CHAPTER - 1

INTRODUCTION

1.1 Background of the study

Financial activities are facilitated by banks in any countries. Banks are pillar of economic activities and Nepal has positive history of banking organizations to play mediators role between resource mobilizations.

Commercial banks are major financial institutions which provide capital for the development of industry. Therefore, it occupies an important place in the framework in every economy. Commercial bank formulates sound investment policies to make it more effective, which eventually contribute to the economic growth of country. The bound policies help commercial bank maximizing quality and quantity of investment hereby achieve the own objective of profit maximization and social welfare. Formulation of sound investment policy and co-ordinate and planned efforts pushed forward the force of economic growth. A non-performing loan is the sum of borrowed money upon which the debtor has not made his payments for at least 90 days. A non-performing loan (NPL) is either in default or close to beginning in default.

A simple definition of non-performing loan is: A loan that is not earning income and: (1) full payment of principal and interest is no longer anticipated, (2) principal or interest is 90 days or more delinquent, or (3) the maturity date has passed and payment in full has not been made. The issue of non-performing loans (NPLs) has gained increasing attentions in the last few decades. The immediate consequence of large amount of NPLs in the banking system is bank failure. Many researches on the cause of failing banking institutions always have high level of non-performing loans prior to failure (Dermigue Kunt, 1989:2). Sometimes borrowers run out of money or fall into situations where they can't repay their debt, and that's how non-performing loans become a problem for so many banks and it has negatively hit on banking performance.

As per the rules laid down by Nepal Rastra Bank, the loan and advance which are overdue for maturity period or more should be treated as NPL. Therefore, the significance of the study is for banking sector. Major impact of NPL lies in the fact it does not generate income. The credit remains idle. As overdue ageing with in three month or interest and principal have not been paid in the repayment period ,more than three month, six month and one year requires 5%,25%, 50% and 100% provision for income, which is virtually sure to reduce the profit. Furthermore, borrowing cost of resources locked in NPL and opportunity loss due in none recycling of funds are other impact. It also increases the administrative and recovery cost and legal cost as well. Effect on employee morale and decision making, lower image and rating of bank and reduce investor and foreign aid agency confidence are some of the prominent impact (Nepal Rastra Bank, 2010:36). Nepal Rastra Bank was formulated strong policies guidelines for the financial institutions towards adopting precautions for default situations.

The negative level of capital fund, high level of NPL, poor risk management skill, government weaknesses and these several deficiencies have been found in the banking so with the view to addressing the huge problem and challenges of this sector, the strategies paper of the government in financial sector reforms has focused more on the banking sector as the overriding component of the overall financial sector reforms strategy in the Nepal. But it does not mean that other areas have been neglected. The other area such as insurance sector, securities market and corporate sector are also being strengthens side by side the government (Barr and Siems, 1994:56).

Beside risk underlying in the business other factors also effects in the increment of non-performing loan. These are attitude of the borrower, types and quality of collateral taken and legal complication created by the borrower during the loan recovery process. Reduction of NPL has always been a major problem for ever commercial bank in recent days. NPL management has been the top priority for banks. Whole banking industry now is struggling to get rid of it through various means.

Performing assets are that advances which generate income for the bank. In simple terms, performing assets are those advances that regularly repay principal and interest to the bank. These assets constitute the primary source of income to banks. Banks are willing to lend as much as possible. However, they have to be careful about the safety of such loans. Loans are risky assets, even though bank lends most of its resources in loans.

“Loan and advances dominate the assets the assets side of the balance sheet of any bank. Similarly, earning from such loan and advances occupy a major space in income statement of the banks. However, it is very important to be remained that most of the bank failure in the world due to shrinkage on the value of the loan and advance. Here 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 loan erodes even existing capital” (Pradhan; 1994:17).

The operating of the banking institutions has been governed by the government rules and regulation, international industry norms, relevant acts, Memorandum of Association(MOA),Article of Association(AOA), instruction given at the time of getting intent and Directives issued by Central bank from time to time. Similarly, the expectation of the stakeholder should also be taken into consideration. All banking institution is supposed to confine their activities within the stated framework.

Commercial Bank

Nepal Commercial Bank Act 1975 A.D "A commercial bank are those which exchange money, deposit money, accept deposits, grants loan and perform commercial banking function which is not for a bank, meant for co-operation, agriculture, industries of such specific purpose". Under the Nepal Commercial Bank Act 2031 BS the commercial banks are those banks which provides short term and long term debt whenever necessary for trade and commerce. They accept deposits from public and grant loan in different forms. They purchase and discount the bill for exchange foreign currency. The commercial banks pool together the savings of the community and arrange for productivity use. It fulfills the financial needs of modern business. They accept deposit from public which are repayable on demand or on short notices. They cannot afford to invest their funds in long term securities or loan. Their business is restricted to financing the short term needs. They provide the working capital required for trade and industry. They cannot afford to supply the block capital required for the purchase of fixed assets. There are 28 commercial banks in operation in Nepal.

A Brief Profile of Rastriya Banijya Bank

The history of organized financial institutions in Nepal began in 1937AD, after the establishment of Nepal Bank Limited (a semi government commercial bank). This bank mainly provide credit for trade and commerce before the establishment of NRB, Nepal Bank was acting as commercial bank as well as central Bank and performs the roles and activities of central bank too. Integrated and speedy development of the country is possible only when competitive banking service reaches nooks and corners of the country.

Rastriya banijya bank limited was established on January 23, 1966 (2022, Magh-10), a synonymous of stable and people's bank in Nepal. RBB limited is one of the pioneer Bank in the country with the history of nearly a half century. Earlier constituted under RBB act 2021 with the full ownership of the government of Nepal, the Bank has been running under Bank and Financial Institute Act (BAFIA) and Company Act (CA) 2063 at present. The Bank licensed by NRB as a 'A' class commercial Bank of the country, has grown up as an indispensable component of the Nepalese economy.

RBBL – which has made glorious history of contributing for the monetization of the economy, eliminating dual currency in the market, initiating preliminary financial literacy, help flourish industrial, commercial and financial sector of the country has now emerged as a modern and strong financial institute of the country. The Bank with 2600 hands has expanded its wings in the most part of the country through multiple distribution outlets of 171 branches, 17 counters, 28 branch less banking (BLB) and 80 ATMs. The Bank with the highest public confidence-reflected in the highest deposit base and growing demand for branch establishment in the various parts -has stood as a pyramid in the financial arena of the country. The Bank with as many as 1.7 millions satisfied /direct customers ranging from poor to elite ones and millions of indirect ones, has drawn important imprint in the picture of country's economy through its significant involvement in the best use of its resources to enhance the production, income and employment opportunities. The Bank is fully committed to contribute its best for the socio economic development of the country and people in the days to come. Keeping this in mind, government set up Rastriya Banijya Bank (RBB) in B.S.2022/10/10 as a fully government owned commercial Bank with the following objectives:-

i. Expand the monetary services all over the country, mostly in rural areas.

ii. Promote the small and medium enterprise by the easy excess of loan facilities.

iii. Provide the banking services in a wider outreach without a sole objective of making profit.
iv. Develop financial infrastructure to accelerate development activities and energize the Nepalese economy.
v. To provide the financial services to all Nepalese and capture small savings and recycle deposits to enhance productive growth of the economy.

RBB has the largest branch network in Nepal, covering 171 branches, 5 Regional Offices in 68 Districts. The Branch Operations Department is responsible for supervising the 171 branch network. The Internal Audit Department monitors the work of the branches and regional offices.

RBB is committed towards the satisfaction of its customers by providing modern banking facilities. At the same time; the Bank is equally committed to the economic growth and development of the country. The Bank aims to reach every rural and urban corner of Nepal to accommodate the requirement of the people. (www.rbb.com.np)

1.2 Focus of the Study

The main focus of this study was to have deep insight about the non-performing loan and loan loss provision of selected Nepalese commercial banks and make case study of non-performing loan and loan loss provision on Rastriya Banijya Bank Ltd. Credit policy of any commercial banks is major policy because it affects overall health of commercial bank. So commercial banks are very aware about credit policy. They are cautious while issuing loan and advances to their customer, still banks have to face NPLs. Most of Nepalese commercial banks are facing the problem of NPL and they are increasing. This study mainly focuses on non-performing loans or assets of RBB.

1.3 Statement of the Problems

Commercial banks are indispensable institutions which act as intermediately between lender and borrower. These institutions are necessary to assist in economic growth and economic development. Any country in the world strives for economic growth and economic development because it is distinct mean for wholesome development of country. Aspiration of people for peace and prosperity is possible only if economic growth and economic development continues in wholesome manner in country. Commercial banks collect money from depositors in small amount to huge amount these deposited money are disbursed to borrowers as loan advances. These loan and advances are capital for business enterprises. So repayment of loan and advances to banks as principle and interest depends upon the economic and financial health of these business enterprises. Besides the economic and financial health of these enterprises, the attitude of owner, legal practices of the land etc. also effects in the repayment of loan and advances. The underlying collateral also effect in the repayment or compensation of loan and advances.

Financial institutions operating in Nepal have to undergo various kinds of problems. They have limited investment opportunities. The available opportunities are also competitive because of existence of many commercial banks. The credit extended by the commercial banks to agriculture and industrial sector is not satisfactory to meet the present growing need of the development of the country. Nepotism and political influence also effects the investment decision of the commercial banks. Granting loans against insufficient deposit, overvaluation of goods pledged, land building mortgaged, risk averting decision regarding loan recovery and negligence in recovery of overdue loan is some of the basic loopholes and the unsound investment policy sighted in the banks. Therefore, investment of commercial banks is not that productive. This has caused various problems to commercial banks. Timely repayment of loan is always expected by commercial banks from borrowers but it is dwindling. As a result bad debt and not-performing loans are increasing which has invited the rise to NPL. This NPL has many implications in the banks. First, it directly affects profitability of commercial banks. On the other hand, they get loss in their investment. Specifically this study is connected to search answer of the following questions;

- What are the causes of the increment of NPL with reference to RBBL?
- What is the trend and actual level of NPL and LLP in RBBL?
- What is the overall effect of NPL on the profitability of RBBL?
- What is the actual level of loan and advances granted by RBBL?
- What is the provision for loan loss in RBBL?
- Does regulation and policy framework of NRB sufficient enough to control NPL level?

1.4 Objectives of Study

The major objective of this research is to examine the level of non-performing loan or assets (NPLs) and loan loss provision. The specific objectives are:

- To describe status of Non-Performing Loan of RBBL.
- To assess the impact of non-performing assets in the profit of RBBL.
- To analyze relationship between loan & advances granted by RBBL and loan loss provision in the bank.

1.5 Significance of the Study

NPL is becoming prominent problem in commercial banks. Good investment policy of the bank has positive impact on economic development of the country and vice versa but due to various reasons investment policy of commercial banks are not effective and productive. Non-productive loan increases non- performing assets and non-performing loans. This increases loan loss provision according to the directive of Nepal Rastra Bank, central bank. The portfolio of loan provision and loan loss provision affect its overall financial strength of the banks. This research is conducted to highlight present issues regarding non-performing and loan loss provision. There are some researches conducted on NPAs (i.e. NPL) concerning various commercial banks in Nepal. They have conducted research just to show the NPA position in various commercial banks. But this research will compare NPA status and its effects in various aspects of their major act ivies like loan lending, deposit collection etc. between private bank and government bank.

1.6 Limitation of the Study

The study is important document in context of NPL and loan loss provision problem in Nepalese financial sectors. Finding of the study might be very much useful for academicians as well as for practitioners. As every study it is also not free from some limitations. This also suffers from following limitations:

- This study is concerned with non-performing loans of commercial bank with reference to RBBL.
- The study period is limited for 5 yrs from fiscal year 2011/12 to 2015/16.
- The study is basically based on secondary data of respective Bank.
- The result of the study may not be thoroughly applied over all types of Commercial banks.
- As the time is limited data and information are also limited.

CHAPTER - 2

REVIEW OF LITERATURE

This part of the study tries to review the literature related to the study non-performing assets and its overall consequences. This chapter helps to take adequate feedback to broaden the information based and inputs to study. The chapter includes main two sections, the first section deals with the conceptual framework of the study while the second section deals with review of previous study i.e. Books, articles, journals, dissertations etc.

2.1 Conceptual Framework

Non-performing loans are the loans that do not repay principal and interest timely to the bank. A common feature of NPL appears to be that if a payment is more than 90 days past due. In Nepal, if the loan is past due over 3 months, it is NPL. A loan is an asset for a bank as the interest payments and the repayment of the principal creates a stream of cash flows. It is from the interest payments a bank makes its income and profits.

A bank is judged on the basis of capital, Assets Quality, Management, Easing, Liquidity and sensitivity to market risk (CAMELS). Almost all the government Banks are running at loss. Though almost all the private sectors banks are showing profit, it is very difficult to call them sound if appraised from CAMELS approach. Some banks have very low capital adequacy ratio (CAR) while some bank have piled up Non-Performing Assets(NPAs). The people have been raising questions over the correctness of credit classification and provisioning of some banks should the suspicion come true, it will prove very costly to the depositors, creditors and national economy as whole. It would be prudent to advice NRB to strictly implement it's recently introduction directive so that other banks avert the fate of NBL, RBB and NIDC (Kerlinnger and Wilnston; 1986:24).

The item 'advance and loan' comes next in the order of liquidity. For all practical purposes, we may say that they are not shift able. Of course, this is the most profitable asset and the profit is mainly derived from these assets. As a rule, a commercial banker will generally lead only for short-term commercial purposes. It is not his duty to provide long-term loans for investment purposes. Such loans are provides by specialized agencies like industrial banks. The reason advanced in support of this view is that in the case long-term loan the banker will find it difficult to realize them when emerges arise. For instance, in the case of a mortgage, the mortgaged properly may cover the loan with a safe margin. But when the bank needs liquid cash most, it may find it difficult to convert the mortgaged property into liquid cash. Here in lays the meaning of the off quoted statement. 'The art of banking' lies in knowing the differences between a mortgage and bill of exchange (Wolf and Pant; 2002:25).

The timing of loan repayment is a basic term of bank's lending policy. Loan repayment is generally agreed upon prior to the extension of the loan and should represent a realistic evaluation of the customer's ability to repay. The objective is to secure repayment through liquidation of the transaction being financed by rather than through forced sale of the pledged security. Therefore, term and condition of loan repayment is highly influenced by the nature of transaction type of the loan and the period of loan(Baidhya; 1999:13).

Performing assets are those assets loans that repay principal and interest to the bank from the cash flow it generates. Loans and risky assets though a bank invests most of its resources in granting loans and advances. If an individual bank has around 10% non-performing assets/loan (NPAs), it sounds the death knell of that bank ceteris paribus. The objective of sound loan policy is to maintain the financial health of the banks, which results in safety of depositors' money and increase in the returns to the shareholders. Since the loan is risky asset, there is inherent risk in every loan. However, the bank should not take risk above a certain degree irrespective of returns prospect (Panday, 2000:36).

