lower. This proportion estimates the piece of provisioned advance with non-

performing Credit. This is the compulsion component because provision can only be made with all loans.

Table 6

Loan Loss Provision to Non-performing Loan Ratio

(In Percentage)

Fiscal Year	GIBL Ratio	NBL Ratio	NIMB Ratio
2013/14	126.40	122.32	89.12
2014/15	137.54	113.02	142.39
2015/16	127.29	103.51	151.95
2016/17	113.33	113.73	174.29
2017/18	114.97	114.91	261.21
2018/19	141.17	106.36	231.87
2019/20	143.02	106.96	164.20
2020/21	213.25	116.12	120.24
2021/22	276.85	140.62	151.68
2022/23	144.73	-152.52	176.02
Mean	153.85	88.50	166.30
SD	51.53	85.33	50.04
CV	33.49	96.42	30.09

(Source: Appendix- I, II & III)

The table 6 portrays the sable bank's Advance Misfortune Arrangement to Non-performing Credit Proportion of GIBL, NBL and NIMB. The proportion of GIBL ranges the most noteworthy proportion of 276.85% in 2019/20 and least proportion is 113.33% in 2014/15. Similarly, NBL's ratio is highest in 2019/20, at 140.62%, and lowest in 2020/21, at -152.52%. Likewise, NIMB have most noteworthy proportion 261.21 and least proportion 89.12 in 2015/16 and 2013/14 separately. The typical proportion of GIBL, NBL and NIMB are 153.85%, 88.50% and 166.30%. By measuring the coefficient of variation, NIMB is more uniform than GIBL and NBL because it has a CV of 30.09%.

4.1.5 Cash Reserve ratio

The cash reserve ratio, or CRR, is the proportion of a bank's total deposits that must be kept in liquid cash. This is a prerequisite of the Nepal Rastra Bank, and the NRB, the national bank, holds the money save. The Nepal Rastra Bank keeps this liquid cash, which cannot be used for investment or lending and is not subject to interest income.

Table 7

Cash Reserve ratio

(In Percentage)

Fiscal Year	GIBL Ratio	NBL Ratio	NIMB Ratio
2013/14	31.11	22.53	19.2
2014/15	30.12	9.6	12
2015/16	35.14	11.55	7.2
2016/17	33.54	17.46	10.5
2017/18	25.34	9.05	8.2
2018/19	22.13	4.06	5.5
2019/20	24.58	4.53	8.7
2020/21	29.89	4.19	4.4
2021/22	23.55	3.49	3.1
2022/23	30.34	7.79	3.5
Mean	28.57	4.46	8.23
SD	4.40	6.32	4.85
CV	15.42	67.06	58.93

(Source: Appendix- I, II & III)

The table 7 portrays the sable bank's liquidity as cash reserve ratio of GIBL, NBL and NIMB. The proportion of GIBL ranges the most noteworthy proportion of 35.14% in 2015/16 and least proportion is 22.13% in 2018/19. Similarly, NBL's ratio is highest in 2016/17, at 17.46%, and lowest in 2021/22, at 3.49%. Likewise, NIMB have most noteworthy proportion 19.20% and least proportion 3.10 in 2013/14 and 2021/22 separately. The typical proportion of GIBL, NBL and NIMB are 28.57, 4.46 and 8.23. By measuring the coefficient of variation, GIBL is more uniform than NIMB and NBL because it has a CV of 15.42%.

4.1.6 Capital Adequacy Ratio

A bank's accessible capital is estimated and communicated as a level of its gamble weighted credit openness by the capital sufficiency proportion, or Vehicle. Capital adequacy refers to the amount of capital that a financial regulator requires for a bank or other financial institution to be held. This makes it more straightforward to ensure that associations aren't holding or partaking in speculations that raise the default risk. Additionally, to guarantee that banks have adequate money to cover working misfortunes and interaction withdrawals.

Table 8

Capital Adequacy Ratio

(In Percentage)

Fiscal Year	GIBL Ratio	NBL Ratio	NIMB Ratio
2013/14	12.38	-0.59	11.27
2014/15	12.69	4.55	11.9
2015/16	12.35	7.49	14.92
2016/17	11.37	10.2	13.02
2017/18	11.47	11.27	12.66
2018/19	12.31	16.8	13.26
2019/20	12.48	17.01	13.54
2020/21	13.2	16.8	14.71
2021/22	12.67	15.05	15.96
2022/23	13.34	13.74	13.32
Mean	12.43	11.23	13.46
SD	0.63	5.92	1.42
CV	5.10	52.74	10.53

(Source: Appendix- I, II & III)

The table 8 portrays the sable bank's capital adequacy ratio of GIBL, NBL and NIMB. The proportion of GIBL ranges the most noteworthy proportion of 13.34% in 2022/23 and least proportion is 11.37% in 2016/17. Similarly, NBL's ratio is highest in 2019/20, at 17.01%, and lowest in 2013/14, at -0.59%. Likewise, NIMB have most noteworthy proportion 15.96% and least proportion 11.27 in 2021/22 and 2013/14 separately. The typical proportion of GIBL, NBL and NIMB are 12.43, 11.23 and 13.46. By measuring the coefficient of variation, GIBL is more uniform than NIMB and NBL because it has a CV of 5.10%.

