

**IMPACT OF NON-PERFORMING LOAN ON PROFITABILITY OF
COMMERCIAL BANKS IN NEPAL**

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DECLARATION

I hereby declare that the project work entitle “Impact of non-performing loan on profitability of commercial banks in Nepal” is carried out by me under the guidance of Dr. Pallavi K. Ingale and in partial fulfillment for the award of Post Graduate Diploma in Cooperative Business Management Course. I also declare that this project is an independent work on my part and it has not formed the basis for any degree or diploma.

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This research entitled “Impact of non-performing loan on profitability of commercial banks in Nepal” has been prepared for the partial fulfillment of the requirement for the Post Graduate Diploma in Cooperative Business Management Course. The general purpose of the study is to discuss, examine and evaluate the Non-Performing Loan, profitability status and the impact of non-performing loan on profitability of commercial banks in Nepal.

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ABBREVIATIONS

CV:	Coefficient of variation
EBL:	Everest Bank Limited
GDP:	Gross domestic product
LER:	Leverage ratio
LR:	Liquidity ratio
LTT:	Loan loss reserves
ADBL:	Agricultural Development Bank Limited
NP:	Net profit
NPM:	Net profit margin
NPL:	Non-performing loan
NRB:	Nepal Rastra Bank
NSBI:	Nepal State Bank of India
ROA:	Return on assets
ROE:	Return on equity
ROI:	Return on Investment
SBP:	State Bank of Pakistan
SPSS:	Statistical package for the social science
TL:	Total loans
USA:	United State America

Executive Summary

Non-performing loan is borrowed money from the bank which has not made the scheduled payments for a specified period is known as non-performing loan. The loan of bank which do not perform any role in getting profit to the organization, such loan are called Non-performing loan. Non-performing loan (NPLs) are one of the major concerns for banking sector in Nepal. The objectives of this are to analysis the impacts of non-performing loan on profitability of commercial banks in Nepal.

In this research, an effort has been made to analyze the impact of NPL on profitability of Nepalese commercial banks. The study covered four commercial banks in Nepal over the period of past 5 fiscal years from 2016 to 2020. The study has used the descriptive design which was focused on determining the relationship between non-performing loan and profitability of commercial banks in Nepal. The study is mainly based on the secondary data collected for the purpose of analysis in this research. The information, facts and figures provided by the banks used to analysis the research. For the purpose of the study convenience sampling under non-probability sampling method was used to analysis. The sample banks are Nabil Bank, Everest Bank Limited (EBL), Agricultural Development Bank Limited (ADBL), and Nepal State Bank of India (NSBI). The trend analysis of selected bank of NPM has fluctuated trends. As compare NABIL has good performance in NPM with highest 39.22% in 2019 and NSBI has low performance with highest 25.56% in 2018. The trend analysis of selected bank of ROA has fluctuated trends. As compare NABIL has adopt better performance with 2.89% highest in 2016 and ADBL has 2.25% highest in 2016 and EBL has 2.25% highest in 2016 and NSBI has 1.97% highest in 2020. Overall NSBI has low performance as compares to other banks. The trend analysis of selected bank of ROE has downward sloping trends. Increasing in NPL can significantly influence the profitability. That mean, if the NPL increases, real profitability decrease but total lending plays vital role to deviate the result. The trend of the non-performing loan in selected banks is going downward sloping which is significance. The trend of ROA and NPM in selected banks is fluctuation, due to the internal and external factors that affect the status of NPL in Banks.

CHAPTER I

INTRODUCTION

1.1 Background of the study

Non-performing loan is borrowed money from the bank which has not made the scheduled payments for a specified period is known as non-performing loan. The exact elements of non-performing means no payment which is known as zero payments of either principal or interest. Generally, the period is 90 days or 180days.

Increase in the level of gross non-performing loans pose a great risk to banks, the financial sector and the economy at large. Equally, failure to manage down non-performing loans over a long period gradually affects profitability of commercial banks (Pastory, 2013).

The non-performing loans of financial institutions are considered as a significant issue in the context of Nepal for last few decades and macroeconomic variables such as the real effective exchange rate have significantly negative impact on non-performing loan (bhattarai S. , 2015).

There is no standard form to define non-performing loans globally. Variation may exist in terms of the classification system, the scope, and contents as per country. As a regulatory financial institution of Nepal, the central bank, that is, Nepal Rastra Bank has classified the loan basically into the pass loan, sub-standard loan, doubtful loan and loss or bad loan. Pass loan is that type of loan whose interest or principal payments are less than three months in arrears. Sub-standard loans whose interest or principal payments are longer than three months in arrears of lending conditions are eased. Doubtful is liquidation of outstanding debts appears doubtful and the accounts suggest that there will be a loss, the exact amount of which cannot be determined. Loss loans are regarded as not collectable, usually loans to firms which applied for legal resolution and protection under bankruptcy laws. Pass loans are under the category of performing loans whereas sub-standard loan, doubtful loan and loss loan are under the non-performing loans (NRB, 2013).

Moreover, non-performing loans are mostly shaped by bank-specific Variables before the crisis, whereas, after the crisis, non-performing loans are also driven by macroeconomic and policy-related variables. In particular, the post-crisis significance

of GDP, policy rate and sovereign debt shows that robust economic activity, tight monetary policy and strong fiscal balances restrict non-performing loans, thereby enhancing financial stability. On the other hand, the significance of inflation in both sub periods indicates that commitment to price stability objective is indispensable for limiting non-performing loans and promoting financial stability (Us, 2016)

Once the distributed loan is not returned timely by clients and becomes overdue than it is known as NPL for the banks. Reduction of NPL has always been a significant problem for every commercial banks and proper attention for the management of the NPL under top priority. Due to various hurdles on way of management of NPL, commercial banks are now losing their profitability and struggling for their existence. Loans and Advances dominate the assets side of balance sheet of any bank. Similarly, earning from such loans and advances occupy major space in income statement of the banks. However, it is very important to be reminded that most of the bank failures in the world were due to shrinkage in the value of the loan and advances. Hence, loan is known as risky assets. Risk of non-repayment of loan is known as credit risk or default risk. Performing loans have multiple benefits to the society while non-performing loans erodes even existing capital.

Performing assets are those loans that repay principal and interest to the bank from the cash flow it generates. Loans are risky assets, though a bank interest most of its resources in granting loans and advances. If an individual bank has around 10% non-performing assets or loans, it sounds the death knell of that bank, other things remaining the same. The objectives of loan policy are to maintain the financial health of the banks, which result in safety of depositor's money and increase in the returns to the shareholders. Since the loan is a risky asset there is inherent risk in every loans, however, the bank should not take risk above the certain degree irrespective of the returns prospects. The speed and the direction of normalization in global monetary policies may determine the course of financial conditions, which therefore have implications regarding non-performing loan dynamics and financial stability (Us, 2016)

The problem of having non-performing loans has been attracting the attention of many researchers, specialists and officials who are working in the banking sector. The spread of this phenomenon in banks can be attributed to a number of economic, social and political factors that govern the financial market. Its spread can be also attributed

to some reasons that are related to lenders and borrowers. However, most specialists believe that the raise in the ratio of non-performing loans can be attributed to the decrease in banks' efficiency in managing credit and to the nature of the credit policies that are being adopted by banks (Hashem1, 2017)

Ozili,(2019)Among the determinants of non-performing loans, bank efficiency, loan loss coverage ratio, competition and banking system stability are inversely associated with NPLs while NPL are positively associated with banking crises and bank concentration. In the regional analysis, NPL are negatively associated with regulatory capital and bank liquidity, implying that banking sectors with greater regulatory capital and liquidity experience fewer NPLs

(Siems)Non-performing loans are the big challenge for the banking sector. Non-performing loan develops the relationship on economic growth. Over the last two decades Pakistani banking sectors has gone through several changes, as privatization and liberalization polices introduced in the financial reforms. Non-Performing Loans are the major problem for the banking sector both in the developed and developing countries (Muhammad, 2016).The dramatic rise in bank failures over the last decade has led to a search for leading indicators so that costly bailouts might be avoided. While the quality of a bank's management is generally acknowledged to be a key contributor to institutional collapse, it is usually excluded from early-warning models for lack of a metric.

It is important to understand the phenomena and nature of non-performing loans; it has many implications, as fewer loan losses is indicator of comparatively more firm financial system, on the other hand high level of nonperforming loans is an indicator of unsecure financial system and a worrying signal for bank management and regulatory authorities. If we look into the causes of great recession 2007-2009 which damaged not only economy of USA but also economies of many countries of the world find that non-performing loans were one of the main causes of great recession (Richard, 2011).

1.2 Statement of the problem

Gertrude,(2016), describes the maintenance of asset quality, efficiency and profitability is a vital requirement for the survival and development of banks. Loans are the main asset class from which banks generate their major portion of income and also signify the greatest risk to banks. There has been significant indication that the financial crises in the USA, Sub-Saharan Africa and East Asia were signaled by high levels of non-performing loans (NPLs). Due to the detrimental effect that these loans have on a bank's revenue and the economic welfare of a country, it is essential to examine and investigate the determinants of NPLs in the banking industry of any country.

Phides,(2013), made an attempt to measure the causes of nonperforming loans related to customer operations were related to moral hazards, inadequate business, financial, marketing, entrepreneurship and management skills, fund diversion and multiple loans. On other hand, causes of nonperforming loans related to banking operations were related to adverse customer selection problem, poor loan policy, inadequate loan monitoring and recovery, long queue in banking hall, poor customer services and corruptions of bank officers.

Kingu et al (2018), found that occurrence of non-performing loans is negatively associated with the level of profitability in commercial banks in Tanzania. The results extend further the information asymmetry theory and bad management hypothesis. The findings of the study have both theoretical and managerial implications for practitioners and policy-makers.

Anh,(2014), non-performing loans affected the economy in a widespread area, at least during the last decade. The phenomenon had never been a concern until the collapse of stock and real estate markets. Considering that those markets accounted for a massive volume of capital, the crisis quickly spread to banking and commercial lending market.

1.3 Significance of the study

The significance of the study of this research is listed below:

- i. The study analyses the non-performing loan of the commercial banks in Nepal.
- ii. The research helps to develop a strategy to reduce the size of NPL and

profitability.

- iii. The study is useful to gain knowledge about the effects of NPL indicators on profitability.
- iv. The study has shown clear picture about the current status of NPL of those commercial banks.
- v. The study also helps to know the present issues faced by those commercial banks.
- vi. This study reflects the financial performance of banks.

1.4 Objectives of the study

The basic objective of the study is to analyze the NPL management of commercial banks as well as to compare it. The specific objectives of the study are given below.

- (i) To identify the position of NPL of the commercial banks in Nepal.
- (ii) To analyze the profitability of the commercial banks in Nepal.
- (iii) To examine the relationship between NPL and profitability of the commercial banks in Nepal.
- (iv) To explore the factor that affects NPL and profitability of the commercial banks in Nepal.

1.5 Limitations of the study

The study has attempted to evaluate NPL of commercial banks of Nepal. The study has been subject to the following limitations.

- i. Data have been taken from bank's secondary sources (like financial reports, websites etc.).
- ii. The study does mainly focus Non-Performing loan of Commercial Bank of Nepal and does not cover other aspects.
- iii. This study has taken 4 commercial banks among 28 commercial banks.
- iv. This research is based on data and information of only five fiscal years.
- v. Only limited financial tools have been taken under this study.
- vi. All banks 2021 data was not available for data analysis therefore 2020 data was considered.

1.6 Organization of the study

The entire research is organized into five sections and the outline of each chapter is given as follows.

Chapter-I Introduction

The introduction chapter deals with the general background and state the problem with objectives of the study. It also included significance of the study and limitations of the study.