Loan review is not a luxury, but a necessity for a sound bank lending program. It not only helps management spot loan-problem more quickly, but also acts as a continuing check on whether loan officers are adhering to the bank's loan policy. For this reason, and to promote objectivity in the loan review process, many of the largest banks separate their loan review personal from the loan department and the bank's board of directors in assessing the bank's overall exposure to risk and its possible need for more capital in the future. Separate loan review division also helps to detect any mishaps and undue influences in the lending process, if any (Singh, 1999:214).

2.1.1 Loan and Advances

The major function of commercial banks is to collect deposits or funds and disburse it to investors as loan and advances. This loan and advances are main sources of income. Loan and advances dominate the assets side of balance sheet of any bank. Same way earning from loans and advances occupy a major portion of the income statement of the banks. This asset generates income to the bank. So it also determines profitability of banks. Loan and advances granted to customers earns interest. This interest is major source of income of banks. Loan is granted as overdraft cash credits and direct loans. Banks grant loan on the base of collateral underlying the loan. Banks make careful assessment before granting loans to investors or business enterprises.

2.1.2 Performing Assets/Loans

Performing loans are those loans, which repay principle and interest timely to the bank from the cash flow it generates. In other word, performing loan are the productive assets that generate some profits. Loans have the certain period to return its principle with its interest. If anyone repays loan with its interest on time is known as the performing loan. It is the most profitable assets of bank. Its help in rapid growth of banking sector in this fast pace competitive age. Better performing loan are the symbol of success of bank. It ultimately helps in economic growth and development. So such loans are necessary for overall development and prosperity of country. However, many banks are suffering from the non-repayment of loan amount.

2.1.3 Non-Performing Assets/Loans (NPAs/NPLs)

NPA in terms of banking sector consist of those loans and advances, which are not performing well and likely to turn as bad loans. Once the borrower has failed to make interest and principal payments for 90 days the loan is considered to be non-performing assets. Non-performing assets are problematic for financial institutions since they depend on the interest payments for income. One of the most emerging problems of the commercial banks is to the management of non-performing assets/loans.

"NPA can be defined as the non-productive assets of the banks. In other words, it is the loan or bad debt and doubtful debts that does not repay timely. Generally the loan which does not repay within three months is known as non-performing loan. The loan amount that does not covered by collateral after selling is also known as non-banking assets (NPA), Non-performing assets also includes the suspend interest. It is the interest, which becomes receivable. Unutilized assets and those investments which do not generate any cash or incomes to the bank are also non-performing assets (NPAs). The proper management of those assets to generate income is known as management of non-performing assets"(Regmi; 2062 B.S. 85:75).

According to the NRB, central banks NPAs are classified loans and advances according to their nature of overdue timing. NRB has directed to maintain loan loss provision according to aging basis for risk mitigation. The loan provision is to LT be maintained by debiting profit account. Thus as the quality of loan degrades the ratio of loan loss provision is increased affecting the profitability of the banks.

2.1.4 Cause of Occurring NPAs

There are various causes to increase the NPAs. NPAs can be increased due to:

- Lack of Effective Credit Appraisal Techniques
- Wrong credit delivery timing
- Lack of transparent and clear lending policy
- Lack of effective and scientific forecast in the actual outcomes of business.
- Lack strong willingness in managerial level of banks.
- Lack of proper legal framework.
- Inadequate Monitoring

2.1.5 Effect of NPAs

Its direct effect is on the profitability of commercial banks. In future, it affects overall performance of banks. It also affects liquidity ad competitive functioning of public and private sector banks and finally the psychology of the bankers in respect to their disposition towards credit delivery and credit expansion.

“Increasing Non-Performing Assets has the direct effects to banks, investors and customers. It has negative impact to the economic health and business of country. It has two types of effects”, (Batra and Dass; 2003:76). Internal Effects Profitability is major objective of any business enterprises and commercial banks are not exceptional. But commercial banks cannot mobilize the non-performing assets to increase profitability. They also have to make provision for doubtful debts from their profits and other resources. That's why the profit of banks decreased and may cause losses. As a result, share capital also becomes capital erosion and capital inadequacy. The central bank can take action on those banks, which have low capital or capital adequacy ratio. When the non-performing assets increase, the banks have to increase the amount of provision for doubtful debts and when the loan is repaid, the profit treated as profit. If the provision for doubtful debts crosses 5% of the total loan amount, the bank have to pay income tax as profit. So, it has direct effects to the cash flow of banks'. As a result, the employment of human resources and profit of the bank has also affected.

A) External Effects

The banks accept deposits from the public and provide loan to the operation of business and other purposes. When the loan does not return with interest, it becomes non-performing assets and banks will not be able to return the deposited amount to their customers. If the banks unable to return the deposited amount the banks are loosed public supports and faiths. Not only that much but also. The banks have to take loan at a higher rate to pay deposit, which directly affects the profitability of banks and which leads the bank bankruptcy and dissolve. It also affects the monetary system and economy of the country.

B) Impact on Profitability

The NPAs has negative impacts on the profitability of the bank. Non-performing assets are the idle assets of the banks, which do not generate any return for the banks. Thus, we can say that the NPAs reduce the profitability of the banks due to the becoming the idle resources. Not only has it reduced the profitability of the banks bur also it may causes for losing the customer's faiths and supports.

C) Impact on the Outlook of Banker towards Credit Delivery

The psychology of the banks today is to insulate them with zero percent risk and turn lukewarm to fresh credit. This has affected adversely credit growth compared to growth of deposits, resulting a low C/D ratio around 50% to 54% for the industry. It is evident that the existence of collateral security at best may convert the credit extended to productive sectors into an investment against real estate, but will not prevent the account turning into NPA. Further blocked assets and real estate represent the most illiquid security and NPA in such advances has the tendency to persist for a long duration. Nationalized banks have reached a dead-end of the tunnel and their future prosperity depends on an urgent solution of this hovering threat.

D) Excessive Focus on Credit Risk Management

The most important business implication of the NPAs is that it leads to the credit risk management assuming priority over other aspects of bank's functioning. The bank's whole machinery would thus be pre-occupied with recovery procedures rather than concentrating on expanding business. A bank with high level of NPAs would be forced to incur carrying costs on a non-income yielding assets. Other consequence would be reduction in interest income, high level of provisioning, stress on profitability and capital adequacy, gradual decline in ability to meet steady increase in cost, increased pressure on net interest margin (NIM) thereby reducing competitiveness, steady erosion of capital resources and increased difficulty in augmenting capital resources. The lesser-appreciated implications are reputation risks arising out of greater disclosures on quantum and movement of NPAs, provisions etc. the non-quantifiable implications can be psychological like 'play safe' attitude and risk aversion, lower morale and disinclination to take decisions at all levels of staff in the banks.

Two decades of regimented and directed banking to credit delivery has deprived bank managers of the instinct skill and knowledge. Nationalized banking did not produce a spring of talent resources. Directive inputs and course direction came externally from NRB and Finance Ministry, which were external to the day-to day affairs and problems of the Nepalese banking industry. The system did not promote initiative and talent, but bred corruption and nepotism. This is the sense of Nepalese Banking struggling hard to transaction from old primitive systems and values to modern professional business ethics and corporate good governance.

E) High Cost of Fund Due to NPAs

Quite often genuine borrowers face the difficulties in raising funds from banks due to mounting NPAs.' Either the bank is reluctant in providing the requisites funds to the genuine borrowers or if the funds are provided, come at a very high cost to compensate the lender's losses caused due to high level of NPAs. Therefore, quite often corporate prefer to raise funds through commercial papers(CPS) where the interest rate on working capital charged by banks in higher. There are other various pressing factors that are relevant from the point of view Nepalese banking operations with a view to focusing on NPAs and its related effects:

F) Excess Liquidity Lending Default

The banks in Nepal are faced with the problem of increasing liquidity in the System 'Further, the Rastriya Banijya Bank (RBB) is increasing liquidity in the system through various rate cuts. Banks can get rid of its excess liquidity by increasing its lending but, often shy away from such an option due to the high risk of default In order to promote certain norms for healthy banking practices, most of the developed economies require all banks to maintain minimum liquid and cash reserves broadly classified into cash Reserve Ratio (CRR) and the Statutory Liquidity Ratio (SLR). A rate cut (for instance, decrease in RR) result into lesser funds to be locked up in NRB's vaults and further infuses greater funds into a system. However almost all the banks are facing the problem of bad loans, nonperforming? Assets, thinning margins, etc, as result of which, banks are little reluctant in granting loans to corporate. As such, though in its monetary policy NRB announces the bankers no longer warmly greet rate cut but such news.

2.1.6 Loan Loss Provision

Risk exists if there are two or more than two outcomes. There is risk in every loan. Loan loss provision is the accumulated fund that is divided as safeguard to cover possible losses. It means that it is accumulated provisioning fund, which is used as safety fund to cover future losses. It is the expected provision fund. The amount of required for provisioning depends upon the level of NPAs, trends of repayment of loan and economic stage of country. The high quality loan requires low loss provision, whereas bad loan requires high loan loss provision. Loan loss provision made for performing loan is called" general loan loss provision" and loan loss provision made for non-performing loan is called specific loan loss provisioning".

2.1.7 Principles of Lending Loan and Advances

The precautions to be taken by a banker, and the principles to be taken care of, While granting advances. By way of introduction, an attempt is being made in the following paragraphs to discuss the general principle to be in mind by a banker while grating advances (Shekher and Shekher; 1999:551).

A) Liquidity

The term 'liquidity' implies the ability to produce cash on demand. A bank mainly utilizes its deposits for the purpose of granting advances. These deposits are repayable on demand or on the expiry of a specified period. In either case, the banker must be ready to meet these liabilities whenever necessary. The advances granted by the banker are as liquid as possible.

B) Profitability

Banks are essentially commercial ventures. It is true that excessive and unjustifiable profits can only be at the cost of the customers, in so far higher lending rates push up production costs, and in the ultimate analysis, adversely affects society in general. At the same time, the facts remain that while strong operation profits allow for full prudential provisioning high net profits allow for allocation to capital and reserves, which is essential for any bank to maintain its competitive viability and expand its lending operations. Also, the shareholders of banks are entitled to reasonable dividend. All this indicates that it is that their lending operations are sufficiently profitable.

C) Safety and Security

The banker should ensure that the borrower has the ability and will to repay Advances as per agreement. The banker should carefully consider the margin of Safety. If it is as unsecured advance, it repayment depends on the creditworthiness of the borrower, and that of guarantor. The banker should consider the Charter, Capacity and Capital or reliability, Responsibility and resources of the borrower and the guarantor.

D) Purposes

The banker has to carefully examine applied. Of course the exact purpose the purpose for which the advance has been for which the advance is actually utilized. There is always the possibility that the advances, once granted, may be diverted for purpose so that indicated by the borrower at the time application. Thus there should be proper analysis of purpose.

E) Social Responsibility

While admitting that banker are essentially commercial venture, a bank should not forget the fact that it is not enough that only people of means are given banks finance. The identification of property sectors for the purpose of extending bank credit should be considered as a positive development in the banking system, aimed at effectively discharging its responsibility towards society. At the same time, this social responsibility should not deter the banks from paying adequate attention to the qualitative aspects of lending. Social responsibility is, no doubt, highly exacting.

2.2 Review of NRB Directives

NRB issues various directives relating banking regulations and prudential norms. Among various directives issued in Unified Directives 2066 (Amended each year) B.S. directive No.2 is relating to loan Classification and provisioning.

Directive No. 2: Loan Classification and Provisioning

Nepal Rastra Bank act, 2058 B. S., granted the central bank full independence in the pursuit of its mandate .It is the duty if independent central bank to be transparent and to communicate. Nepal Rastra Bank's act 2058 B.S. mentioned its role at preamble" where as, it is expedient to established a Nepal Rastra Bank to function as the central bank to formulate necessary monetary and foreign exchange policies, to maintain the stability of price, to consolidate balance of payment for sustainable development of the economy of the kingdom of Nepal, and to develop a secure, healthy and efficient system of payment, to appropriately regulate, inspect and supervise I order to maintain the stability and healthy development of banking and financial system, and for the enhancement of public credibility towards the entire banking and financial system of country. "To fulfill the theme that mentioned on its preamble of act, 2058 B.S. the act 2058 B.S. Chapter 2 sections 4 defined the objectives of Nepal Rastra Banks. Objectives (d) and (e) are related to manage bank and financial system, which are as follows:

- To regulate, inspect, supervise and monitor the banking system
- To promote the entire banking and financial system of the kingdom of Nepal and to enhance its public credibility.

To fulfill objectives as a central bank Nepal Rastra bank issue various directives. Banking business is changing day by day not only from the external element but also within the banks. It is also observed from different element of the society that banking in Nepal is not being operated in such a manner to deserve sufficient public confidence. It is also not operated with due consideration of its long term financial health. This environment in banking business is not only the challenge to the individual bank but also became big challenge to banking and financial as whole and more to the central bank of the country. In order to safe guard from future damage on the banking sector and to have health competition with the banking sector, new directives on code of ethics may help a lot this banking industry.

Directives related to loan classification and provisioning (Unified Directives No.2) effective from FY 2071 /72 B.S., banks shall classify outstanding loan and advance on the basis of aging of principal amount into the following 5 categories

1) Pass

Loans and advances whose principal amount is not past due for period up to three months shall be included in this category. These are classified and defined as performing loans.

2 Watch list

All loan and advance, whose borrowers missed the loan repayment deadline by a month. If the borrower maintained negative working capital, cash flow or net worth for two consecutive years. If borrowers failed to clear payments of domestic raw material suppliers or if, renewal process of loans, such as working capital was delayed.

3) Sub-Standard

All loans and advances that are past due for a period of 3 months to 6 months shall include in this category.

4) Doubtful

All the loans and advances which are past due for a period of 6 months to 1 year will be included in this category.

5) Loss

All loans and advances, which are past due for one year or a period of more than 1 year as well as advances which have least possibility of recovery or considered unrecoverable and those having thin possibility of even partial recovery I future shall be included in this category. Loans and advances failing in the category of sub-standard, Doubtful, and loss are classified and defined as Non-performing Loan.

Directive No. 2(a): Additional Arrangement in Respect of "Pass" Loan

Loan and Advances fully secured by bullions, fixed deposit receipts and Government of Nepal securities shall be included under "Pass" category. However, where collateral of fixed deposit receipt or Government of Nepal Securities or NRB Bonds is placed as security against loan for other purposes, such a loan has to be classified on the basis of ageing loan against FDRs of other banks shall also qualify for inclusion under Pass Loan.

The respective overdue period of pass, sub-standard and doubtful loans will be considered for higher classification from the next day of date of expiry of the overdue period provided for each class.