4.2 Statistical Analysis

In this piece of information examination, the measurable devices, for example, coefficient of relationship examination between different factors, Pattern investigation of various factors have been utilized. These are the main ones:

4.2.1 Correlation between ROA, ROE, CRR, NPLR, CAR, CAR and LLPR

The relationship between the ROA, ROE, CRR, NPLR, CAR, CAR, and LLPR is very important because it shows where the total loan is going as the volume of CDR changes. A bank will not be able to give enormous volumes of credit on the off chance that it doesn't

get satisfactory and adequate stores in an ideal premise. The correlation coefficient between total credit and CDRs, denoted by r, is shown in the table below. "r" stands for the coefficient of determination, and tcal and ttab stand for the calculated value of the t-statistic and the tabulated value of the t-statistic, respectively, at the 5% level of significance at 3 degrees of freedom. The accompanying outcomes merit featuring.

Table 9

Correlation between ROA, ROE, CRR, NPLR, CAR, CAR and LLPR

Variables	ROE	ROA	CRR	NPLR	CDR	CAR	LLPR
Return on Equity	1						
Sig. (2-tailed)							
Return on Assets	.381*	1					
Sig. (2-tailed)	.038						
Cash Reserve Ratio	.208	.011	1				
Sig. (2-tailed)	.270	.954					
Non-Performing Loan Ratio	.045	-.416*	-.168	1			
Sig. (2-tailed)	.813	.022	.375				
Credit Deposit Ratio	-.372*	-.007	.277	-.665**	1		
Sig. (2-tailed)	.043	.972	.138	.000			
Capital Adequacy Ratio	-.522**	.151	-.307	-.572**	.579**	1	
Sig. (2-tailed)	.003	.424	.099	.001	.001		
Loan Loss Provision Ratio	.047	-.064	.081	-.228	.326	.046	1
Sig. (2-tailed)	.803	.736	.672	.225	.079	.810	

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Appendix II

Table 9 shows the connection grid to show the connection between factors. The connection among ROE and ROA shows emphatically critical at 5% degree of importance with coefficient of 0.381 where Vehicle shows adversely huge connection with ROE of - 0.522 at 1% degree of importance. Likewise, CDR shows adversely critical relationship with ROE with coefficient of 0.372 at 5% degree of importance. At a 5% level of significance, the relationship between ROA and NPLR is -0.416, indicating a moderate degree of negative correlation. CDR and Vehicle shows serious level of negative relationship with NPLR at 1% degree of importance. The connection among CDR and Vehicle is serious level of positive and the relationship is huge at 1% degree of importance.

4.3 Regression Analysis

Relapse examination is a bunch of measurable techniques utilized for the assessment of connections between a reliant variable and at least one free factors. It tends to be used to survey the strength of the connection among factors and for displaying the future connection between them. In this review, ROE and ROA is consider as reliant variable and credit store proportion, capital sufficiency proportion, cash hold proportion, non-performing advance proportion and credit misfortune arrangement proportion is consider as autonomous factors.

The following equation can be used to express it:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3$$

Where,

Y = Dependent Variables i.e. ROE and ROA

a = Intercept or Average

B.... = Slope of

X₁, X₂, X₃..... = Independent Variables i.e. Credit Deposit Ratio, Capital Adequacy Ratio, Cash Reserve Ratio, Non-Performing Loan Ratio and Loan Loss Provision Ratio

4.3.1 Impact of LLPR, CAR, CRR, NPLR and CDR on ROE

Table 10

Model Summary of ROE

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.673a	.453	.339	4.69424

a. Predictors: (Constant), LLPR, CAR, CRR, NPLR, CDR

The model summary's coefficient of determination, R², is 0.453, indicating that independent variables, such as the credit deposit ratio, capital adequacy ratio, cash reserve ratio, non-performing loan ratio, and loan loss provision ratio, account for 45.30 percent of change. ROE. It depicts the combined effect of all independent variables on the dependent variables, or total variance.

Table 11

ANOVA Table

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	438.156	5	87.631	3.977	.000b
	Residual	528.862	24	22.036		
	Total	967.018	29			

a. Dependent Variable: ROE

b. Predictors: (Constant), LLPR, CAR, CRR, NPLR, CDR

Table 11 shows the ANOVA table to show the effect of free thinkers factors on subordinate factors. The fact that the independent variables credit deposit ratio, capital adequacy ratio, cash reserve ratio, non-performing loan ratio, and loan loss provision ratio have a significant impact on the dependent variables, i.e., ROE.

Table 12

Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	55.932	12.673		4.414	.000
	CRR	.040	.109	.074	.362	.021
	NPLR	-2.538	1.020	-.544	-2.488	.020
	CDR	-.325	.178	-.472	-1.833	.079
	CAR	-.884	.420	-.541	-2.105	.046
	LLPR	.008	.013	.096	.578	.069

a. Dependent Variable: ROE

Source: Appendix- III

The linear equation of this model is,

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + e$$

$$ROE = 55.932 + 0.040 X_1 - 2.538 X_2 - 0.325 X_3 - 0.884 X_4 + 0.008 X_5$$

Table 12 shows the relapse coefficient. The CRR, CDR and LLPR has p-esteem more noteworthy than 0.05 demonstrating unimportant effect on ROE. However, the constant term, NPLR, and CAR p-values are lower than the level of significance of 0.05 by 0.000, 0.020, and 0.046, respectively. It shows steady term, NPLR and Vehicle fundamentally affects ROE. The p-values for CRR, CDR, and LLPR are greater than 0.05 by 0.721,

0.079, and 0.569, respectively, indicating that CRR, CDR, and LLPR have no significant effect on ROE.

