

# Chapter - 1

## INTRODUCTION

### 1.1 Background of the Study

The financial sector plays a predominant role in the overall development of any nation. To see how prosperous and developed a country is, one can cast a glance on the contribution and efficient functioning of the financial sector of that country. In fact, the prosperity of a nation and her people depends much on the manner how financial market plays a role in the transfer of funds. This helps to integrate the various sectors of the economy. As in most of the countries, the banking sectors pre-dominate the financial system of Nepal. The composition of Nepalese financial sector encompasses banking sector and non-banking sector. Banking sector comprises Nepal Rastra Bank (NRB) and Commercial Banks. The non-banking sector includes: (i) Financial institutions licensed by NRB viz. Development Banks, Finance Companies, Micro-finance Development Banks, Co-operative Financial Institutions, Non-governmental Organizations (NGOs) performing limited banking activities (ii) Financial institutions other than licensed by NRB viz. Insurance Companies, Employee's Provident Fund, Citizen Investment Trust, Postal Saving Offices and Nepal Stock Exchange. Among all these institutions, the commercial banks are the key players in the economy of the country.

"A bank is an establishment for the custody of money received from or on behalf of its customers and which it pays on the customer's order". (*Oxford Dictionary*)

"A bank or bank is a person, firm or a company having a place of business where credits are opened by deposit or collection of money or currency subject to be paid or remitted upon draft, cheque or order or where money is loaned on stocks, bonds, bills of exchange and promissory notes are received for a discount and sale". (*Upadhaya and Tiwari; 2003*)

“A Bank can be defined as a ‘financial department store’ which renders a host of financial services besides taking deposits and giving loans”. (*Dahal; 2002:7*)

A bank is a financial intermediary that accepts deposits and channels those deposits into lending activities, either directly or through capital markets. A bank connects customers with capital deficits to customers with capital surpluses. Simply, a bank is an institution offering deposit subject to withdrawal on demand and making loan of a commercial or business nature. But now-a-days, bank is no longer limited to borrowing and lending of funds. With the passage of time, functions of banks have increased manifold. Recent years have shown that the banks are diversifying their activities into new areas to widen their business horizons. They are rendering a wide range of services to people of all level to cater their different needs and wants.

Commercial banks are the dominant financial intermediaries engaged in the collection of savings and providing loans as well as offering a wide variety of non-fund-based financial services to the customers according to their needs and preferences. In our country, commercial banks are playing crucial role in the growth of the economy and making a significant contribution to the promotion of financial market. In the context of Nepal, as of Mid – July 2010 statistics of NRB, Commercial Banks hold more than 76 percent of the total assets and liabilities of the financial system.

Commercial banks are defined as institutions, which issue demand liabilities used as means of payment and at the same time make loans to business in a tradition that goes several hundred years back. In the course of time, commercial banks have expanded their activities on both the asset and the liability side of the balance sheets. They accept various types of time and saving deposits while they have expanded their lending activities to include term loans to business, consumer loans, long term mortgage loans, and investments in debt securities of all types of a wide range of maturities.

Commercial bank’s primary function is the transfer of monetary resources from the savers to the users. They work as intermediaries between the two sectors of the economy: the surplus sector and the deficit sector. The Surplus sector includes middle and lower class people who save money that is not enough to invest or start a new business. Generally they are employees and labors. They generally do not want to take risk. They are risk averter. The Deficit sector comprises the business people who always seek money to invest in the

business. They are investor rather than saver. They are risk taker. The commercial bank collects money in small amount from the surplus sector and gives to the deficit sector. While collecting money from surplus sector bank gives the guarantee of repayment of money as well as certain amount as interest. On the other hand, while giving money to the deficit sector as a loan, it charges certain percent as interest which is slightly greater than that is paid to saver.

Commercial Banks' mission, goals, objectives and policies are similar to those of other financial institutions. All business organization look for long run profits by lending and investing funds at their disposal as high rate of return as is consistent with an appropriate degree of safety of principal. But unlike many other lenders, banks must be prepared to meet the withdrawal of these funds virtually on demand. The need for liquidity is therefore of utmost importance, and the central problem facing the bank's management is how to reconcile these often conflicting demands upon the bank's resources- safety, earnings and liquidity. (*Henin, Pigott and Robert; 1982*)

During the last two and half decades the Nepalese Financial System has grown significantly. At the beginning of 1980s, there were only two commercial banks and two development banks in the country. After the adoption of economic liberalization policy, particularly the financial sector liberalization that paved the way for establishment of new banks and non-bank financial institutions in the country. Consequently, by the end of Mid – January 2011, altogether 277 banks and non- bank financial institutions licensed by NRB are in operation. Out of them, 30 are “A” class commercial banks, 87 “B” class development banks, 79 “C” class finance companies, 21 “D” class micro-finance development banks, 15 saving and credit co-operatives and 45 NGOs.

Fierce competition is likely to erupt in Nepal's banking sector. At a time when the market pie has not increased and over four dozen industries are lying closed across the country, the rise in number of financial institutions is leading to cut-throat competition in the domestic banking sector. The economic condition of the country is not improving to the desired degree. The less opportunity for getting new investment avenues for loan flotation has compelled the banks to finance without being choosy. Quality of the loans and advances could not be maintained to the desirable level if there is no choice whether to finance or not. Once the loan is given it is supposed that the repayment of interest with principal shall

have to be made without any hindrance. The resources could not be considered of being utilized properly when the loans provided to the clients are not regular and if there is cumulative overdue outstanding. There may be various reasons behind the loans that turn irregular from regular one. The main reason may economic situation of the country which has global and far reaching impact. The smooth operation of the commercial banks is possible only when the economy of the country functions well. Satisfactory level of return on investment is the prerequisite for the financial sector to be groomed. The other contributing factors that turn the good loan into bad are attitude of the borrower, types and quality of security taken and legal hurdles created by the borrower when the recovery action is started. Once the distributed loan is not returned timely by clients and becomes overdue than it is known as NPA for the banks. Reduction of NPA has always been a problem for every commercial banks and proper management of the NPA has been a top priority. Due to various hurdles on way of management of NPA, commercial banks are now losing their profitability and struggling for their existence.

An asset which ceases to generate income for the bank is called non-performing asset. Non-performing assets literally means assets which are useless for the certain time frame or say assets that cannot be used in the productive sector and in such condition, the asset doesn't show any performance or positive results. In the banking system, when the borrower takes the loan, he should pay interest along with principle in the certain specified time. But if that borrower doesn't show initiation in payment of interest and principle for long time, then these types of loans fall under the category of non-performing assets (NPA). Non-Performing Assets have a deleterious effect on the return on assets because (i) they erode current profits through provisioning requirements (ii) they result in reduced interest income (iii) they require higher provisioning requirements affecting the capacity to increase good quality assets in future.

### **1.1.1 Brief History of Evolution of Banking**

The origin of the term "Bank" was believed to be derived from an Italian word "Banco", French word "Banque" which means "bench, counter". Benches were used as desks or exchange counters during the Renaissance by Florentine bankers, who used to make their

transactions atop desks covered by green tablecloths. It is believed that the word “bank” has been originated by merchant traders, goldsmiths and moneylenders.

The first banks were probably the religious temples of the ancient world, and were probably established in the third millennium BC. Banks probably predated the invention of money. Deposits initially consisted of grain and later other goods including cattle, agricultural implements, and eventually precious metals such as gold, in the form of easy-to-carry compressed plates. Temples and palaces were the safest places to store gold as they were constantly attended and well built. As sacred places, temples presented an extra deterrent to would-be thieves. There are extant records of loans from the 2nd century BC in Babylon that were made by temple priests/monks to merchants. In ancient Greece, the famous temple of Delphi and Olympia served as the great depositories for peoples’ surplus funds and these were the centre of money lending transactions. However as a public enterprise, banking made its first beginning around the middle of the 12<sup>th</sup> century in Italy. The Bank of Venice, founded in 1157 A.D. was supposed to be the most ancient bank followed by The Bank of Barcelona and The Bank of Geneva in 1401 A.D. and 1407 A.D. respectively. The popular bank of the ancient time was the Bank of Amsterdam which was established in 1609 A.D. The Bank of Venice and The Bank of Geneva continued to operate until the end of the 18<sup>th</sup> century. The oldest bank still in existence is Monte dei Paschi di Siena, headquartered in Siena, Italy, and has been operating continuously since 1472 A.D.

However, the history of organized banking in Nepal is relatively new. Like in most other countries of the world, landlords, moneylenders, merchant, goldsmith etc. were the bankers of ancient Nepal. As stated in the annals of Nepal, Shankhadhar who was a merchant of Kantipur in 880 A.D., introduced the ‘Nepal Sambat’ after paying all the outstanding debts in the country. This can be taken as the basis of money landing practice prevalent in the ancient Nepal. The first step taken towards institutional development of banking sector in Nepal was the establishment of ‘Tejrath Adda’ during 1877 A.D. ‘Tejrath Adda’ used to grant loans to public against the collateral of bullions, but it did not accept the deposit from the public. But this type of banking activity was not able to spread in different areas of the country. With the passage of time, due to increase in trade with India, China and other countries of the world, a need of the institution which can work widely to increase the trade and can touch even the remote areas of the country was realized and the result was

the establishment of 'Udyog Parishad' in 1936 A.D.. One year after, in 1937 A.D., it formulated the 'Company Act' and 'Nepal Bank Act'.

With the establishment of Nepal Bank Limited (NBL) in 1937 A.D. by the government of Nepal, the era of modern banking practices started in Nepal. Later in 1956, Nepal Rastra Bank (NRB) was established as the national central bank under the Nepal Rastra Bank Act, 1955 with the objective of supervising, promoting and directing the functions of commercial banking activities. Nepal Rastra Bank is a non-profit organization fully owned by the government. Similarly, Rastriya Banijya Bank (RBB) was established in 1966 (2022 B.S.) as a fully government owned commercial bank. After the emergence of RBB, banking services started to spread its wings in both urban and rural areas but due to excessive political and bureaucratic interference, there was a lack of quality banking services. With a view to promote and develop the agricultural sector in the country, the government established Agricultural Development Bank (ADB) in 1968 (2024 B.S.).

The growth of financial sector in the country was slow-moving. The efforts of the government were not sufficient to develop financial sector. In the mean time, Nabil Bank Limited (erstwhile Nepal Arab Bank Limited) made an entry in the Nepalese banking sector as a first privately owned commercial bank. Establishment of Nabil Bank Limited in the year 1984 (2041B.S.), paved the way for opening commercial banks to private sector. Nabil Bank Limited emerged as the first joint venture bank at the time when the banking industry of the country was completely taken over by government and semi-government banks. The bank soon gained popularity among the public for providing efficient customer services and started to play its role in revitalizing the economy by accelerating productivity in various sectors of the economy. Impressed and inspired with the success of Nabil Bank and also because of the liberal economic policy adopted by the successive governments of Nepal, many commercial banks have come into existence so far. The list of the commercial banks of Nepal as on Mid-January 2011 is shown in Table No. 1.1.

**Table 1.1****List of Class ‘A’ Licensed Financial Institutions (Commercial Banks)****(Mid-January, 2011)**

<b>S.N.</b>	<b>Name of Banks</b>	<b>Operation Date (A.D.)</b>	<b>Head office</b>
1	Nepal Bank Limited	1937-11-15	Dharmapath, Kathmandu
2	Rastriya Banijya Bank	1966-01-23	Singhdarbarplaza, Kathmandu
3	Nabil Bank Limited	1984-07-16	Kantipath, Kathmandu
4	Nepal Investment Bank Limited	1986-02-27	Durbar Marg, Kathmandu
5	Standard Chartered Bank Nepal Limited	1987-01-30	Naya Baneswor, Kathmandu
6	Himalayan Bank Limited	1993-01-18	Thamel, Kathmandu
7	Nepal Bangladesh Bank Limited	1993-06-05	Naya Baneswor, Kathmandu
8	Nepal SBI Bank Limited	1993-07-07	Hattisar, Kathmandu
9	Everest Bank Limited	1994-10-18	Lazimpat, Kathmandu
10	Bank of Kathmandu Limited	1995-03-12	Kamaladi, Kathmandu
11	Nepal Credit and Commerce Bank Limited	1996-10-14	Siddharthanagar, Rupandehi
12	Lumbini Bank Limited	1998-07-17	Narayangarh, Chitwan
13	Nepal Industrial and Commercial Bank Ltd.	1998-07-21	Biratnagar, Morang
14	Machhapuchhre Bank Limited	2000-10-03	Prithivichowk, Pokhara
15	Kumari Bank Limited	2001-04-03	Durbarmarg, Kathmandu
16	Laxmi Bank Limited	2002-04-03	Adarshnagar, Birgung
17	Siddhartha Bank Limited	2002-12-24	Hattisar, Kathmandu

18	Agriculture Development Bank Limited	2006-03-16	Ramshahapath, Kathmandu
19	Global bank Limited	2007-01-02	Birgunj, Parsa
20	Citizens Bank International Ltd.	2007-06-21	Kamaladi, Kathmandu
21	Prime Commercial bank Limited	2007-09-24	New Road, Kathmandu
22	Sunrise Bank Limited	2007-10-12	Gairidhara, Kathmandu
23	Bank of Asia Nepal Limited	2007-10-12	Tripureswor, Kathmandu
24	Development Credit Bank Limited	2008-05-25	Kamaladi, Kathmandu
25	NMB Bank Limited	2008-06-05	Babarmahal, Kathmandu
26	Kist bank Limited	2009-05-07	Anamnagar, Kathmandu
27	Janata Bank Nepal Limited	2010-04-05	New Baneshwor, Kathmandu
28	Mega Bank Nepal Limited	2010-07-23	Kantipath, Kathmandu
29	Commerz and Trust Bank Nepal Limited	2010-09-20	Kantipath, Kathmandu
30	Civil Bank Nepal Limited	2010-11-26	Kamaladi, Kathmandu

*(Source: NRB, Banking and Financial Statistics, Mid-January 2011)*

### **1.1.2 Profile of the selected Commercial Banks**

Five major commercial banks are selected here for the study, they are:

- (i) Nepal Bank Limited (NBL)
- (ii) Rastriya Banijya Bank (RBB)
- (iii) Nabil Bank Limited (NABIL)
- (iv) Nepal Investment Bank Limited (NIBL)
- (v) Standard Chartered Bank Nepal Limited (SCBNL)



A brief profile of the above commercial banks is presented below.