Directive No. 2. (b): Additional Arrangement in Respect of "Loss" Loan

Even if the loan is not past due, loans having any or all of the following discrepancies shall be classified as "loss".

a. No security at all or security that is not in accordance with the borrower's agreement with the bank.
b. The borrower has been declared bankrupt.
c. The borrower is absconding or cannot be found

d. Purchased or discounted bills are not realized within 90 days from the due date.
e. The credit has not been used for the purpose originally intended.
f. Owing to non-recovery, initiation as to auctioning of the collateral has passed six months and if there convey process is under litigation.
g. Loans provided to the borrowers included in the blacklist and where the credit information bureau blacklists the borrower.

Note

Bills purchased/ discounted are to be classified in to loss loan where they are not realized within 90 days from due date. This is departure from the normal Classification rules applicable to other loans. Accordingly, it bills would have only two classification viz. Pass and Loss.

Directive No. 2 (c): Additional Agreement in Respect of "Term" Loan

In respect of term loans, the classification shall be made against the entire outstanding loan on the basis of the past due period of overdue installment.

Loan Loss Provision

The loan loss provisioning, on the basis of the outstanding loan and advances and bills purchases classified as per this directives, shall be provided as follow:

Table: 2.1

Loan Loss Provision

S.N	Classification of loan	Period beyond Prescribed Limit	Loan loss provision
1	Pass	Not matured	1%
2	Watch list	Crossed only 3 month after maturity, maintained negative working capital, if renewal process of loans, such as working capital, was delayed.	5%
3	Sub-standard	Crossed 3-6 months after maturity	25%
4	Doubtful	Crossed 6-12 months after maturity	50%
5	Loss	Crossed 1 year maturity	100%

Source: NRB Directives no.2, 2071

Loan Loss provision set aside for Performing Loan is defined as "General Loan Loss Provision" and Loan loss provision set aside for non performing loan is defined as "specific Loan Loss Provision".

Where the banks provide for loan loss provisioning in excess of the proportional required under the directives of NRB, the whole amount of such additional provisioning may be included in General Loan Provision under the supplementary capital.

Directive No. 2 (d): Additional Provisioning in the case of Personal Guarantee Loan

Where the loan is extended only against personal guarantee a statement of the assets, equivalent to the personal guarantee a mount not claimable by any other shall be obtained. Such loans shall be classified as per above and where the loans fall under the category of pass, sub-standard and doubtful, in additional to the normal loan loss provision applicable for the category, an additional provision by 20% point shall be provided. Classification of such loan advances shall be prepared separately. Hence, the loan loss provision required against the personal guarantee loan will be 21%, 45% and 70%, for pass, substandard and doubtful category respectively.

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

In respect of loans and advances failing under the category of substandard, Doubtful or loss, banks may reschedule or restructure such loans only upon receipt of a written plan of fraction from the borrower citing the following reason:

a. The internal and external causes contributing to deterioration of the quality of loan.
b. The reduced degree of risk inherent to the borrower/enterprise determined by analyzing its balance sheet and profit and loss account in order to estimate recent cash lows and of project future ones, in addition to estimate recent cash flows and to project future ones, in addition to assessing market conditions.
c. Evidence of existing of adequate loan documentation
d. An evaluation of the borrower/enterprise's management with particular emphasis on efficiency, commitment and high standards of business ethics.

Directive No. 2 (f): Loan Loss Provisioning in Respect of Rescheduled, Restructured or Swapped Loan

a. Except for priority sector, in respect of all types of reschedule or restructured or swapped loan, if such credit falls under pass category according to NRB directives, loan loss provisioning shall be provided at minimum 12.5%
b. In case of rescheduling or restructuring or swapping of insured or guaranteed priority sector credit, the loan loss provisioning shall be provided at one fourth of the percentage mentioned in clause (a).
c. In respect of swapped loans, the bank accepting the loans in swapping has to provide loan loss provision classifying the loans under the same classification as were existing. The bank accepting the loan in swapping shall obtain certification from the concerned bank of financial institutions as to the existing classification.

Directive No. 2 (g): Provisioning Against Priority Sector Credit

Full provisioning a per normal loan loss provisioning shall be made against the Uninsured priority and deprived sector loan However in respect of insured loans requisite provisioning shall be 25% of the percentage normal loan loss provisioning. The required provisioning in the case of insured priority/ deprived sector credit is as follows.

Table: 2.2

Provisioning Against Priority Sector Credit

Pass	0.25
Sub standard	5%
Doubtful	12.5%
Loss	25%

Source: NRB Directive No. 2, 2068

In case of rescheduling, restructuring or swapping of insured or guaranteed priority sector credit, the proportion of loan loss provision would be 3.125% (Being 25% of 12.5%).

Non Performing Asset means an asset or account of borrower, which has been classified by a bank or financial institution as sub-standard, doubtful or loss asset, in accordance with the directions or guidelines relating to asset classification issued by RBI. An amount due under any credit facility is treated as "past due" when it has not been paid within 30 days from the due date. Due to the improvement in the payment and settlement systems, recovery climate, up gradation of technology in the banking system, etc., it was decided to dispense with 'past due' concept, with effect from March 31, 2004.Accordingly, as from that date, a Non performing asset (NPA) would be an advance where:

a. Interest and/ or installment of principal remain overdue for a period of more than 180 days in respect of a Term Loan.
b. The account remains 'out of order' for a period of more than 180 days, in respect of an overdraft cash Credit (OD/CC).
c. The bill remains overdue for a period of more than 180 days in the case of bills purchased and discounted.
d. Interest and/ or installment of principal remains overdue for two harvest seasons but for a period not exceeding two half years in the case of an advance granted for agricultural purpose ,and
e. Any amount to be received remains overdue for a period of more than 180 days in respect of other accounts.

With a view to moving towards international best practice and to ensure greater transparency, it has been decided to adopt the '90 days overdue' norm for identification of NPAs, form the year ending March 31, 2004. Accordingly, with effect from March 31, 2004, a non-performing asset (NPA) shall be a loan or an advance where:

a. Interest and /or installment of principal remain overdue for a period of more than 90 days in respect of a Term Loan,
b. The account remains 'out of order' for a period of more than 90 days, in respect of an overdraft cash Credit (OD/CC),
c. The bill remains overdue for a period of more than 90 days in the case of bills purchased and discounted,
d. Interest and/ or installment of principal remains overdue for two harvest seasons but for a period not exceeding two half years in the case of an advance granted for agricultural purpose, and
e. Any amount to be received remains overdue for a period of more than 90 days in respect of other accounts.

(Dhungana, 2006). had written an article on *“NPLS and its management*" in Banking Prabradan, expired an introduction of NPL and its problem in commercial banking sector. It explains the main cause for high level of NPL in the Nepalese banking system and gives instruction of how to solve the NPL problem? It describes the steps initiated by NRB to control the level of NPLS in the system.

(Ferguson, 2007). conducted a research on “*Observations on the Securitization of Non- Performing Loans in Russia*”. Asset securitization is a burgeoning trend in Russia as companies burdened by poor credit ratings seek access to capital at lower costs than they would be allowed in traditional equity or debt markets. Study indicates that securitization of these bad loans has not occurred in Russia at the levels one might expect. This has been due to both relatively small amount of loans that under- perform as well as legal and regulatory impediments that have discouraged investors and lenders alike.

(Ghimire, 2008). in his article titled "*Credit Sector Reform and NRB*" has tried to highlight the effects of change or amendment in NRB directives regarding loan classification of loan loss provisioning." Study focused on maintaining financial discipline by financial institutions through adopting appropriate mechanisms and system to retain the banking capacity. Although the circumstances leading to financial problem or crisis in many Nepali banks differ in many respects, what is a common are most of the bank is the increased size of non-performing-assets (NPAs).To resolve the problem of the loan losses or likely losses of this nature facing the industry NRB has as the central bank amended several directives and issued many new circulars in the recent years"

Financial crisis in banking sector is due to weak accounting procedures, defect in loan classification, lack of transparency, loss control measure etc (Neupane, 2008). Internal measures comprise classification of loan and advances and providing provision for probable loss and external measure comprises to help from Credit Information Bureau (CIB), appointment of Asset Management Company (AMC) and Debt Recovery Tribunal (DRT). He concludes, banks must give priority for reducing NPA. He also mentioned that many countries are adopting various measures for reducing loan loss. Recently the president of Philippines has announced tax rebate system for reducing NPA. Now it is high time improved bad debts of banking sector with firm determination.

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

Non-performing Loans (NPLs) or credit risk encapsulates the potential loss in the event of credit deterioration or default of a borrower (Elaine, 2007). Thus a sound credit appraisal of loans is very important to the creditor. As argued by Dorfman (1998), bankers required an understanding of credit standards, the process by which credit worthiness and credit structure are analyzed, decision-making techniques, negotiation, follow-up and problem resolution, in order to effectively manage credit risk. Abolo (1999) supported Dorfman's assertion and presented his own principles of lending under three headings, i.e. safety, suitability and profitability of credit, which equally compel bankers to follow the lending rules. Although credit depends on good faith, and no matter the amount of confidence that parties have on each other, it does not reduce the importance of scrutiny of these loan portfolios where good faith has been violated either deliberately or inadvertently.

Thus, the lenders must search for and avoid dishonest borrowers. This involves sound credit analysis, which Nwankwo (1991) describes as the process of assessing the risk of lending to a business or individual against the benefits to accruable from such investment. The benefits can be direct, such as interest earnings and possibly deposit balances required as a condition of the loan or indirect, such as initiation or maintenance of a relationship with the borrower, which may provide the bank with increased deposits and with demand for a variety of bank services. He argues further that credit risk assessment has two aspects. One is qualitative, and generally the more difficult; and the other quantitative. To evaluate the qualitative risk, the loan officer has to gather and appraise information on the borrower's record of financial responsibility, determine his true or correct need for borrowing, identify the risks facing the borrower's business under current and prospective economic and political situations, and estimate the degree of his commitment regarding the repayment.

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

Non-performing Loans (NPLs) are the most common causes of bank failures. This has made all regulatory institutions to prescribe minimum standards for credit risk management. The basis of sound credit risk management is the identification of the existing and potential risks inherent in lending activities. Measures to counteract these risks normally comprise clearly defined policies that express the bank's credit risk management philosophy and the parameters within which credit risk is to be controlled. De Servigny and Renault (2004) opined that specific credit risk management measures typically include three kinds of policies. One set of policies include those aimed to limit or reduce credit risk, such as policies on concentration and large exposure, adequate diversification, lending to connected parties, or over-exposure. The second set includes policies of asset classification which expose a bank to credit risk. The third set include policies of loss provisioning or the making of allowances at a level adequate to absorb anticipated loss-not only on the loan portfolio, but also on all other assets that are sensitive to losses.

(Murinde and Yaseen, 2012). in their article "*Management of NPA*" on management of NPA made it clear that the traditional approaches to bank regulation are not conducive for management of NPA. These approaches emphasized the view that the existence of capital adequacy regulation plays a crucial role in the long-term financing and solvency position of banks, especially in helping the banks to avoid bankruptcies and their negative externalities on the financial system. In general, capital or net worth serves as a buffer against losses and hence failure.

(Shingjergji, 2013) studied on "*The Impact of Bank specific Factors on NPLs in Albanian Banking System*". The researcher used capital adequacy ratio, loan to asset ratio, net interest margin and return on equity as determinants of NPLs. The study utilized simple regression model of panel data for the period of 2002 to 2012 and found that capital adequacy ratio has negative but insignificant whereas ROE and loan to assets ratio has negative significant effect on NPLs. Besides, total loan and net interest margin has positive significant relation with NPLs.

2.3 Research gap

Most of the studies mentioned earlier dealt about NRB Directives as a whole and generalized the matter about the objectives, purpose and impact of the directives to the commercial banks and financial institutions. Very few of them have gone specific about the position of the non-performing loans but none of them has written over the position of the non-performing loans taking RBB in specific. So, this study is conducted to make a specific review of the position of the non-performing loans with a specific case of RBBL. The study covers the data of only five fiscal years from 2011/12 to 2015/16 based on secondary data, which consist of banks publications, audited reports and other secondary sources. It may be the case that the bank is very old, so, many studies regarding this bank have been made compared to other elder commercial banks.

The study is focused on the position of the non-performing loans of the bank, norms fulfilled by the bank and its impact on profitability of the bank. The study has also reviewed few important items like trend of total deposits, loan, advances, and loan loss provision, which have important role to play in the position of NPL. Moreover, the study has incorporated the views and opinions of the bank officials with the help of questionnaires regarding NPL requirements set by NRB. In addition to that, the study has been able to incorporate the views of the stake holder regarding the causes and position of NPL. The studies certainly give clear picture of the position of the NPL of RBBL and identify the impact, cause and consequences of NPL.

CHAPTER - 3

RESEARCH METHODOLOGY

3.1 Introduction

Research is conducted for various reasons. Methodology is a design or framing of whole study. Good research result is based upon good and well planned research methodology. To accomplish research and find out the objective of research it must be systematically managed. This study has used mostly descriptive research methods. This study is only based on secondary data, as a data analysis tools, researcher has used the statistical and financial analysis tools to show the relations. This study aims to evaluate the impact of non-performing assets on various sectors of commercial banks. The objective can be achieved by analyzing the activities i.e. deposit, loan and advances and investment of commercial banks.

In the previous chapter, the conceptual framework regarding non-performing assets and relevant literature has been reviewed so as to broaden the base of this Study. As a result these study and analysis has become a major tool to choose research methodology. Research methodology refers to the various sequential steps to adopt by a researcher in studying a problem with certain objectives in view (Kothari; 1989). In other words research methodology describes the method, procedures and plans of conducting research. It is a blue print to achieve goal. Appropriate and adequate methodology yields more accurate conclusions and findings which ultimately help to recommend viable solutions to their research problems.

3.2 Research Design

Research design is the detailed outline of how an investigation was done. It is the specification of methods and procedures for acquiring the information needed. It is the plan, structure and strategy of investigation conceived so as to obtain answer to research question and to control variance. This study does not strictly follow entire aspect of a single research design. Mainly quantitative types of data and information have been processed. So, descriptive and analytical designs have been used to analyze the non-performing loan and loan loss provision of the sample banks. In order to ascertain the extent to which non-performing loan and investment policies are related; to describe whether these two or more other variables co-vary and if so, to establish the direction, magnitude and form of Observed relationship, analytical design is appropriate. Similarly, descriptive nature of associated problems and other objectives of the study, descriptive design would be additional benefit to make this study complete and meaningful.

3.3 Sources of Data

Basically, there are two types of data one is primary and second is secondary data. These data are classified on the basis of the nature of collection. Primary data: Primary data is collected for the first time and it is original in its form. On the basis of research questions information are directly gathered from the informant is known as primary data. These data are collected from the informant directly. These data are first hand information.