Chapter-II Literature Review

In the second chapter, the chapter looked for the review of the previous studies related to this research subject to know the prevalent of the non-performing loan and its effect on profitability. The first part deals with conceptual frame work and second part deals with the review of related studies and third part deal with the research gap.

Chapter-III Research Methodology

This chapter deals with the research approach and method of doing research on which this study based upon. It also clears about the population sample taken and the research instrument taken to collect the data and to analysis tools.

Chapter-IV Results and discussions

This chapter deals with the presentations and analysis of the data collected from various sources. It also deals with the different financial and statistical tools with findings and brief comment on them.

Chapter-V Conclusion

This chapter has summary, conclusions and implication of the study. This chapter tries to draw out a conclusion of the study and attempts to offer various suggestions and implications for the improvement of the future performance of the banks under review. Finally, bibliography and appendices are also included at the end of the study.

CHAPTER II

REVIEW OF LITERATURE

This chapter is concerned about literature review on the impact of non-performing loan on profitability of commercial banks. This study is related to examine and review some related to books, articles, published and unpublished different economic journals, bulletins, magazines, newspapers and web site.

2.1 Conceptual review

2.1.1 Concept of non-performing loans

A nonperforming loan (NPL) is a sum of borrowed money upon which the debtor has not made the scheduled payments for a specified period. Although the exact elements of nonperformance status vary, depending on the specific loan's terms, "no payment" is usually defined as zero payments of either principal or interest. The specified period also varies, depending on the industry and the type of loan. Generally, however, the period is 90 days or 180 days (Segal, 2019).

(Khemraj) Over the last few years the literature that examines non-performing loans has expanded in line with the interest afforded to understanding the factors responsible for financial vulnerability. This situation may be attributed to the fact that impaired assets plays a critical role in financial vulnerability as evidenced by the strong association between NPLs and banking/financial crises in Argentina, East Asia and Sub-Saharan African Countries during the 1990s. In this section we review the existing literature so as to formulate a theoretical framework to investigate the determinants of non-performing loans in Guyana.

2.1.2 Classification of loans and advance

Having exercised the powers conferred by Section 79 of the Nepal Rastra Bank Act, 2002, the following Directives have been issued with regard to classification of credit/advances and provisions to be made for its possible loss by the institutions obtaining licenses from this Bank to carry out financial transactions. NRB, (2018) Entire loans and advances extended by a licensed institution have to be classified as follows based on expiry of the deadline of repayment of the principal and interest of such loans/advances:

(a) Pass: Loans/advances which have not overdue and which are overdue by a period up to one month.

(b) Watch list: Loans/advances which are overdue by a period from one month to a maximum period of three months.

(c) Sub-standard: Loans/advances which are overdue by a period from three months to a maximum period of six months.

(d) Doubtful: Loans/advances which are overdue by a period from six-months to a maximum period of one year.

(e) Loss: Loans/advances which are overdue by a period of more than one year. The loans which are in pass class and which have been rescheduled/restructured are called as "the performing loan, and the sub-standard, doubtful and loss categories are called non-performing loans.

2.1.3 Additional provisions relating to pass loans:

(1) NRB,(2020) the following loans may be included in the pass loan:-

(a) Loans/advances extended against the collateral of gold and silver;

(b) Loans/advances of fixed receipts

(c) Loans/advances of Government of Nepal securities and loans/advances made against the collateral of Nepal Rastra Bank bonds; Provided that the cases of the loans/advances against the fixed receipts or Government of Nepal securities or Nepal Rastra Bank bond as the additional collateral, such loans and advances shall also have to be classified in accordance with the directive referred to into Point No. 1 above.

(2) The working capital loan having the deadline of up to one year for repayment may be included in the pass loan class. In case the interest to be received from the loans of working capital nature is not regular, such loans have to be classified on the basis of the duration of interest to be due.

2.1.4. Additional provisions relating to loss loans

NRB,(2020) in case there seem any of the following discrepancies in any of the following loans, whether or not the deadline for repayment of which is expired, such loans and advances has to be categorized as the loss loan:

(a) The market price of the collateral cannot secure the loans;

(b) The debtor is bankrupt or has been declared to be bankrupt;

- (c) The debtor disappears or is not identified;
- (d) In case non-fund based facilities such as purchased or discounted bills and L/C and guarantee which have been converted into fund-based loan, are not recovered within ninety days from the date of their conversion into loan;
- (e) Loan is misused;
- (f) Expiry of six months of the date of auction process after the loan could not be recovered or a case is pending at a court under the recovery process;
- (g) Providing loan to a debtor who has been enlisted in the black-list of Credit Information Bureau Ltd;
- (h) The Project/business is not in a condition to be operated or project or business is not in operation
- (i) The credit card loan is not written off within 90 days from the date of expiry of the deadline; 47
- (j) While converting the L/C, guarantee and other possible liabilities into a fund based loan under the regular process, if the said loan is not recovered within 90 days; and
- (k) In case of expiry of the deadline of a trust-receipt loan.

2.1.5 Additional provisions relating to term-loan

NRB,(2020) in cases of the term loans extended in installments, if the deadline of installment of the principal amount expires, remaining entire loan amount has to be classified based on expiry of the deadline of the installment amount.

Provided that in cases of the installment of the term loan given by licensed institution not having the facility of engaging in overdraft transaction, entire loan amount has to be categorized as loss loan only if the installment amount has crossed the deadline by a period of more than one year. In case the installment amount has crossed the deadline by a period of less than one year, only such installment amount has to be classified in the loss loan with a provision of loan loss. However, this clause shall not be deemed to have hindered if the licensed institution wants to classify the entire loan amount as the loss loan.

2.1.6 Provisions relating to rescheduling and restructuring of loans

(1) In case a licensed institution is convinced on the following bases stated in the written action plan submitted by the debtor, it may reschedule or retract the loan:-

- (a) Evidence showing that documents relating to loans and security are adequate;
- (b) Bases on which the licensed institution is convinced of the possibility that the rescheduled or restructured loans would be recovered;

(c) In addition to submission of written plan of actions for rescheduling and restructuring loans at least 25 percent of the interest due to be paid until the date of rescheduling or restructuring of such a loan has been paid;

(2) While rescheduling or restructuring the loans to the industries which have been recommended by the Sick Industries Preliminary Inquiry and Recommendation Committee formed under Government of Nepal, a minimum of 12 percent of interest has to be paid, other procedures need to be fulfilled and rescheduling and restructuring shall have to be carried out making a provision for twenty-five percent loan loss. Provided that in the event where the loan has been rescheduled and restructured based on payment of less than 12 percent of interests, provision for loan loss has to be made based on the duration upon expiry of the deadline according to the prevailing provisions.

(3) Description of the loans classified pursuant to classes (1) and (2) has to be separately prepared (NRB, 2020).

2.1.7 Provision to be maintained for loan loss

(1) For the loans and bills purchase classified according to these Directives, the following loan loss provision shall be maintained based on the remaining amount of principal:

Loan classification	Minimum Provision for loan loss
(a) Pass	1 percent
(b) Watch list	5 percent
(c) Sub-standard	25 percent
(d) Doubtful	50 percent
(e) Loss loan/the loan extended to blacklisted Persons, firms, company or corporate body	100 percent

Provided that in case of the insured loans, it would be required to make provision of only 25 percent of the provision referred to in sub-clause (1)

(2) In cases of the loans rescheduled and restructured, the following loan loss provision shall be made:

(a) The loans classified in the pass class at the time of rescheduling and restructuring shall, while rescheduling and restructuring, provision of at least 12.5 percent has to be made as loan loss, while rescheduling and restructuring the loans classified as substandard, doubtful and loss, no adjustment shall be allowed in the then loan loss provision except in the cases referred to in clause 10(c).

In cases of the loans made available on an equal monthly installment, no loan loss provision shall have to be made in case of rescheduling and restructuring of the following of such loans if the principal and interest is regular:

(i) In case amount of installment and number of installment is decreased because of prepayment of installment.

(ii) Due to change in the rate of interest having regard to the market situation, the duration of the loan and installment amount has been changed. In this context, if the rate of interest is increased and thereby by the duration and installment amount is increased, the installment amount determined at the time of sanctioning the loan is not allowed to be decreased. Similarly, if the rate of interest is decreased and thereby the duration and number of installment are decreased, the installment amount determined at the time of sanctioning the loan is not allowed to be decreased.

(b) In case the installment of principal of the rescheduled and restructured loan and interest of two years, such loans may be converted into pass loans.

(c) No loans extended having pledged shares shall be rescheduled and restructured.

(3) In the event of deprive sector lending made by licensed institution Bank and financial institution to deprived communities according to Directives of this Bank; if such loans have been secured through Deposit Insurance and Credit Guarantee Corporation or if other loans have also been insured an exemption of 75 percent has been made and provision for remaining 25 percent shall be required.

(4) Banks and financial institution shall not provide any type of loan on the security of the memo (adhakatti) of an application to be submitted for share purchase at the time of initial public offering. In case of providing loan in such a way, the concerned bank or financial institution shall have to make cent percent loan loss provision.

(5) While providing loan on personal/institutional guarantee, description of property equal in value to the amount of the personal guarantee and in sole ownership of the debtor and free of any claim of anyone else shall compulsorily be obtained. Even the

loans given only on the basis of personal/institutional guarantee shall also be classified as stated above in pass, substandard and doubtful as may be required and loan loss provision shall be made 20 percent more in addition to the percentage prescribed for that class. Even in the cases where personal guarantee has been taken for the collateral of physical property alone could not secure the loan, the provision for additional loan and stated above has to be made. Classifications of such loan have to be made separately.

Provided that in cases of loans and advances made to the institutions referred to in sub-clause (b) of clause 4 of the Directives No. 3, Nepal Oil Limited and Nepal Food Corporation, no additional loan loss provision of 20 percent shall be required to be made.

(6) No additional loan loss provision of 20 percent shall be required to be made in the loan loss provision referred to in sub-clause (3) above in cases of education loan and loans extended to micro-credit financial institutions and cooperative financial institution under the deprived sector lending by banks and financial institution on personal guarantee.

(7) There is no restriction to classify loans and advances of higher class to lower class in case licensed institution so wishes. For an example, substandard loan may be classified as doubtful or loss loan and doubtful loan may be classified as loss loan.

(8) Loans/advances also include bills purchase and discounts.

2.1.8 Conditions for adjustment in loan loss provision

NRB,(2020) No loan loss provision shall be allowed for adjustment except in the following conditions:-

- (a) In case the loan is written off;
- (b) In the event where repayment of loan is in installment or in partial basis, the loan loss provision made to the extent of the loan so repaid may be written back and adjusted while maintaining loan loss provision according to loan classification; and
- (c) In the event of the loan is reclassified after loan rescheduling and restructuring, if the repayment of the principal and interest of the loan so rescheduled and restructured is regular for a consecutive period of two years. Details of such loans shall be separately prepared.

2.1.9 Loss provisions and auction of non-banking assets

(1) In case of the non-banking assets accepted by the licensed institution, cent percent loss provisions shall be made from the date of the acceptance.

(2) In case of sale of the non-banking assets, necessary adjustment in the accounts of loss provision maintained for such property shall immediately be made.

(3) While accepting collateral security as non-banking assets by licensed institution, the following provisions shall be applicable while selling the non-banking assets so accepted:

(a) While accepting the collateral property of a customer as non-banking assets whose outstanding loan amount is more than 2.5 million, the concerned party shall compulsorily be black-listed.

(b) Prior to auctioning the non-banking assets in the name of the institution, it shall have to be evaluated by an independent evaluator. No excessive/less evaluation shall be allowed.

(c) Transparent and clear provisions shall be made with regard to auction sale of collateral security/non-banking assets in Financial Administration Byelaws and sales shall have to be carried out in such a manner to serve interest of the bank or financial institution.

(d) While accepting the non-banking assets in such a manner, entire property mortgaged as collateral that could not be sold by auction shall have to be accepted and it may not be accepted in part.