**(i) Nepal Bank Limited (NBL)**

Nepal Bank Limited (NBL) is the oldest commercial bank of Nepal. It was established in 15 November 1937 which marked the beginning of an era of formal banking in Nepal. The Bank is also one of the largest in Nepal with 108 branches in different locations of the country. It was formed under the principle of Joint venture (Joint venture between government and general public). NBL's authorized capital was Rs. 10 million & issued capital Rs. 2.5 million of which paid-up capital was Rs. 842 thousand with 10 shareholders. The bank has been providing a wide range of banking services through its branch offices in the different geographical locations of the country. The head quarter of the bank is in Dharmpath, Kathmandu. As NBL was established prior to Nepal Rastra Bank (Central Bank of Nepal), it carried out the function of commercial bank as well as of the central bank until the inception of NRB.

Despite being the oldest and one of the largest banks of Nepal, the bank suffered massive difficulty in terms of unpaid loan and falling profits. Thus the Bank was put under the control of Nepal Rastra Bank, the central bank of Nepal which hired services of Bank of Scotland (Ireland), ICC Consulting from 2002 for the management of the bank for an initial period of two years. The period was further extended for two years.

Nepal Bank Limited is playing a vital role for economic development of the country with the objectives (i) to continue to maintain leading share of banking sector with a significant presence in all major geographical areas in the country. (ii) to provide competitive and customer oriented banking services to all customers through competent and professional staff. (iii) to reclaim leadership within the national financial community.

**(ii) Rastriya Banijya Bank (RBB)**

Rastriya Banijya Bank (RBB) is fully government owned, and the largest commercial bank in Nepal. RBB was established on January 23, 1966 under the RBB Act. RBB provides various banking services to a wide range of customers including banks, insurance companies, industrial trading houses, airlines, hotels, and many other sectors.

RBB has Nepal's most extensive banking network with over 128 branches. Through its branch network, RBB has been contributing to Nepal's economic development by providing banking services throughout the country. RBB's main objectives are to provide banking services throughout Nepal and contribute in the socio economic development of the country. The bank's major activities include accepting deposits, investment in government securities, lending to productive sectors, dealing with foreign currency, processing domestic and foreign remittances, merchant banking and correspondent banking services etc.

RBB has many correspondent arrangements with major international banks all over the world that facilitate trade finance, bank-originated personal funds transfers and interbank funds transfer via SWIFT. In a bid to promote remittance business, RBB works with Western Union and International Money Express, two leading person-to-person funds transfer networks. 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.

In addition RBB runs various programs i.e. Banking with the Poor, Micro Credit project for Women etc. to enhance the living standard of people as per the government directives. As well, RBB actively delivers various government programs to people living in remote parts of the country; these programs are intended to raise living standards.

### **(iii) Nabil Bank Limited (NABIL)**

Nabil Bank Limited (formerly known as Nepal Arab Bank Limited) is the first foreign joint venture bank of Nepal and it started operations in July 1984. Nabil was incorporated with the objective of extending international standard modern banking services to various sectors of the society. Pursuing its objective, Nabil provides a full range of commercial banking services through its 48 points of representation across the country and over 170 reputed correspondent banks across the globe.

NABIL, as a pioneer in introducing many innovative products and marketing concepts in the domestic banking sector, represents a milestone in the banking history of Nepal as it

started an era of modern banking with customer satisfaction measured as a focal objective while doing business.

Nabil Bank has been providing a wide range of modern banking services to people throughout the country. The bank ranks among the top three successful financial institutions in Nepal in terms of market share of handling Nepal's trade. Operations of the bank including day-to-day operations and risk management are managed by highly qualified and experienced management team. Bank is fully equipped with modern technology which includes ATMs, credit cards, state-of-art, world-renowned software from Infosys Technologies System, Bangalore, India, Internet banking system and Telebanking system.

#### **(iv) Nepal Investment Bank Limited (NIBL)**

Nepal Investment Bank Limited is one of the leading commercial banks of Nepal. Nepal Investment Bank Ltd. (NIBL), previously Nepal Indosuez Bank Ltd., was established in 1986 as a joint venture between Nepalese and French partners. The French partner (holding 50% of the capital of NIBL) was Credit Agricole Indosuez, a subsidiary of one the largest banking group in the world.

With the decision of Credit Agricole Indosuez to divest, a group of companies comprising of bankers, professionals, industrialists and businessmen, had acquired on April 2002 the 50% shareholding of Credit Agricole Indosuez in Nepal Indosuez Bank Ltd. The name of the bank has been changed to Nepal Investment Bank Ltd. upon approval of bank's Annual General Meeting, Nepal Rastra Bank and Company Registrar's office with the following shareholding structure:

- J A group of companies holding 50% of the capital
- J Rastriya Banijya Bank holding 15% of the Capital.
- J Rastriya Beema Sansthan holding the same percentage.
- J The remaining 20% being held by the General Public (which means that NIBL is a company listed on the Nepal Stock Exchange).

NIBL, which is managed by a team of experienced bankers and professionals having proven track record and can offer people what they are looking for. NIBL is sure that

peoples' choice of a bank will be guided among other things by its reliability and professionalism. The bank is providing state-of-the-art banking services through its 41 branches in different parts of the country.

NIBL is committed to building and maintaining a strong relationship between the Bank and the larger community. In order to do so the bank invests in various projects that promote our heritage and the arts, in education & health initiatives, various NGO programs, sports as well as in supporting the less privileged sections of our society. Each year, NIBL sponsors a diverse range of programs that encourage a strong corporate culture of giving in the name of charity and responsibility to our community and nation.

**(v) Standard Chartered Bank Nepal Limited (SCBNL)**

Standard Chartered Bank Nepal Limited (SCBNL), formerly known as Nepal Grindlays Bank Limited, was established in January 1987 as the third joint venture bank of Nepal in technical collaboration with ANZ Grindlays Bank. Today the Bank is an integral part of Standard Chartered Group who has 75% ownership in the company with 25% shares owned by the Nepalese public. The bank enjoys the status of the largest international bank currently operating in Nepal. The shares of the bank are actively traded in Nepal Stock Exchange with leading price in comparison to other commercial bank in the current market. The bank is providing modern banking services through its 15 branches in the different locations of the country. The bank is one of the top three financial institutions of the country.

An integral part of the international banking group currently operating in Nepal, the bank enjoys an impeccable reputation of a leading financial institution in the country. The bank offers the full range of banking products and services in wholesale and consumer banking, catering to a wide range of customers encompassing individuals, mid-market local corporate, multinationals, large public sector companies, government corporations, airlines companies, hotel as well as the segments comprising of embassies, aid, agencies, NGOs and INGOs.

The SCBNL is continually playing leading role in introducing new products in delivering superior services. The bank has been the pioneer in introducing customer focused products and services in the country. It is the first bank in Nepal that has implemented the anti-

money laundering policy and applied the 'Know Your Customer' procedure on all the customers' accounts. The bank especially focuses to the people of high income group, so sometimes the name 'bank of rich customers' is attributed to SCBNL.

## **1.2 Focus of the Study**

The study will be focused on analysis of non-performing asset (NPA), its causes and impact on the financial health of the bank. Here, for the study purpose, five major commercial banks of Nepal are taken into account. NPA may simply be called as the Bad Debt. In banking term, NPA comprises those loans and advances which are not performing well and likely to be turn as bad loan. NPA has severe impacts on the growth and development of financial institution. On the one hand, the investment becomes worthless as expected return cannot be realized. On the other hand, the profitability is directly affected due to the provisioning requirement for the risk mitigation. Therefore, interest along with principle has to be recovered within the stipulated time and without any hassles. Otherwise, it may raise question marks in the profitability of the bank and ultimately to its existence.

NPA as per current directives of Nepal Rastra Bank (NRB) has been categorized as classified loans and advances. For the probable loss on lending that cannot be recovered even after liquidation of security held with banks, NRB has directed to maintain loan loss provisioning according to ageing basis for risk mitigation. The loan loss provision is to 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. The problem may lead to failure of the banking system which may ultimately affects the depositors and the other stakeholders of the society. This study will be focused to find out the relationship of NPA on profitability of the commercial banks.

## **1.3 Statement of the Problem**

Economic liberalization policy adopted in Mid-1980s, particularly the financial sector liberalization, paved the way for establishment of new banks and non-bank financial institutions in the country. There has been a significant growth in the numbers of financial institutions. However, with the increase in the number of the financial institutions, the actual performance of these institutions could not get better. The reason behind this is that, these institutions have to face a number of problems like limited market size, lack of

smooth functioning of the economy, cut throat competition due to the rapid increase in number of financial institutions, over liquidity caused due to lack of sound lending opportunities, political instability, lack of security, increase in non-performing assets, lack of proper policies, rules and regulations etc.

In the present context, the most common problem that the Nepalese banks are confronting with is the increased size of non-performing asset. The banks have to allocate more and more amount for the loan loss provision. Every loan and advance has its maturity period or expiry date. The borrower must repay the loans by the maturity period but there is no certainty that all the loans are recovered by the maturity date. Once the loan is given it is supposed that the repayment of interest with principal will be made within the stipulated time. But if the repayment of loan is not made, it turns out to be non-performing loan or non-performing asset for the bank. Non-performing assets are those assets that cannot be used to enhance productivity. It could reduce bank's profitability both a loss of interest income and write off the principle loan amount. In one hand, the bank cannot mobilize its asset to profitable investment opportunity, which increase opportunity cost for the bank. In the other hand, the banks have to make provision for doubtful debts from their profit and other sources. That results in decrease in profit margin or even may cause a loss in the profit of the bank.

Bank faces loan losses due to the borrower's defaults of loan obligations. It is not possible for the bank to have 100 percent success in selecting the good clients since in practice some percentages of customers do not pay the loans either intentionally or due to some genuine causes and the factors beyond their control. There are many other factors like change in economic environment, keen competition in the economy, managerial weaknesses and other outright frauds that bring the loan losses to the banks. This affects the earnings and the reserve building capacity of the banks. In such situation, the regulatory body like central bank compels the commercial banks to maintain loan loss provisions according to classification of loans into various categories like good loan, indicative substandard loan, substandard loan, doubtful loan and bad loan. To resolve the problem of the losses or likely losses of this nature, to safeguard depositor's interest and to ensure stability in the economy, Nepal Rastra Bank (NRB), as the central bank, has amended several old directives as per present need and issued many new circulars,

directives from time to time related to various aspects of the banks. NRB has directed to maintain loan loss provisioning according to aging basis for risk mitigation.

The small borrowers, in most cases, have paid their debt by selling their collateral, their homes and their belongings but the big borrowers have gone to court to obtain stay orders, delayed the recovery process and creating various problems to complete the auctions of their properties. Lender banks are raising the voice that instead of being declared as bankrupt or having social exclusion to those banks; the life style, social status, political affiliation and increase in expending pattern on luxurious items of the borrowers are to be investigated.

Commercial banks have been the source of inspiration to entrepreneurs who have no resource base in terms of liquid financial assets of their own. Thus resources collected by banks from savers are channeled to entrepreneurs running different economic activities, which contribute to increase national income, provide employment and infrastructure development. All know that the collections of deposits and making loan and advances are core functions of banks and financial institutions. While collecting the deposits the banks has to provide interest to the depositors, it is cost to the banks. The money collected in the form of deposits is again translated into loans and advances and banks get interest income. On this transformation process banks have a small interest spread from which they have to meet the operating expenses, cost of bad debts and a small profit margin. In order to pay the interest to the depositors, there should be regular repayments of principal and interest of loan from the borrowers as per agreed schedule. In order to make this system smooth, banks should have all the loans as performing assets i.e. good loans. Good loans and advances are called performing assets. Banks and 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 the quality of such assets. Deterioration in the quality of loans and other assets give birth to non-performing loans and ultimately invites the financial crisis. (*Dhungana; 2063*)

Though loans and advances are the significant items of the bank in the asset side, negligence in managing and administering this asset could be the main cause of a liquidity crisis in the bank and one of the main reasons of failure for the bank. It can be clearly seen

on two largest government owned banks, Nepal Bank Limited (NBL) and Rastriya Banijya Bank (RBB). Not only government owned banks but some of the banks under private ownership are also suffering from NPA burden. Private sector banks have comparatively low level of non-performing assets to those of NBL and RBB. The reports below show that all the Nepalese commercial banks have more or less some non-performing loan.