Secondary Data: Secondary data are reused data. Those data already collected by various individuals and organizations in the form of primary data and secondary data are known as secondary data. To conduct this study, secondary data are taken from annual reports of related office and their websites. So the major sources and types of data include these published sources,

- Financial statement of Rastriya Banijya Bank Ltd.
- Annual report of the banks
- Different previous studies
- Related bulletins, reports, periodically published by various government bodies.

3.4 Method of Analysis

Both statistical and financial tools are used in this study. The analysis of data was done according to pattern of data available. Because of limited time and sources, simple analytical statistical tools such as graph, percentage, Karl Pearson's co-efficient of correlation and the method of least square are adopted in this study. Similarly some strong tools such as ratio analysis and trend analysis have also been used for financial analysis. The various calculated results obtained through financial, and statistical tools tabulated under different headings. Then they were compared with each other to interpret the results.

3.4.1 Financial Tools

Financial analysis is the process of identifying the financial strength and weakness of the firm by properly establishing relationship between the item of balance sheet and profit and loss account (Pandey; 2000:108). While adopting financial tools a ratio is used as benchmark for evaluating the financial position and performance of any firm, "financial analysis is the use of financial statement to analyze a company's financial position and performance and to assess future financial performance (Wild et.al; 2003:13).

Ratio Analysis

Ratio analysis is the most effective tool of financial analysis. It is the widely used tool in financial analysis. A ratio simplify shows the relationship between the two variables or one another. It presents the relative strengths and weakness of any firm or organization. It also shows the financial growth of the organization and financial performances of the organizations. It summaries the financial figures and make quantitative judgment about the financial performances and positions. The relationship between two accounting figures expressed mathematically is known as financial ratio (Pandey; 2000:108). To make analysis we can use various ratios. But only those ratios have been calculated which are related to the research topic.

Loan and Advances to Total Assets Ratio

The loan and advances to total assets ratio measures the amount of loan and Advances in the total assets. It means that it shows the proportion of loan and Advances to total assets. High degree of loan and advances indicates the good position of the organization that of good mobilization of deposits of funds. In inverse, low degree of loan indicates that is no use of fund properly. Loan is the risky assets. Thus, higher loan and advances to total assets ratio shows high risk and inversely low loan and advances to total assets ratio shows low risk. Risk consist the uncertainty and future is uncertain. Thus, the loan and advances may or may not be recovered with its interest. This ratio can be calculated as follows:

$$\text{Loan and advances to Total Assets Ratio} = \frac{\text{Loans and Advances}}{\text{Total Assets Ratio}} \times 100\%$$

Loan and Advances to Total Deposit Ratio (CD Ratio)

The loan and advance to total deposit ratio shows the relationship between the loan and advance and total deposit. It shows how much fund of deposit is provided as loan and advance. This ratio is used to find out how successfully the banks are utilizing their deposited fund on credit or loan for profit generating purpose as loans and advances yield high rate of return. Higher CD

Ratio implies the better utilization of total deposits and better earning. Hence 70% to 80% CD ratio is considered as more appropriate. This ratio can be calculated as follows:

$$\text{Loan and Advances to Total Deposit Ratio} = \frac{\text{Loan and Advance}}{\text{Total Deposits}} \times 100\%$$

Non-performing Assets to Total Loans and Advances Ratio

This ratio determines the non-performing assets in the total loan and advances portfolio' Greater ratio implies the bad quality of loan of the bank. Hence lower non-performing assets to loans and advances ratio are preferable. As per international standard only 5%NPA is allowed but in the context of Nepal 10% NPA is acceptable. It is calculated as:

$$\text{NPA to Total Loans and Advances Ratio} = \frac{\text{Non-performing loan}}{\text{Loan and Advance}} \times 100\%$$

Non – performing Loan to Assets Ratio

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

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

Loan loss provision to Non-performing Assets Ratio

This ratio describes the proportion of provision held to non-performing assets of the bank. This ratio measures up to what extent of risk inherent in NPA is covered by the total loan provision. Higher ratio signifies that the banks are safeguarded against future contingencies that may create due to non-performing assets. So,, higher the ratio better is the financial strength of the bank. This is expressed as:

$$\text{Loan loss Provision to NPL} = \frac{\text{Loan loss provision}}{\text{Non-Performign loan}} \times 100\%$$

Return on Loans and Advances

This ratio indicates the proportion of the return over total loans and advances. It Describe show efficiently the bank has utilized and mobilized its resources in the form of loans and advances of the banks. Higher the ratio better is the performance of the banks and vice versa. It is calculates as:

$$\text{Return on Loan and Advances} = \frac{\text{Net profit}}{\text{Loan and Advance}} \times 100\%$$

3.4.2 Statistical Tools

The statistical tool is essential to measure the relationship of two or more variable. It is the mathematical technique used to facilitate the analysis and interpretation of the performances of the organizations. It also helps to present the data, show the relation and deviations or differences of variables of organizations. In this study, the following statistical tools are used:

Arithmetic Mean

The arithmetic mean or simple mean of set of observations is the sum of all the observation divided by the number of observations. It is the best value, which Represent to the whole group i.e. mean is the arithmetic average of a variable. Arithmetic mean of aeries is given by:

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

Where,

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

N= No. of Observation

This tool is used to find out mean of Total Deposit, total loan and advances Non-Performing asset, Loan Loss Provision.

Standard Deviation

The standard deviation is the absolute measure of dispersion in which the drawback present in other measure of dispersion as it satisfied most of the requisites of a good measure of dispersion. Standard deviation is defined as the positive square root of the mean as square of the deviation takes from the arithmetic mean. It indicates the range sand size of deviance from the middle or mean. It measures the absolute dispersion. Higher the standard deviation Higher will be the variability and vice versa. Dispersion measures the variation of the data from the central value. In other words, it helps to analyze the quality of data regarding its variability. It is calculate as:

$$\text{Standard Deviation (S.D.)} = \sqrt{\frac{\Sigma(X - \bar{X})^2}{n}}$$

This tool is used to calculate the deviation of total deposit, total loan and advances, loan loss provision and non-performing assets.

Co-efficient of Variation (CV)

Standard deviation is the absolute measure of dispersion. The relative measure of dispersing based on the standard deviation is known as the measurement of coefficient of standard deviation. The percentage of measure of co-efficient of so is called co-efficient of variation. Less CV is the more uniformity and consistency and vice versa. Only standard deviation is not appropriate to compare two pairs of variables but also CV is capable to compare two variables independently in terms of their variability. It is calculated as under:

$$\text{Coefficient of Variation (C.V.)} = \frac{\text{S. D.}}{\bar{X}} \times 100$$

This tool is also used to find out the consistency of total deposit, total loan and advance, loan loss provision and non-performing assets.

Correlation Coefficient (r)

Correlation coefficient is defined as the association between the independent Variable and independent variable. It is a method of determining the relationship between these two variables. If the two variables are so related change in the value of independent variable cause the change in the value of dependent variable then it is said to have correlation coefficient.

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

Where,

r = coefficient of correlation

ΣXY = Sum of product of two series.

ΣX^2 = Sum of squared in X series

ΣY^2 = Sum of squared in Y series

n = number of years

The value of this coefficient can never be more than + 1 or less than -1. Thus, + 1 and -1 are the limit of this coefficient. The r = + 1 implies that correlation between variables is positive and vice- versa. And zero denoted no correlation.

Probable Error of Correlation

Probable error of correlation is an old testing the reliably of an observed value of correlation coefficient. It is calculated to find the extent to which correlation coefficient is dependable as it depends upon the condition of random sampling probable error of correlation coefficient denoted by P.E (r) is obtained as

$$\text{P.E. (r)} = 0.6745 \times \frac{1 - r^2}{\sqrt{n}}$$

Where, r = Correlation Coefficient

n = no. of pairs of observation

Standard error reason for taking 0.6745 is that in a normal distribution Vn 5 % of observation lie in range ju±10.675 <x Where *ju and* a denotes the population mean and standard deviation.

P.E. (r) is used to test it an observed value of sample correlation coefficient is significant of any correlation in population.

If r is less than its P.E (r< P.E) it is not all significant correlation. If r is more than its P.E (r < 6 P.E) there is correlation.

If r is more than 6 times it's P.E. and greater than ±0.5, than it is considered correlation.

Trend Analysis

A series formed from asset of statistical data arranged in accordance with their Time of occurrence is said to be a time series. It is one of the statistical tools, which indicates the improvement or decrement of the financial situation. It helps to determine the future values of the variables. The way from which the maximum information can be drawn from the figure collected is known as the analysis of time series.

$Y = a + bx$

Where,

Y = trend value or dependent variables

a = Y intercept

b = Slope of trend line of the amount of change in Y variables that is an associate with change in 1 unit in X variable

x =Time variable

This is also very important statistical tools. This tool is used to forecast loan and advances, loan loss provision and non-performing assets and also net profit of the company.

CHAPTER – 4

DATA PRESENTATION AND ANALYSIS

In this chapter, efforts have been made to present and analyze the collected data. All the efforts have been made to analyze and Present the collected data from the various sources. This chapter is devoted to presentation and analysis of the selected data of Rastriya Banijya Bank Ltd. collected to fulfill the set objectives of the study. Under this chapter various financial ratios are used to analyze the non-performing loans and its relationships with other measures of bank performance. The financial indicator of the bank is compared with the help of ratio analysis, as well as statistical tools.

4.1 Ratio Analysis

4.1.1 Loan and Advances to Total Deposit Ratio

Loan and Advance is major function of commercial banks. Its circulation plays vital role in the profit of company and its overall performance of company. Banks must be able to use its fund and assets as loan and advances.

Same way deposit collection is major function of commercial banks. These deposit demands interest. Collected deposits in the form of saving and fixed deposits are to be paid certain interest. So, if banks are unable to mobilize these deposits in the form of loan and advances they may not be able to pay any interest. Finally and gradually they may go bankrupt. Hence it is always necessary to mobilize funds of commercial banks in the form of loan and advances.

The ratio of Loan and Advances to Total Deposit reveals the loan and advance situation of commercial banks. It shows how much of their deposit is utilized in the form of loan and advances. While disbursing deposit as loan and advance banks must act prudently. Banks deals with many people known as its clients in the form of depositor, creditor and other stake holders. These clients have their own problem and demands. They approach banks with different demands and problems. Banks have to disburse money to lenders and borrowers. So bank must have certain money to meet the needs of borrowers and lenders. Banks cannot use all deposits as loan and advance. Meantime bank cannot preserve deposit without using as loan and advances because they are obliged to meet the interest of deposit. The ratio is calculated by dividing Total Loan and Advances by total deposit as follow:

Table: 4.1

Total Loan and advance to Total deposit

(Rs. in Millions)

Year	**Loan and advance**	**Total Deposit**	**Ratio (%)**
2011/12	40,449	87,775	**46**
2012/13	49,045	91,098	**54**
2013/14	60,855	107,270	**57**
2014/15	75,836	124,221	**61**
2015/16	85,470	1 46,208	**58**
Mean	**55.20**		
S.D.	**5.12**		
C.V.	**9.30**		

Source: Appendix 1& 4

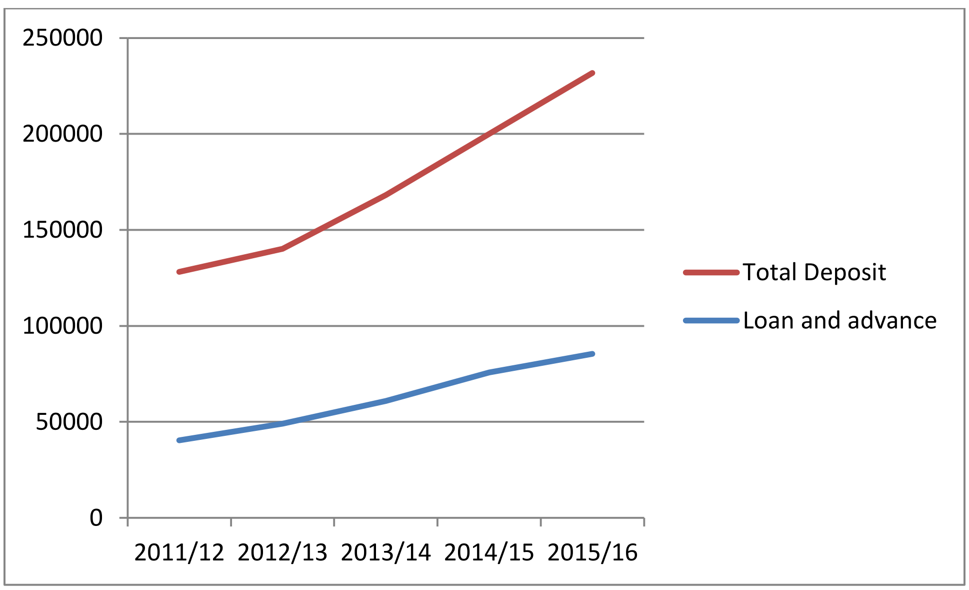
Table 4.1 shows that the loan & advances to total deposit ratio is in fluctuating trends. The Bank has higher ratio in each year and mean too. It indicates the better mobilization of deposit. The mean is 55.20%. The highest ratio is 61.00% in 2014/15 and lowest ratio is 46% in Fiscal year 2011/12. It reveals that the deposit is quickly converted into loans and advances to earn income. The greater ratio mean, signifies that the bank lend higher amount in the form of loans and advances to earn better returns. The S.D. and C.V is 5.12 and 9.30 respectively which signifies the less deviation.

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

Figure: 4.1

Total Loan and advance to Total deposit Ratio

4.1.1 Loans and advances to total deposit ratio:



4.1.2 Loan and Advances to Total Asset Ratio

Loans & advances is the major part of total assets for the bank. This ratio indicates the volume of loans & advances out of the total Assets. A high degree of the ratio indicates that the bank has been able to mobilize its fund through lending function.

However lending always carries a certain risk of default. Therefore a high ratio represents low liquidity and low ratio represents low productivity with high degree for safety in terms of liquidity. Followings are the summarized picture of total Loans and Advances and Total assets of Rastriya Banijya Bank Ltd.