(e) The property so accepted shall have to be sold at the earliest to the extent possible. In case it is necessary for own purpose of the licensed institution, the same shall have to be approved by the Board of Directors and information thereof shall be made available to this Bank as well.

2.1.10 Cause of non-performing loans

Brownbridge, (1998) most of the bank failures were caused by non-performing loans. Arrears affecting more than half the loan portfolios were typical of the failed banks. Many of the bad debts were attributable to moral hazard: the adverse incentives on bank owners to adopt imprudent lending strategies, in particular insider lending and lending at high interest rates to borrowers in the most risky segments of the credit

markets.

I. Inside lending

According to Brownbridge, the single biggest contributor to the bad loans of many of the failed local banks was insider lending. In at least half of the bank failures, insider loans accounted for a substantial proportion of the bad debts. Most of the larger local bank failures in Kenya, such as the Continental Bank, Trade Bank and Pan African Bank, involved extensive insider lending, often to politicians. The threat posed by insider lending to the soundness of the banks was exacerbated because many of the insider loans were invested in speculative projects such as real estate development, breached large-loan exposure limits, and were extended to projects which could not short term returns.

II. High interest rates

In the study the second major factor contributing to bank failure was lending, at high interest rates, to borrowers in high-risk segments of the credit market. This involved elements of moral hazard on the part of both the banks and their borrowers and the adverse selection of the borrowers. It was in part motivated by the high cost of mobilizing funds.

III. Macroeconomic instability

Brownbridge cited macroeconomic instability as the third most important cause. During the 1990s, inflation reached 46% in Kenya. High inflation increases the volatility of business profits because of its unpredictability, and because it normally entails a high degree of variability in the rates of interest, there is increase of the prices of the particular goods and services which make up the overall price index. This intensifies both adverse selection and adverse incentives for borrowers to take risks, and thus the probabilities of loan default.

IV. Liquidity support and prudential regulation

The fourth most important factor is liquidity support and prudential regulation. The Willingness of the regulatory authorities to support distressed banks with loans, rather than close them down, was probably an important contributor to moral hazard.

V. Inadequate management of credit risk

Fernandez de L et al., (2000)state that the growth of bank credit in Spain and its prudential implications is an ever-present item on the agenda of banking supervisors, since most banking crises have had as a direct cause the inadequate management of credit risk by institutions. They further assert that even though bank supervisors are

well aware of this problem, it is however very difficult to persuade bank managers to follow more prudent credit policies during an economic upturn, especially in a highly competitive environment. They claim that even conservative managers might find market pressure for higher profits very difficult to overcome.

VI. Economic mismanagement and political interference

One important impact that non-performing loans have had on banks is the attempted improvement on the management of credit risk. In China for example, in a bid to help the banks get rid of the NPLs accumulated over past years, the Chinese government in 1998 established four state-sponsored asset management companies to take over bad debts from the banks' balance sheets. On top of that, the government injected RMB 270 billion into the four major banks to strengthen their capital bases (Ding et al., 2000)

To help address credit risk management in Ugandan banks, the government has introduced a statute that deals with several issues such as insider lending, following the recent scandal in which billions of shillings were lent without sufficient collateral to Greenland Bank by the newly privatized Uganda Commercial Bank Ltd. The statute further seeks to reduce owner concentration (Shandre et al., 2001)

2.1.11 Concept of profitability

Balasubramaniam,(2001) NPL means booking of money in terms of bad asset, which occurred due to wrong choice of client. Because of the money getting blocked the productivity of bank decreases not only by the amount of NPL but NPL lead to opportunity cost also as that much of profit invested in some return earning project/asset. So NPL does not affect current profit but also future stream of profit, which may lead to loss of some long-term beneficial opportunity. Another impact of reduction in profitability is low ROI (return on investment), which adversely affect current earning of bank. Mtabazi,(2013)NPL means booking of money in terms of bad asset, which occurred due to wrong choice of client. Because of the money getting blocked the profitability of bank decreases not only by the amount of NPL but it lead to opportunity cost also as that much of profit invested in some return earning project/asset. So NPL does not affect current profit but also future stream of profit, which may lead to loss of some long-term beneficial opportunity.

Relationship between non-performing assets and profitability

Commercial banks operate in very sensitive markets with considerable risk and

uncertainty. The study was carried out with a view of investigation the problems of non-performing loans in Kenyan commercial banking sector and the likely effect on their profitability and returns. To achieve the objective of the study, regression model was developed with return on asset as the dependent variable and the amount of credits, level of non-performing loan, and the level of shareholders equity as the independent variables. The weak relationship between dependent variable and the chosen independent variables indicates there more factor that affect banks profitability. Other measures such as improving the credit information sharing platform and developing robust monetary policies will go a long way in making the returns the banks better. Impacts of NPL over the banking profitability are as follow:

- It is adversely affect the image of the banks.
- NPL do not earn any income but it can earned profit by making performing assets.
- NPL have direct impacts on ROA and ROE of the commercial banks.
- Moreover NPL inversely affects the balance sheet of banks.

2.2 Review of related studies

Many researchers have research in different aspects of commercial banks to know the fact and to have a better idea about the results of NPL the views of some related articles, journal, thesis, are presented below.

Klein, (2013)the level of NPLs can be attributed to both macroeconomic conditions and banks“ specific factors, though the latter set of factors was found to have a relatively low explanatory power. The examination of the feedback effects broadly confirms the strong macro-financial linkages in the region. While NPLs were found to respond to macroeconomic conditions, such as GDP growth, unemployment, and inflation, the analysis also indicates that there are strong feedback effects from the banking system to the real economy, thus suggesting that the high NPLs that many CESEE countries currently face adversely affect the pace economic recovery.

Tahir,(2014)describes the effect of the loan loss provision on the stability and performance of banks working in Pakistan and also describes about the important factor in affecting profitability of banks in ideal condition, a well establish bank is supposed to be having less loan loss provision and higher profitability moreover bank deposits and its advances also play a vital role in the stability and profitability, in first

Bank profitability was dependent variable and was get 2 significant results and 3 insignificant results. In second ROA was dependent variable and were get 2 significant and 3 insignificant results, in third ROE was dependent variable and was get 1 significant and 4 insignificant result.

Karim et al.,(2010) cost efficiency was estimated using the stochastic cost frontier approach assuming normal-gamma efficiency distribution model,the cost efficiency scores were then used in the second stage Tobit simultaneous equation regression to determine the effect of non-performing loans on bank efficiency and results indicate that there is no significant difference in cost efficiency between banks in Singapore and Malaysia although banks in Singapore exhibit a higher average cost efficiency score and the Tobit simultaneous equation regression results clearly indicate that higher non-performing loan reduces cost efficiency. Likewise, lower cost efficiency increases non-performing loans. The result also support the hypothesis of bad management proposed by Berger and DeYoung (1992) that poor management in the banking institutions results in bad quality loans, and therefore, escalates the level of non-performing loans.

Sarraf, (2009) descriptive cum analytical research design was adopted. Out of the total population of twenty three commercial banks, 3 banks were taken as sample using Judgmental Sampling method, secondary data have been used. The secondary data has been collected through annual report and other publications. Setting of Recovery Cell, hiring asset Management Company etc. are some to the measures to resolve the problem of NPL. Loan classification and loan loss provision also helps to confront the problem thus created due to non-performing loans. The latest directive regarding loan classification and loan loss provisioning is very important for maintaining sound financial health of the banks. The new provisioning directives leads to increment in provision amount of the banks leading to decrement in profitability of the bank but this is only for a short run.

Hashem et al, the major attention that was given to the problem of non-performing loans by the banking institutions. Such attention was given to this problem due to the several impacts it has upon commercial banks and which may extend to affect the whole banking system, the current study aimed at identifying whether there is a statistically significant impact for the non - performing loans upon the prices of stocks or not in Jordanian commercial banks at the significance level of ($\alpha = 0.05$), study

was concerned with investigating the Jordanian commercial banking sector during the period of (2005-2015). The study also shows that there is need for training workers in applying the credit policy that is being adopted. Such training should raise the practical efficiency levels of those employees. The study also showed that banks' control should be stricter and they should set more dissuasive penalties in relation to granting facilities without having adequate guarantees.

Bhattarai, (2014) based on the primary information collection from 140 bankers working in large ten commercial banks of Nepal and the bank perceive that energy crisis; lack of timely budgetary expenditure by the government and instable political environment increases the non performing loan. Similarly, bankers also perceive that borrowers honesty in disclosing the information, better monitoring and evaluation of the loan, have significant negative impact on non-performing loan. However, 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 bankers also perceive that the increase in GDP growth rate decrease the non-performing loan of commercial banks in Nepal.

Gezu, (2014) study shows a downward sloping of nonperforming loans for commercial banks in Ethiopia. The finding also revealed as loan to deposit ratio had positive whereas inflation rate had negative, but insignificant effect on NPLs of commercial banks in Ethiopia. However, bank profitability measured in terms of ROE, banks capital adequacy ratio and lending rate had negative and statistically significant effect whereas bank profitability measured in terms of ROA and effective tax rate had positive and statistically significant effect on NPLs of commercial banks in Ethiopia. The finding of this study is significant since once identifying the determinants of NPLs might enable management body to make appropriate lending policies that prevent the occurrence of NPLs. Furthermore, the study recommended as bank managers should emphasize the management of current assets and loans than fixed assets in order to reduce the level of nonperforming loans. Besides, it is better for the loan officers to provide financial counseling to the borrowers on the wise use of loan and also to make decision on timely fashion to meet their need.

Dr.Dahalanc et al, (2011) study utilized the ratio of NPLs to total financing in Islamic banks to measure the extent of NPL in Malaysia. The findings indicate two

long run relationships among the variables and note that interest rate has significant positive long run impact on NPLs. Industrial production index turns out with a positive but insignificant sign. This reflects the popular believe that Islamic banking system in Malaysia is not fully motivated by profit and loss mechanism, as the impact of interest rate is stronger relative to productivity. Producer price index appears to have negative and significant impact on NPLs.

Giannopoulos, (2018) study a sample of loans granted to micro and small enterprises in order to cover working capital needs. Non-performing loans dramatically increased as the recession of Greek economy deepens. Moreover we prove that in general the variables still affect in the same way the creation of non-performing loans during the studied period. Particularly, binomial logistic regression shows a positive correlation between non-performing loans and factors Adverse and Age. In contrast, we find a negative correlation between the probability of classifying a loan as non-performing and the independent variables Collateral, Own Facilities, Property, Residence and Years of operation. Finally, the predicted performance of the binomial logistic regression reduced as the crisis deepens.

Marijana et al, (2013) motivated by the fact of the growth of non-performing loans as well as adverse consequences of credit risk for financial stability of both individual banks and banking system as well as for economic activity, this paper empirically investigates the determinants of non-performing loans in Southeastern European banking systems. The analysis is based on sample of 69 banks in 10 countries in the period from 2003 to 2010 and Generalized Method of Moments estimator for dynamic panel models. The research encompasses both macroeconomic and bank-specific factors. The results show that lower economic growth, higher inflation and higher interest rate are associated with higher non-performing loans. Additionally, the credit risk is affected by bank-specific variables such as bank size, performance (ROA) and solvency.

Azeem et al, (2017) study shows that Non-performing loans (NPL) is an important problem for the whole banking industry and also a big hurdle in its development. According to our consideration there are many factors which are responsible for increasing NPL such as GDP, Credit appraisal, Interest rate, Improper lending disbursement to agriculture sector. This study investigates the causes & effects that occur due to NPL & how to overcome all these problems of NPL to maintain the

credit stability. During the study, time series data were followed over the period of 2000 to 2016. The result shows no significant relation of GDP, Interest rate and improper lending disbursement to agriculture sector with NPL however there is a significant association of Credit appraisal with NPL. Therefore we recommend that banks should control their credit advancement policies. Also we would like to recommend that State bank of Pakistan (SBP) should give information about fraudulent to every bank so that they can't take money to other banks for this act NPL has the chances to decrease.