As per the NRB statistics, the total non-performing loan of commercial banks declined to 2.39 percent in Mid – July 2010 from 3.53 percent in the Mid - July 2009. The total amount of NPA remained to Rs. 11223.34 million in Mid - July from Rs. 13574.6 million in the Mid - July 2009. The table no.1.2 shows the last three year non-performing loan status of commercial banks of Nepal:

**Table 1.2**

**Non-Performing Assets of Commercial Banks of Nepal**

<b>S. N</b>	<b>BANKS</b>	<b>Mid-July 2008(%)</b>	<b>Mid-July 2009(%)</b>	<b>Mid-July 2010(%)</b>
1	Nepal Bank Limited	8.95	5.91	2.28
2	Rastriya Banijya Bank	21.65	15.68	11.45
3	Nabil Bank Limited	0.79	0.80	0.14
4	Nepal Investment Bank Limited	1.12	0.82	0.46
5	Standard Chartered Bank Nepal Limited	0.92	0.66	0.54
6	Himalayan Bank Limited	2.35	2.16	3.16
7	Nepal Bangladesh Bank Limited	31.1	19.3	1.77
8	Nepal SBI Bank Limited	3.65	2.02	1.47
9	Everest Bank Limited	0.64	0.48	0.16
10	Bank of Kathmandu Limited	1.76	1.27	1.18



11	Nepal Credit and Commerce Bank Limited	16.36	2.74	2.71
12	Lumbini Bank Limited	14.87	9.06	4.66
13	Nepal Industrial and Commercial Bank Ltd.	0.86	0.90	0.56
14	Machhapuchhre Bank Limited	1.04	2.75	1.78
15	Kumari Bank Limited	1.35	0.43	0.40
16	Laxmi Bank Limited	0.13	0.05	0.12
17	Siddhartha Bank Limited	0.60	0.45	0.42
18	Agriculture Development Bank Limited	11.63	8.83	8.22
19	Global bank Limited	0.00	0.09	0.61
20	Citizens Bank International Ltd.	0.00	0.00	0.04
21	Prime Commercial bank Limited	0.00	0.00	0.21
22	Sunrise Bank Limited	0.00	0.16	1.34
23	Bank of Asia Nepal Limited	0.00	0.01	0.10
24	Development Credit Bank Limited	2.16	1.62	1.19
25	NMB Bank Limited	1.52	0.49	0.70
26	Kist Bank Limited	0.00	0.00	0.19
27	Janata Bank Nepal Limited	0.00	0.00	0.00
	<b>Total</b>	<b>6.08</b>	<b>3.53</b>	<b>2.39</b>

(Source: Banking and Financial Statistic of NRB, Mid-July 2010)

As shown in table 1.2, the level of total NPL is in decreasing trend but the existing level of NPL of few banks is still alarming in order to restore the financial sustainability in the system.

As per the international standard, only 5% NPL is allowed but in the context of Nepal, 10% NPL to total gross loan is acceptable. While studying the data presented in the above table, each and every commercial bank has more or less some percentage of NPL to total loan. The old and government owned banks are facing the high level of NPL whereas the privately owned banks have managed to maintain the NPL below the standard level except the one.

The issue of NPA in Nepalese banking sector is really a big problem for the whole nation's economy. NPA has always been a headache and a burning issue for the Nepalese banking sector. So, the root cause of NPA should be analyzed and the impact of NPA on bank's profitability is to be examined. This research is focused on these areas particularly. This study has identified the following research questions regarding to NPA with special reference to Nepal Bank Limited, Rastriya Banijya Bank, Nabil Bank Limited, Nepal Investment Bank Limited and Standard Chartered Bank Nepal Limited:

- a. What is the present status and general trend of non-performing loan of sampled commercial banks?
- b. What are the major internal as well as external factors leading to increase in non-performing asset (NPA)?
- c. What percentage of total assets and total lending is occupying by NPA of selected Nepalese commercial bank?
- d. What is the relationship between loan and loan loss provision in the selected commercial banks?
- e. Is the NPA level of commercial banks lies within the national and international standard?
- f. Is there any significant difference in the NPAs of Nepalese commercial banks?
- g. What measures can be adopted to control the NPA?
- h. What is the overall impact of NPA on the profitability of the banks under study?
- i. What are the guidelines and provisions of NRB pertaining to loan classification and loan loss provision and how strictly these are being followed?

## **1.4 Objectives of the Study**

The problem of NPA is to be faced more or less, by every commercial bank in the country. So, every bank has now put the NPA management under top priority list. In the present context, the analysis of the cause and implication of NPA, therefore, will obviously be useful for the stakeholders of banking sector. The basic objective of this study is to identify and analyze the cause, impact and consequence of NPA. The following objectives have been considered as specific objectives of this study:

- ) To evaluate the proportion of non-performing loan and the level of NPA in total assets, total deposit and total lending in selected commercial banks.
- ) To analyze the relationship between loan and loan loss provision in the selected commercial banks.
- ) To study the trend line of the non-performing assets, loan and advances, loan loss provision of selected commercial banks
- ) To find out the causes of NPA in the Nepalese commercial banks and the measures to be adopted to control them.
- ) To find the overall impact of non-performing loan on performance and profitability of selected commercial banks
- ) To examine whether Nepalese commercial banks are fulfilling the NRB directives regarding loan loss provision for non performing assets or not.
- ) To provide suggestion and recommendations for the further improvements.

## **1.5 Significance of the Study**

NPA is an issue of greater concern among the banks and financial institutions in Nepal. Proper management of NPA is a major problem and it is one of the top priorities of all the commercial banks in the country. Recovery of loans is a challenging task for banks and financial institutions, therefore effective tools and techniques are of paramount importance in the recovery of loan and advances. The study will be directed to analyze the non-performing assets of the selected Nepalese commercial banks and make comparative study of non-performing loan of the selected commercial bank. So this research will be able to

deliver some of the present issues, latest information and data regarding non-performing loan and loan loss provision. Hence, this study will give the real picture of the current non-performing assets of the selected commercial banks.

This study will have both academic as well as practical significance. The finding and conclusion of the study will add to the literature of non-performing assets in general and review the previous findings. The study will be significant for bankers, its shareholders, depositor, students, researchers and all general public who are interested on the current affair of banking industry. The study will be helpful for the banking industry to identify and to trace its level. This study will also be helpful for the regulating authority to know existing recovery problem so as to have some modification on directives, laws and other proceedings. The result of the study is thought to be importance for the following groups:

- ) Management of the bank: After analyzing the cause and effect of NPA, it would be helpful to the management. They can observe internal as well as external reasons for growing NPA in their organizations.
- ) Potential investors: They can analyze themselves the condition of banks whether it is advisable or not by reviewing this research.
- ) Government: Government authorities can think to make necessary policy or adjustment in current policy and guidelines by reviewing current study. They can make a base whether the commercial banks following their policy and guidelines or not.
- ) Policy formulators: They can review many aspects of NPA related matters by going through this research.
- ) Depositors: The study will inform them about the real situation of the bank and help them to decide to make deposit of their hard earned money.
- ) Academicians: This study will be helpful for students and researcher for further research in this field.

## **1.6. Limitation of the Study**

This study is a milestone in searching the NPA problems and its solutions in Nepalese financial sector, especially commercial banks. Findings of the study might be very much

useful for academicians as well as for practitioners. But, in general, no research work is found to be free from limitations. The study has been subjected to the following limitations:

- ) Only Nepalese commercial banks have been considered for the study and five banks have been selected as samples for the study. Hence, the findings of the study may not be generalized.
- ) This study is concerned only with the issue of non-performing asset/loan in Nepalese commercial banks. It does not cover other aspects of the banks.
- ) Only five years period will be taken for the study. The period of study is limited to statistics available from fiscal year 2005/06 to 2009/10.
- ) The whole study is based on secondary data. The data published in annual reports, publication, articles, journals of the respective topic and information published in the website of the concerned banks are taken into account, which may or may not provide exact vision of the field. So, reliability of this research will highly depend upon the accuracy of information. If available data are not accurate, this may affect the findings of the study.
- ) The study is intended to fulfill the requirement for the masters in business studies, so it has to be carried out within the limited time and resources.

## **1.7 Organization of the Study**

The study has been organized in the following five chapters:

Chapter 1: Introduction

Chapter 2: Review of Literature

Chapter 3: Research Methodology

Chapter 4: Data Presentation and Analysis

Chapter 5: Summary, Conclusion and Recommendations.

## **Chapter- 1: Introduction**

This chapter is the introductory part which gives a general idea about the framework of the study. It deals with the various aspects of the study like general background of the study, focus of the study, statement of the problem, objectives of the study, significance of the study and limitation of the study.

## **Chapter - 2: Review of Literature**

In this chapter, the brief conceptual framework as well as review of existing literature in the relevant area is kept. In this chapter both conceptual and theoretical review is done. It includes reviews of books, reports, banking journals, websites etc.

## **Chapter - 3: Research Methodology**

This chapter deals with the methodology adopted in carrying out the research and it includes research design, sources of data, the method of data collection and analysis, population and sample along with different statistical and financial tools. It provides guidelines and gives a road map to analyze the collected data.

## **Chapter -4: Data Presentation and Analysis**

This is the main part of the study. Various statistical tools are used to analyze and interpret the result. This chapter covers analysis, presentation and interpretation of the acquired data, which was collected through the designed methodology. Data are presented in tabular, graphic or in an equation form to reach to a conclusion. This chapter provides a shape to facilitate the analysis of relevant data in an attractive way.

## **Chapter - 5: Summary, Conclusion and Recommendations**

This is the last chapter of the study and this chapter presents summary in aggregate, conclusion drawn through the findings and the probable recommendations regarding the subject matter that can be useful for academicians as well as for practitioners.

## **Chapter – 2**

### **REVIEW OF LITERATURE**

Review of literature is the process of locating, obtaining, reading, analyzing and evaluating the research literature in the related area of study. Review of literature is a crucial component of all studies because it helps the researcher to develop a thorough understanding and insight into various research works related to the present study. It can prevent the researcher from conducting a study that has already been done, it can identify questions that need to be answered and it can help in acquiring ideas for designing the study.

This chapter presents the review of various books related to the subject, published and unpublished articles, different economic journals, bulletins, magazines, newspapers, balance sheet of respective banks, NRB directives and guidelines, economic survey, previous thesis on related subject and websites related to the area of study. This chapter mainly includes the following parts:

#### 2.1 Conceptual Framework/Theoretical Review

#### 2.2 Review of Related Studies

##### 2.2.1 Review of Books

##### 2.2.2 Review of Relevant NRB Directives

##### 2.2.3 Review of Relevant Articles/Journals

##### 2.2.4 Review of Previous Relevant Thesis

#### 2.3 Research Gap

## 2.1 Conceptual Framework

### 2.1.1 Meaning of Commercial Banks

According to Commercial bank Act 2031 BS of Nepal “A commercial bank is one which exchanges money, deposits money, accepts deposits, grants loans and performs commercial banking functions and which is not a bank mean for cooperative, agriculture, industries for such specific purpose.”

But the bank and financial development institutions ordinance, 2060 has accumulated the five banking acts including Commercial Bank Act 2031, which defines the bank with respect to their transaction. This act is trying to categories the banking institutions in two ways that is based on their transactions. According to this Act, “Bank is the institution which performs its transaction under the provision mentioned on section 47 of this act”.

Rosenberg (1982) has stated commercial bank as an organization chartered either by the Comptroller of the Currency and known as` a national bank or chartered by the state in which it will conduct the business of banking. A commercial bank generally specializes in demand deposits and commercial loans.

"Bank is an institution that deals in money and substitutes and provides other financial services. Banks accept deposits and make loans and derive a profit from the difference in the interest rates paid and charged, respectively. Some banks also have the power to create money. Commercial bank is a bank with the power to make loans that, at least in part, eventually become new demand deposits. Because a commercial bank is required to hold only a fraction of its deposits as reserves, it can use some of the money on deposit to extend loans. When a borrower receives a loan, his checking account is credited with the amount of the loan; total demand deposits are thus increased until the loan is repaid. As a group, then, commercial banks are able to expand or contract the money supply by creating new demand deposits." (*Encyclopedia Britannica, 2002*)

"Banking is the business of providing financial services to consumers and businesses. The basic services a bank provides are checking accounts, which can be used like money to make payments and purchase goods and services; savings accounts and time deposits that can be used to save money for future use; loans that consumers and businesses can use to purchase goods and services; and basic cash management services such as check cashing



and foreign currency exchange. Commercial banks specialize in loans to commercial and industrial businesses. Commercial banks are owned by private investors, called stockholders, or by companies called bank holding companies." (*Microsoft Encarta Reference Library, 2003*)

The main objective of a commercial bank is to earn profit by collecting the fund scattered around the general public, and mobilizing it. So, the main functions of commercial banks happen to be collecting deposits from general public and lending loans to various economic sectors that require financing. Commercial banks make profit by charging a bit higher interest rate in loans than they pay to depositors. So, interest income i.e. the income generated through interest is the primary source of income of commercial banks.