Table: 4.2

Total Loan and advance to Total assets

(Rs. In Millions)

Year	**Loan and advance**	**Total Assets**	**Ratio**
2011/12	40449	100560	**40.22**
2012/13	49046	105742	**46.38**
2013/14	60855	126856	**47.97**
2014/15	75837	143782	**52.74**
2015/16	85470	174627	**48.94**
Mean	**47.25**		
S.D.	**4.09**		
C.V.	**8.66**		

Source: Appendix 1& 4

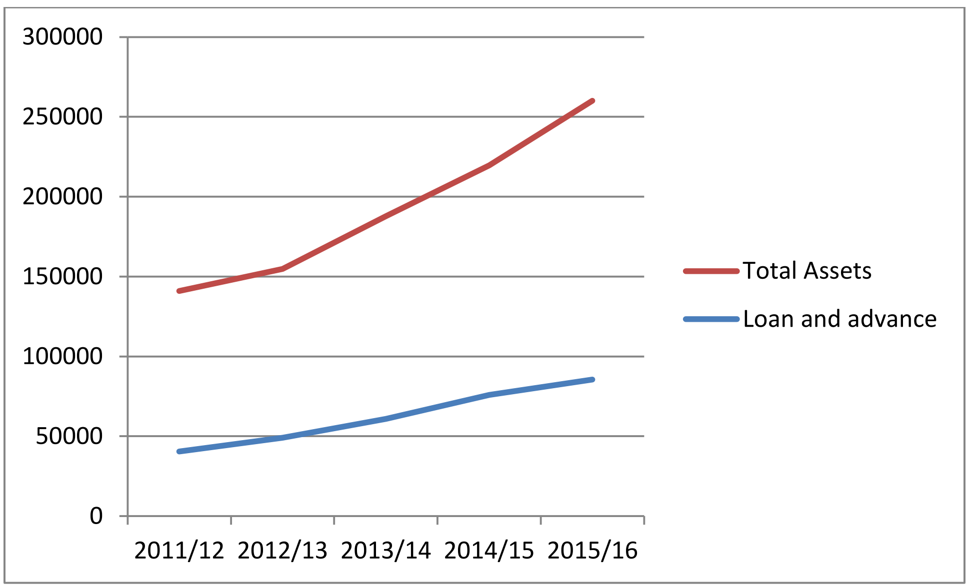
Table 4.2 shows the loans and advances to total assets ratio of the bank for five years. The loan & advances to total assets ratio is primarily upward moving during the study period. While observing its ratio the bank is better mobilizing of fund as loans and advances and it seems quite successful in generating higher ratio in each year.

The highest ratio is 52.74% in the year 2014/15 and the lowest ratio is 40.22% year 2011/12. The mean is 47.25%. It reveals that in total assets, the bank has high proportion of loans and advances. It has utilized its total assets more efficiently in the form of loan & advances. S.D. and C.V. is 4.09 & 8.66 respectively. The above loans and advances to total assets ratio can be presented in a diagram also which is as follows

Figure: 4.2

Total Loan and advance to Total assets

4.1.2 Loans and advances to total assets ratio:



4.1.3 Non- Performing Loans to Total Loan and Advance Ratio

Non-performing assets, also called non-performing loans, are loans on which repayments or interest payments are being made on time. A loan is an asset for a bank as the interest payments and the repayments of the principal create a stream of cash flows. It is from the interest payments a bank makes its profits. Banks usually treat assets as non-performing if they not serviced for some time. If payments are late for a short time a loan is classified as past due. Once a payment becomes really late the loan classified as non-performing.

Increase in the amount of non-performing assets or loans means mismanagement of loan and deposit of individuals and households. Profitability of bank may dwindle. So commercial banks need to reduce non-performing assets or loans.

The Ratio of NPL to total loan Advance reveals how much or the loan and advances are non-performing assets. It is calculated as follow

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

Table: 4.3

Non-performing Loans to Total Loan and advance Ratio

(Rs.Millions)

Year	Non – performing loans	Loan & advance	Ratio
2011/12	2941	40449	**7.27**
2012/13	2604	49045	**5.31**
2013/14	2404	60855	**3.92**
2014/15	2563	75837	**3.38**
2015/16	3376	85470	**3.95**
Mean	**4.77**		
S.D.	**1.40**		
C.V.	**0.29**		

Source: Appendix 3& 4

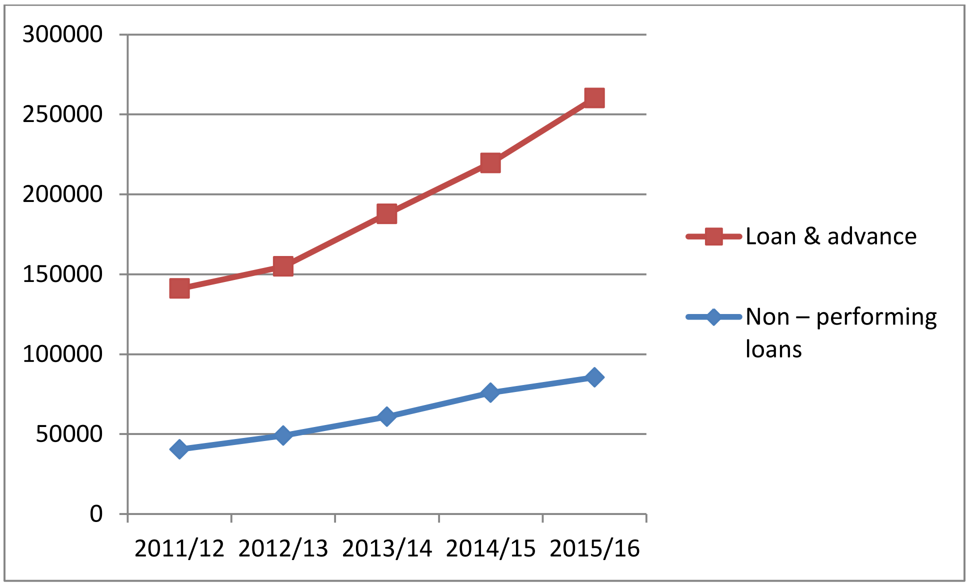
Table 4.3 shows that the bank has the fewer ratios during period. Mean ratio is 4.77. The highest ratio is 7.27% in 2011/12 and lowest ratio is 3.38 % in 2014/15.

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

Figure: 4.3

Non – performing Loan to Loans and Advance

4.1.3 Non – performing Loan to Loans and Advance ratio:



4.1.4 Non – performing Loan to Assets Ratio

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

The Ratio is Calculated Using Following Formula;

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

Table: 4.4

Non – performing Loan to Total Assets

(Rs. in millions)

Year	**Non – Performing Loan**	**Total Assets**	**Ratio (%)**
2011/12	2941	100560	2.92
2012/13	2604	105742	2.46
2013/14	2404	126856	1.89
2014/15	2563	143782	1.78
2015/16	3376	174627	1.93
Mean	**2.20**		
S.D.	**0.43**		
C.V.	**0.20**		

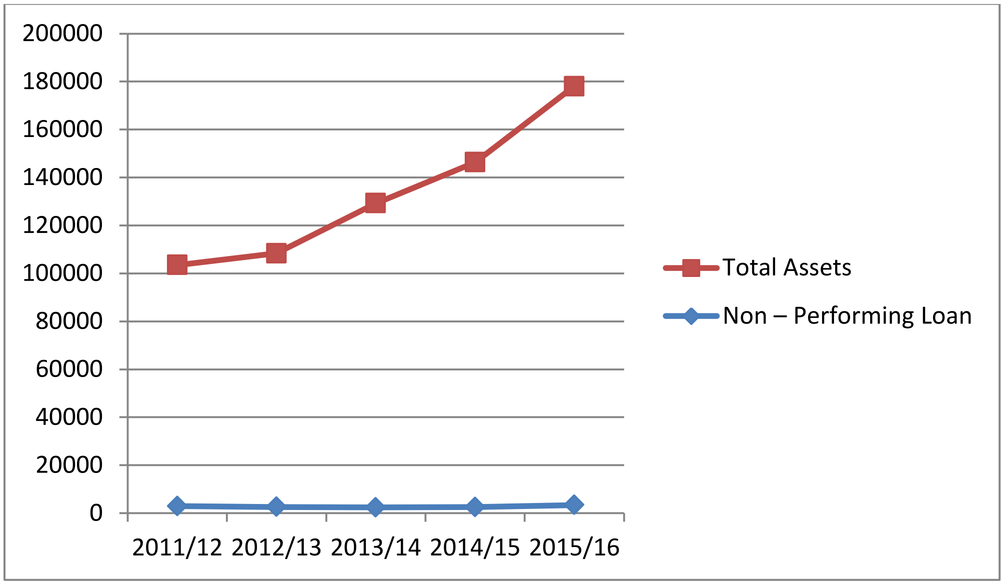
Source: Appendix 3 & 4

Table 4.4 presented below, exhibits the non-performing loans to total assets ratio for six consecutive periods. The ratio has been continuously decreasing indicates that bank has proper utilized and invests the assets. However, the ratio in the FY 2015/16 has increased slightly. The S.D is 0.43 and coefficient of variation is 0.20 The lowest and decreasing ratio all over the period indicates the greater profitability and the better performance to recover the loan and its interest during the study period Thus, the bank has the lowest ratio all over the period which indicates the greater profitability and the better performance to recover the loan and its interest during the study period. The above non-performing assets to total assets ratio can be presented in diagram as;

Figure: 4.4

Non – performing Loan to Total Assets

4.1.4 Non – performing Loan to Total Assets ratio:



4.1.5. Loan Loss Provision to Non-Performing Loan

Loan loss provision is reserve created to save individual and households savings. Commercial banks have to maintain certain percentage as loan loss provision on the basis of the nature of loan. Higher the NPA higher the loan loss provision. If Loan loss provision is higher, it may curtail the performance of bank. If NPA is higher, it has to create higher loan loss provision. Higher loan loss provision is trained from its available funds which otherwise can be used as productive fund. The ratio of loan loss provision to NPA shows the relationship between them. What is its trend? Is it increasing or decreasing? The ratio is calculated using following formula:

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

Table: 4.5

Loan Loss Provision to Non-performing Loan

(Rs. in thousand)

Year	Loan Loss Provision	Non – performing Loan	Ratio (%)
2011/12	639	2941	21.74
2012/13	369	2604	14.15
2013/14	639	2404	26.58
2014/15	684	2563	26.68
2015/16	1057	3376	31.31
Mean	**24.9**		
S.D.	**5.82**		
C.V.	**0.24**		

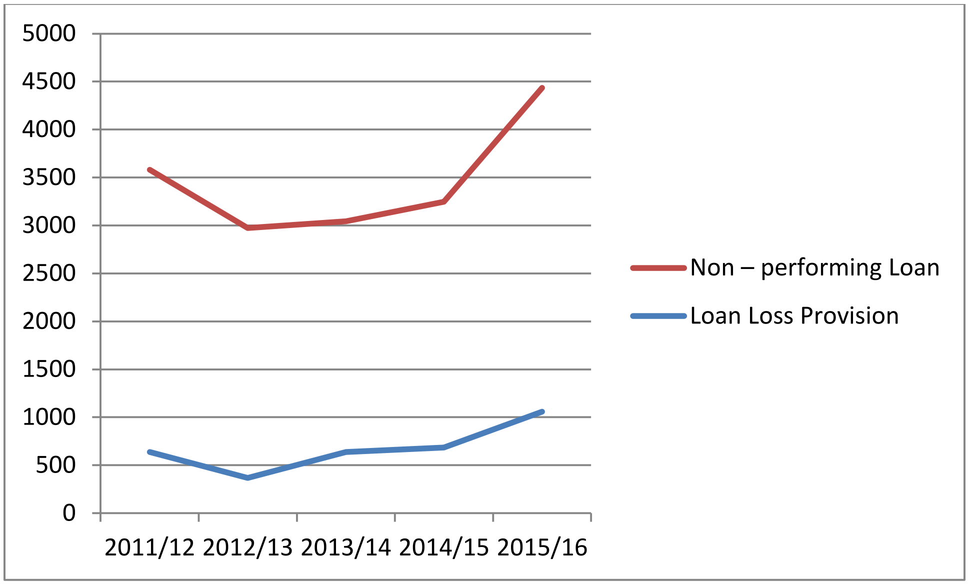
Source: Appendix 3 & 4

Table 4.5 presents the ratio of provision held to total non-performing loans for 5 consecutive years. The mean ratio is 24.90%. The highest provision i.e. ratio is 26.68% in 2070/71 and lowest ratio is 14.15% in 2069/70. The S.D is 5.82 and coefficient of variation is 0.24, which indicate that the Bank has appropriate provision for non- performing assets. The above provision held to non-performing assets ratio can be presented in a diagram also, which is as follows;

Figure: 4.5

Loan Loss Provision to Non-performing Loan

4.1.5 Loan Loss Provision to Non-performing Loan ratio:



4.1.6 Net Profit to Total Loan and Advances

Net Profit reveals the performance of bank. It shows efficiency of management. It shows the capacity of management has been able to utilize deposits. Net profit increment plays vital role of the bank. The ratio of net profit to total loan and advances reveals profit in comparison to total loan and advance disbursed. It is calculated using following formula

$$\text{Loan Loss provision to Non performing Loan} = \frac{\text{Net profit}}{\text{Loan and Advance}} \times 100$$

Table: 4.6

Net profit to Loan and Advance

(Rs. in millions)

Year	**net profit**	**Loan and advance**	**Ratio**
2011/12	1446	40449	3.58
2012/13	1518	49045	3.09
2013/14	1733	60855	2.85
2014/15	4502	75837	5.94
2015/16	2649	85470	3.10
Mean	**3.71**		
S.D.	**1.14**		
C.V.	**0.31**		

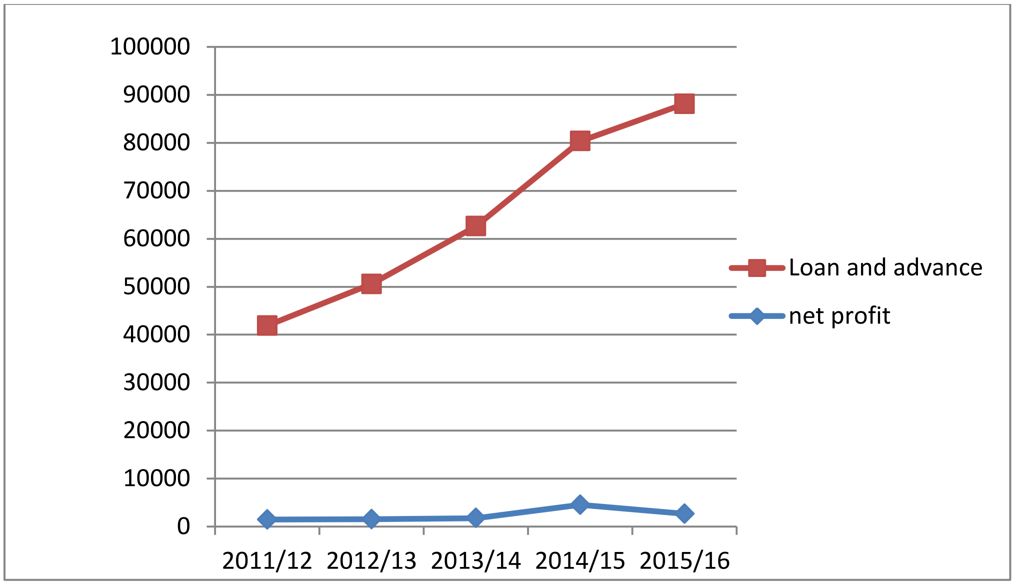
Source: Appendix 3 & 4

Above table 4.6 shows that the ratio of net profit on loan and advance Rastriya Banijya Bank Ltd. are 3.58%,3.09%,2.85%, 5.94% and 3.10% in the year 2011/12, 2012/13, 2013/14, 2014/15 and 2015/16 respectively. Standard deviation and the coefficient of variations are 1.14% and 0.32% percent respectively. It is also presented in following figure.