Muriithi, (2011) the study adopted the Descriptive Design and applied both multiple regression models on secondary data to determine the relationship between causes of Non-Performing Loans in Commercial Banks in Kenya. The study used secondary data for the period 2008-2012. The Interest rates, Inflation and growth in loans were used as independent variables. Non-performing loan was used as dependent variable. The population of this study comprised of 43 commercial banks in Kenya and data was analyzed using SPSS. The study concludes that the independent variables considered in the study jointly caused the non-performing loans in commercial banks in Kenya. The study also found that the non-performing loans were positively correlated to inflation rate. The study further concludes that non-performing loans are negatively correlated with real interest rate and growth rate in loans in Kenya. The objective of the study, which was to determine the causes of non-performing loans in commercial banks in Kenya, was therefore met.

Dung, (2014) Non-performing loans affected the economy in a widespread area, at least during the last decade. The phenomenon had never been a concern until the collapse of stock and real estate markets. Considering that those markets accounted for a massive volume of capital, the crisis quickly spread to banking and commercial lending market. Researcher hopes to distribute a general look into non-performing loans, including actual explanations for causes, consequences of non-performing loans. Understanding of nature and reality of non-performing loans will allow investors to explain movement and tendency of lending market thoroughly. For further concern about consequences of non-performing loans, the researcher also monitors recent reforms and actions of banking market, as a main consequence. The analysis of non-performing loans is a valuable reference to evaluate the health of financial markets, in particular, and the stability of the economy, in general. Hence, this paper aims at being a hint to investors, especially foreign investors who keep

doubtful viewpoint about Vietnam, one of the most emerging markets in Asia-Pacific. Bolat, (2016) analyzes the factors that determine the non-performing loans (so-called bad loans) of 20 deposit banks in Turkey for 2006-2012 period using panel data analysis method. The analysis results reveal that solvency, profitability, credit quality, diversification, economic growth and the recent financial crisis are essential indicators of non-performing loans rate in Turkish banking sector. More specifically, greater profitability and revenue diversification significantly lowers non-performing loans rate, whereas greater capital and loan loss provisions significantly increase non-performing loans rate. In terms of macroeconomic variables, only economic growth has a negative effect on the non-performing loans ratio. Moreover, our results also uncover that deposit banks' NPLs ratio increases during the latest global financial turmoil period.

Bhattarai, (2015) study was conducted mainly with secondary sources and the data were collected for 26 commercial banks covering the period of 2002-2012 with 227 observations. The study found that macroeconomic variables such as the real effective exchange rate have significantly negative impact on non-performing loan. The impact of GDP growth rate was found to be insignificant in this study. One year lagged inflation rate has significant positive impact on non-performing loan. The banks which charge relatively higher real interest rate have higher non-performing loan, which is consistent with the findings of previous studies. The ownership dummy has positive coefficient and significant at one percent level showing that if the bank is government owned the non-performing loan would be higher than that of the private owned banks. As well, more lending in the previous years and current year reduces the non-performing loan since the coefficient of change in loan in current and previous years have negative coefficient and significant at one percent level.

Anjom, (2016) financial stability is considered as a pre requisite for the sustained and rapid economic progress for any economy. Among various indicators of financial stability, banks' non-performing loan assumes critical importance since it reflects on the asset quality, credit risk and efficiency in the allocation of resources to productive sectors. Non-performing loans has become a concerning issue for banking sector in recent times. This study attempted an empirical analysis of the non-performing loans of a SAARC country such as Bangladesh and investigated the response of non-performing loans to macroeconomic with bank specific factors with multiple regression and correlation matrix analysis aiming to find out the most significant

variables affecting non-performing loan as well as correlation among factors that may have an Influence on non-performing loans. With respect to macroeconomic factors, this study focuses a broad area showing the relationship between non-performing loans to macroeconomic factors such as annual growth rate of gross domestic production (GDP), real interest rate, inflation rate, public debt as percentage of gross domestic production etc. With respect to bank specific factors this study shows how non-performing loans response with the changes of the bank specific factors such as growth in loan, return on equity, return on assets, loan to asset ratio, loan to deposit ratio, Total capital to total asset ratio, operating expense to operating income ratio, total liabilities to total asset ratio, non-interest income to total income ratio. Thereafter, the empirical study is analyzed with secondary data collected from some selected commercial banks of Bangladesh and compared with other SAARC countries. The asset base of the scheduled commercial banks is also considered as a yardstick of comparative ranking of the commercial scheduled banks in Bangladesh.

Erdogdu, (2016) the data analysis including the unit root test was conducted in the Augmented Dickey Fuller and Phillips Perron methods and Granger causality test. In this study, unit root tests were carried out primarily in order to examine the stability of the series, and simple regression model was estimated as a result of the unit root tests. In the present study, the relationships were between variables in the determination of the model were estimated with ordinary least squares. In accordance with the results of the empirical analyses in Turkey, there is a causality relationship between non-performing loans and domestic credit volume of the Turkish banking sector. Granger causality tests show that these relationships are bivious. Non-Performing Loans, gross domestic product at constant prices, public sector expenditure at constant prices and private sector expenditure at constant prices, domestic credit volume, total loan interest income (I) are the most significant sub-items of the economic growth. In another respect, it is expected to have the causality relationships between NLP, GDP, PE, PSE, CV and I which are the sub-items of the economic growth. Rifat, (2016) both macroeconomic and firm-specific variables are tested to determine the impact on classified loan ratio. A panel data-set consisting of seven Non-banking financial institutions with a time-span of 12 years (2003-2014) is analyzed for this purpose. Among macroeconomic variables, GDP growth rate, inflation rate and broad money in GDP are used. To capture management ability, firm-specific variables like, loan growth, loan to asset ratio, return on asset and relative size of firm were included in

the study. Results show that firm-specific factors were more significant for non-performing loan of the NBFIs. Among macroeconomic variables, money supply was found to have significant impact.

Yang, (2017) the increase in non-performing loans around the world has had quite a negative impact on many nations' banking systems. To address these problems, many creative regulatory solutions and well-designed risk techniques have been utilized in the hope of reducing non-performing loans to an acceptable level. The purpose of this study is to apply newly developed data envelopment analysis model to suggest the most efficient plan(called Plan 4) to reduce non-performing loans that can maximize the efficiency of the entire banking industry's control over the bad debts. For comparison purpose, three other reduction plans are also represented. The four plans are presented using data from Taiwan's banking industry. The empirical results show that among the plans presented, Plan 4 shows the most effective allocation of the industry-wide reduction target. The plan focuses on a finite number of banks, helping identify the key units to improve industry-wide efficiency. The findings implicitly suggest that the regulator should devise more incentive measures to encourage target banks to perform the non-performing loan reduction task. Our results also suggest that for the regulator, forcing banks to cut their non-performing loans by the same ratio will not help improve the relative efficiency of the industry.

Mazreku et al, (2018) analysis has sought to determine the impact of specific macroeconomic factors of transition countries on the level of NPLs and the relationship by using four different econometric models and found that GDP growth showed the strongest (inverse) relationship with NPLs, meaning that as GDP growth increases, people have more disposable income and can meet their loan payment obligations. Inflation also showed a significant negative relationship with NPLs, revealing that in times of low inflation, people can honor their loan obligations due to the reduced real burden of such repayments as general prices rise. Unemployment showed a significant positive relationship with NPLs, in line with prior findings, further underscoring the importance of domestic economic conditions for NPLs. Finally, export growth showed largely non-significant results, indicating that NPLs within our sample were mainly affected by domestic conditions rather than external economic shocks. Thus, these findings have important implications for the stability and health of the banking sector within transition economies, since they underscore the importance of macroeconomic conditions. In particular, the results underline the

need for pro-growth macroeconomic policies within these countries, particularly the need to attract domestic and foreign investment in order to boost growth and employment. Data from the World Bank and International Monetary Fund for a sample of transition countries over the period 2006 and 2016. Findings show that GDP growth and inflation are both negatively and significantly correlated with the level of NPLs, while unemployment is positively-related to NPLs.

Kjosevsk, (2018) examines the link between determinants of non-performing loans (NPLs) and their macroeconomic impact in the Czech Republic, using two complementary approaches and explore macroeconomic and bank-specific determinants of NPLs for a panel of 22 banks from the Czech Republic, using annual data for the period 2005-2016. For our analysis applied difference Generalized Method of Moments. Empirical results provide evidence that the most important macroeconomic factors influencing NPLs are GDP growth, inflation, and unemployment. As for the bank-specific determinants, found that return on assets, return on equity growth of gross loans, and equity to total assets ratio, size of the banks and foreign ownership have an impact on the amount of NPLs and investigate the feedback between NPLs and its macroeconomic determinants. The results suggest that the real economy responds to NPLs, and the analysis also indicates that there are strong feedback effects from macroeconomic conditions, such as domestic credit to private sector, GDP growth, unemployment, and inflation, to NPLs. The negative relationship between economic growth and growth of NPLs confirms the fact that, in times of expansion, the credit ability of economic agents grows, which has positive effects on the timely servicing of their debt and, hence, lower level of credit risk for banks.

John, (2018) loans have a vital contribution towards development of economy. However, its nonpayment also leads to incidence of huge loss on banks in particular and country in general. Hence, this study was conducted to examine both bank specific variable (return on asset) and macroeconomic factors (gross domestic product, unemployment rate and exchange rate) determinants of NPLs of commercial banks in Nigeria. This research is an explanatory research design that identifies the cause and effect relationships between the NPLs and its determinants. Two commercial banks in Nigeria were sampled judgmentally. This study used secondary sources of data, which is panel data in nature, over the period 2010-2015. These data were collected from annual statement of account and CBN statistical bulletins. The

study found that GDP ratio had positive relationship with ROA, whereas exchange rate as well as unemployment rate had negative relationship with ROA. The study, therefore, recommended that the government should maintain political stability and combat corruption at all levels, banks should have a good track of their customers regarding loans repayment and lastly the banks should employ sustainable manpower. The study also concludes that there is significant role of macroeconomic factors in determination of commercial banks' performance with respect to non-performing loans and this implies that all challenges against the realization of macroeconomic objectives to be tackled. The study also shows that the findings should be given utmost importance as the R-square of our study was 80.8% which is a good fit.

Babuna, (2018) study is based on secondary data and information. The information has been collected from different sources, such as the annual reports, various websites like Dhaka Tribune, Financial Express and different journals. Nonperforming loans is common phenomena for banking industry in Bangladesh. A Non-performing loan is a loan that is in default or close to being in default. Many loans become non-performing after being in default for 90 days, but this can depend on the contract terms. NPL started at the early stage of liberation. During 1980s and 1990s, Privatization and liberalization of banking sector could not control NPLs. Rate of NPLs was 41.1% in 1999. Now it is 11.90%. The amount of NPL increased to taka 73.3 billion in 2012 from taka 47.3 billion in 2003. There are many reasons behind the NPL in Bangladesh. First reason is entrepreneurs related. Borrower need experience, need trade and organization training background or need of supporting office. At some point borrowers do it intentionally. Business people age too is a vital factor. There are certain other reasons behind this. Secondly strong competition from other firms in the same industry leads to a loan default situation. If the management system of the firm is poor, than it's hard to manage the cash flow and loan repayments. Then comes poor financial performance, along with it comes poor cash flow which leads to a loan being a default. Business could be defaulter because of low market share. Low market share mean low revenue so that business cannot pay the interest payment. Third reason is leading related. It is mainly Bank's fault. Loan could be default if Bank delayed assessment of loan proposal, delayed disbursement of fund, lack of proper monitoring, lack of taking proper action. Last reason is macroeconomic factors. Low GDP growth, increasing crimes, and frequent policy change effect loan. For those reasons loans become default loan. Effects of NPL are such as Stopping Money Cycling, Earning

Reduction, Capital Erosion, Increase in Loan Pricing, Frustration etc. As a result, the values of security are increased and the risks of financial recession also see a rise.