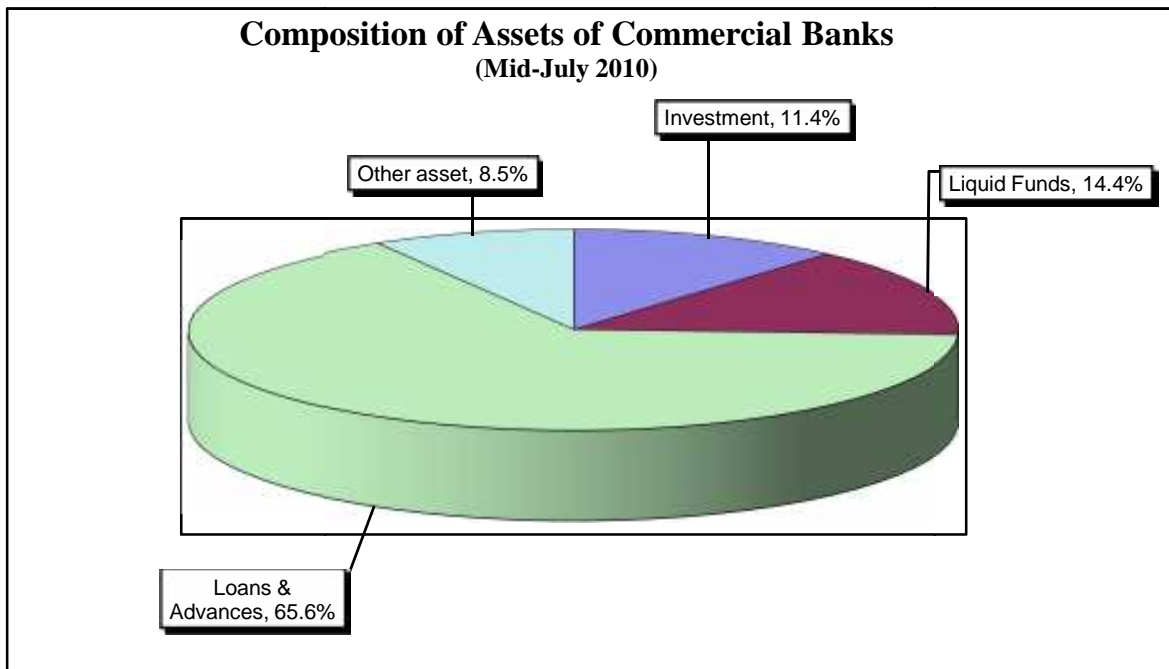
### **2.1.2 Nepalese Commercial Banks at a Glance**

# By the end of Mid – January 2011, altogether 277 banks and non- bank financial institutions licensed by NRB are in operation. Out of them, 30 are “A” class commercial banks, which is listed in Table No. 1.1.

# Though, the entry of new banks in financial system along with increased in the business, the total assets i.e. sources of fund of commercial banks decreased by 3.06 percent compared to 43.30 percent in the previous year. By the end of this fiscal year, the total assets of commercial banking sector reached to Rs. 787300.9 million from Rs 812165.9 million in the last period.

# The share of loans and advances to total assets increased to 65.6 percent in Mid - July 2010 from 49.02 percent in mid July 2009. Similarly, share of investment and liquid funds to total assets registered 11.4 percent and 14.4 percent respectively. In the preceding year, the respective shares were 16.11 percent and 13.05 percent.

**Figure 2.1**



*(Source: Banking and Financial Statistics, NRB, Mid –July 2010)*

# The composition of liabilities of commercial banks shows that, the deposit has occupied the dominant share of 81.1 percent followed by borrowings 2.6 percent and capital fund 5.3 percent in the Mid - July 2010. The respective shares of deposit, borrowings and capital fund in the previous period were 69.40 percent, 2.26 percent and 3.74 percent respectively.

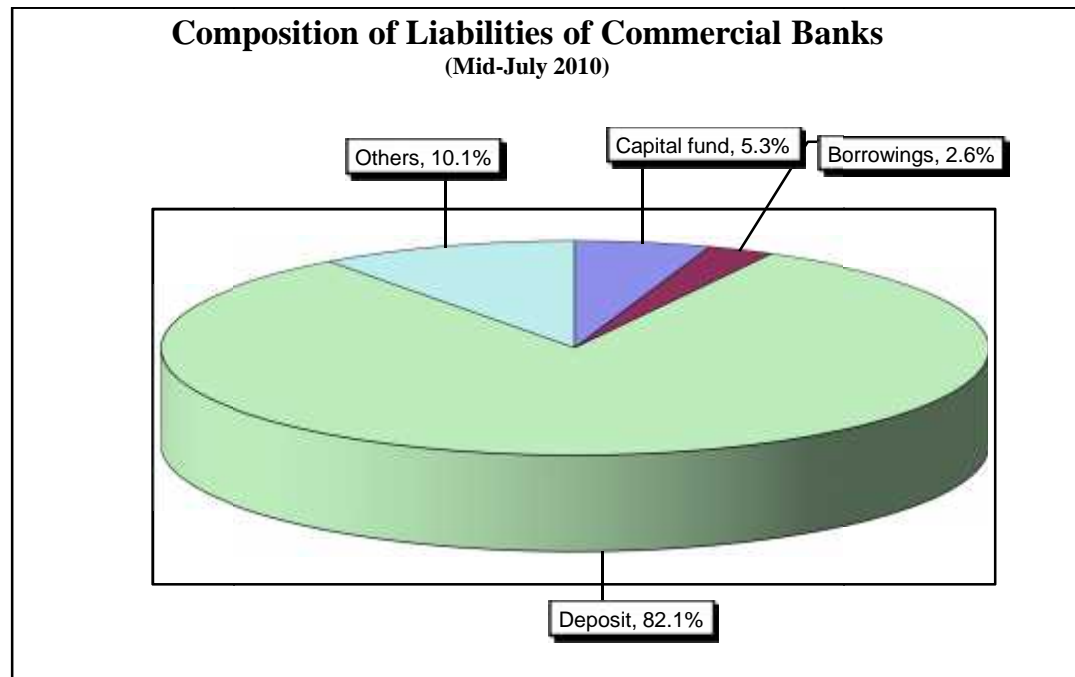
# In the Mid - July 2010, the loans and advances increased marginally at lower rate of 17.3 percent compare to 31.44 percent in Mid - July 2009. By the end of Mid - July 2010, the total outstanding amount of loans and advances of commercial banks reached to Rs. 467107.2 million. It was Rs. 398143.0 million in Mid - July 2009.

# The total investment of commercial banks in Mid - July 2010 increased by 2.43 percent and remained to Rs. 134041.2 million from Rs. 130856.9 million in Mid - July 2009. Similarly liquid fund decreased by 3.1percent and amounted to Rs.102749.0 million.

# In the Mid - July 2010, total deposit of commercial bank increased by 11.94 percent compared to 32.28 percent growth in the Mid - July 2009. As of Mid - July 2010, it reached to Rs. 630880.8 million from Rs 563604.5 in the Mid - July 2009. Among the

component of deposit, current deposit increased with rate of 12.5 percent compare to 27.74 percent in last year. Similarly, saving deposit decreased by 8.55 percentage and fixed deposit increased by 41.62 percent.

**Figure 2.2**



*(Source: Banking and Financial Statistics, NRB, Mid –July 2010)*

# The saving deposit comprises the major share in total deposit followed by fixed deposit and current deposit. As of Mid - July 2010, the proportion of saving, fixed, and current deposits are 37.68 percent, 31.71percent and 12.78 percent respectively. In the last year the respective share of saving, fixed and current deposit were 46.12 percent, 25.06 percent and 12.71 percent.

# In the Mid - July 2010, the borrowing increased by 7.99 percent compared to 27.15 percent in the previous year. By the end of Mid - July 2010, it reached to Rs.19783.9 million from Rs. 18320.2 million in the Mid - July 2009.

# Capital fund of commercial banks is increased by33.95 percent compared to previous year and reached to Rs. 40719.8 million in Mid - July 2010. It was Rs. 30399.5 million in Mid - July 2009.

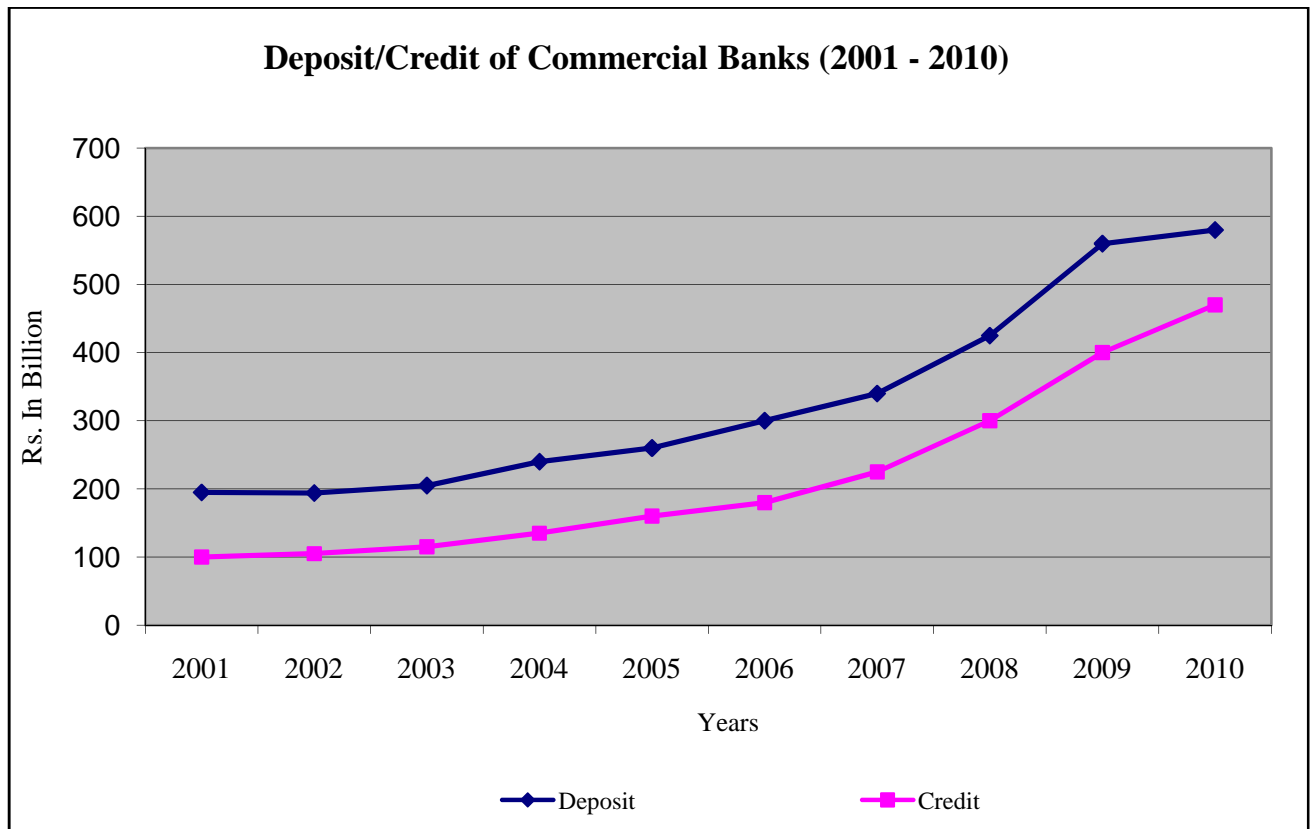
# Out of the Rs. 469298.4 million outstanding sector wise credits in Mid - July 2010, the largest proportion of the loans and advances is occupied by manufacturing sector. The

share of this sector is 20.13 percent followed by wholesale & retailers 18.90 percent, other sector 14.65 percent, finance, insurance & fixed assets by 11.51 percent and construction 10.56 percent. Similarly, transportation, communication & public services comprise 5.52 percent, consumable loan by 5.38 percent, other service industries by 4.95 percent and agriculture by 3.05 percent in the same period.

# The outstanding of deprived sector credit of commercial banks in the Mid - July 2010 increased by 23.32 percent compared to 76.36 percent in the Mid - July 2009. By the end of Mid - July 2010, it reached to Rs. 16728.9 million from Rs. 13565.1 million in Mid - July 2009. The ratio of deprived sector credit to total outstanding of product wise loans and advances stood at 3.56 percent in the current period. Last year it was 2.96 percent.