The fact that the significant coefficients NPLR and CAR have beta values of -2.488 and -2.105, respectively, indicates that an increase of one unit in NPLR or CAR results in a decrease of -2.488 and -2.105 units in ROE. Likewise one unit increase in CRR and LLPR prompts increment of 0.362 and 0.578 units in ROE and one unit increase in CDR prompts - 1.833 unit decline in ROE.

4.3.2 Impact of LLPR, CAR, CRR, NPLR and CDR on ROA

Table 13

Model Summary of ROA

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.568a	.323	.182	.44933

a. Predictors: (Constant), LLPR, CAR, CRR, NPLR, CDR

The model summary's coefficient of determination, R^2 is 0.323, indicating that Independent variables, such as the credit deposit ratio, capital adequacy ratio, cash reserve ratio, non-performing loan ratio, and loan loss provision ratio, account for 32.30% of change. ROA. It depicts the combined effect of all independent variables on the dependent variables, or total variance.

Table 14

ANOVA Table

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.311	5	.462	2.289	.000b
	Residual	4.846	24	.202		
	Total	7.157	29			

a. Dependent Variable: ROA

b. Predictors: (Constant), LLPR, CAR, CRR, NPLR, CDR

Table 14 shows the ANOVA table to show the effect of free thinkers factors on subordinate factors. The F-value is low at 2.289, and the p-value is 0.078, which is higher than the 5% level of significance. This indicates that the independent variables credit

deposit ratio, capital adequacy ratio, cash reserve ratio, non-performing loan ratio, and loan loss provision ratio have no significant impact on the dependent variables, which are. ROA.

Table 15

Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.615	1.213		3.805	.001
	CRR	.002	.010	.049	.216	.031
	NPLR	-.297	.098	-.740	-3.044	.006
	CDR	-.031	.017	-.515	-1.798	.085
	CAR	.006	.040	.045	.156	.078
	LLPR	.000	.001	-.071	-.388	.001

a. Dependent Variable: ROA

Source: Appendix- III

The linear equation of this model is,

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + e$$

$$ROE = 4.615 + 0.002 X_1 - 0.297 X_2 - 0.031 X_3 + 0.006 X_4 + 0.000 X_5$$

Table 15 shows the relapse coefficient. With p-values greater than 0.05, the CRR, CDR, CAR, and LLPR have no effect on ROA. However, the constant term and NPLR p-values are 0.001 and 0.006 lower than the 0.05 level of significance, respectively. It shows steady term and NPLR essentially affects ROA. The p-values for CRR, CDR, CAR, and LLPR are greater than 0.05 by 0.831, 0.085, 0.878, and 0.701, respectively, indicating that these factors have no significant effect on ROA.

The beta upsides of critical coefficients NPLR is - 3.044 which shows one unit increase in NPLR prompts abatement of - 3.044 unit in ROA. Likewise one unit increase in CDR and LLPR prompts abatement of - 1.798 and - 0.388 units in ROA and one unit increase in CRR and Vehicle prompts 0.216 and 0.156 unit expansion in ROA.

4.3 Major Findings

- In the years 2019/20 and 2020/21, the loan and advance to total assets ratios for GIBL and NBL reach their highest levels of 74.53% and 60.82, respectively. In 2017/18, NIMB had the highest ratio, with 70.29 percent. The least proportion of

each of the three example banks are 66.19%, 47.21% and 60.37% in 2013/14, 2013/14 and 2013/14 separately. Among GIBL, NBL and NIMB the most noteworthy mean is 69.81% of GIBL. One might say that GIBL is better preparing of asset as credits and advances and it appears to find success in producing high proportion than NBL and NIMB. The CVs of GIBL, NBL, and NIMB are respectively 3.79 percent, 8.21 percent, and 5.13 percent, indicating that GIBL appears to have a low risk or ratio.

- It appears that the ratio of total deposits to loans and advances fluctuates. GIBL and NBL's most elevated proportion is 90.79% and 83.18% separately in F/Y 2019/20 and 2020/21. NIMB has the most elevated proportion of 89.84% in 2020/21. GIBL, NBL, and NIMB have a mean ratio of 81.72 percent, 67.87 percent, and 79.52%, respectively. One might say that GIBL activated its complete store as credit and advances and procuring high benefit. The CVs of the sample bank are 6.19 percent, 16.88 percent, and 8.23 percent, respectively, indicating that the GIBL appears to be consistent or low risk.
- GIBL's non-performing loan to loan and advance ratio ranges from 2.62 percent in 2014/15 to 0.55 percent in 2019/20. As a result, NBL has the highest ratio in 2013/14, which is 5.99%, and the lowest ratio in 2020/21, which is 2.05%. Similarly, NIMB has the most elevated proportion of 3.42% in 2013/14 and the least proportion is 0.69% in 2015/16. Since higher NPL always puts a bank in a very risky position, a bank's performance is correlated with its lowest NPL to loan and advance ratio. NSBL shows better for this situation. GIBL, NBL, and NIMB have respective mean ratios of 1.82 percent, 3.93 percent, and 1.97 percent. A lower ratio indicates that banks' assets, which include loans and advances, are of higher quality. The higher ratio indicates that banks' assets—loans and advances—are of poor quality. It is possible to assert that NBL banks maintain the CV more consistently than GIBL and NIMB, despite performing well or maintaining their NPLs with less than 1% during the study period.
- The Loan Loss Provision to Non-Performing Loan Ratio of GIBL ranges from the highest ratio in 2019/20 (276.50%) to the lowest ratio in 2014/15 (113.33%). Similarly, NBL's ratio is highest in 2019/20, at 140.62%, and lowest in 2020/21, at -152.52%. Likewise, NIMB have most noteworthy proportion 261.21 and least proportion 89.12 in 2015/16 and 2013/14 separately. The typical proportion of