Shingjergji, (2013) found out that the effect of the macroeconomic situation plays an important role in the determination of nonperforming loans level. To understand the reasons of the ongoing growth of the nonperforming loans in this paper are used a simple regression model. In the model are taken into consideration some macroeconomic and banking factors that have contributed to increase the nonperforming loans level. Also the real effective exchange rate is positively related with the nonperforming loans according to which the international competition of the economy of a country is an important determinant of the credit risk. In other words any time there is a deterioration of the competition in a country's economy the nonperforming loans level that derives from the main export sectors is likely to increase.

Donnery et al, (2018) study experienced a systemic crisis, which saw Non-Performing Loan ratios rise to among the highest levels in the euro area, followed by a sharp decline in NPL ratios that has not been experienced in many comparable countries. This article highlights the sequence of policy interventions that were implemented by the Central Bank of Ireland as a response to this systemic crisis, beginning with the 2011 stress test and recapitalization exercise that formed part of the Financial Measures Program. It then outlines how certainty around capital adequacy allowed policy to focus on the operational capacity and incentives of the banks and borrowers to resolve the NPL crisis in Ireland, highlighting the many specific measures adopted and lessons learned during the process. We finish with a discussion of the risks and remaining challenges, with a focus on the large share of late-stage mortgage arrears cases outstanding on Irish banks' balance sheets in early 2018.

Monokroussos et al, (2016) Using a new dataset of macroeconomic and banking-related variables study explain the evolution of "bad" loans in Greece over the period 2005-2015. Study findings suggest that the primary cause of the sharp increase in non-performing loans following the outbreak of the sovereign debt crisis can be mainly attributed to the unprecedented contraction of domestic economic activity and the subsequent rise in unemployment. Furthermore, our results offer no empirical evidence in support of a range of examined hypotheses assuming overly aggressive lending practices by major Greek credit institutions or any systematic efforts to boost

current earnings by extending credit to lower credit quality clients. We find that the transmission of macroeconomic shocks to NPLs takes place relatively fast, with the estimated magnitude of the respective responses being broadly comparable with that documented in some earlier studies for other euro area periphery economies. Overall, our results support a swift implementation of reforms agreed with official lenders in the context of the new 3rd bailout programmed. These envisage the modernization the country's private sector insolvency framework and the creation of a more efficient model for the management of NPLs. A vigorous implementation of these reforms is key for allowing a resumption of positive credit creation, by freeing up valuable resources that are currently trapped in unproductive sectors of the domestic economy. This, in turn, would facilitate a speedier return to positive economic growth and a gradual reduction in unemployment.

Jolevski, (2017) investigated the relationship between non-performing loans and the basic indicators for banks' performance. The analysis was conducted among the banking sector in the Republic of Macedonia for the period 2007-2015. The share of non-performing loans in total loans is one of the basic indicators for the quality of the credit portfolio in banks. The analysis of the movement and the level of non-performing loans are of great importance for identifying possible problems in bank risk management as a whole. With the application of correlation and regression method, we confirmed the findings of the consequences of non-performing loans on the performance of banks. The results indicate that a large share of non-performing loans to total loans leads to deterioration in the financial and liquidity position. There is a weak negative correlation between the rate of capital adequacy and nonperforming loans ratio and that requires further research. The results of analysis show that there is a moderately high negative correlation between the rate of non-performing loans and rates of return on equity. Nonperforming loans increase impairment losses and have impact on the financial result, can reduce the liquidity and solvency position of the bank.

Messai et al, (2013) tried to detect the determinants of non-performing loans for a sample of 85 banks in three countries (Italy, Greece and Spain) for the period of 2004-2008. These countries have faced financial problems after the subprime crisis on 2008. The variables used are macroeconomic variables and specific variables to the bank. The macroeconomic variables are included the rate of growth of GDP, unemployment rate and real interest rate with respect to specific variables opted for

the return on assets, the change in loans and the loan loss reserves to total loans ratio (LLR/TL). After the application of the method of panel data and found the problem loans vary negatively with the growth rate of GDP, the profitability of banks' assets and positively with the unemployment rate, the loan loss reserves to total loans and the real interest rate. The results show that banks should give interest to many variables when they offer loans in order to decrease the level of nonperforming loans. Principally, banks should consider the international competitiveness of the national economy, because if this competitiveness is low level, this could influence the ability of borrowers to several export sectors to repay debt (kabra and kabra, 2010). Such bank should also take into account the profitability of the real economy when extending loans. Impaired loans are expected to be important during the period of economic recession. Commercial banks should likewise extend its scope of macroeconomic surveillance to include prudential indicators such as GDP to assess the soundness and stability of the banking system.

Zorana Agic et al, (2018) the empirical results show that there is a correlation between nonperforming loans and unemployment rate, inflation rates measured by the growth rate of consumer prices, return on assets and credit growth rates, while the impact of the growth rate of real gross domestic product, capital adequacy ratio, return on equity and active interest rates is not statistically significant. Research results show that two macroeconomic and two specific banking factors may be used to explain the behavior and to forecast the values of NPL of BiH banking sector in the coming period. In that, the unemployment rate and return on assets have statistically significant and positive impact to NPL, while the growth rate of retail prices and rate of credit growth have statistically negative relation with NPL. The research showed that the growth rate of real GDP, ration of capital adequacy and interest rate do not have statistically significant impact to the NPL in BiH banking sector. The research constructed a regression equation that may be used to forecast the value of NPL in the coming period using the independent values of unemployment rate, inflation, return on assets and rate of credit growth. According to the equation, based on arbitrary unemployment rates, inflation rates, asset contributions and credit growth rates, the NPL value in the forthcoming period can be predicted. The share of non-performing loans in BiH's banking sector's total loans is high.

2.3 Research gap

Many researchers have conducted the research on the topic of non-performing loan of

commercial banks in Nepal but they were based on determinant, causes, factors of the non-performing loan and were not able to analyse the impact of non-performing loan on profitability of commercial bank in Nepal. The previous researcher conducted could not explain the relationship of NPL to the total lending, profitability, interest rate in market and operating profit. This study fulfilled the gap by analyzing the impact of Non-performing loan on profitability. This research has tried to study the impact of non-performing loan on profitability of the four banks in Nepal i.e. NABIL, EBL, ADBL and NSBI. While reviewing through previous research there is no study found that has used the profitability indicator profit margin ratio and loan ratio. So, this study fulfilled the gap by analyzing the relationship of NPL and Profitability.

CHAPTER-III RESEARCH METHODOLOGY

This section identifies the sources of data, present the data and describes the models that that has been used to investigate. It presents the research design, the population, and sample selection, sampling procedure, and research instruments, methods of data analysis and data collection and limitations encountered during the research process.

3.1 Research design

The study has used the descriptive design which was focused on determining the relationship between non-performing loan and profitability of commercial banks in Nepal.

3.2 Population and sample

The population of this study is all commercial banks in Nepal. There are 27 commercial banks in Nepal out of them, four banks are taken as sample for the study. For the purpose of the study convenience sampling under non-probability sampling method was used to analysis. The sample banks are Nabil Bank, Everest Bank Limited (EBL), Agricultural Development Bank Limited (ADBL), and Nepal State Bank of India (NSBI).

3.3 Data sources and collection

The study is mainly based on the secondary data collected for the purpose of analysis in this research. The information, facts and figures provided by the banks used to analysis the research. Many sources of data are the annual reports published by the bank. The directives and supervision of the NRB are also the main source. The required information has obtained from the journal, related websites, published and unpublished thesis, articles, and books are used to collect the required data for the research.

3.4 Data analysis tools and techniques

For the study data analysis is based on the secondary data and is collected from the related websites of the selected commercial banks. Financial ratios and statistical tools had used as the data analysis tools and techniques.

3.4.1 Financial tools

(a) Profitability ratio

Profitability ratios are a class which measures the financial metrics that are used to assess a business's ability to generate earnings relative to its associated expenses. For most of these ratios, having a higher value relative to a competitor's ratio or relative to the same ratio from a previous period indicates that the company is doing well.

Profit margin

Profit margin is commonly used profitability ratios to measure the profitability of the company. It represents how much percentage of sales has turned into profits. Simply put, the percentage figure indicates how many cents of profit the business has generated for each dollar of sale.

Return on asset

It is a financial ratio that shows the percentage of profit a company earns in relation to its overall resources. Return on assets has used to how effective the company is in deploying assets to generate sales and eventually profits. It also shows the performance of the asset of related company. Higher the return on asset higher will be the performance as result more sales, more profit generated.

Return on equity

It measures the ability of the earning return on their equity on their equity investments. It is a ratio that calculates the profit for the equity investment.

3.4.2 Statistical tools

It measures or analyzes the collection data from the different sources. the following statistical tools have been used to analyze the data.

Average/Mean

It refers to the mean or average that is used to derive the central tendency of the data and also obtained by adding the values of all observations and dividing it by the number of observations. It is determined by adding all the data points in a population and then dividing the total by the number of points. The resulting number is known as the mean or the average.

Standard deviation

It measure quantity expressing by how much the member of a group differ from the mean value for the group. A low standard deviation indicates that the data points tend to be very close to the mean, high standard deviation indicates that the data points are spread out over a large range of values. It measures the risk of the company, lower the rate higher will be the value.

Correlation of coefficient

It is the statistical measure that calculates the strength of the relationship between the relative movements of two variables. The range of the values for correlation of coefficient bounded by 1.0 on an absolute value basis or between -1.0 to 1.0. If the correlation of coefficient is greater than 1.0 or less than -1.0 then the measurement is incorrect. A correlation of -1.0 shows a perfect negative correlation and vice versa but a correlation of 0.0 shows no relation between two variables.

Regression analysis

It is the set of statistical processes for estimating the relationships among variables. It also includes many techniques for modeling and analyzing several variables, when the focus is on the relationship between a dependent variable and one or more independent variables. Specifically, it helps one understand how the typical value of the dependent variable change when any one of the independent variables is varied, while the other independent variables are held fixed. The regression line of dependent variable (Y) on independent variable (X) is given by;

$$Y = a + bX$$

Where, a = constant, b = regression coefficient

There are two types of linear regression analysis they are explain below:

a) Simple line of regression

It consider only two variables, one dependent and other one is independent. It predicts the dependent variable when there is one unit of change in independent variable.

b) Multiple regression analysis

It considers more than two variables. So, it considers multiple regression analysis to know the joint effect of independent variable.

CHAPTER IV RESULT

This chapter has been organized to present the result, analysis and interpret them accordingly. Its main objective is to present data and facts and interpret them. Data collected from various sources were classified and tabulated as requirement of the study and in accordance to the nature of collected data. Different types of financial and statistical tools are used in this chapter.