# In Mid - July 2010, the credit to deposit ratio of the commercial banks significantly increased to 74.0 percent compared to 74.64 percent in Mid - July 2009 and 71.09 percent in Mid - July 2008.

**Figure 2.3**



(Source: Banking and Financial Statistics, NRB, Mid - July 2010)

# The non-performing loan of commercial banks declined to 2.39 percent in Mid – July 2010 from 3.53 percent in the Mid - July 2009. The total amount of NPA remained to Rs. 11223.34 million from Rs. 13574.6 million in the Mid - July 2009.

### **2.1.3 Loans and Advances**

A loan is a type of debt. Like all debt instruments, a loan entails the redistribution of financial assets over time, between the lender and the borrower. In a loan, the borrower initially receives or borrows an amount of money, called the principal, from the lender, and is obligated to pay back or repay an equal amount of money to the lender at a later time.

The term ‘loan’ refers to the amount borrowed by a person or firm from the bank. The amount is in the nature of loan and refers to the sum paid to the borrower. Thus, from the view point of borrower, it is ‘borrowing’ and from the view point of bank, it is ‘lending’. Loan may be regarded as ‘credit’ granted where the money is disbursed and its recovery is made on a later date. It is a debt for the borrower. While granting loans, credit is given for a definite purpose and for a predetermined period. Interest is charged on the loan at agreed rate and intervals of payments. ‘Advance’ on the other hand, is a ‘credit-facility’ granted by the bank. Banks grants advances largely for short-term purposes, such as purchase of goods traded in and meeting other short-term trading liabilities. There is a sense of debt in loan, whereas an advance is a facility being availed of by the borrower. However, like loans, advances are also to be repaid. Loans and advances are the assets of the bank. Interest income on such loans is the primary source of income of the commercial banks.

Loans and advances are the most profitable of all the assets of a bank. Banks universally seek after the assets. These constitute primary source of income to banks. As the business institution, a bank aims at making a huge profit and providing loans and advances are more profitable than any other assets, banks are willing to lend as much as of their fund as possible but it has to be careful about the safety of such loan and advances. "Banking when properly organized aids and facilitates growth of trade and industries and hence of national economy. The bankers have to time liberality with caution. If he is too liberal, he may easily impair his profits by bad debts, if he is too timid he may fail to obtain adequate

return on the fund. (*M. Radhaswamy and SV Vasudevan, a text book of banking, law and practice and theory of banking, New Delhi, S. Chand & company Ltd. 1991, p 29*)

Loans and advances dominate the assets side of balance sheet of any bank. Similarly, earning from such loan and advances occupy major space in income statement of the bank. Lending can be said to be the major source of generating income of a bank. However, it is very important to be reminded that most of the banks are failures in the world due to shrinkage in the value of the loan and advances. Hence loan is known as risky assets. Risk of non-repayment of loan is known as credit risk or default risk. Performing loan has multiple benefits to the society while non-performing loan erodes even existing capital. (*Bhuvan Dahal and Sarita Dahal, a hand book of banking, Asmita Publication Ltd., 2002*)

#### **2.1.4 Types of Loan**

Loans and advances are the most profitable assets of banks. The extent to which these assets could be deployed is usually governed by the policy parameters enunciated by the central bank. Most of the bank's funds are used to acquire earning assets, which provide the bulk of revenue and enable them to cover expenses, including the cost of capital. So, one of the most important earning assets is loans. There are various types of bank loans, according to the way in which the interest payments are calculated. Bank loans may be classified as:

- (i) Amortized Loans
- (ii) Add-On Loans
- (iii) Discount Interest Loans

##### **(i) Amortized Loans**

Amortized loan refers to the determination of the equal annual loan payments necessary to provide a lender with a specified interest return and repay the loan principal over a specified period, so the loan takes the form of an annuity.

In the amortized loans system, first step is to calculate installments to be paid for every period. Suppose the loan amount is Rs.  $L$ , the rate of interest is  $K$  percentage per period,

and the number of payments is n, then the installment payment can be calculated as follows:

$$\text{Periodical Installment} = \frac{\text{Loan borrowed}}{PVIFA_{k,n}}$$

### **(ii) Add-On Loans**

The term add-on means that the interest is calculated and then added to the amount received to determine the loans face value. The sum of the principal and interest is then divided over the number of periods to calculate the constant periodic payments.

The effective annual rate is found as follows:

$$\text{Effective annual rate}_{\text{Add-On}} = (1+k)^n - 1$$

Where, k = required rate of return

n = number of period

### **(iii) Discount Interest Loans**

In a discount interest loan, the bank deducts the interest in advance (beginning of the period). In this type of loan, the lender receives payments of all the interest that will accrue on the loan at the time the loan is granted. Since the interest is prepaid, the borrower must only repay the principal, usually in equal payments.

## **2.1.5 Loan Classification**

The guideline on loan classification stresses that the decision to classify loans should be largely judgmental based on assessment of the borrower's capacity to repay and on the degree of doubt about the collectability of the principal or interest on a loan.

Loan classification refers to the process banks use to review their loan portfolio and assign loans to categories or grades based on the perceived risk and other relevant characteristics of loans and as per guidelines of central banks. The process of continual review and classification of loans enables banks to monitor the quality of their loan portfolios and when necessary to take remedial action to counter deterioration in the credit quality of their

portfolios. In most of the countries, a number of days a past due payments represents a minimum condition for loan classification purposes. However some criteria which exhibit forward looking features are also considered. In the Nepalese context, as per guidelines of NRB, loans are classified into four categories namely, Pass, Substandard, Doubtful and Loss.

### **2.1.6 Loan Loss Provision**

There is a certain degree of risk associated with every loan. To minimize the risk from possible losses from loan, banks have to allocate some fund as loan loss provision. Loan loss provision is the accumulated fund that is provided as a safeguard to cover possible losses upon classification of risk inherited by individual loans. It is the expected accumulated provisioning fund. The amount required for provisioning depends upon the level of NPAs and their quality. The high quality loan requires low loan loss provision, whereas bad loan requires high loan loss provision. High amount of provision is an indication of that bank's credit portfolio needs serious attention. One percent provision of total credit is minimum requirement as every pass/good loans have to be provisioned. However, the ratio of provision may differ from nation to nation. In Nepal, NRB has prescribed 1%, 25%, 50% and 100% provision for pass, substandard, doubtful and loss loans respectively. 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 provision".

### **2.1.7 Performing Loan/Performing Asset**

Strictly speaking, a performing asset is any asset that is generating an income. A loan is said to be performing if the borrower is paying the interest on it. A loan on which payments of principal and interest are less than 90 days past due are said to be performing loan. Performing Loans are those loans that repay principal 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 time period to return its principal with its interest. If anyone repays the loan with its interest within the stipulated time, it is known as the performing loan. Different country may have different policy to classify the



performing loans. In the context of Nepal, loans that have fallen under 'pass' category are treated as performing loan. It is the most profitable assets of banks. Better performing loan are considered to be the positive sign for banks.

### **2.1.8 Non-Performing Loan/Non-Performing Asset**

A loan on which neither interest payments nor repayments of the principal are being made is said to be Non-performing loan. Non-performing 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. Non-performing Loan can also be defined as the non-productive assets of the banks. It is a debt obligation where the borrower has not paid any previously agreed upon interest and principal repayments to the designated lender for an extended period of time. The non-performing asset is therefore not yielding any income to the lender in the form of principal and interest payments. When a bank has such a loan on its books it can either write it off against profits immediately or make loan loss provisions ready to make such a write-off in the future.

Non-performing assets, also called non-performing loans, are loans, made by a bank or finance company, on which repayments or interest payments are not being made on time. A loan is an asset for a bank as the interest payments and the repayment of the principal create a stream of cash flows. It is from the interest payments than a bank makes its profits. Banks usually treat assets as non-performing if they are 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 (usually 90 days) the loan classified as non-performing.

NPL has many different meanings, which varies from country to country. In some countries non-performing loans means, the loan is impaired. In some countries, it means that the payments are past due, but there are significant differences among countries how many days a payment should be in arrears before past due status is triggered. Nevertheless, a rather common feature of NPL appears to be that a payment is 'more than 90 days past due. In Nepal also, if the loan is past due for over 3 months, it is non-performing loans. Hence the loans falling under Substandard, Doubtful and Loss categories are regarded as Non-performing loans.

Non-performing assets can be non-performing loan, non-banking assets, remaining non-performing loan, suspend interest, unutilized assets etc. Generally the loan which does not repay within three months is nonperforming loan. The loan amount that does not cover by the collateral after selling is known as non-banking assets (NBA). Suspend interest is the interest which becomes receivable. Unutilized assets are those which do not generate any cash or incomes to the bank. In general, NPA is the sum of following terms:

$$\text{NPA} = \text{NPL} + \text{NBA} + \text{RNPL} + \text{SI} + \text{UA}$$

On the process of collection of debts, remaining amounts of loan after realizing the collateral are called non banking asset (NBA). Outstanding interest and other amounts from the loans which are due called remaining non-performing loan (RNPL). The amount which bank and financial institution cannot get from their capital investment are called suspend interest (SI). The movable and immovable assets which cannot be used in bank's own transaction and the asset which have no contribution for the value addition in the bank and financial institutions are called unutilized asset (UA).

An asset is classified as NPA if the borrower does not pay dues in the form of principal and interest for a period of 90 days. NPA could wreck bank's profitability both through a loss of interest income and write off the principal loan amount. It tackles the subject starting from the stage of their identification till the recovery of dues in such account. The details and classification of non-performing loans vary from country to country as the country put in place norm as per the requirements of their own banking system. Generally speaking, a loan is classified, as non performing loans only after arrears at least 3 months. In Nepalese case too, the same rule has been adopted. So we can say that NPA is that portion of lending or loans which is irrecoverable by banks in the specific period as marked up by central bank. (*Yogendra Regmi, Niscriya Sampati Byabasthapan, Nepal Rastra Bank Samachar, 2062, p75*)

NPLs create problems for the banking sector's balance sheet in the asset side. They also create a negative impact on the income statement as a result of provisioning for loan losses. Ultimately a riskier portfolio combined with lower net income makes new lending more difficult, often resulting in slower credit growth. In the worst scenario, a high level of NPLs in a banking system poses a systemic risk, inviting a panic run on deposits and sharply limiting financial intermediation and subsequently investment and growth in the

economy. A high level of non-performing assets compared to similar lenders may be a sign of problems. However this needs to be looked at in the context of the type of lending being done. Some banks lend to higher risk customers than others and therefore tend to have a higher proportion of non-performing debt, but will make up for this by charging borrowers higher interest rates, increasing spreads.

### **2.1.9 Types of NPA**

#### **A. Gross NPA:**

Gross NPAs are the sum total of all loan assets that are classified as NPAs as per NRB guidelines as on Balance Sheet date. Gross NPA reflects the quality of the loans made by banks. It consists of all the non standard assets like as sub-standard, doubtful, and loss assets.

It can be calculated with the help of following ratio:

$$\text{Gross NPA Ratio} = \frac{\text{Gross NPAs}}{\text{Gross Advances}}$$

#### **B. Net NPA:**

Net NPAs are those type of NPAs in which the bank has deducted the provision regarding NPAs. Net NPA shows the actual burden of banks. Since in Nepal, bank balance sheets contain a huge amount of NPAs and the process of recovery and write off of loans is very time consuming, the provisions the banks have to make against the NPAs according to the central bank guidelines, are quite significant. That is why the difference between gross and net NPA is quite high. It can be calculated by following:

$$\text{Net NPA Ratio} = \frac{\text{Gross NPAs} - \text{Provisions}}{\text{Gross Advances} - \text{Provisions}}$$

We can see that there is huge difference between gross and net NPA. While gross NPA reflects the quality of the loans made by banks, net NPA shows the actual burden of banks.

### **2.1.10 Classification of NPA**

The assets are classified in the following broad groups:

(i) Standard assets: It is one, which does not disclose any problems and which does not carry more than normal risk attached to the business. Such as assets is not a NPA for e.g.. if any account is regular and there is no problem of repayment, then the collateral placed for that loan is standard asset.

(ii) Sub-standard assets: It is one, which has been classified as NPA. In such cases, the current net worth of the borrower/guarantor or the current market value of the security charged is not enough to ensure recovery of the dues to the bank in full. In other words, such as assets has well defined credit weaknesses that jeopardize the liquidation of a debt and is characterized by the distinct possibility that the bank will sustain some loss if deficiencies are not corrected. However, in respect of accounts where there are potential threat of recovery an account of erosion in the value of security or non-availability of security and existence of other factors such as frauds committed by borrowers, it will not be prudent for banks to classify them as sub-standard and then as doubtful after expiry of specified years from the date the account has become NPA. Such accounts should be straightway classified as doubtful or loss assets as appropriate, irrespective of the period for which it has remained as NPA.