GIBL, NBL and NIMB are 153.85%, 88.50% and 166.30%. By measuring the coefficient of variation, NIMB is more uniform than GIBL and NBL because it has a CV of 30.09%.

- In 2013/14, the sample bank's ratio of NPL to total assets was 1.84 percent, 2.83 percent, and 2.17 percent higher, respectively. Most minimal proportion is 0.41%, 1.25% and 0.46% in 2019/20, 2020/21 and 2015/16. GIBL, NBL, and NIMB have respective mean ratios of 1.26 percent, 2.07 percent, and 1.31 percent. A lower ratio indicates that banks are more profitable, so GIBL appears to be in a stronger position when it comes to managing non-performing loans.
- GIBL, NBL, and NIMB have a mean net profit to loan and advance ratio of 2.02%, 2.75 percent, and 2.89 percent, respectively. It demonstrates that the NIMB has high volume of premium pay is a sign of good execution of loaning exercises and it income more benefit. From the computation of SD and CV, GIBL has the lower deviation with 0.43% and lower CV NBL and NIMB for example 21.28%.
- There is positive connection between's these two factors for example 0.8323 for GIBL, 0.9216 for NBL, and 0.7217 for NIMB, respectively. It suggests that they are proceeding in the same manner. The positive relationship brings up the way that an expansion in credit and advance prompts increment of non-performing advances leads. The coefficient of assurance r^2 are 0.6927, 0.8493 and 0.5209 which shows that 69.27%, 84.93% and 52.09% of nonperforming credit is made sense of by credit and advance. The determined worth t_{cal} of GIBL and NBL are 4.247 and 6.714 separately, which are higher than arranged esteem for example 3.182 at 5% importance level at 3 level of opportunity for two followed test. In this way, there is huge connection among credit and non-performing advance however in the event of NIMB the determined worth is lower than organized esteem for example 2.950, which indicates that the relationship between the loan and the non-performing loan is insignificant.
- The coefficient of assurance r^2 showing the percent of the amount of the Profit from Credit and Advance (ROLA) is made sense of by the autonomous variable is 0.0135 for example 1.35%. The dependent variable, i.e., tends to rise and fall with the negative coefficient of the NPL ratio. ROE likewise will in general diminish. With a p-value of 0.5399, the NPL ratio is statistically insignificant as an

independent variable, as shown in the table above. The t-value and the associated P-value are taken into consideration when determining the regression coefficient's statistical significance. For "a," the tcal value is 10.6477, with a P-value of 0.000 or 0.00%. It suggests that the letter "a" is important. From above translation of relapse model, it reason that there is negative connection between Autonomous Factors and Ward Factors.

CHAPTER- V

SUMMARY, CONCLUSION AND RECOMMENDATION

This last part examines the discoveries of rundown, ends and proposals. From the above data analysis, the main findings and conclusions are drawn. Lastly, recommendations have been made based on major findings and conclusions.

5.1 Summary

The term "non-performing loan" is used by banks to describe loans and advances on which the principal is past due and no interest payments have been made for some time. This basic introduction to our topic is included in Chapter 1. This study focuses primarily on the management of non-performing loans, with the goal of determining the NPL levels of Global IME Bank Limited, Nepal Bank Limited, and Nepal Investment Mega Bank Limited. Subsequently, look at the connection between Credit and Advance and Non-performing Advance. This study led to features present issues to non-performing credit however because of absence of time and assets it covers the restricted information.

Part two comprise of different surveys of various sorts of study materials like books, diary, article, various kinds of report and magazine, recently concentrated on theories. Non-performing credits are advances that have defaulted or are at risk for defaulting when installments are at this point not ready to be made. The financial market is a highly risky and unpredictable sector. Various critics and researchers find that bad debts, investing in unproductive areas, political circumstances, and inadequate supervision are the primary causes of the rise in non-performing loans, which ultimately leads to the organization's liquidation, such as in the case of ACE Bank of India. The primary driver of the selling of Pro Bank of India is unfortunate administration of Non-performing resources. Although specific contract terms may occasionally differ, loans that have not received payments for three months typically qualify as non-performing loans. The degree of NPL in Nepalese financial area is exceptionally disturbing and the issue is turning out to be increasingly more wild step by step. Numerous financial reports indicate this. During this time, the total NPL in Nepal's banking system is so high.