4.1 Trend analysis

4.1.1 Net profit margin

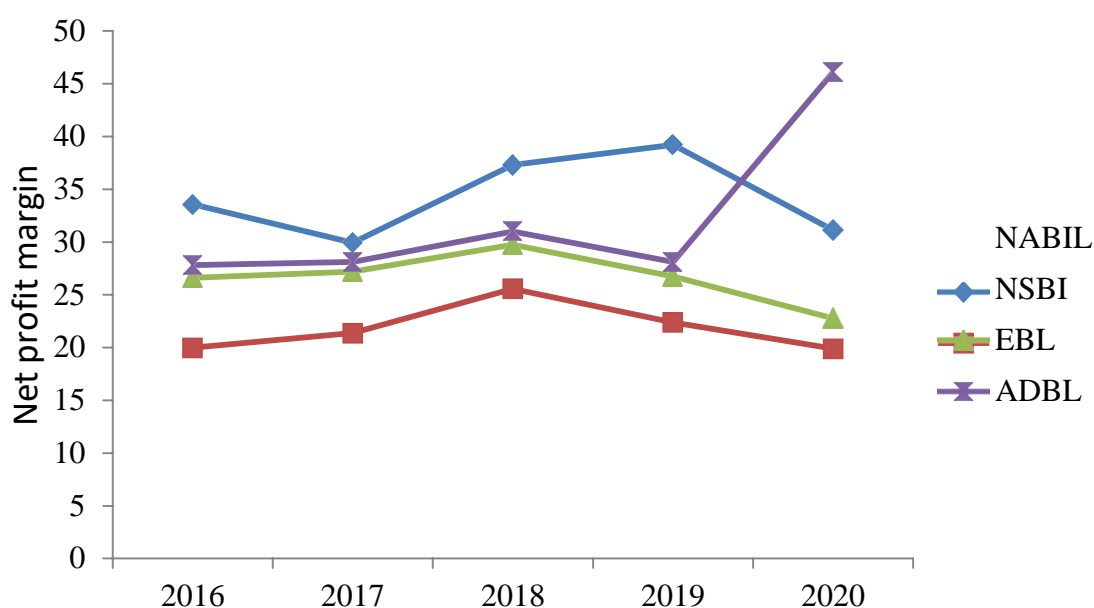


Figure 4.1 Net Profit Margin

Figure 4.1 represents the different net profit margin of selected bank. The net profit margin of NABIL has fluctuation trend line in which 33.5% in the year 2016 which went on different fluctuation and the highest was in the year 2019 i.e. 39.22% and the lowest has 29.93% in the year 2017. Similarly, the net profit margin of ADBL has adopted an increment in half year and in the next year it has adopt decreasing trends. ADBL has 27.8% in the year 2016 having the different fluctuation the net profit margin of ADBL has the highest in the year 2020 as compare to selected bank in the study.

The net profit margin of EBL bank adopts an increment in the half year and in the next year it has adopt decreasing trend. It's highest in the year 2018 i.e. 29.75% and

the lowest was in the year 2020 i.e. 22.77%. The net profit margin of NSBI has adopted an increment in half year and in the next year it has adopt decreasing trends. It's highest in the year 2018 i.e. 25.56% and the lowest in the year 2020 i.e. 19.87%. This shows that there is fluctuation in net profit margin of selected banks. Overall as comparison NPM of NABIL and ADBL bank has high as compare to EBL and NSBI.

4.1.2 Return on assets

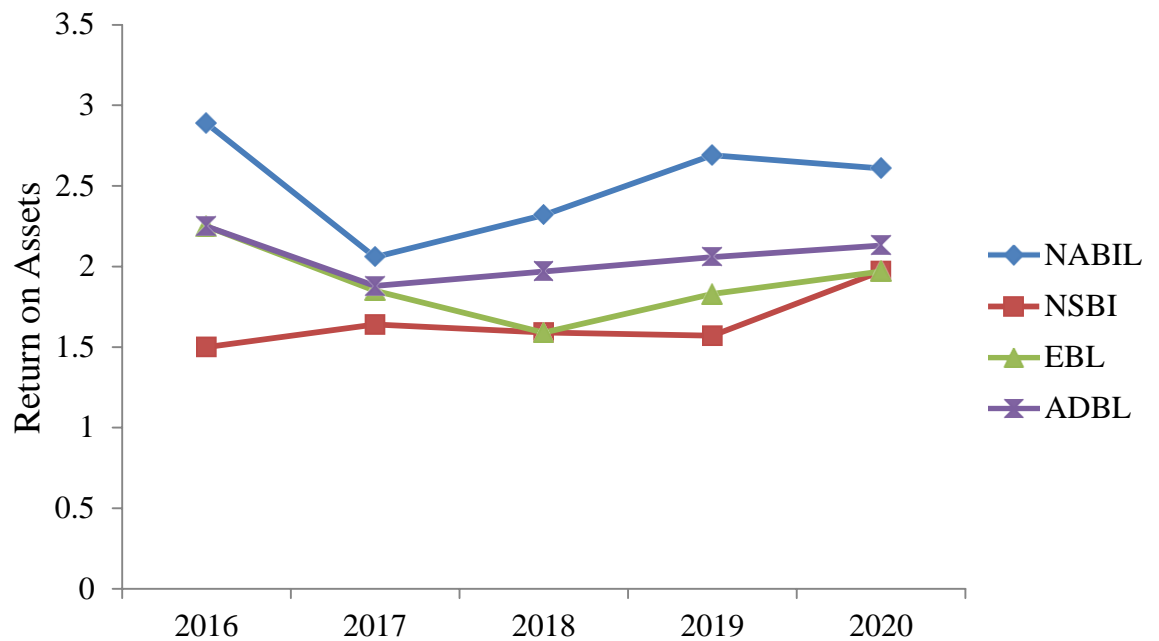


Figure 4.2 Return on Assets

Figure 4.2 shows that the different level of ROA of the selected banks. Figure shows that NABIL bank has fluctuated trend line. The highest ROA in the year 2016 i.e. 2.89% and the lowest was in the year 2017 i.e. 2.06%. As compare to other bank in the study of selected bank, NABIL has better performance. The ROA of ADBL has incremental line after second year. ADBL has 2.25% in the year 2016 and the lowest ROA was in the year 2017 i.e. 1.88%. Similarly, the ROA of EBL has adopted an increment in half year and in the next year it has adopt decreasing trends. EBL has 2.25% in the year 2016 and the lowest ROA was in the year 2018 i.e. 1.59%. The ROA of NSBI bank has incremental trend line. NSBI has 1.5% in the year 2016. The highest ROA was 1.97% in the year 2020.

4.1.3 Return on equity

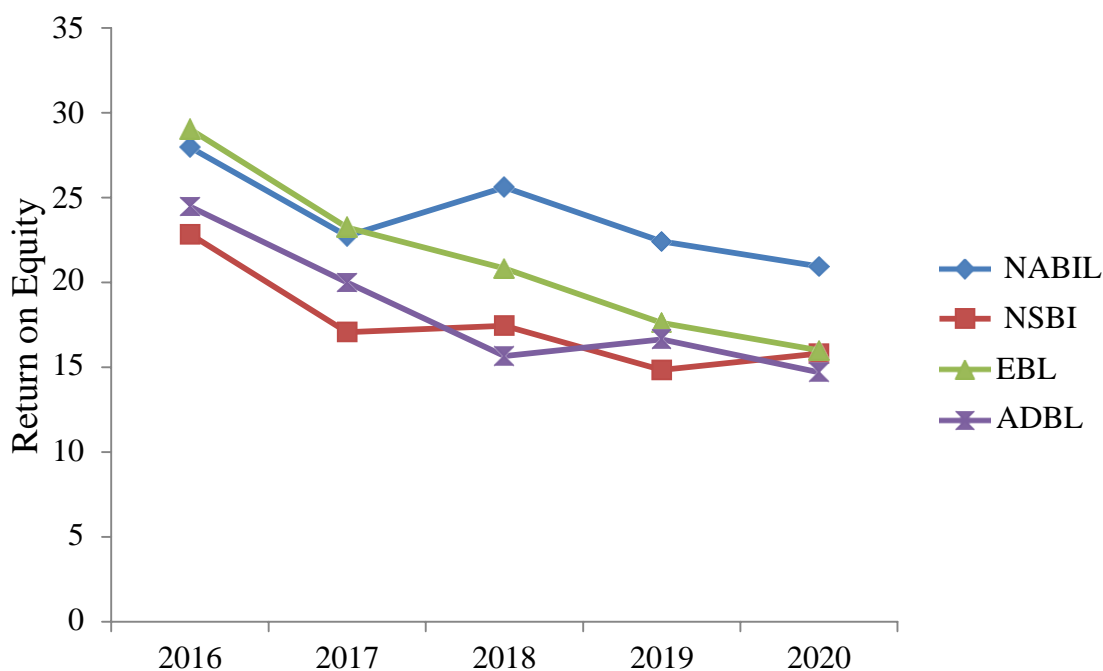


Figure 4.3 Return on Equity

Figure 4.3 represents the ROE of the selected sample banks in the different years of the study. NABIL has adopted decreasing trends. The ROE of NABIL bank has 27.97% in the year 2016 and the lowest ROE of NABIL bank has 20.94% in the year 2020. Similarly, EBL has adopted perfectly decreasing trend line. The highest ROE of the EBL was in the year 2016 i.e. 29.04% and the lowest ROE of EBL was 16% in the year 2020. Similarly, the ROE of ADBL also adopt decreasing trends line. It has 24.47% in the year 2016 and the lowest ROE of ADBL was 14.71% in the year 2020. The ROE of NSBI also has adopted decreasing trend line. Bank has 22.85% in the year 2016 and the lowest ROE of NSBI was 14.85%. This shows that the ROE of selected sample banks slightly fluctuated in the different years of the study. This show that return on equity of NABIL is the highest over the period of study i.e. the shareholder of NABIL got highest earning from investment. The lowest ROE of the study was NSBI bank; it means that the shareholder of NSBI bank received lower return on their investment among the selected commercial banks.

4.1.4 Non-performing loan

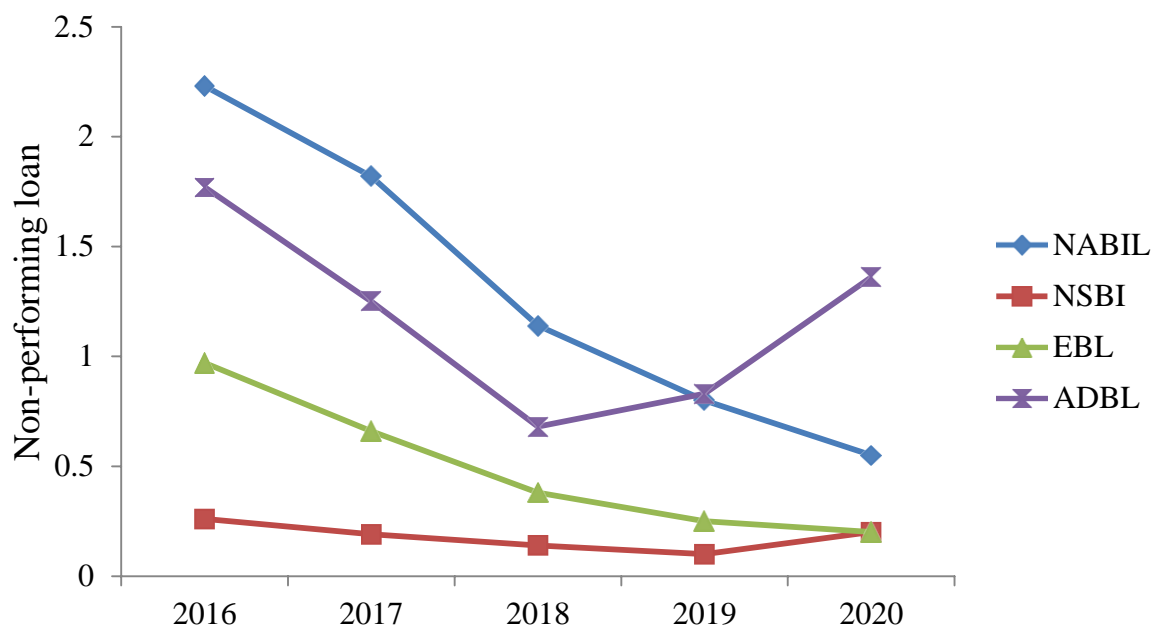


Figure 4.4 Non-Performing Loan

Figure 4.4 represents the different NPL of selected bank in the period of study the NPL NABIL bank has adopted decreasing trends line. It has 2.23% in the year 2016 and the lowest NPL was 0.55% in the year 2020. Similarly, the NPL of ADBL has adopt u shape trend line the first three years bank has adopts decreasing trends after that it has adopt increasing trend line. It has 1.77% in the year 2016 and the lowest NPL was 0.68% in the year 2018. The NPL of EBL bank has also decreasing trend line. It has 0.97% in the year 2016 and the lowest NPL was 0.2% in the year 2020. And the NPL of NSBI has also decreasing trend line. It has 0.26% in the year 2016 and the lowest NPL was 0.1% in the year 2019. Overall performance of NABIL shows better performance due to the highly downward sloping of trend line but as compare NSBI has adopt effective performance.