Figure: 4.6

Net profit to Loan and Advance

4.1.6 Net profit to Loan and Advance ratio:



4.2 Correlation

Correlation defines two or more variables are correlated with each other or not. The correlation between variables varies from -1 to 0 to +1. If two variables are inversely correlated then they have negative correlation, whereas if they are highly correlated or proportionately correlated then they have positive value. If value is between 0.7 and 1, then they are highly correlated.

For the purpose of decision-making interpretation of the result is based upon following conditions:

When r = 1, there is perfect positive correlation

When r = -1, there is perfect negative correlation

When r = 0, there is no correlation

When r lies from 0.7 to 0.999 (-0.7 to -0.999), there is a high degree of positive (or negative) correlation.

When r lies from 0.5 to 0.6999, there is moderate degree of correlation.

When r is less than 0.5, there is low degree of correlation.

4.2.1 Correlation between Total Loan & Advances and Deposit

The calculation was conducted to find out the relationship between loan and advances and total deposit. The table given below shows the correlation between loan and advances and deposit within the study period.

Table: 4.7

Correlation between loan & advance and total deposit

Name of Bank	r	P. E(r)	6P.E (r)	Decision
RBB	0.98	0.010	0.06	Significant

Source: Appendix-5

From the above table 4.7 it is found that coefficient of correlation between deposits and loan & advances is 0.98. It is shows the significant positive relationship between these two variables. It refers that deposit and loan & advances move together very closely. The value of coefficient of determination is 0.010 which refers that 1% variance in loan & advances are affected by total deposit. The coefficient of determination of the bank is significant because the correlation coefficient is greater than the relative value of 6 P.Er. In other words, there is significant relationship between deposits and loan & advances.

4.2.2 Correlation between Loan and Advances and Loan Loss Provision

The co-efficient shows the degree of relationship between Loan loss Provision and Loan and Advances. Here, Total loan and advance is considered as independent variable (x) and loan loss provision is dependent variable (y).

The below table describes the total relationship between Loan Loss provision and Loan and Advances, during the study period.

Table: 4.8

Correlation between loan & advance loan loss provision

Name of Bank	r	P. E(r)	6P.E (r)	Decision
RBB	0.76	0.128	0.77	Insignificant

Source: Appendix 6

Table 4.8 shows correlation coefficient between, loan loss provision and loans and advances. It has positive correlation i.e. 0.76 between loan loss provisions and loan and advances. The coefficient of determination R is 0.128, which indicates that 12.8% variability in provision is explained by loans and advances. The bank has correlation coefficient lower than 6 P.Er. and implies that the relationship between loan loss provision and loans and advances is insignificant. In other words, this relationship indicates that the higher the loans and advances, the higher the loan loss provision.

4.2.3 Correlation between Loan and advance and Non – Performing Loan

To measure and evaluate the co-efficient of correlation between these two variables i.e. Loan and Advance and non-performing loan (NPL). In this analysis, Non-Performing Loan (y) is taken as dependent variable and Loan and Advance is taken as independent justify whether LLP and NPL are highly significant or not. The following table describes the relationship between LLP and NPL within study period.

Table: 4.9

Correlation between loan and advance and Non-Performing Loan

Name of Bank	r	P. E(r)	6P.E (r)	Decision
RBB	0.36	0.263	1.58	Insignificant

Source: Appendix 7

Table 4.9 shows correlation between non-performing loans and loans and advances. There is positive correlation i.e. 0.36 between non-performing loans and loans and advances. The coefficient of determination R is 0.263, which indicates that 26.30% variability in non-performing loans is explained by loans and advances. The relationship is significant because the coefficient of correlation is little less than 6 P.Er .i.e. 0.36 < 0.1.58. As a whole there are significant correlation coefficient of bank between non-performing loans and loans and advances during the study.

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

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

Table: 4.10

Correlation between Non-Performing Loans and Total Assets

Name of Bank	R	P. E(r)	6P.E (r)	Decision
RBB	0.52	0.220	1.32	Insufficient

Source: Annual Reports

Table 4.10 shows the relationship between the non-performing loans and total assets. There is positive correlation i.e. 0.7437 between the non-performing loans and total assets. The coefficient of determination R is 0.5531 which indicates that 55.31% of non- performing loans is explained by total assets. The coefficient of correlation is marginally greater than 6P.Er. So the relationship between non-performing loans and total assets is insignificant.

4.3 Trend Analysis

Trend analysis is done to predict the future scenario. This analysis is very important for business. Business environment is more complex and dynamic than ever before so firms want to know will- be scenario. This scenario helps to build strategies and tune to the unseen changes in the economy. So this statistical tool helps businessmen to estimate future. The estimation is based upon past data or information. Among various methods of estimating trend the least square method is used in this research. In this method trend line is fitted to the data satisfying following two conditions:

4.3.1 Least Square of Linear Trend of Loan and advance

Loans are the major source of income for a bank. If it defaults, it is the loan portfolio which may lead to the insolvency of the bank. Here the effort has been made to calculate the trend values of loans and advances of the Bank for further five years from 2013/14 to 2017/18on the basis past data from 2008/09 to 2012/13.

Table: 4.11

Least Square of Linear Trend of Loan and advance

(Rs. In millions)

Year	Actual & Estimated Loan and advance of RBB Ltd.
2011/12	38964.4
2012/13	50647.8
2013/14	62331.2
2014/15	74014.6
2015/16	85698
2016/17	97381.4
2017/18	109064.8
2018/19	120748.2
2019/20	132431.6
2020/21	144115

Source: Appendix 9 & 10

Figure: 4.7

Loan and advance Trend of Bank

(Rs. In millions)

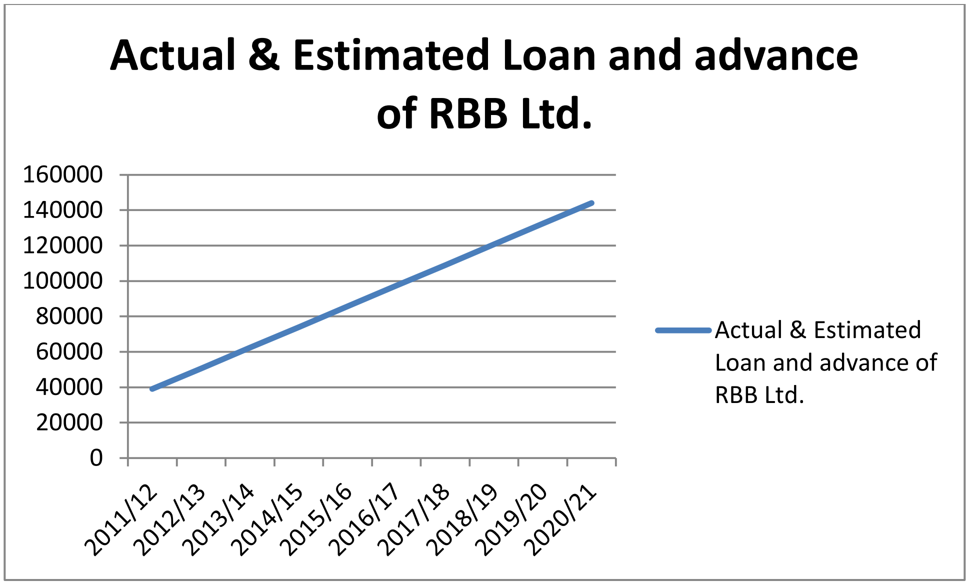


Table 4.7 depicts that loan & advances of the both banks are in increasing trend. The trend projected for further five year 2016/17 to 2020/21. From the above analysis, it is clear that the bank is mobilizing its collected deposits and other funds in the form of loan and advances in a very systematic way. The expected future value of loan of RBB Ltd. will be Rs. 144115 million respectively in fiscal year 2020/21.

4.3.2 Least Square of Linear Trend of Net Profit

Under this topic, the trend values of net profit for 5 years from 2011/12 to 2015/16 is calculated and forecasted for next 5 years 2016/17 to 2020/21.

Table: 4.12

Least Square of Linear Trend of Net profit

(Rs. In millions)

Year	Actual & Estimated Net profit of RBBLtd.
2011/12	1291.6
2012/13	1830.6
2013/14	2369.6
2014/15	2908.6
2015/16	3447.6
2016/17	3986.6
2017/18	4525.6
2018/19	5064.6
2019/20	5603.6
2020/21	6142.6

Source: Appendix 11 & 12

Figure: 4.8

Net Profit Trend of Bank (Rs. In millions)

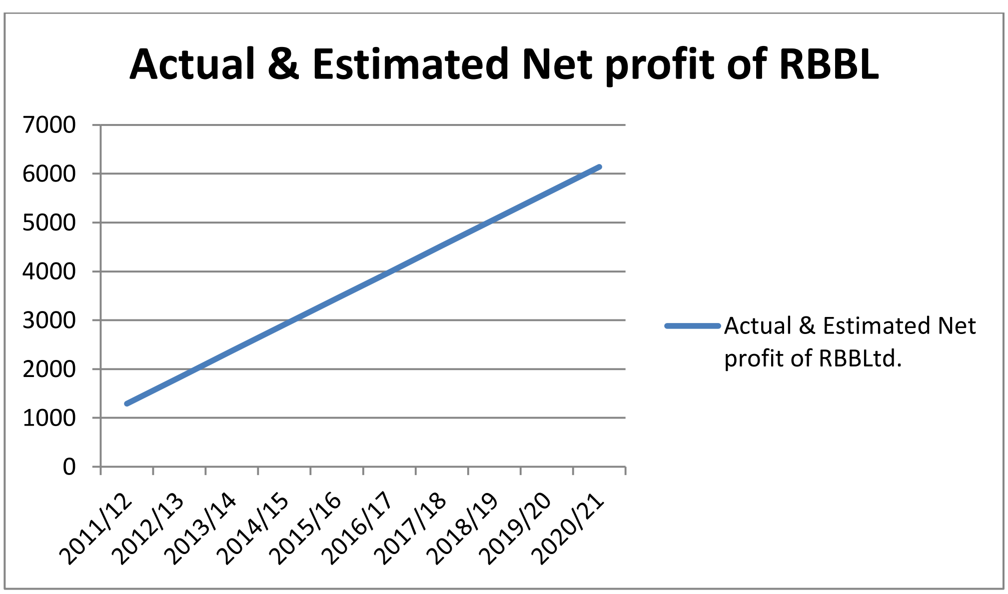


Table 4.8 and figure 4.8 reveal the trend of Net profit which shows that the both banks have inconsistent net profit throughout the study period. The trend of RBB Ltd. is Rs1291.6 million in year 2011/12 and it will increase. It has earned Rs 3447 million in the year 2015/16. Rastriya Banijya Bank has posted the maximum profit. It is forecasted that the bank will have increasing trend of net profit. In case of RBB Ltd. in the year 2011/12 net profit is Rs.1291.60 million and in2020/21 it will increase to Rs. 6142.60, if the business environment remains constant.

4.3.3 Least Square of Linear Trend of Loan loss provision

Here, the trend values of loss loan provision have been calculated for 5 years FY 2008/09 to FY 2012/13 and forecasting for the next 5 years till FY 2017/18.

Table: 4.13

Least Square of Linear Trend of Loan loss provision (Rs. In millions)

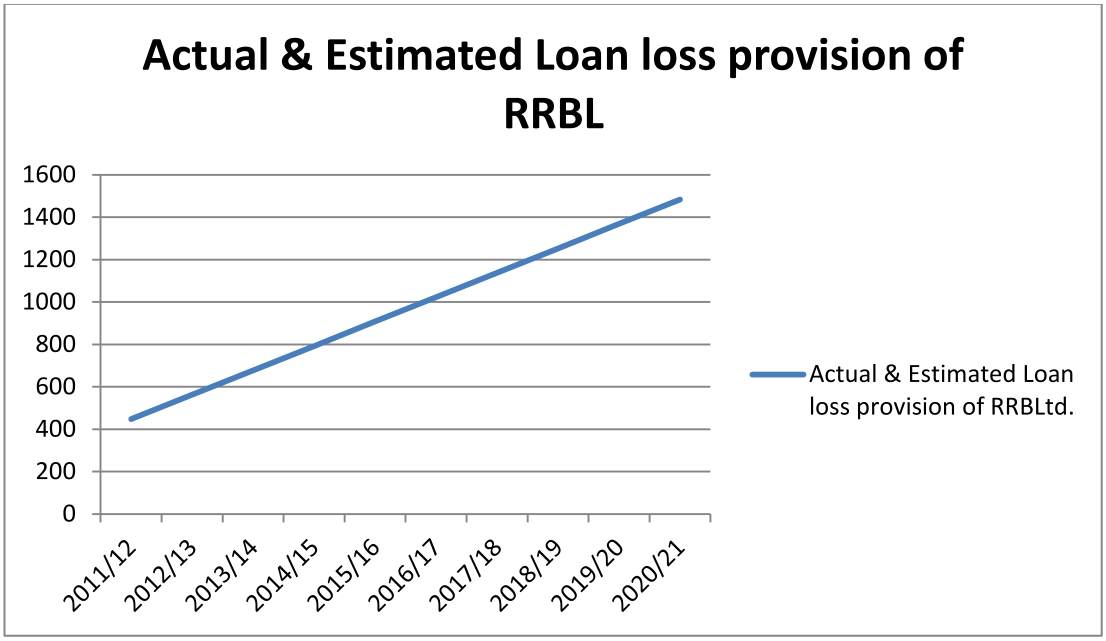
Year	**Actual & Estimated Loan loss provision of RRBLtd.**
2011/12	447.4
2012/13	562.5
2013/14	677.6
2014/15	792.7
2015/16	907.8
2016/17	1022.9
2017/18	1138
2018/19	1253.1
2019/20	1368.2
2020/21	1483.3

Source: Appendix xix

Figure: 4.9

Trend of loan loss provision

(Rs. In millions)



Above table 4.13 and figure 4.9 show the trend of Loan loss provision and is forecasted in increasing trend. RBB Ltd. have 447.40 millions as LLP in 2011/12 but it will increase to 1483.3 million in 2020/21. This is based upon the year 2011/12 to 2015/16. So within the estimated period if the business environment remains same trend of Loan loss provision will increase. The trend of increasing value is higher and aggressive. It is suggested to decrease the NPL to minimize loan loss provision.