Part third address the different technique to make it valuable for additional. Among the 27 commercial banks in Nepal, GIBL, NBL, and NIMB—the current context's emerging commercial banks—were chosen as a sample. As an administration understudy the principal concern is to look the sufficiency of the organization. In this way, different monetary apparatuses like liquidity proportions, resources the board proportions, risk proportions has been for the improved outcome. In this way measurable apparatuses like mean, standard deviation, speculation, connection and so on makes the concentrate more comparative with the current setting for all partners and concern bunch.

Section four is primary piece of this study where examination is centered around concentrating on the non-performing credit the board of GIBL, NBL and NIMB. Descriptive and analytical research designs have been used for this purpose. To lead this examination, optional information were utilized. Other than this, paper, significant postulation, diaries, articles, related site and so forth were additionally taken. The data that were gathered from various sources were systematically recorded, presented in appropriate table and chart formats, and analyzed using the appropriate statistical and financial tools. To achieve the study's goal, the data from ten consecutive years were analyzed. Using a variety of ratios, this study looks at how non-performing assets affected the bank's profitability during the study period.

Part five is the last section of this review and essentially it gives the general synopsis of this review. It shows the condition where scientist sees as the all-out synopsis and took some significant end part which address the principal part of examination. At long last, scientist give some suitable idea and rules to the connected gathering for advancement.

5.2 Conclusion

It is believed that the banking industry plays an important part in the country's economic growth. This is especially evident in the field of financial intermediary. Notwithstanding, past examinations on the area showed that little achievement was kept in such manner. Due to errors or deficiencies in managing their lending portfolio, some banks struggle to fulfill their obligations to owners and customers and run the risk of becoming illiquid or insolvent. The performance of banks is directly impacted by non-performing loans (NPLs), which reduce banks' liquidity, credit expansion, and overall economic activity.

It tends to be inferred that the acknowledge as well as the nonperforming credits of GIBL, NBL and NIMB has been attempt to control. Credit and advance to add up to store of GIBL, NBL and NIMB are in great position. The banks have the greatest success mobilizing their entire deposit as loans and advances, resulting in high profits. In parallel, the NIMB's non-performing loan to total loan and advance ratio is rising. In comparison to NIMB, it has been determined that the lending policies of GIBL and NBL are sound and effective. Advance recuperation process, proficient administration and inside and out study are the primary drivers of low NPL level of GIBL and NBL. In a similar vein, the GIBL's assets are of high quality when compared to the total volume of loans and advances, as measured by loan loss provision. Albeit the quantum of nonperforming credits is projected to be expanding in future, the degree of the nonperforming advances comparable to the all out credits is still high. Similarly, the bank's provision for nonperforming assets during the study period was found to be extremely high, indicating that uncollectible loans will not have a negative impact on the bank's future profitability.

5.3 Recommendations

Following are a portion of the suggestions in light of the above examination:

- The average loan and advances to total deposit ratio of GIBL is found to be higher than that of the other two commercial banks. Therefore, it is suggested that NBL and NIMB adopt a liberal policy, invest a greater percentage of their total deposits in loans and advances, and maintain greater credit policy stability.
- NPL disintegrates the exhibition of any banks. Profitability suffers as a result of an unmanaged loan. Banks won't have enough money to invest in productive sectors because of this non-performing loan.
- Depending on the type of loan, commercial banks are required to keep a certain percentage as loan loss provision. The bank's performance may suffer if the number of non-performing loans is higher. The proportion of credit misfortune arrangement to non-performing credit of NBL is a stopped high. That is the reason, NBL is prescribed to diminish this proportion from each conceivable way.
- The non-performing loan-to-loan and advances ratio is still high for NIMB. which demonstrates NBL's elevated credit risk. Therefore, it is suggested that NBL grant

loans and advances with greater caution and realistic expectations. For loans to be used properly, regular supervision and follow-up should be provided.

- There is a strong correlation between NIMB, GIBL, and NBL's non-performing loans and Loan & Advance. Thus, it is suggested for the bank under study for test banks to diminish NPL when its credit and advance is increment.
- The primary elements which lead to NPL are inappropriate credit examination framework, ineffectual credit observing and management framework and so on other than that carelessness in assuming data from Praise Data Department may likewise prompt awful obligations. As a result, it is advised that all banks exercise greater caution and be more realistic when granting loans and advances. In order to make good use of the loan, regular supervision and follow-up should be provided after it has been advanced.