4.2 Correlation between NPL with ROA, ROE, and NPM

Table 4.1 Correlation between NPL with ROA, ROE, and NPM

Independent Variable	Dependent Variable		
	ROA	ROE	NPM
NPL	0.2936	0.9289	-0.8254

Table shows that the correlations between different variables are displayed. Table shows the correlation between independent and dependent variable i.e. independent variable included NPL and dependent variables included ROA, ROE, and NPM. The correlation between NPL and ROA is positive i.e. 0.2936. This means that the correlation between NPL and ROA is very low significance i.e. it has slightly positive correlation. The correlation between NPL and ROE is also positive i.e. 0.9289 which is highly significant. And also shows that there was perfectly correlation between the NPL and ROE. The correlation between NPL and NPM is negative i.e. -0.8254. This means that the correlation between NPL and NPM is highly significant. And it has perfectly negative correlation. On an average there seem negative relation between NPL and NPM. And there is positive relation between NPL with ROE and ROA.

4.3 Analysis of the regression results

Regression results are found through the ordinary least square technique.

4.3.1 Analysis of the regression result between NPL and ROA

Table 4.2 *Analysis of the Regression Result between NPL and ROA*

<i>Model Summary</i>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.294	0.086	-0.218	0.1854202

a. Predictors: (Constant), NPL

b. Dependent Variable: ROA

Table shows $R^2 = 0.086$ this means that the NPL is explain by ROA only by 8.6% and remaining by other factor i.e. 91.4%. Therefore, ROA has significant bearing on NPL.

Table 4.3 *ANOVA*

	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	0.010	1	0.010	0.283	0.632
	Residual	0.103	3	0.034		
	Total	0.113	4			

a. Dependent Variable: ROA

b. Predictors: (Constant), NPL

Table shows F-value of 0.283, with a corresponding p-value of 0.632, which means that the overall fitness of the model is well justified. This means that the model using ROA to measure NPL can be relied on to explain the variability in loan.

Table 4.4 *Coefficients*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.918	0.227		8.442	0.003
	NPL	0.143	0.268	0.294	0.532	0.632

a. Dependent Variable: ROA

Table shows the coefficient of regression ROA on NPL is positive with 0.143. While determining NPL, the impact of ROA is positive that shows the increase in ROA leads to increase NPL. This regression coefficient has 0.268 as SE, which measures the variability of the observed value around the fitted line of regression. The coefficient's t-statistic is 0.532 and p-value is 0.632 which means there is significance in both t-statistic and p-value.

4.3.2 Analysis of the regression result between NPL and ROE

Table 4.5 *Analysis of the regression result between NPL and ROE*

<i>Model Summary</i>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.929	0.863	0.817	1.5336978

a. Predictors: (Constant), NPL

b. Dependent Variable: ROE

Table shows $R^2=0.863$ this means that the NPL is explain by ROE only by 86.3% and remaining by other factor i.e. 13.7%. Therefore, ROE has significance bearing on NPL.

Table 4.6 *ANOVA*

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	44.396	1	44.396	18.874	0.023
	Residual	7.057	3	2.352		
	Total	51.453	4			

a. Dependent Variable: ROE

b. Predictors: (Constant), NPL

Table shows f-value of 18.874, with a corresponding p-value of 0.023, which means that the overall fitness of the model is well. The model using ROE to measure NPL can be relied on to explain the variability in profitability.

Table 4.7 *Coefficients*

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	
	B	Std. Error	Beta			
1	(Constant)	12.694	1.880		6.754	0.007
	NPL	9.636	2.218	0.929	4.344	0.023

a. Dependent Variable: ROE

Table shows the coefficient of regression ROE on NPL is positive with 9.636. While determining NPL, the impact of ROE is positive that shows the increase in ROE leads to increase in NPL. This regression coefficient has 2.218 as SE, which measures the variability of the observed value around the fitted line of regression. The coefficient's t-statistic is 4.344 and p-value is 0.023 which shows there is significance in both.

4.3.3 Analysis of the regression result between NPL and NPM

Table 4.8 *Analysis of the regression result between NPL and NPM*

<i>Model Summary</i>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.825	0.681	0.575	1.2087856

a. Predictors: (Constant), NPL

b. Dependent Variable: NPM

Table shows $R^2 = 0.681$ this means that the NPL is explain by NPM only by 68.1% and remaining by other factor i.e. 31.9%. Therefore, NPM has significance bearing on NPL.

Table 4.9 *ANOVA*

Model	Sum of Squares	Df	Mean Square	F	Sig.	
1	Regression	9.372	1	9.372	6.414	0.085
	Residual	4.383	3	1.461		
	Total	13.755	4			

a. Dependent Variable: NPM

b. Predictors: (Constant), NPL

Table shows f-value of 6.414, with a corresponding p-value of 0.085, which means that the overall fitness of the model is well. The model using NPM to measure NPL can be relied on to explain the variability in profitability.

Table 4.10 *Coefficients*

Model		Unstandardized		Standardized	t	Sig.
		Coefficients		Coefficients		
		B	Std. Error	Beta		
1	(Constant)	32.217	1.481		21.747	0.000
	NPL	-4.427	1.748	-0.825	-2.533	0.085

a. Dependent Variable: NPM

Table shows the coefficient of regression NPM on NPL is negative with -4.427. While determining NPL, the impact of NPM is negative that shows the increase in NPM leads to decrease in NPL. This regression coefficient has 1.748 as SE, which measures the variability of the observed value around the fitted line of regression. The coefficient's t-statistic is -2.533 and p-value is 0.085 which shows there is significance in both.

4.4 Major finding of the study

1. The trend analysis of selected bank of NPM has fluctuated trends. As compare NABIL has good performance in NPM with highest 39.22% in 2019 and NSBI has low performance with highest 25.56% in 2018.

2. The trend analysis of selected bank of ROA has fluctuated trends. As compare NABIL has adopt better performance with 2.89% highest in 2016 and ADBL has 2.25% highest in 2016 and EBL has 2.25% highest in 2016 and NSBI has 1.97% highest in 2020. Overall NSBI has low performance as compares to other banks.

3. The trend analysis of selected bank of ROE has downward sloping trends. As compare NABIL has adopt better performance with 27.97% highest in 2016 and ADBL has 24.47% highest in 2016 and EBL has 29.04% highest in 2016 and NSBI has 22.85% highest in 2016. Overall NSBI has low performance as compares to other banks.

4. The trend analysis of selected bank of ROE has downward sloping trends. As compare NSBI has adopt better performance with 0.1% lowest in 2019 and NABIL has 0.55% lowest in 2020 and ADBL has 0.68% lowest in 2018 and EBL has 0.2% lowest in 2020. Overall ADBL has adopted low performance in NPL. Lower the NPL has better performance for the company.

5. Result of correlation has adopted 0.2936 between NPL and ROA which is very low significant and has slightly positive correlation. Correlation between NPL and ROE has adopted 0.9289 which is high significant and perfectly correlation. Correlation between NPL and NPM has adopted -0.8254 which is very high significant and perfectly negative correlation. Over all NPL with ROE, NPM has adopted high significant.

6. Result of regression between NPL and ROA has adopted $R^2 = 0.086$ which means the NPL has explained by ROA only by 8.6% and remaining by other factor i.e. 91.4%. And f- value has adopted 0.283 with corresponding p-value of 0.632 which means well justified.

7. Result of regression between NPL and ROE has adopted $R^2 = 0.863$ which means the NPL has explained by ROE only by 86.3% and remaining by other factor i.e. 13.7%. And f- value has adopted 18.874 with corresponding p-value of 0.023 which means model is well.

8. Result of regression between NPL and NPM has adopted $R^2 = 0.681$ which means the NPL has explained by NPM only by 68.1% and remaining by other factor i.e. 31.9%. And f- value has adopted 6.414 with corresponding p-value of 0.085 which means model is well.

9. Increasing in NPL can significantly influence the profitability. That mean, if the NPL increases, real profitability decrease but total lending plays vital role to deviate the result.

10. The trend of the non-performing loan in selected banks is going downward sloping which is significance.

11. The trend of ROA and NPM in selected banks is fluctuation, due to the internal and external factors that affect the status of NPL in Banks.

CHAPTER-V CONCLUSION

This chapter handles the summary, conclusion and recommendations of the study.

5.1 Discussion

The main purpose of this study was to examine the impact of non-performing loan on profitability of commercial banks in Nepal. The major finding of this study shows that there is significantly relationship between NPL and the profitability. The study result shows insignificance relation between NPL with NPM (Bhattarai., 2014). The results shows that lower economic growth, higher inflation and higher interest rate are associated with higher non-performing loan and credit risk is affected by bank-specific variables such as bank size, performance (ROA) and solvency by (Marijana et al., 2013) and this study shows trend of ROA and NPM in selected banks is fluctuation, due to the internal and external factors that affect the status of NPL in Banks and there is inverse relationship between NPL and ROA. As ROA increase there is decrease in NPL and vice versa.

Increasing in NPL can significantly influence the profitability. That mean, if the NPL increases, real profitability decrease but total lending plays vital role to deviate the result. For other researcher this study helps to compare the relationship between non-performing loan and profitability. This study helps to researcher in finding relationship between NPL and profitability. The study as compare to other study mostly other researcher only focus on factor that affect non-performing loan but this focus on the profitability of selected banks and as a result there is inverse relationship between the NPL and profitability. The part this study careless on factor of NPL. And also less focus on the comparison between the NPL and the factor which directly and indirectly impact on profitability. Factor may be inflation, interest rate, exchange rate, budget expenditure.

The study also helps in the different banking sector, mostly employee who works in loan department. Researcher can take the reference with this latest data related with the non-performing loan. As compare this study finding, May gives the best decision by financial tool like ROA, ROE, NPM, and statistical tools like standard deviation, correlation of coefficient, regression analysis. The result helps people who are confusion on NPL and in banking sector. So, there is different result with different topic under NPL but this study included almost part of non-performing.

5.2 Conclusion

NPL is the most sensible and crucial aspect of the bank. Increase in NPL is often one of the first signs that a bank is in serious financial trouble and lead to the loss public faith upon banks. On the basis of the study, net profit of NABIL is comparatively better than other sampled banks according to ROA and ROE. On the basis of NPL, NSBI bank is capable of maintaining low level of NPL that insures for better performance. The average ROA and ROE of NABIL bank is comparatively better than other selected commercial banks. The study also reveals that in Nepal, NPL has negatively effect on the profitability indicators. So, investor's interest towards the bank may reduce the goodwill of the banks. The relationship between non-performing loan and profitability of the selected commercial bank is negative. Higher the non-performing loan lower will be the NPM represents profitability ratio. The correlation between NPL and ROA is positive with 0.2936 and the correlation between NPL and ROE is also positive with 0.9289 and the correlation between NPL and NPM is negative with -0.8254. Thus, to improve the efficiency and profitability the various steps have been taken by government to reduce the NPL. The NPL level of our banks is still high as compared to the international standards. So, banks should take care to ensure that they give loans to creditworthy customers. With the help of descriptive research tool the study find out, the relationship between NPL and profitability. With the three profitability measures i.e. NPM, ROA, ROE applied for correlation. As compare to selected banks NABIL banks has greater performance and as compare in NPL with selected banks SBI bank has lower NPL which means better performance. But compare at NPM, NABIL bank has higher NPM which means high profit. So, overall NABIL bank has better performance. To analysis the data different tool has been used such as statistical tool like coefficient of correlation, regression, trend analysis, financial tools. Financial tools included profitability ratio under it included return on equity, return on asset, and net profit margin. The data that have been analyzed by financial and statistical tool include from 2016 year to 2020 year. This study is mainly conducted on the basis of secondary data. Therefore, the study has inherent limitation of the secondary data.