(iii) Doubtful assets: A doubtful asset is one, which has remained NPA for a period exceeding 2 years. In the case of term loans, where installments of principle has remained overdue for a period exceeding 2 years should be treated as doubtful. A loan classified as doubtful has all the weaknesses inherent that has been classified as sub-standard with the added characteristics that the weakness makes collection or liquidation if full, on the basis of currently known facts, conditions and values, highly questionable and improbable.

(iv) Loss assets: A loss asset is one where loss has been identified by the bank or internal or external auditors or the central bank's inspectors but the amount has not been written off, wholly or partly. In other words, such an asset is considered uncollectible and of

such little value that its continuance as a bankable assets is not warranted although there may be some salvage or recovery value and where no security is available.

### **2.1.11 Causes of NPA/Loan Becoming Bad**

When loans are overdue to repay their specific period then it becomes bad loan. By analyzing various studies, following are some important causes for turning a loan into a bad one.

#### **(i) Lack of Credit Policy and Culture**

The credit policy generally guides the institution to disseminate and diversify the loans. It also helps in making the decision for whether or not granting the loan to a certain party. Hence a clear and in written form a credit policy is a must. The bank also must have a credit culture. They must not only focus on their loan but also the customer who is taking the loan. The credit team should know each and every loan taker and should watch from near. The bank now is not only the lender it must also act as the financial advisor also to the customer. (*Gajurel, 2006: 89*)

In Nepal only few financial Institutions have a clear-cut credit policy. At the same time credit policy should also be strictly adhered to.

#### **(ii) Undue Influence/Pressure**

One of the major factors contributing in Banks Non Performing assets is the undue Influence exerted by politician, bureaucrats, board members and senior executives of the bank itself. This is the reasons most of the state owned commercial banks and some private banks have large NPA. (*Subramanyam, 2003:1*)

#### **(iii) Cut Throat Competition**

There is a rapid growth in the number of commercial banks. It is nearly saturated. But the market size is very small and the economic situation is not improving. It is found that the number of commercial banks is three times greater that it is needed for the Nepalese economy. In such situation, the commercial banks have very less option to invest. Due to this, there is unfair competition exercised by the banks to attract the customer. In such

situation, NPA may increase due to sanctioning the loan without studying and analyzing the client properly.

#### **(iv) Lack of Vision**

The success of any organization lies on the ability to think and have long term vision. Creativity is very essential thing for the managers to drive the whole organization to success. The managers should be able to create new products. In Nepal, there is a culture of copying others product. Recently almost all commercial banks are catering consumer loan. Lack of vision results investment in those areas which will turn the loan into NPA. *(Gajurel, 2006:89)*

#### **(v) External Factors**

There are many external factors that turn a good loan to bad. Economic condition of the country, political situation, technological change, etc. also plays a key role in turning a good loan to bad. We have currently witnesses the closer of the factories in the Terai region of Nepal due to political instability. This closer of the factories, result in inability to repay loan taken by the organization although the business man do not intend to be a defaulter. *(Source: National Daily Newspapers and Business Magazines).*

One of the potential factors responsible for increasing non-performing assets of the commercial banks is lending policy of the banks. Similarly ineffective credit policy, weak monitoring , lacking of portfolio analysis, shortfall on security, weak credit concentration, mismanagement within the banks, inability to identify borrowers bad intention etc are loopholes in the side of banks and economic and industrial recession, insufficient legal provision for the recovery of dues, inconsistency on government policy, lack of monitoring and supervision from Central Bank, high and conservative provisioning requirement are some external factors responsible increasing NPA of banks.

Various factors that increase the NPAs/NPL can be pointed out as follows:

- Lack of transparent and clear policy to mobilize the assets productivity.
- Lack of effective forecasting or deviation between expectation and actual outcomes of the business.

- Wrong choice of the project and business to lend the fund.
- Lack of supervision, monitoring and control.
- Lack of information and communication between banks and customer.
- Lack of proper information about the situation and transaction of the customer at the time of rendering loan.
- Wrong valuation of accepted collateral by the bank to the loan
- Lack of efforts towards the decrease or sell the NPAs, which are not useful to the bank.
- Lack of trainings and seminars to develop the smart human resources.
- Depression of the economy of the country due to the insecurity and instability of the business environment.
- Lack of proper policy and act to return the expired loan.
- Funds borrowed for a particular purpose but not used for the said purpose.
- Project not completed in time.
- Inability of the corporate to raise capital through the issue of equity or other debt instrument from capital markets.
- Diversion of funds for expansion\modernization\setting up new projects\ helping or promoting sister concerns.
- Willful defaults, siphoning of funds, fraud, disputes, management disputes, misappropriation etc.
- Deficiencies on the part of the banks viz. in credit appraisal, monitoring and follow-ups, delay in settlement of payments\ subsidiaries by government bodies etc.
- Industrial recession, Shortage of raw material, raw material\input price escalation, power shortage, natural calamities like floods, earthquakes etc.
- Government policies like excise duty changes, Import duty changes etc.

### **2.1.12 Problems due to NPA**

1. Owners do not receive a market return on their capital. In the worst case, if the banks fail, owners lose their assets. In modern times this may affect a broad pool of shareholders.

2. Depositors do not receive a market return on saving. In the worst case if the bank fails, depositors lose their assets or uninsured balance.

3. Banks redistribute losses to other borrowers by charging higher interest rates, lower deposit rates and higher lending rates repress saving and financial market, which hamper economic growth.

4. Non-performing loans epitomize bad investment. They misallocate credit from good projects, which do not receive funding, to failed projects. Bad investment ends up in misallocation of capital, and by extension, labour and natural resources.

Non-performing asset may spill over the banking system and contract the money stock, which may lead to economic contraction. This spill-over effect can channelize through liquidity or bank insolvency:

a) When many borrowers fail to pay interest, banks may experience liquidity shortage.

This can jam payment across the country,

b) Illiquidity constraints bank in paying depositors,

c) Undercapitalized banks exceeds the banks' capital base.

### **2.1.13 Effects of NPA on Profitability of Bank**

NPAs have a deleterious effect on the return on assets because:

- They erode current profits through provisioning requirements.

- They result in reduced interest income.

- They require higher provisioning requirements affecting the capacity to increase good quality assets in future.

The impact of NPA can be described as follows:

#### **Profitability Impact:**



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

**Liquidity Impact:**

Money is getting blocked, decreased profit lead to lack of enough cash at hand which lead to borrowing money for short period of time which lead to additional cost to the company. Difficulty in operating the functions of bank is another cause of NPA due to lack of money.

**Involvement of management:**

Time and efforts of management is another indirect cost which bank has to bear due to NPA. Time and efforts of management in handling and managing NPA would have diverted to some fruitful activities, which would have given good returns. Now-a-days, banks have special employees to deal and handle NPAs, which is additional cost to the bank.

**Credit loss:**

If bank is facing problem of NPA then it adversely affect the value of bank in terms of market credit. It will lose its' goodwill and brand image and credit which have negative impact to the people who are putting their money in the banks.

Under the circumstances assets that do not earn any income to the bank affect the profits in a number of ways: (*Athmanathan Saraswati and Venkatakrishnan R, Management of NPA, 2001, p5*)

**Profitability impact:**

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

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

- Lower ROE and ROA
- Lower image and rating of bank
- Disclosure reduces investors' confidence
- Increases costs/difficulties in raising capital
- NPA do not generate income
- They require provisioning
- Borrowing cost of resources locked in
- Opportunity loss due to non recycling of funds
- 100% risk weight on net NPA for CAR
- Capital gets blocked in NPA
- Utilize capital but does not generate income to sustain the capital that is locked.
- Recapitalization by government comes with strings.

- Administration and recovery cost of NPA
- Effect on employee morale and decision making

#### **2.1.14 Management of NPA**

The most calamitous problem facing commercial banks all over the world in recent times is the spiraling non-performing assets (NPAs) which are affecting their viability and solvency and thus posing challenge to their ultimate survival. Naps adversely affect lending activity of banks as non-recovery of loan installment as also interest on the loan portfolio negates the effectiveness of credit-dispensation process. Non-recovery of Loans also hurt the profitability of banks. Besides, banks with high level of NAPs have to carry more owned funds by way of capital and create reserves and provision and to provide cushion for the loan losses. Banks have to make provisions on NPAs from out of the income earned by them on performing assets.

Presently, high level of NPAs in loan portfolio of banks make them fragile leading ultimately to their failure. This will shake confidence both of domestic and global investors in the banking system which will have multiplier effect bringing disaster in the economy. Thus, managing bad loans and keeping them at the lowest possible level is critical for banks. It may be noted at this juncture that world class banks do not have NPAs of over 2% of total portfolio. An NPA level of over 5% is indicator of poor quality of loan portfolio. With growing competition and shrinking spreads banks should strive to keep NPAs much below the level of 10% to make net earnings necessary for their survival and growth. It is very important to take the necessary steps for lowering down the NPAs.

Large portion of resources are being utilized on loan and advanced by commercial banks. They follow the principle of higher return higher risk. On one hand, the mushrooming growth of banks has led them towards cut-throat competition. On the other hand, economic condition of the country is more or less stagnant. Result is that no new area could be explored. The competition among bank is just to share the small size of the cake. The quality of the loans and advances could not be maintained which resulted in increased NPAs of Bank. Increasing NPA has the direct effect to banks, investors and customer.

**Internal Effect:** Due to NPA the banks have to make loan loss provision from their profit and other sources. That's why the profit of the banks decreases or it may occur loss. As a

result share capital also becomes capital erosion and capital inadequacy. 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 effect to the cash flow of bank. As a result the profit of the bank has affected.

**External Effect:** When banks accept deposits from the public and provide loan to the operation of business and other purposes. When the loan does not return with its interest, it becomes non-performing assets and banks will not 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 the banks and which lead the bank bankruptcy and dissolved.

Likewise, NPAs adversely affect profitability and the reputation of the banks hence they concentrate on management of loan and advances. Classification of Loan and advances, Loan rescheduling and restructuring, Loan loss Provision are measures of NPA management. Nepal Rastra Bank has been issuing Directives for the NPA management of Commercial Banks to cope up with the increasing level of NPA.

Loan classification is basis for loan loss provisioning. Loan classification is based in aging factor of loan. Sometime for the maintenance of the commercial relation and going through the viability of project or by evaluating the borrowers financial viability often back up by additional personal and corporate guarantee or additional collateral security loans are restructured or rescheduled. Restructure and rescheduled loan on its aging factor and interest and principal payment criteria is again classified under-performing and non performing loan. Loan loss provisioning is done to curb up the financial loss that occurred due to Non- performing loan. Inefficiency in part of bank and country's economical and political instability, prevailing cut-throat competition among bank are some factor responsible for increasing NPA of Banks. Banks deal in public money so they must be responsible to the general public. In this regard Bank has to do loan loss provisioning for out of operating profit it made every year. Loan loss provisioning is made to safeguard the interest of stakeholders of bank. Loan loss provisioning set aside for Performing Loan is defined as "General Loan Loss Provision" and Loan loss provisioning set aside for Non Performing Loan is defined as "Specific Loan Loss Provision". For restructured and

rescheduled loan additional loan loss provisioning is made. In this regard it has to follow NRB directives. NPA Management aims for reduction of the risk aroused through NPA by classifying the loan and advances on the basis of aging factor. Thereby making loan loss provisioning every year out of operating profit so when loan finally turns into loss loan, there is no heavy financial burden at that time. Hence, mitigating the risk by doing proper planning of loan loss provisioning is a must.

### **2.1.15 Preventive Measures for NPA**

**Early Recognition of the Problem:-** Invariably, by the time banks start their efforts to get involved in a revival process, it's too late to retrieve the situation- both in terms of rehabilitation of the project and recovery of bank's dues. Identification of weakness in the very beginning when the account starts showing first signs of weakness regardless of the fact that it may not have become NPA is imperative. Assessment of the potential of revival may be done on the basis of a techno-economic viability study. Restructuring should be attempted where, after an objective assessment of the promoter's intention, banks are convinced of a turnaround within a scheduled timeframe. In respect of totally unviable units as decided by the bank, it is better to facilitate winding up/ selling of the unit earlier, so as to recover whatever is possible through legal means before the security position becomes worse.

**Identifying Borrowers with Genuine Intent:-** Identifying borrowers with genuine intent from those who are non-serious with no commitment or stake in revival is a challenge confronting bankers. Here the role of frontline officials at the branch level is paramount as they are the ones who have intelligent inputs with regard to promoters' sincerity, and capability to achieve turnaround. Based on this objective assessment, banks should decide as quickly as possible whether it would be worthwhile to commit additional finance.

Borrowers having genuine problems due to temporary mismatch in fund flow or sudden requirement of additional fund may be entertained at branch level, and for this purpose a special limit to such type of cases should be decided. This will obviate the need to route the additional funding through the controlling offices in deserving cases, and help avert many accounts slipping into NPA category.

**Timeliness and Adequacy of response:-** Longer is the delay in response, greater the injury to the account and the asset. Time is a crucial element in any restructuring or rehabilitation activity. The response decided on the basis of techno- economic study and promoter's commitment, has to be adequate in terms of extend of additional funding and relaxations etc. under the restructuring exercise. The package of assistance may be flexible and bank may look at the exit option.