References

- Acharya, T. (2018). *A study of non-performing assets (With reference to Nepal Bank Limited and Rastriya Banijya Bank Limited)*. Kathmandu: An Unpublished Master's Degree Thesis, Submitted to Faculty of Management, Shanker Dev Campus, T.U.
- Agaba, F. & Eton, M. (2022). Credit risk management practices and loan performance of commercial banks in Uganda. *Business Perspective Review*, 4(1), 16-28.
- Al-Sharkas, A. A., & Al-Sharkas, T. A. (2022). The impact on bank profitability: Testing for capital adequacy ratio, cost-income ratio and non-performing loans in emerging markets. *Journal of Governance and Regulation*, 11(1), 52-61.
- Arora, N., & Ostwal, N. (2014). Unearthing the epidemic of non-performing assets: A study of public and private sector banks. *Management Insight*, 10 (1), 47.
- Azzahra, A., Gunawan, H., Aditya, S., & Nasution, M. I. (2023). Influence of non-performing loans and interest rates on company profits with profitability levels as intervening. In *Proceeding Medan International Conference on Economic and Business*, 1(1), 368-375.
- Baidya, S. (1999). *Banking management*. Kathmandu: Taleju Publication.
- Basnet, S. (2016). *Non-performing assets of Nepalese commercial bank*. Kathmandu: An Unpublished Master's Degree Thesis, Submitted to Faculty of Management, Shanker Dev Campus, T.U.
- Batra, M., & Dass, N. (2003). *Financial management*. New Delhi: Vikash Publishing House.
- Bhattacharai S. (2020). Effect of Non-performing loan on the profitability of commercial banks in Nepal. *Lumbini Journals of Business and Economics*, 2(2), 59-72
- Bhattacharai, B. P. (2020). Effect of non-performing loan on profitability of commercial banks in Nepal. *Journal of Business & Management*, 6(6), 164-170.
- Bindani, S.N. (2003). *Managing non-performing assets*. New Delhi: Vision Books Publisher.
- Birhanu, T., Boshu Deressa, S., Azadi, H., Viira, A.-H., Van Passel, S. & Witlox, F. (2021). Determinants of commercial bank loan and advance disbursement: the case of private Ethiopian commercial banks. *International Journal of Bank Marketing*, 39(7), 1227-1247.

- Dahal, B., & Dahal, S. (2002). *A hand book of banking*. Kathmandu: Asmita Publication.
- Dahal, N. (2017). *Non-performing assets and profitability of commercial bank*. Kathmandu: An Unpublished Master's Degree Thesis, Submitted to Faculty of Management, Shanker Dev Campus, T.U.
- Das, P. (2019). *Non- performing loan management of Nabil bank*. Kathmandu: An Unpublished Master's Degree Thesis, Submitted to Faculty of Management, Shanker Dev Campus, T.U.
- Dongol, R., & Prajapati, P. (2001). *Accounting for financial planning*. Kathmandu: Taleju Publication.
- Ferguson, T.P. (2007). Observations on the securitization of non- performing loans in Russia. *Hamburg: Bucerius Law Journal*, 5(4), 48.
- Golcha, H. C. (2007). *NPAs at Nepalese financial sector*. Kathmandu: New Business Age, 6(8), 2.
- Gupta, S.P. (1999). *Statistical method*, (28th ed.). New Delhi: Sultan Chand and Publishers.
- Jati, W. (2021). The effect of non-performing loan and capital adequacy ratio on return on assets in bank Victoria international, Tbk Period 2009-2018. *Budapest International Research and Critics Institute- Journal*, 4(1), 482-491.
- Jha, P. (2020). *Analysis of non-performing assets (NPAs) Among SBI Bank and ICICI Bank for Operating 2011-2018* (December 10, 2018). Available at SSRN:
- Jiajia, L., Kun, G., Fangcheng, T., Yahan, W., & Shouyang, W. (2023). The effect of the disposal of non-performing loans on interbank liquidity risk in China: A cash flow network-based analysis. *The Quarterly Review of Economics and Finance*, 89(2), 105-119.
- Joshi, P. (2001). *Research methodology*, (1st edition). Kathmandu: Taleju Publication.
- K.C., S. (1999). *Banking theory and practice*, New Delhi: Vikash Publishing House Pvt. Ltd.
- Kerlinger, N., & Wilnston, J. (1986). *Foundation of behavior research*. New York: Holt Rise Chart.
- Kjosevski, J., & Petkovski, M. (2017). Non-performing loans in Baltic States: Determinants and macroeconomic effects. *Baltic Journal of Economics*, 17(1), 25-27.
- Lama, I. (2014). *Non -performing loan management of commercial banks (With Reference to NIBL)*. Kathmandu: An Unpublished Master's Degree Thesis, Submitted to Faculty of Management, Shanker Dev Campus, T.U.

- Mirza, N., Afzal, A., Umar, M., & Skare, M. (2023). The impact of green lending on banking performance: Evidence from SME credit portfolios in the BRIC. *Economic Analysis and Policy*, 77, 843-850.
- Montecillo, P. G. (2013). *Bank's nonperforming loans down in June*. New Delhi: Business Enquirer, 2(3), 21.
- Msomi, T. S. (2022). Factors affecting non-performing loans in commercial banks of selected West African countries. *Banks and Bank Systems*, 17(1), 1.
- Mundat, P. (2006). *Banks cut NPAs to global levels*, New Delhi: Indian Law House.
- Murinde, P., & Yaseen, J. (2012). Management of NPA. New York: *International Journal of Research in Commerce, Economics and Management*, 1(2), 45.
- Narula, S., & Singla, M. (2015). Empirical study on non-performing assets of bank. New Delhi: *International Journal of Advance Research in Computer Science and Management Studies*, 2(1), 194.
- Panday, M. (2000). *Banking management*. New Delhi: Vikash Publishing House Pvt. Ltd.
- Pant, P. R. (1998). *Fieldwork assignment and report writing* (1st Edition). Kathmandu: Veena Academic Enterprises Pvt. Ltd.
- Partovi, E., & Matousek, R. (2019). Bank efficiency and non-performing loans: Evidence from Turkey. *Research in international Business and Finance*, 48, 287-309.
- Pradhan, R.S. (1994). *Financial management practices in Nepal*. Kathmandu: Asmita Books and Stationery.
- Rajda, G. (1998). *Banking law and practices in India*. New Delhi: Indian Law House.
- Rizvi, N. U., Kashiramka, S., Singh, S., & Sushil. (2019). A hierarchical model of the determinants of non-performing assets in banks. *Applied Economics*, 51(35), 3834-3854.
- Rusli, M., & Fitriana, A. (2023). The effect of non-performing loans (NPL) to the bank profitability during the Covid-19 Pandemic (Case Study of Buku III Bank in Indonesia). *Educational Journal of History and Humanities*, 6(2), 385-392.
- Saleh, I., & Afifa, A. (2020). The effect of credit risk, liquidity risk and bank capital on bank profitability: Evidence from an emerging market. *Cogent Economics & Finance*, 8(1), 1814509.
- Shah, M., & Vongbusin, V. (2019). Credit risk management and profitability: a study from Nepalese commercial bank. *Nepalese Journal of Management Science and Research*, 2(1), 42-47.