5.3 Implications

The study has also several implications pointing to interesting avenues for future research. Some implication and suggestion for future research are discussed here.

1. The banks have to conduct the awareness regarding impact of NPL's on the borrowers and how it will effect on the profitability of the banks and also on the economy of the country.
2. Since, the average return on asset of Nepal SBI is lower than other selected banks. So, it is recommended to increase the investment and profit. The NPL of NABIL and ADBL are comparatively higher than other selected commercial banks. So, it is highly recommended to sanction loans by more care.
3. Other factors like total lending, interest rate, operating, and economic condition of the country and other external factors also plays vital role for the determination of profitability of banks. So, banks must pay adequate to manage these factors.
4. The provisions made by Nepal Rastra Bank determine the provisioning to be made for the non-performing loan i.e. these provisions decrease the profit. So, not only amount of non-performing loan but these provisioning also rule also determines the profitability.
5. The study helps to fulfill the gap of proper research about the relationship between NPL and profitability. It may provide the knowledge about NPL management in Nepalese commercial banks and their profitability position.
6. While lending the loan to borrowers, banks have to take all the necessary steps honestly without skipping any of the steps in the procedure. If bankers skip any of the important procedures that may lead to default of the loan.
7. The bankers has to take corrective measures to avoid default i.e., data analysis on regular interval for the prediction of defaulter and take necessary action on predicted defaulter in advance.

REFERENCES

- Avasthi G.P, S. M. (2001). Informantion Technology in Banking: Challenges for Regulators. *Prajanan*, 29(4), 343.
- Bahram Meihami, Z. (2013). The effect of using electronic banking on profitability of Bank . *Iran: Interdisciplinary Journal of Contemporary Research in Business*, 4(12), 1299.
- Balasubramaniam, C.S. (2002).Non-performing assets and profitability of commercial banks in India: Assessment and emerging issues. *National monthly refereed Journal of Research in Commercial and Management*, 1(7), 41.
- Balasubramaniam, C. (2013). Non performing assets and profitiability of commercial banks in India:assassment and emerging issues. *National monthly refereed Journal of Research in Commercial and Management*, 1(7), 41.
- Bhandari.R. (2004). Analysis of Non performing assets of commercial of Nepal.
- Bhatia. (2007). Non-performing assets of Indian public, private and foreign sector banks. *ICFAL Journal of Bank Management*, 6(3), 7-28.
- Bhattacharjee, A. (2001). Understanding information systems continuance: an expectation-confirmation model. *India: MIS Quaterly*, 25(3), 351-370.
- Bhattarai, S. (2014). Determinants of non performing loans:perception of nepali bankers. *Economic Journal of Development Issues*, 17&18(1-2), 128.
- Bhattarai, S. (2014). Determinants of non performing loans:perception of nepali bankers. *Economic Journal of Development Issues* , 17-18(1-2), 128.
- Boulding, W. K. (1993). A dynamic process model pf service quality from expectation to behavioural intentions. *Journal of Marketing Research*, 30(1), 7-27.
- Balasubramaniam, C. (2012). A conceptual discussion on NPAs and overall profitability of bank. *National Monthly Refereed Journal of Research in Commerce and Management*, 1(7), 42.

- Centeno, C. (2004). Adoption of internet services in acceding and candidate countries, lessons from the internet banking case. *Telematics and Informatics*, 21(4), 293-315.
- Chatterjee, C. a. (2012). Management of nonperforming assets - a. *International Journal of Social Science & Interdisciplinary Research*, 1(11), 204.
- Chaudhary, K. &. (2011). Performance of Indian Public Sector Banks and Private sector. *International Journal of Innovation, and Management*, 2(3), 249.
- Collins, N. j. (2011, april). The effects of interest rate spread on the level of non performing assets:a case of commercial banks in kenya. *International Journal of Business and Public Management*, 1(1), 58-65.
- Firas Na'el Rawhi Hashem¹, K. A. (2017). The impacts of non-performing loans upon the prices of stocks in jordanian commercial banks. *Accounting and Finance Research*. doi : <https://doi.org/10.5430/afr.v6n1p139>
- Fournier, S. a. (1999). Rediscovering satisfaction. *Journal of Marketing*, 63(4), 5-23
- Garau, C. (2002). Online banking in transactions economies: The implementation and development of online banking systems in Romania. Romania: *International Journal of Bank Marketing*, 20(6), 285-296.
- Gertrude, T. k. (2016). What are the determinants of non-performing loans in Botswana?
- Gupta, B. (2012). A Comparative study of non-performing assets of SBI & Associates & Other. *SIT Journal of Management*, 2(2), 175-189.
- H.S, S. (2013). A study on cause and remedies for non performing assets in Indian public sector banks with special reference to agricultural developments branch, state bank of Mysore. *Internayional Journal of Business and Management Invention*, 2(1), 26-38.
- Iftekher Hasan, S. D. (1997). A note on fixed costs and the profitability of depository intermediaries. *Managerial and Decision Economics*, 18(1), 47-53.
- Ishfaq.MA.,W.G.(2016). Non-performing loans and economic growth. *Scholars Journal of Economics, Business and Management*.doi:10.21276/sjebm.2016.3.10.9

- Kafle, D. (2005). Non performing loan of Nepalese Commercial Banks. *Central library*,1(2), 54-72.
- Karunakar, M. (2008). Are non - performing assets Gloomy or Greedy from Indian Perspective. *Research Journal of Social Sciences*, 3: 4-25.
- Kaur, K. (2011). Non-performing assets of public and private sector banks . *South Asian Journal of Marketing and Management Research*.
- Khan M.S. & Mahapatra, S. (2009). Service quality evaluation in internet banking: an empirical study in India. *India: Int. J. Indian culture and business management*,2(1), 30-46.
- Kingu, P.S, Macha, S & Gwahula, M. (2018). Impact of non-performing loans on Bank's Profitability: Empirical evidence from Commercial Banks in Tanzania. *International Journal of Scientific Research and Management*, 06(01),71-78.doi: 10.18535/ijstrm/v6i1.em11
- Kingu, P. S. (2018). Impact of non-performing loans on bank's profitability: Empirical evidence from Commercial Banks in Tanzania. *International Journal of Scientific Research and Management*,06(01),71-78.doi: 10.18535/ijstrm/v6i1.em11
- Kumar, P. (2013). A Comparative study of NPA of old private sector banks and foreign banks. *Research Journal of Management Sciences*,2(7), 38-40.
- liu, C.-c. (1997). Differential valuation implication of loan loss provision across bank and fiscal quarters. *Accounting Review*,72(1), 133-146.
- Mahajan. (2014). Non performing assets: A study of public, private & foreign sector Banks in India. *Pacific Business Review International*,7(1) 9-16.
- Nath, A. M. (2003). A Model of trust in online relationship banking. India: *International Journal of Bank Marketing*,21(1) 5-15.
- NRB. (2020).
- Oliver, R. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 17(4), 460-469.

- Oliver, R. (1981). Measurement and evaluation of satisfaction processes in retail settings. *Journal of Retailings*, 57, 25-48.
- Ozili, P. K. (2019). Non-Performing Loans and Financial Development: new evidence. *The Journal of Risk Finance*.
- Pastory, I. K. (2013). Credit risk and commercial banks performance in Tanzania: A penal data nalysis. *Research Journal of Finance and Accounting*,4(16), 55-62.
- Phides, M. S. (2013). An assessment of the cause of non performing loans in Tanzania commercial banks.
- Prasad, G. (2011).NPAs reduction strategies for commercial Banks in India. *IJMBS*,3. *International Journal of Management & Business Studies*, 1(3), 47-53.
- Prashanth, K. R. (2002). A Comperatative study of non-performing assets in India in the Global context. *Indian Institute of Management..*
- Rai, K. (2012). Study on performance of NPAs of Indian commercial banks. *Asian Journal* .
- Richard, E. (2011). Factors that cause non- performing loans in commercial banks. *Journal of Management Policy*, 12(7), 50-58.
- Sapkota, N. (May 2004). Potion of NPA in commercial bank. *Rajdhani National Daily*, 5.
- Siems, R. S. (n.d.). A non-parametric frontier estimation approach. *Forecasting Bank Failure*, 60(4), 417-429.
- Simpson, J. (2002). The Impact of the internet in banking: Objervations and evidence from developed and emerging markets. *Telematics and Informatics*,19(4), 315-330. doi: 10.1016/S0736-5853(01)00019-3
- Singh, V. R. (2016). A study of non performing ssets of commercial banks and it"s recovery in India. *Annual Research Journal of SCMS*, 4, 110-125.

- Singhal, D. &. (2008). A study on customer perception towards internet banking: Identifying major contributing factors (Vol. V). Nepal: *The Journal of Nepalese Business Studies*,5(1), 101-111.
- Us, V. (2016). A dynamics approach to analyzing the effect of the global crisis on non performing loans: Evidence from the Turkish Banking Sector. www.researchgate.net/publication/305996255.
- Vasudevan, A. (2018,). Non performing assets. *money,bank and finance*, 53(13).
- Wahlen, J. M. (1994). The nature of information in commercial bank loan loss disclosures. *Accounting Review*,69(3) 455-478.
- Williamson, G. (2006). Enhanced authentication in online Banking. *Journal of Economic Crime Management*,4(2), 1.

APPENDIXES

Appendix-1: Financial Ratio

ROE

Year	NABIL	SBI	EBL	ADBL	Average
2016	27.97	22.85	29.04	24.47	26.0825
2017	22.73	17.08	23.25	20	20.765
2018	25.61	17.46	20.83	15.66	19.89
2019	22.41	14.85	17.63	16.65	17.885
2020	20.94	15.81	16	14.71	16.865

Source: Annual reports of the respective Banks

NPM

Year	NABIL	SBI	EBL	ADBL	Average
2016	33.56	19.97	26.63	27.8	26.99
2017	29.93	21.36	27.2	28.1	26.6475
2018	37.3	25.56	29.75	31	30.9025
2019	39.22	22.38	26.75	28.1	29.1125
2020	31.12	19.87	22.77	46.1	29.965

Source: Annual reports of the respective Banks

ROA

Year	NABIL	SBI	EBL	ADBL	Average
2016	2.89	1.5	2.25	2.25	2.2225
2017	2.06	1.64	1.85	1.88	1.8575
2018	2.32	1.59	1.59	1.97	1.8675
2019	2.69	1.57	1.83	2.06	2.0375
2020	2.61	1.97	1.97	2.13	2.17

Source: Annual reports of the respective Banks

NPL

Year	NABIL	SBI	EBL	ADBL	Average
2016	2.23	0.26	0.97	1.77	1.3075
2017	1.82	0.19	0.66	1.25	0.98
2018	1.14	0.14	0.38	0.68	0.585
2019	0.8	0.1	0.25	0.83	0.495
2020	0.55	0.2	0.2	1.36	0.5775

Source: Annual reports of the respective Banks

Appendix-2: Correlation ROE, ROA, NPM, on NPL

ROA	ROE	NPM	NPL
2.2225	26.0825	26.99	1.3075
1.8575	20.765	26.6475	0.98
1.8675	19.89	30.9025	0.585
2.0375	17.885	29.1125	0.495
2.17	16.865	29.965	0.5775
0.293579	0.928898	-0.82543	