4.3.4 Trend Analysis of Non-performing Loan

Here, the trend values of non-performing loans have been calculated for 5 years FY 2011/12 to FY 2015/16 and forecasting for the next five year till FY 2020/21. NPL reduces and hinders the performance of bank. It also reduces the credibility of bank. So banks have to reduce NPL to increase productivity and profitability. Trend of NPL of banks is estimated below:-

Table: 4.14

Least Square of Linear Trend of non-performing loan

(Rs. In millions)

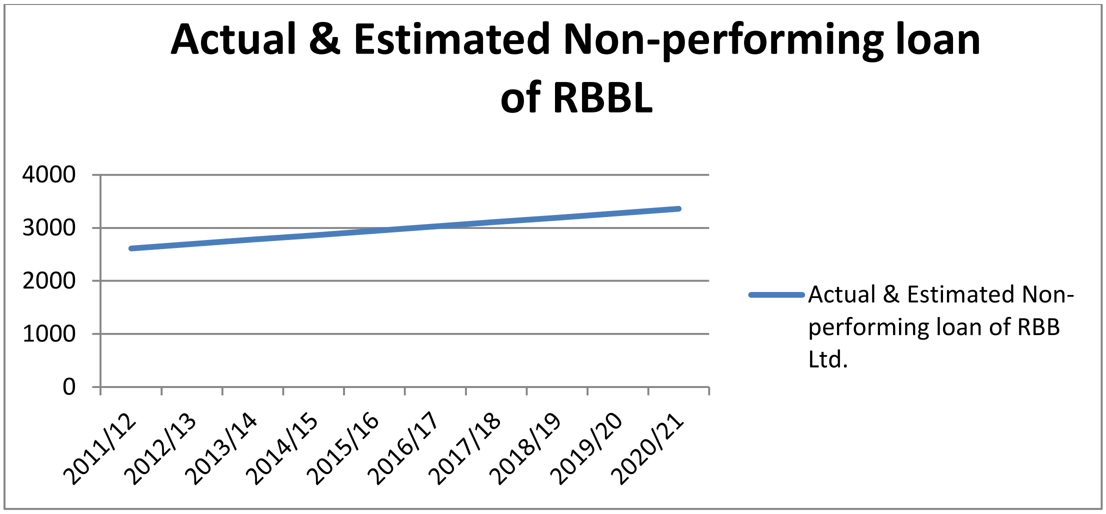
Year	Actual & Estimated Non-performing loan of RBBL
2011/12	2611.8
2012/13	2694.7
2013/14	2777.6
2014/15	2860.5
2015/16	2943.4
2016/17	3026.3
2017/18	3109.2
2018/19	3192.1
2019/20	3275
2020/21	3357.9

Source: Appendix xx

Figure: 4.10

Trend of Non- Performing Loan

(Rs. In millions)



Above table 4.14 and figure 4.10 show that the trend of RBBL Non-performing loan is gradually declining. It has Rs 2611.8 million in year 2011/12 then it has continuously decreasing at 3357.9 million in 2020/21 .This trend is good for the bank. Bank is able to utilize resources in productive sources. So bank will continuously decrease its Non-performing loan in coming days if the economic environment remains same as the past performances were occurred.

4.4 Major Findings

Major findings of the study are as follows:

- The loans and advances to total deposit ratio is in increasing trend during the study period. The mean ratio is 55.20%. The proportion of loans out of total assets has increased up to F.Y. 2014/2015 and decreased thereafter. The bank seems mobilizing loans and advances in relation to the total assets to a larger extent and generating higher ratio in each fiscal year.
- The loans and advances to total asset ratio is also in the increasing trend. The mean is 47.25% which indicates the average efficiency of the bank in utilization of its deposits. The S.D. is 4.09% and C.V is 8.66%. It signifies less deviation and more consistency in advancing loans out of deposits.

- The average mean ratio of non-performing loans to total loans and advances is 4.77 %, which is considered to be a strong side of the bank in managing NPLs. The S.D is 1.40% and C.V is 0.29%. It can be said that the bank controlling its NPLs efficiently.
- The ratio of provision held to total non-performing loans is sufficiently high. The average mean is 24.90%. The standard deviation is 5.82% and C.V. is 0.24%. It indicates that the bank has sufficiently provisioned against non-performing loans. The higher the ratio of NPL provisioned against loans, the better the cushion against the risk of actual loan loss.
- The average ratio of non-performing loan to total asset is 2.20%. The ratio is continuously decreasing. This indicates that banks have properly managed its loans and advances. The S.D is 0.43% and C.V. is 0.20 % respectively.
- The ratio of net income to total loans and advances shows how efficiently bank has through its lending activities. The average ratio is 3.71%. The S.D of the ration is 1.14% and C. V. is 0.31% respectively. The lower S.D. and higher the C.V. indicates greater the stability in income generation.
- The correlation between deposits and loans and advances is positive and significant. The coefficient of correlation between loans and deposits is 0.98. The coefficient of determination is 0.9851. The correlation is significant because the correlation coefficient is greater than the relative value of 6 P.Er.
- The correlation coefficient between, loan loss provision and loans and advances is 0.76. It refers that there is positive correlation between these two variables. Here, 12.8% variability in provision is explained by loans and advances. Since the bank less correlation coefficient than 6P.Er., ,

the relationship between Loans loss Provision and Loans and advances is insignificant.

- The correlation coefficient between, non-performing loans and loans and advances is 0.36. It refers that there is positive correlation between these two variables. Here, 26.63% of non-performing loans is contributed by loans and advances. The relationship is insignificant because the coefficient of correlation is less than 6 P.Er.
- The bank's assets and nonperforming loans are positively correlated. The correlation coefficient between the non-performing loan and total assets is 0.52. There is 55.31% percent of non-performing loan explained by total asset. The coefficient of correlation is marginally less than 6P.Er. So the relationship between non- performing loan and total assets is still insignificant.
- The trend line of loans and advances is in increasing trend. The increasing trend of total loans is considered to be good symptom of potential performance efficiency. The trend of profit reveals that the bank's profits have consistently growing throughout the projected period. It signifies that the future profitability of the both bank is high.
- The trend of non-performing loans is estimated in increasing trend of RBBL. In case of RBBL the trend of NPL is decreasing trend (i.e. -275.7 millions at 2017/18), so it has good sign for the bank. But RBBL NPL has been caused by the increasing potential loans and advances and the positive relationship between NPL and total loans.
- The trend of Loss loan provision is forecasted to be in increasing trend. Since the provision is set aside against the NPL, the increasing NPL has been the major source of the increasing loan loss provision.
- Trend of Net profit is increasing in both banks. The rate of increment of RBBL is lower than the RBBL. In 2011/12 the net profit is Rs.1291.60 million. In year 2020/21 the net profit of RBBL is Rs. 6142.60 million.

CHAPTER -5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

Today's financial market is unpredictable and loaded with risk. Nonperforming loans are loans that have defaulted or are in danger of defaulting when payments are no longer able to be made. Typically, loans that have not received payments for three months are considered to be non performing loans, though specific contract terms may differ occasionally. The level of NPL in Nepalese banking sector is very alarming and the issue is becoming more and more unruly day by day. It is well known from different financial reports. The total NPL in Nepalese banking system is so high during the period.

All know that collection of deposits and making of loan and advances are core functions of financial institutions. While collecting the deposits the commercial banks have to provide interests to the depositors, it is cost to the bank. The money collected in the form of deposit is again translated into loans and advances and companies get interests income. On this transformation process commercial banks have a small interests spread from which they have to meet the operating expenses, costs of the bad debt and a small profit margins. In order to pay the interests to the depositors and meet the withdrawals of depositors, there should be regular repayments of principle and interests of loan from the borrowers as per as agreed schedule. In order to make this system interrupted, commercial banks should have all the loans as performing assets, i.e. good loans. Financial institutions always try to have almost all the financial assets as performing assets, i.e. good loans. Good loans and advances are called performing assets. Financial institutions always try to have almost all the financial assets as performing assets to make them sound, sustainable, profitable and healthy within the system.

Sometimes, unfavorable internal economic shocks and other discrepancies affect quality of such assets. Deterioration in the quality and other assets, give birth to non- performing assets and ultimately invites the financial crisis.

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

5.2 Conclusions

One of the major components of bank's assets is loans and advances, and the effective management of such loan portfolio has been a challenging to bankers. The failure of many banks is not because of their inability to mobilize adequate deposits from the surplus sector, but mainly because their lending portfolios have been poorly managed.

The banking sector is seen to have an important role to play in the economic development of the country. This is mostly pronounced in the realm of financial intermediation. However, previous studies on the sector showed that little success was recorded in this regard. Some banks find it difficult to meet their obligations to their customers and owners due to fault or weakness in managing their lending portfolio and the shortcomings which could render them either illiquid or insolvent.

Non-Performing Loans (NPLs) reduces the profitability of bank, reduces the liquidity of bank , increases the cost of bank and also hamper in credit expansion which affect overall growth of the economic activities with direct consequences on the performance of banks.

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

5.3 Recommendations

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

- To be a successful banker a bank must utilize depositors' money as loan and advances. Loan and advances is the largest item of the bank in the asset side of balance sheet which is risky but a source of profitability. Since the bank seems strong in carrying large extent of loans as performing loans, it is recommended to extend more credits by adopting the liberal lending policy to increase its total loan and advances in order to earn more profit.
- The bank has already maintained adequate provisions for non-performing loans so as not to distort the true presentation of the bank's financial position in their balance sheets. It is recommended to continue the existing practice of provisioning sufficient amount against the nonperforming loans to create a cushion against the bank failure due to credit default.
- Non-performing loans reduces the performance of any banks. It reduces profitability because of LLP. This LLP will reduce banks fund for productive sector. NPL of RBB is either in increasing or decreasing trend. So, it is better to control that trend.
- The bank is advised to review its current policies regarding its sectoral credit exposure so that it can accommodate current changing scenario in the economy and still maintain its higher profits. Large exposure on big corporate or single project in the single sector should be avoided and an optimal portfolio of loans should be formed.
- One of the main causes of default loans and increasing the NPLs could be insufficient collateral mortgaged by borrower. Therefore, it should make ensure that enough collateral has been taken. This act further accelerates the timely recovery of principal interest amount even in the event of loan default.

- Banks have to adhere to the guideline of central bank to reduce the amount of NPL and also to increase accountability and credibility of bank.

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APPENDIX - 1

BALANCE SHEET OF RASTRIYA BANIJYA BANK LTD.

(Rs. In Thousand)

LIABILITIES	2011/12	2012/13	2013/14	2014/15	2015/16
Share Capital	5497610	8588972	8588972	8588972	8588972
Reserves and funds	(8294989)	(7106645)	(5583423)	(1697269)	734043
Debenture & Bonds	-	-	-	-	-
Borrowings	2923127	2167176	1778600	1305345	943800
Deposits	87775031	91097978	107269942	124221663	146207634
Bills payable	-	-	-	-	-
Proposed dividend	-	-	-	-	-
Income tax liabilities	-	-	-	-	-
Other liabilities	12659244	10995265	14802179	11363084	18152116
Total liabilities	**100560023**	**105742746**	**126856270**	**143781795**	**174626564**
ASSETS	**2011/12**	**2012/13**	**2013/14**	**2014/15**	**2015/16**
Cash and bank balance	19262919	15288816	24668595	22444591	31599993
Money at call and short notice	512300	302828	387873	450000	2296000
Investment	26501130	29634789	32060646	35331338	43773868
Loans, Advances & B.P	40448863	49044912	60854849	75836498	85470868
Fixed assets	1060414	1103996	1172482	1281743	1347377
Non banking assets	126126	114757	102980	83648	83648
Other assets	12648270	10252648	7608845	8353977	10055309
Total assets	**100560023**	**105742746**	**126856270**	**143781795**	**174626564**

APPENDIX - 2

PROFIT AND LOSS ACCOUNT OF RASTRIYA BANIJYA BANK LTD.

(Rs. In Thousands)

Particulars	2011/12	2012/13	2013/14	2014/15	2015/16
Interest Income	5399992	5748969	6114683	6520239	7422643
Interest Expenses	3045590	2461853	2223791	1924983	1872716
Net Interest Income	**2354402**	**3287116**	**3890892**	**4595256**	**5549927**
commission and Discount	427239	429396	405682	455476	445256
Other Operating Income	210706	318985	375621	479434	553256
Exchange Fluctuation Income	100820	(73908)	33862	42350	42229
Total operating Income	**3093167**	**3961589**	**4706057**	**5572516**	**6590661**
Staff Expenses	1439593	2100496	2349686	2670474	2560976
Other Operating Expenses	599075	696850	732325	849875	902063
Exchange Fluctuation Loss	-	-	-	-	-
Operating profit before Provision for Possible Loss	**1054499**	**1164243**	**1624046**	**2052167**	**3127622**
Provision for Possible Losses	639248	368509	638945	684008	1056899
Operating Profit	**415252**	**795734**	**985101**	**1368159**	**2070723**
Non-operating Income/loss	75880	4287	6021	2875046	10259
Provision for Possible loss written back	994873	731350	867492	937873	1096437
Profit from Regular Operation	**1486004**	**1531371**	**1858614**	**5181078**	**3177419**

Profit/loss from extra-ordinary Activities	210455	107562	146681	811329	397177
Net profit after All Activities	**1696459**	**1638933**	**2005295**	**5992407**	**3574596**
Provision for staff Bonus	125664	121402	-	443882	261035
Provision for Income Tax	124575	-	271904	1046933	665090
Net Profit/Loss	**1446220**	**1517531**	**1733391**	**4501592**	**2648471**

APPENDIX – 3

CLASSIFICATION OF LOANS & BILLS PURCHASE & PROVISIONING OF RBBL

(Rs. in millions)

Particulars	**2008/09**	**2009/10**	**2010/11**	**2011/12**	**2012/13**
1. Performing Loan	15296.1	17471.1	21479.5	26319.8	29085.2
1.1 Pass	15296.1	17471.1	21479.5	26319.8	29085.2
2. Non- performing Loan	315.9	492.6	239.3	143.8	108.7
2.1 Restructure/ Reschedule	-	227.4	139.9	106.4	27.6
2.2 Sub –standard	13.2	12.9	2.4	4.6	-
2.3 Doubtful	11.3	1.1	1.8	2.8	-
2.4 Loss	291.4	251.0	95.1	30.0	81.1
A Total Loan	15612	17963.6	21718.8	26463.7	29193.9
3. Loan Loss provision					
3.1 pass	149.5	173.6	213.7	262.4	299.0
3.2 Restructure/Rescheduled	39.1	60.3	46.41	29.9	27.6
3.3 Sub- standard	2.7	3.2	0.51	1.1	-
3.4 Doubtful	3.7	0.22	0.59	1.2	-
3.5 Loss	285.3	245.8	91.8	26.9	79.1
B. Total Provisioning	480.3	483.1	353.02	321.6	405.7
Net Loan (A – B)	15131.7	17480.5	21365.8	26142.0	28.738.0

APPENDIX – 4

For RBBL

(in millions)