- Shah, R. (2019). *Credit risk management and its impact on profitability of Nepalese commercial banks* (Doctoral dissertation, Department of Management).
- Shakya, M. (2015). *A study on the credit risk management of Nepalese commercial banks (With Reference to Kumari Bank Ltd and Machhapuchre Bank Ltd)*. Kathmandu: An Unpublished Master's Degree Thesis, Submitted to Faculty of Management, Shanker Dev Campus, T.U.
- Shrestha, M. (2004). *Fundamentals of banking, (2nd Edition)*. Kathmandu: Buddha Academic Publication House.
- Singh, S. (1999). *Managing non-performing assets*. New Delhi: Vision Books Publisher.
- Siraj, K. K. & Pillai, P.S. (2016). Management of NPAs in Indian SCBs. New Delhi: *International Journal for Business and Management*, 2(3), 45.
- Sthapit, B., Gautam, H., Joshi, R., & Dangol, M. (2003). *Statistical methods* (1st ed.). Kathmandu: Buddha Academic Publishers and Distributors Pvt. Ltd.
- Sushmitha, G. (2020). Non-performing assets management in the co-operative banks in India: A descriptive analysis. *International Journal of Banking, Risk and Insurance*, 8(1), 80-89.
- Suyanto, S. (2021). The effect of bad credit and liquidity on bank performance in Indonesia. *The Journal of Asian Finance, Economics and Business*, 8(3), 451-458.
- Timilsina, Y. (1997). *Banking business in Nepal: Challenges to investors of investment risk management (1st ed.)*. Kathmandu: Monitor Nepal.
- Van Horn, J.C. (2000). *Financial management and policy*. New Delhi: Prentice Hall of India.
- Western, B. (1998). *Essential of managerial finance*. New Orland: The Dryden Press.
- Wolf, H., & Pant, R. (2002). *A handbook for social science research and thesis writing (3rd ed.)*. Kathmandu: Buddha Academic Publishers and Distributors Pvt. Ltd.
- Yeasin H.M. (2022). Impact of credit risk management on financial performance: A study of commercial banks in Bangladesh. *Interdisciplinary Journal of Applied and Basics Subjects*, 2(1), 14-22.

APPENDICIES

APPENDIX -I

Major Financial Indicators

Nepal Bank Ltd.

NBL	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Total Deposit	56052	62,984	69,338	77,999	77,999	89410	99831	118275	142989	162813
Loan & Advance	27671	35,612	39,036	50,971	50971	61250	78296	95725	106825	135420
Total Assets	58616	70,777	77,980	88211	103480	112057	136811	171516	191163	222645
LLP	2028	2240	2183	2418	2274	2627	2519	2990	3791	-4234
NPL	1658	1982	2109	2126	1979	2470	2355	2575	2696	2776
Net Profit	176	755	717	484	2,883	3,118	3,216	2,597	2,333	2961

(Source: Annual Reports of NBL 2013/14 to 2022/23)

Nepal Investment Bank Ltd.

NIMB	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Total Deposit	57011	62,429	73,831	90,631	108,627	125669	140328	152183	168824	174558
Loan & Advance	41637	46,400	52,019	66,219	85461	104625	120826	127141	140002	156816
Total Assets	65756	73,153	86,174	104345	129783	150818	171894	185842	203024	227930
LLP	1270	1300	1439	1471	1549	2059	2734	4378	6369	6791
NPL	1425	913	947	844	593	888	1665	3641	4199	3858
Net Profit	1039	1914	1,940	1962	2551	3114	3659	3324	2423	3558

(Source: Annual Reports of NIBL 2013/14 to 2022/23)

Global IME Bank Ltd.