**Focus on Cash Flows:-** While financing, at the time of restructuring the banks may not be guided by the conventional fund flow analysis only, which could yield a potentially misleading picture. Appraisal for fresh credit requirements may be done by analyzing funds flow in conjunction with the Cash Flow rather than only on the basis of Funds Flow.

**Management Effectiveness:-** The general perception among borrower is that it is lack of finance that leads to sickness and NPAs. But this may not be the case all the time. Management effectiveness in tackling adverse business conditions is a very important aspect that affects a borrowing unit's fortunes. A bank may commit additional finance to an align unit only after basic viability of the enterprise also in the context of quality of management is examined and confirmed. Where the default is due to deeper malady, viability study or investigative audit should be done – it will be useful to have consultant appointed as early as possible to examine this aspect. A proper techno- economic viability study must thus become the basis on which any future action can be considered.

**Multiple Financing:-**

(A) During the exercise for assessment of viability and restructuring, a pragmatic and unified approach by all the lending banks as also sharing of all relevant information on the borrower would go a long way toward overall success of rehabilitation exercise, given the probability of success / failure.

(B) In some default cases, where the unit is still working, the bank should make sure that it captures the cash flows (there is a tendency on part of the borrowers to switch bankers once they default, for fear of getting their cash flows forfeited), and ensure that such cash flows are used for working capital purposes. Toward this end, there should be regular flow of information among consortium members. A bank, which is not part of the consortium,

may not be allowed to offer credit facilities to such defaulting clients. Current account facilities may also be denied at non-consortium banks to such clients and violation may attract penal action.

(C) In a forum of lenders, the priority of each lender will be different. While one set of lenders may be willing to wait for a longer time to recover its dues, another lender may have a much shorter time frame in mind. So it is possible that the letter categories of lenders may be willing to exit, even at a cost – by a discounted settlement of the exposure. Therefore, any plan for restructuring/rehabilitation may take this aspect into account.

### **2.1.16 General Principles of Lending**

Banker is essentially a dealer in the funds of others and that too funds mostly repayable on demand. Therefore he follows a cautious policy in the matter of lending and is generally governed by the well known general principles of sound lending which are discussed below: (*Radhaswami & Vasudevan, 1979:205*)

#### **1. Safety**

The main business of banking consists in borrowing various types of deposits such as current, saving and fixed and lending such deposits to needy borrowers in the form of advances and discounting of bills. This obviously implies that safety of such funds should be ensured. Otherwise the banker will not be in a position to repay his deposits and once the confidence of the depositors is shaken, he cannot carry on the banking business.

If the banker has to ensure safe lending, he has to look to the three C's of the borrower namely Character, Capacity and Capital. Character of the borrower is important because that determines his willingness to repay the loan. His capital and capacity to run the business successfully determines his capacity to pay. The safety of the loan depends on both his capacity to repay and willingness to repay.

#### **2. Liquidity**

By liquidity is meant the readiness with which the bank can convert the assets into cash. As the banker's deposits are subject to the legal obligation of being repayable on demand and at short notice, he must ensure liquidity also while lending, so that in times of needs, he will be able to convert the assets into cash.

There is yet another reason for paying attention to the liquidity factor. The cost of borrowing from Reserve Bank depends on the net liquidity ratio, which is the ratio calculated by taking the proportion of specified net liquidity assets of the borrowing bank, to the bank's aggregate demand and time liabilities.

In fact, if one looks at the banker's balance sheet, he finds the assets arranged in the order of liquidity. Cash is the most liquid assets and it appears as the first item. Banker can ensure high liquidity by keeping all deposits in the form of cash only. In such a case as pointed out earlier, he will not be in a position to meet the interest obligations and expenditure of the establishment. From experience, he has learnt that he can safely lend out a substantial portion of the funds. But while lending he should try to ensure liquidity, i.e., in times of need, he must be able to obtain repayment of the money within a reasonably short time. Liquidity also implies that the assets can be sold without any loss. Thus the concept of liquidity has twin aspects namely quick sale-ability or convertibility of the assets and to risk of loss in such conversion.

### **3. Profitability**

Commercial banks have obtained funds from shareholders and naturally if dividend is to be paid on such shares it can only be paid by earning profits. Even in the case of public sector banks although they are service motivated they will have to justify their existence by earning profits. This is not possible unless the funds are employed profitably. From out of the revenue earned the banker has to pay interest on deposits, salary to the staff, meet other establishment expense, build-up reserves and the balance must permit the payment of dividend to shareholders. However, the banker will not give under importance to this aspect because a particular will not give undue importance to this aspect because a particular customer may offer a higher rate of interest but an advance made to him result in a bad debt. Therefore for the sake of profitability, the other two principles, liquidity and safety cannot be sacrificed.

### **4. The purpose of the Loan**

Baker should enquire the purpose for which it was taken. If an advance is given for productive purpose, in all probability, it will be repaid. Thus safety is ensured. If an advance is made for speculative purpose, the banker may come to grief. Similarly advances made for wasteful expenditure on social functions etc. are unproductive in nature and as a



rule banks avoid such advances. But it is very difficult for the bank to ensure that the advance has been used for the purpose for which it was taken. A person may take a loan obviously for a productive use, but may spend it on speculation. In recent years there is scrutiny of some of the account, as a follow-up measure to see that the end, use of credit is not for some other purpose.

## **5. Diversification of Loans**

The familiar saying is 'Do not put all the eggs in the same basket'. Banker should try to diversify loans as far as possible, so that he may minimize his risk in lending. If the banker lends only to one industry or only to few big firms or concentrates in a certain geographical area, the risk is great. He should diversify lending, so that he may not be affected by the failure of one industry, or the few big borrowers. Where lending is done only in one area, it may be affected by political upheaval or natural calamities.

### **2.1.17 Loan Approval Process**

Loan is approved by the approving authority only after being convinced that the loan will be repaid together with interest. There are many processes involved to approve the loan which are as follows: (*Dahal & Dahal, 1992:121*)

#### **(1) Application**

A borrower is normally required to submit an application to the bank along with required documents:- Project Proposal, historical financial statements and documents pertaining to company's legal existence.

#### **(2) Conducting the Interview**

Though the documents submitted give much information about the borrower; collecting information by interviewing the borrower is of great importance. Normally, such an interview takes place at the bank premise.

The interviewer normally a loan officer should attempt to gain as much information as possible during the initial interview. This should be done in a friendly and positive manner. Respect should be shown for the applicant's business situation and ideas. Complex terminology not familiar to the applicant should be avoided.

There is the danger that the interviewer, who is very sensitive to the risk of making an undesirable loan, may appear overly negative. The interviewer may seem to be looking for that one answer that will justify rejecting the application. Needless to say, if the business person leaves with this feeling, more harm than good has come from interview. This demands a great deal of finesse.

If a loan should not be made, it is better to make this determination in the initial interview than after both the lender and the applicant have invested extensive time and effort. Thus, as many pertinent questions as possible should be asked during the initial interview. When the interviewer recognizes that the loan should not be made, the applicant should be informed. The turndown should be made clearly and as politely as possible.

#### What to learn during Interview

- Loan Purpose.
- Loan Amount.
- Repayment Source.
- Repayment Schedule.
- History of the Business.
- Banking Relationship.

### **(3) The Credit Analysis**

Followings steps are taken to analyze/ appraise loan application:

#### **Historical Analysis**

Historical analysis refers to analysis of past financial statements and business risk. The former is quantitative while the latter is qualitative analysis. The financial analysis exhibit the financial performance of the management and business risk analysis helps to the major risk factors (supply, production, demand, collection, management) observed in the past and how management mitigated them. The underlying purpose of historical analysis is to know the major factors in borrower's present condition and past performance which foreshadows borrower's likely success or failure in repaying the debt in future.

There is a practice of analyzing 5Cs of Credit (Character, capacity, Condition, Capital, and Collateral) by the financial institutions.

### **Character**

It refers to the personal traits (ethics, honesty and integrity) of borrowers which is very important for lending decision. Serious purpose, truthfulness in answering the queries, responsibility and seriousness in making all the efforts to repay loan make up what a lending official call the character. Dishonest borrower always finds a way to avoid the restrictions imposed through the loan agreement. No further credit analysis is made if the lending official feels the borrower lacks character.

### **Capacity**

Capacity is being used in two senses.

1. Legal Capacity to borrow money.
2. Capacity to generate enough income to repay loan or through liquidation of assets.

### **Condition**

Condition refers to the general economic condition beyond the control of the borrower that affects the business of the borrower. This is basically security, political and other social conditions under which the business has to operate. Loan is given to the borrower if lending officials feels general condition is favorable for that type of business.

### **Collateral**

Loan is given if the banker is satisfied that the borrower can repay money from the cash flow cash flow generated from operating activities. However, the bank wants to ensure that their loan is repaid even in case of default. In such cases, the banker asks for additional securities. Collateral can be fixed in nature land, building, machinery or working capital like inventories and account receivables.

### **Capital**

Capital refers to the net worth of the borrower. This is covered under capacity above while analyzing the leverage ratio. Leverage ratio will be high if the borrower has low capital. A

bank gives loan only when it finds leverage ratio acceptable to it or if the borrower has enough capital.

#### **(4) Forecast and Risk Rating System**

Based on the findings of historical analysis, and in light of present and foreseeable future environment, the analyst has to forecast impending major risks. The analyst should also highlight to what extent inherent risks will be mitigated and how unmitigated risks can be covered.

Analysis of credit information attempts to answer the question “How risky would it be to lend to this applicant?”. Most commercial loans are risky to some degree. Up to a certain risk level, a lender may justify granting a particular loan and attempt to compensate for the relatively high risk by charging a high rate of interest and adequate securities. Above a certain risk level, loans will not be granted. Thus, it can be said that credit analysis: (1) determines which loans will be made and which will not and (2) provides a ranking from low risk to high risk for those loans that are made, thus helping determine the rates of interest to be charged and the value of securities to be obtained.

#### **(5) Return**

The amount of loan has got inherent cost as it is obtained from either shareholder or depositor or creditor. The analysis should be made to calculate total return (interest, fee and commission) and compare whether it meets banks standard.

#### **(6) Liquidation**

The analyst should ascertain banks ability to recover loan in case of liquidation of the borrower. If liquidation analysis reveals insufficient security, additional security may be asked for.

#### **(7) Creditworthiness and Debt Structure**

If the analyst finds the borrower creditworthy and decides to extend loan, he should structure the debt facility to be extended.

#### **(8) Collateral**

Bank analyzes various financial statements like Balance Sheet, Profit and Loss Account, and Cash Flow Statement of borrower for financial appraisal and for the assessment of

borrower's credit-worthiness. Bank decides to sanction the loan mainly relying on the borrower and his proposition. However, it proves very costly for the bank in the event the borrower and his proposition fails. To safeguard banks interest, bank asks for security which proves to be cushion in cause of default. There are two types of securities:

#### **a. Primary Security**

The security deposited by the borrower himself is known as primary security. This includes promissory note and tangible securities offered by the borrower.

#### **b. Collateral Security**

Collateral means "additional" or "secondary". If the bank feels that primary security is insufficient, the borrower is asked to provide additional security. Thus, collateral security means security deposited by the third party to secure advance made to the borrower. This includes guarantee and tangible securities offered by the third party.

## **2.2 Review of Related Studies**

### **2.2.1 Review of Books**

Mrs. Suneja (1992) in her book "Management of Bank Credit" pointing out the cause of NPA says that the risk connected with lending to business depends on an enormous number of factors. For any particular type of business, the risk failure is affected by the state of economy, trend in demand for the product or service provided, competition from any other suppliers, financial resources are too limited and management skills are lacking. Reiterating the difficult decision facing a banker is to determine when it becomes necessary to recall a loan and to begin the process of liquidating the security. Further, she suggests that if a customer fails to make repayment on the due date, the bank has to consider what steps need to be taken to recover the debt.

Mr. Shakespeare Vaidya in his book "Project Failures and Sickness in Nepal, Challenges to Investors for Investment Risk Management" has discussed about the early warning system for investment risk management. In this book, the author has also envisaged number of examples about crisis created by the banks in the world. As per his view,

banking sector cannot ignore any sector of the economy on the basis of its good and bad and there is vital role of financial institutions in regards to bad accounts.

“Nepalese financial institutions have made significant progress especially during this decade, although they are still far behind the developed markets. In spite of having great risk management i.e. focused on collateral rather than on project, credit culture is a new aspect both to the investors and corporate. Unless we have a credit culture, they will end up nowhere. How to identify a good bank? Huge deposits, high technology, strong marketing, broad branching network etc? Finally we arrive the point – collection of the loans, on the whole, private sector banks have lower non-performing assets (NPAs) than their public sector counterparts. NPAs are the loans that cannot be or have not been recovered. The government owned banks suffer acutely from this, as they have to lend to various priority sectors, at the whims of their political masters and then forget everything about the money forever.”<sup>1</sup>

With the growing number of financial institutions, market economy, economic liberalization etc industrial sickness in Nepal has phenomenal proportions in the last few years. Much of the amounts of almost all leading financial institutions are blocked in sick company, which can be witnessed from the auction notice published regularly in newspaper. Credit risk is the first risk, which keeps the bank moving in the market. The loans provided against the securities are simply a promise to pay. When borrowing customers fail to make payment, part or all of their promised interest and principal, these default loans and securities result in losses that can eventually erode bank’s capital. Because owner’s capital is usually no more than ten percent of the volume of loans and risky securities, and often much less than that, it cannot absorb too many defaults on loans and securities before bank capital simply becomes inadequate to absorb further losses. At this point, the bank fails and will close unless the regulatory authorities elect to keep it afloat with government loans until a buyer can be found or until the bank becomes viable by reducing its non-performing assets.