Fiscal Year	Loans to deposit		Loans to T.A.		NPL to total Assets	
	X	$(X - \bar{X})^2$	X	$(X - \bar{X})^2$	X	$(X - \bar{X})^2$
2011/12	46	-9.20	40.22	-7.03	2.92	0.72
2012/13	54	-1.20	46.38	-0.87	2.46	0.26
2013/14	57	1.80	47.97	0.72	1.89	-0.31
2014/15	61	5.80	52.74	5.49	1.78	-0.42
2015/16	58	2.80	48.94	1.69	1.93	-0.27
Total	276		236.25		10.98	
Mean	55.20		47.25		2.20	
S.D.	5.12		4.09		0.43	
C.V.	9.30		8.66		0.20	

Source: Table 4.1,4.2&4.4

$\bar{X} = \frac{\Sigma x}{n}$, S.D. = $\sqrt{\frac{\Sigma(X - \bar{X})^2}{n}}$ and C.V. = $\frac{S.D.}{\bar{X}}$

For RBBL

(in millions)

Fiscal Year	NPL to Loan & advance		LLP to Non-performing loan		Net profit to loan and advance	
	X	$(X - \bar{X})^2$	X	$(X - \bar{X})^2$	X	$(X - \bar{X})^2$
2011/12	7.27	2.50	21.74	-2.35	3.58	-0.13
2012/13	5.31	0.54	14.15	-9.94	3.09	-0.62
2013/14	3.92	-0.85	26.58	2.49	2.85	-0.86
2014/15	3.38	-1.39	26.68	2.59	5.94	2.23
2015/16	3.95	-0.82	31.31	7.22	3.10	-0.61
Total	23.83		120.46		18.56	
Mean	4.77		24.9		3.71	
S.D.	1.40		5.82		1.14	
C.V.	0.29		0.24		0.31	

Source: Table 4.3,4.5&4.6

$$\bar{X} = \frac{\Sigma x}{n}, \text{ S.D.} = \sqrt{\frac{\Sigma(X - \bar{X})^2}{n}} \text{ and C.V.} = \frac{\text{S. D.}}{\bar{X}}$$

APPENDIX -5

Correlation between Loan & Advances and Total Deposit of RBBL

(Rs. In Millions)

Year	Loan & Advance (x)	Total Deposit (y)	Xy	x^2	y^2
2011/12	40449.00	87775.00	3550410975.	1636121601.00	7704450625.0
2012/13	49045.00	91098.00	4467901410.	2405412025.00	8298845604.0
2013/14	60855.00	107270.00	6527915850.	3703331025.00	11506852900.
2014/15	75837.00	124222.00	9420623814.	5751250569.00	15431105284.
2015/16	85470.00	146208.00	12496397760	7305120900.00	21376779264.
sum(Σ)	**311656.00**	**556573.00**	**36463249809**	**20,801,236,120**	**64318033677.**

Source: Appendix I and II

Calculation of coefficient of correlation (r)

We have,

$$r = \frac{n\Sigma xy - \Sigma x\Sigma y}{\sqrt{n\Sigma x^2 - (\Sigma x)^2}\sqrt{n\Sigma y^2 - (\Sigma y)^2}} = \frac{182316249045.00 - 173459314888.0}{82925.98 * 108704.48} =$$

$$\frac{8856934157.00}{9014425635.25} = 0.98$$

, r = 0.98

We have,

$$P.E.\ (r) = 0.6745 \times \frac{1 - r^2}{\sqrt{n}} \qquad = 0.6745 \times 0.02 = \mathbf{0.01}$$

Significant of r = 6 × 0.01

= 0.06

APPENDIX - 6

Correlation between Loan & Advances and Loan Loss provision of RBBL

(Rs. In Millions)

Year	Loan & Advance (x)	Loan loss provision (y)	Xy	x^2	y^2
2011/12	40449.00	639.00	25846911.00	1636121601.00	408321.00
2012/13	49045.00	369.00	18097605.00	2405412025.00	136161.00
2013/14	60855.00	639.00	38886345.00	3703331025.00	408321.00
2014/15	75837.00	684.00	51872508.00	5751250569.00	467856.00
2015/16	85470.00	1057.00	90341790.00	7305120900.00	1117249.00
sum(□)	**311656.00**	**3388.00**	**225045159.00**	**20801236120.00**	**2537908.00**

Source: Appendix I and II

Calculation of coefficient of correlation (r)

We have,

$$r = \frac{n\Sigma xy - \Sigma x\Sigma y}{\sqrt{n\Sigma x^2 - (\Sigma x)^2}\sqrt{n\Sigma y^2 - (\Sigma y)^2}} = \frac{112522579500 - 105589052800}{105589052800} =$$

$$\frac{69335267.00}{91256113.83} = 0.76$$

r = 0.76

We have,

$$P.E.\ (r) = 0.6745 \times \frac{1 - r^2}{\sqrt{n}} = 0.6745 \times 0.19$$

$$= 0.13$$

Significant of r = 6 × 0.13

= 0.77

APPENDIX - 7

Correlation between Loan & Advances and Non – performing Loan of RBBL

(Rs. In Millions)

Year	Loan & Advance (x)	Non-performing loan (y)	xy	x^2	y^2
2011/12	40449.00	2941.00	118960509.00	1636121601.00	8649481.00
2012/13	49045.00	2604.00	127713180.00	2405412025.00	6780816.00
2013/14	60855.00	2404.00	146295420.00	3703331025.00	5779216.00
2014/15	75837.00	2563.00	194370231.00	5751250569.00	6568969.00
2015/16	85470.00	3376.00	288546720.00	7305120900.00	11397376.00
sum(□)	**311656.00**	**13888.00**	**875886060.00**	**20801236120.00**	**39175858.00**

Calculation of coefficient of correlation (r)

We have,

$$r = \frac{n\Sigma xy - \Sigma x\Sigma y}{\sqrt{n\Sigma x^2 - (\Sigma x)^2}\sqrt{n\Sigma y^2 - (\Sigma y)^2}} \qquad = \frac{437943030000 - 432827852800}{687671826400 * 3002746.00}$$

$$= \frac{51151772.00}{14369773227} = 0.36$$

r = 0.36

We have,

$$P.E.\ (r) = 0.6745 \times \frac{1 - r^2}{\sqrt{n}} \qquad = 0.6745 \times 0.39 = 0.26$$

Significant of r = 6 × 0.26 = 1.58

APPENDIX -8

Correlation between Non – performing Loan and Total Assets of RBBL

(Rs. In Millions)

Year	Non-Performing Loan (x)	Total Assets (y)	xy	x^2	y^2
2011/12	100,560	2941	295,746,960.00	10112313600	8649481.00
2012/13	105,743	2604	275,354,772.00	11181582049	6780816.00
2013/14	126,856	2404	304,961,824.00	16092444736	5779216.00
2014/15	143,782	2563	368,513,266.00	20673263524	6568969.00
2015/16	174,627	3376	589,540,752.00	30494589129	11397376.00
sum(□)	**651,568**	**13,888**	**1,834,117,574**	**88,554,193,038**	**39175858.00**

Calculation of coefficient of correlation (r)

We have,

$$r = \frac{n\Sigma xy - \Sigma x\Sigma y}{\sqrt{n\Sigma x^2 - (\Sigma x)^2}\sqrt{n\Sigma y^2 - (\Sigma y)^2}} \qquad = \frac{9{,}170{,}587{,}870.00 - 9{,}048{,}976{,}384.00}{18230106566.00 * 3002746.00}$$

$$= \frac{12161148600}{23396662063} = 0.52$$

r = 0.52

We have,

$$P.E.\ (r) = 0.6745 \times \frac{1 - r^2}{\sqrt{n}} \qquad = 0.6745 \times 0.33 = 0.22$$

Significant of r = 6 × 0.22= 1.32

APPENDIX - 9
Least Square of Linear Trend of Loan & Advances

(Rs. In millions)

Year	Loan & Advance (Y)	X = t-2010/11	X^2	XY
2011/12	40449.00	-2.00	4.00	-80898.00
2012/13	49045.00	-1.00	1.00	-49045.00
2013/14	60855.00	0.00	0.00	0.00
2014/15	75837.00	1.00	1.00	75837.00
2015/16	85470.00	2.00	4.00	170940.00
Sum(Σ)	Σy =311656.00	0.00	10.00	116834.00

$\Sigma x = 0$, $a = \; = \frac{311656.00}{5}$ = Rs. 62331.2& $b = \frac{\Sigma xy}{\Sigma x^2} = \frac{116834}{10}$ =Rs11683.4

Substituting these values in the following
y = a + bx

Year	RBBL
2016/17	63221.20+11683.4× 3=Rs.97341.4
2017/18	63221.20+11683.4×4= Rs.109080.64
2018/19	63221.20+11683.4× 5= Rs.120748.20
2019/20	63221.20+11683.4 = Rs. 132431.60
2020/21	63221.20+11683.4× 7= Rs.144115

APPENDIX - 10

Least Square of Linear Trend of Net Profit

(Rs. In millions)

Year	Net Profit (Y)	X = t-2010/11	X^2	XY
2011/12	1,446	-2	4	-2892
2012/13	1,518	-1	1	-1518
2013/14	1,733	0	0	0
2014/15	4,502	1	1	4502
2015/16	2,649	2	4	5298
Sum(Σ)	Σy =11848.00	0	10	Σxy =5390

$\Sigma x = 0,\ a = \frac{\Sigma y}{n} = \frac{11848}{5}$ = Rs. 2369.60 & $b = \frac{\Sigma xy}{\Sigma x^2} = \frac{5390}{10}$ =Rs539

Substituting these values in the following
y = a + bx

Year	RBBL
2016/17	11848+5390× 3 = Rs. 3986.60
2017/18	11848+5390× 4 = Rs.4525.60
2018/19	11848+5390× 5 = Rs. 5064.60
2019/20	11848+5390× 6 = Rs. 5603.60
2020/21	11848+5390× 7= Rs.6142.60

APPENDIX - 11
Least Square of Linear Trend of Loan Loss Provision

(Rs. In millions)

Year	Loan Loss Provision (Y)	X = t-2010/11	X^2	XY
2011/12	639	-2	4	-1278
2012/13	369	-1	1	-369
2013/14	639	0	0	0
2014/15	684	1	1	684
2015/16	1057	2	4	2114
Sum(Σ)	Σy =**3388.00**	0	10	Σxy =**1151**

$\Sigma x = 0$, $a = \frac{\Sigma y}{n} = \frac{3388}{5}$ = Rs.677.6& $b = \frac{\Sigma xy}{\Sigma x^2} = \frac{1151}{10}$ =Rs115.1

Substituting these values in the following

y = a + bx

Year	RBBL
2016/17	667.6 + 115.1× 3= Rs. 447.4
2017/18	667.6 + 115.1× 4 = Rs.562.50
2018/19	667.6 + 115.1× 5 = Rs. 677.60
2019/20	667.6 + 115.1× 6 = Rs. 792.70
2020/21	667.6 + 115.1× 7= Rs.677.60

APPENDIX – 12

Least Square of Linear Trend of Non – Performing Loan

(Rs. In millions)

Year	Non – performing loan(Y)	X = t-2010/11	X^2	XY
2011/12	2941	-2	4	-5882
2012/13	2604	-1	1	-2604
2013/14	2404	0	0	0
2014/15	2563	1	1	2563
2015/16	3376	2	4	6752
Sum(Σ)	Σy =**13888.00**	0	10	Σxy =829

$\Sigma x = 0,\ a = \frac{\Sigma y}{n} = \frac{13888}{5} = \text{Rs. } 2777.6 \ \& \ b = \frac{\Sigma xy}{\Sigma x^2} = \frac{829}{10} = \text{Rs}82.9$

Substituting these values in the following

y = a + bx

Year	RBBL
2016/17	2776.60+82.90× 3=Rs. 3026.30
2017/18	2776.60+82.90× 4 = Rs.3109.20
2018/19	2776.60+82.90× 5=Rs. 3192.10
2019/20	2776.60+82.90× 6 = Rs.3275
2020/21	2776.60+82.90× 7=Rs. 3357.90

APPENDIX - 13

List of Commercial Banks in Nepal

S.N	Bank Name	Operation Date	Head Office	(Rs in Million) Paid up Capital
1	Nepal Bank Ltd.	11/15/1937	Dharmapath, Kathmandu	4000
2	Rastriya Banijya Bank Ltd.	1/23/1966	Singhadurbarplaza, Kathmandu	8580
3	Agriculture Development Bank Ltd.	1/21/1968	Ramshahpath,Kathmandu	3928
4	Nabil Bank Ltd.	7/12/1984	Kantipath, Kathmandu	4755
5	Nepal Investment Bank Ltd.	3/9/1986	Durbarmarg,Kathmandu	8707
6	Standard Chartered Bank Nepal Ltd..	2/28/1987	Nayabaneshwor, Kathmandu	2804
7	Himalayan Bank Ltd.	1/18/1993	Thamel, Kathmandu	4499
8	Nepal SBI Bank Ltd.	7/7/1993	Hattisar, Kathmandu	3882
9	Nepal Bangladesh Bank Ltd.	6/6/1994	Nayananeshwor, Kathmandu	3040
10	Everest Bank Ltd.	10/18/1994	Lazimpat , Kathmandu	2623
11	Bank of Kathmandu lumbuni Ltd.	3/12/1995	Kamaldi, mKathmandu	2120
12	Nepal Credit and Commerce Bank Ltd.	10/14/1996	Siddharthanagar, Rupandehi	2025
13	Machhapuchchhe bank Ltd	10/3/2000	Prithwichowk,Pokhara, Kaski	3865

14	Kumari Bank Ltd.	4/3/2001	Durbarmarg, Kathmandu	2698
15	Laxmi Bank Ltd.	4/3/2002	Adarsanagar, Birgunj, Parsa	3039
16	Siddhartha Bank Ltd.	12/24/2002	Kamaladi, Kathmandu	3022
17	Global IME Bank Ltd.	1/2/2007	Birgunj, Parsa	6164
18	Citizens Bank International Ltd.	4/20/2007	Kamaladi, Kathmandu	4752
19	Prime Commercial Bank Ltd	9/24/2007	Newroad, Kathmandu	4940
20	Sunrise Bank Ltd.	10/12/2007	Gairidhara, Kathmandu	3437
21	NMB Bank Ltd.	6/2/2008	Babarmahal, Kathmandu	4487
22	Janata Bank Nepal Ltd.	4/5/2010	Naya Baneshwor, Kathmandu	2060
23	Mega Bank Nepal Ltd.	7/23/2010	Kantipath, Kathmandu	4050
24	Civil Bank Ltd.	11/26/2010	Kamaladi, Kathmandu	3083
25	Century Commercial Bank Ltd.	3/10/2011	Putalisadak , Kathmandu	3004
26	Sanima Bank Ltd.	2/15/2012	Nagpokhari, Kathmandu	4590
27	NIC Asia Bank Nepal Ltd.	30/06/2013	Trade Tower, Thapathali, Kathmandu	5819
28	Prabhu Bank ltd	2016	Prabhu Building, Babarmahal	3209