GIBL	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Total Deposit	15066	26914	34111	52,292	60,176	74,683	101,910	106,511	124,499	226,643
Loan & Advance	12372	20297	26212	41,778	48,937	59,219	78,965	92,352	113,033	198,009
Total Assets	17523	30664	39018	60,018	69,186	87,701	116,592	128,842	151,654	273,877
LLP	407	469	779	1241	1,290	1,622	1,855	1,529	1,722	5096
NPL	322	341	612	1095	1,122	1,149	1,297	717	622	3521
Net Profit	225	265	449	974	961	1,382	2,006	2,101	2,762	2,909

(Source: Annual Reports of GIBL 2013/14 to 2022/23)

APPENDIX-II
Relationship between LLPR, CAR, CRR, NPLR and CDR on ROE

		Correlations						
		ROE	ROA	CRR	NPLR	CDR	CAR	LLPR
ROE	Pearson Correlation	1	.381*	.208	.045	-.372*	-.522**	.047
	Sig. (2-tailed)		.038	.270	.813	.043	.003	.803
	N	30	30	30	30	30	30	30
ROA	Pearson Correlation	.381*	1	.011	-.416*	-.007	.151	-.064
	Sig. (2-tailed)	.038		.954	.022	.972	.424	.736
	N	30	30	30	30	30	30	30
CRR	Pearson Correlation	.208	.011	1	-.168	.277	-.307	.081
	Sig. (2-tailed)	.270	.954		.375	.138	.099	.672
	N	30	30	30	30	30	30	30
NPLR	Pearson Correlation	.045	-.416*	-.168	1	-.665**	-.572**	-.228
	Sig. (2-tailed)	.813	.022	.375		.000	.001	.225
	N	30	30	30	30	30	30	30
CDR	Pearson Correlation	-.372*	-.007	.277	-.665**	1	.579**	.326
	Sig. (2-tailed)	.043	.972	.138	.000		.001	.079
	N	30	30	30	30	30	30	30
CAR	Pearson Correlation	-.522**	.151	-.307	-.572**	.579**	1	.046
	Sig. (2-tailed)	.003	.424	.099	.001	.001		.810
	N	30	30	30	30	30	30	30
LLPR	Pearson Correlation	.047	-.064	.081	-.228	.326	.046	1
	Sig. (2-tailed)	.803	.736	.672	.225	.079	.810	
	N	30	30	30	30	30	30	30

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Source: SPSS Output

APPENDIX- III

Impact of LLPR, CAR, CRR, NPLR and CDR on ROE

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.673a	.453	.339	4.69424

a. Predictors: (Constant), LLPR, CAR, CRR, NPLR, CDR

ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	438.156	5	87.631	3.977	.000b
	Residual	528.862	24	22.036		
	Total	967.018	29			

a. Dependent Variable: ROE

b. Predictors: (Constant), LLPR, CAR, CRR, NPLR, CDR

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	55.932	12.673		4.414	.000
	CRR	.040	.109	.074	.362	.021
	NPLR	-2.538	1.020	-.544	-2.488	.020
	CDR	-.325	.178	-.472	-1.833	.079
	CAR	-.884	.420	-.541	-2.105	.046
	LLPR	.008	.013	.096	.578	.069

a. Dependent Variable: ROE

(Source: SPSS Output)

Impact of LLPR, CAR, CRR, NPLR and CDR on ROA

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.568a	.323	.182	.44933

a. Predictors: (Constant), LLPR, CAR, CRR, NPLR, CDR

ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	2.311	5	.462	2.289	.000b
	Residual	4.846	24	.202		
	Total	7.157	29			

a. Dependent Variable: ROA

b. Predictors: (Constant), LLPR, CAR, CRR, NPLR, CDR

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.615	1.213		3.805	.001
	CRR	.002	.010	.049	.216	.031
	NPLR	-.297	.098	-.740	-3.044	.006
	CDR	-.031	.017	-.515	-1.798	.085
	CAR	.006	.040	.045	.156	.078
	LLPR	.000	.001	-.071	-.388	.001

a. Dependent Variable: ROA

(Source: SPSS Output)

NON-PERFORMING LOAN AND ITS IMPACT ON PROFITABI...

By: Rashmi Maharjan

As of: Jul 3, 2024 3:02:03 PM
22,552 words - 116 matches - 8 sources

Similarity Index

9%

Mode: Summary Report ▼

sources:

577 words / 3% - from 16-Feb-2024 12:00AM
elibrary.tucl.edu.np

456 words / 2% - from 02-Feb-2024 12:00AM
elibrary.tucl.edu.np

162 words / 1% - from 28-Jul-2023 12:00AM
elibrary.tucl.edu.np

147 words / 1% - from 17-Jan-2024 12:00AM
elibrary.tucl.edu.np

329 words / 1% - from 17-Feb-2024 12:00AM
pdfcoffee.com

159 words / 1% - Internet from 08-Aug-2022 12:00AM
www.nepjol.info

138 words / 1% - from 15-Apr-2023 12:00AM
www.researchgate.net

137 words / 1% - Internet from 22-Jan-2022 12:00AM
devr.nagariknetwork.com

paper text:

CHAPTER - I INTRODUCTION 1.1 Background of the Study A reliable indicator **of**

a financial institution's performance is the amount of NPA it covers. As credit and advances are the bank's primary sources of revenue, an increase in non-performing assets could put the bank at risk of failure (NRB, 2017). Loans and advances that have been unpaid for at least three months should be considered NPL, according to the guidelines of Nepal Rastra Bank. The review's meaning thus pertains to the banking sector. The absence of income from NPL has a significant effect. The credit hasn't been used. As past due developing over multi month, half year

and one year requires 25 %, half **and 100** % course of action **for** cash, **which is** essentially **sure to** decrease **the** advantage. **Borrowing**