“Banks and financial institution invoke penal measure when an installment of a term loan is defaulted. This is simply a banking procedure to offend the borrowers in case of defaults; however it is not the complete panacea for project failures. The follow up

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<sup>1</sup> Vaidya Shakespeare , Project Failures and Sickness in Nepal, Challenges to Investors for Investment Risk Management, (Kathmandu : Monitor Nepal, 1998), p. 20-21

machinery to enquire into the reasons for the default is generally slow in movement or maximum time would have already been consumed when banks normally acknowledge the failure of the projects. The consequence is that by the time, lending institution is able to ascertain the causes for the first default, more installments are overdue.

Delays in implementation schedule, cost escalation in mid-stream, inadequate cash generation or siphoning of fund are few of the factors responsible for default. A lending institution unless it has an effective monitoring system, may miss these signs of potential sickness. The first default should be ample evidence that something is out of order and the term lending institution should take immediate steps to review the position in detail before go out of hand.”<sup>2</sup>

Finally he concludes “In order to safeguard the banks from the financial crisis likely to be arise from the project failures and sick units, that is, non performing loans, the government needs to do a number of things and fast. It must bring broad rules for poor financial institutions transferring bad loans to bridge bank or loan recovery agency removes many non-performing loans from even healthier bank’s balance sheets, beef up regulation, supervision and disclosure, improve ability to banks to sell the collateral that backs soured loans, and recapitalizes the banking system.”<sup>3</sup>

In the book “A Hand Book to Banking” by Mr. Bhuwan Dahal and Mrs. Sarita Dahal, different aspects of banking have been discussed. As they said, banks have gained paramount trust in the public and they are rendering wide range of services covering different strata of society.

“A bank is judged on the basis of Capital, Assets Quality, Management, Earning, Liquidity and Sensitivity to market risk (CAMELS). Almost all the government banks are running at loss. Though almost all the private sector 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 banks have piled up Non Performing Assets (NPAs). Similarly banks do not have proper system in place for management of market risks. The people have been raising questions over the correctness of credit classification and

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<sup>2</sup> Ibid (p. 29)

<sup>3</sup> Ibid (p.54)

provisioning of some banks. Should the suspicion come true, it will prove very costly to the depositors, creditors and national economy as a whole. It would be prudent to advise NRB to strictly implement its recently introduced directive so that other banks avert the fate of NBL, RBB & NIDC.”<sup>4</sup>

They stated that loans and advances dominate the asset side of the balance sheet of any bank and earnings from such loans and advances occupy a major space in income statement. “Most of the banks failures in the world are due to shrinkage in the value of the loan and advances. Hence loan is known as risky assets. Risk of non-repayment of loan is known as credit or default risk. Performing loans have multiple benefits to the society while non-performing loan erodes even existing capital. If loan is given to viable project not only lenders and borrower but also the whole society gets benefit but society loses its scarce capital if loan is given to project which is not viable.”

As per their view, there is risk inherent in every loan and efforts should be made to have proper control in every step of loan management. They further suggested that bank should not take risk above certain degree irrespective of returns prospects. “Though all the loans are good at the time of disbursement, with the passage of time, they show the sign of problem. Based on the health of the loan, the loan should be classified and provided accordingly. Provisioning is made as cushion against possible losses and to reflect the true picture of bank’s assets. Hence there is practice of showing net loan (Total Loan – Loan Loss Provision) in financial statements. The bank should comply with the statutory regulation relating to loan classification and provisioning.”<sup>5</sup>

### **2.2.2 Review of Relevant NRB Directives**

Streamlining the previous directives and to have more effective control mechanism for overall financial sector, recently, on August 2005, NRB has issued consolidated new directive for all financial institution i.e. commercial banks, development banks, finance companies and micro finance institutions. Before this directive, commercial banks, development banks, finance companies and micro finance institutions are guided by separate directives. As per this new directive also, loan classification and provisioning of

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<sup>4</sup> Dahal Bhuvan and Dahal Sarita, A Hand Book to Banking, (Kathmandu: Asmita Books & Stationery, 2002), p. 21

<sup>5</sup> Ibid (p.115)



loans of financial institutions are mentioned on E. Pra. Directive No. 2/061/062. This directive is dealt in detail as follows:

## **1. Classification of Loans and Advances**

### **a. Pass**

Loans and advances whose principal amount are not past due and past due for a period up to Three months shall be included in this category.

### **b. Substandard**

Loans and advances whose principles are past due for a period of 3 months to 6 months shall be included in this category.

### **c. Doubtful**

Loans and advances whose principles are past due for a period of 6 months to 1(one) year shall be included in this category.

### **d. Loss**

Loans and advances whose principles are past due for a period of more that 1(one) year shall be included in this category.

Loans and Advances which are categorized into Pass loan are defined as Performing Loan. Similarly, Loans and Advances failing in the category of Sub-standard, Doubtful, and Loss are defined as Non-Performing Loan.

Note:

- a. If it is appropriate in the views of the bank management, there is not restriction in classifying the loan and advances from low risk category to high-risk category. For instance, loans falling under Sub-standard may be classified into Doubtful or Loss and loans falling under Doubtful may be classified into Loss Category.
- b. The 'term' loan and Advances also includes Bill Purchased and Discounted.

## **2. Additional Arrangement in Respect of Pass Loan**

Loans and advances that are fully secured by gold, silver, fixed deposit receipts and HMG securities shall be included under 'Pass' category. However, where collateral of fixed

deposit receipt or HMG securities or NRB Bonds is placed as security against loan for other purposes, such loan has to be classified on the basis of ageing.

### **3. 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. Insufficient security/collateral.
- 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 80 days from the due date.
- e. Misused to loans.
- f. Owing to non-recovery, initiation as to auctioning of the collateral has passed six months and if the recovery process is under litigation.
- g. Loans provided to the borrowers which is included in the blacklist of credit information Bureau.
- h. If project/business is in non-operative condition of closed.
- i. Credit card loan not write off which is dues since 90 days.

### **4. Additional Arrangement Regarding 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.

### **5. Principle and interest should not be collected from Current Account by Overdrawing the Account**

### **6. Letter of Credit and Guarantee**

If non-funded facilities such as letter of credit, guarantees and other liabilities turn into funded liabilities and have to pay by the financial institution, these credits have to be categorized into 'pass' loan up to 90 days and if not paid within 90 days then treated as 'loss' loan.

### **7. Rescheduling and Restructuring of Loan**

1. Financial institutions may reschedule or restructure loans and advances upon receipt of written plan of action from the borrower citing the following reason:
  - a. Evidence for adequate collateral and documentation regarding loans.

- b. Financial institutions have confidence that loans can be recovered after rescheduling

Note:

Rescheduling means to extend the loan payment period that have been borrowing by the customer.

Restructuring means to change the loan type and terms and conditions and including change in loan payment period.

- 2. To reschedule or restructuring the loans, it is mandatory that at least 25% of past due interest up to rescheduled or restructuring date should be paid by the borrower. If all interests have been recovered before renewal of loans, it can be categorized in to 'pass' loan.

**8. Loan Loss Provisioning**

- 1. The loan loss provisioning, on the basis of the outstanding loans and advances and bills purchases classified as per the directives, shall be as follows:

Provisioning rate of Classified Loan and advances as per NRB Directives

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

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".

2. Loan loss provisioning to rescheduled or restructured loans should be as follows:
  - a. For rescheduled/restructured loan, loan loss provision should be at least 12 percent.
  - b. If priority sector or deprived sector or deprived sector loan which is insured or guaranteed priority sector credit has been rescheduled or restructured, provision should be only 25 percent of above point (a) for such loans. (i.e. 25% of 12.50%)
  - c. If interest and principle of rescheduled/restructured loans have been served regularly since two years, such loans can be converted in to 'pass' loan.
3. Priority sector or deprived sector loans which are not insured should be provisioned as per above clause no 1.
4. Where the loan is extended only against personal guarantee, a statement of the assets, equivalent to the personal guarantee amount 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, Substandard and doubtful, in addition to the normal loan loss provision applicable for the category, an additional provision by 20 percentages shall be provided. Classification of such loans and 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.

Additional Provisioning rate of Guaranteed Loan and advances

Classification of Loans and Advances	Provisioning Rate
Pass	21%
Substandard	45%
Doubtful	70%

**2.2.2.1 Policies Initiated By NRB to Control the Level of NPA**

Various initiatives have been taken by the NRB to address the high risk assets such as: NPL, non-banking assets, monitoring of high risk exposures. These steps include strengthening of capital, monitoring risk, enhancing the capacity absorbing identified risk, strengthening credit management and implementing best credit policies.

**Directive on good governance:** NRB has issued a separate directive in order to enhance the level of corporate governance in the banks and financial institutions. This comprise of setting the minimum acceptable level of code of conducts for Directors, CEO, employees. Similarly, provision of fair dealing with borrowers, prohibition to work in conflict with organization, maintaining of proper records, maintaining of confidentiality, timely submission of returns, qualification of CEO and reporting of compliance of code of conduct, requirement of audit committee, and responsibility of audit committee are also incorporated in it.

**Adequate capital in relation to risk weighted assets:** Generally, unidentified credit risk should be covered by the capital fund of the bank and financial institutions. Therefore, in order to absorb this type of risks, two types of measures have been prescribed by the NRB. The first is the minimum paid up capital which is Rs. 1 billion for the banks and it would vary for financial institutions as per their categories. The second is the risk based capital which is prescribed as 12% of total risk weighted assets. Out of total capital fund the requirement of core capital is at least 6%.

**Prudent loan classification and provisioning:** For the identified risk, the loan loss provisions are 25% for substandard, 50% for doubtful and 100% for bad loan categories.

**Requirement to monitor the concentration of assets:** As per NRB guidelines loans should be at least classified under 14 categories and monitored whether any exposures in the sector are within the 100% of core capital or beyond that limit. Exposure up to 100% of core capital should be monitored by the management and beyond it should be monitored by the Board of Directors.

**Maintaining of a good loan portfolio and establishing proper system for the collection of interest and principal:** It has been a motivating task for the banks and financial institutions to recognize the interest in cash basis and classification of loans on the basis of overdue periods.

**Compulsion for formulating and implementing Credit Policy Guidelines (CPG):** NRB regulations require the bank and financial institutions to prepare and implement prudent credit management procedures. For this purpose CPG needs to be formulated and implemented by each bank and financial institutions. Credit management aspects needs to

be specified by the CPG. A standard CPG should address all the areas that cover all aspects on credit risk management policies and procedures.

**Strengthening the credit information system and blacklisting procedures:** In order to strengthen the financial discipline a system for obtaining credit information needs to be developed. For this purpose, the directives of blacklisting were issued by NRB almost one decade ago. This has been amended and strengthened in order to improve the credit information system and dealing with willful defaulters in a scientific way. This has facilitated to restore a good credit culture among bankers and the borrowers.

**Provisioning of loan write-offs:** Each bank and financial institution should have its own loan write off policy. Generally, write offs are charged against reserves made for loan losses. Top management, normally, with the concurrence of legal and audit department makes decision to write off the loans. It will be prudent to write off a loan when the amount of loan is less than that of the amount to be spent to recover the loan or while proceeding to the legal steps, there will be still an excess outstanding amount than that of the liquidation value of the loan securities or if a loan is considered as uncollected under various possibilities and circumstances of recovery.

**Strengthening of consortium loan management:** The consortium loans disbursed in the past were turning into problematic loan due to lack of adequate procedures for risk management in the bank. To fill this gap NRB issued policy directives to guide such exposures. It is observed that there is still a huge exposure in the consortium NPL in the Nepalese banking system.

**Refinance facility to sick industries:** NRB has provided refinance facility for the rehabilitation of sick industries since 2001/02. During the last five years a sum of Rs. 3 billion has been disbursed to 151 hotels and 41 industries. NRB still has allocated Rs. 2 billion in current fiscal year to facilitate them. If the loan is performing and fulfill the criteria, then these industries can benefit from this facility. The provision has also helped to make the loan as performing for difficult time.

**Working with government to deal with big defaulters of this system:** It has been observed that the credit culture among the borrowers have not improved to desired level. It is international practice that either the loan should be repaid by the borrower (or by his

collateral) or needs to be declared as bankrupt. Nepal government has constituted a high level committee under the vice chairmanship of NPC, in order to suggest the measures to build financial discipline in the financial system. This committee has recommended several long term and short term measures for implementation. Government has made several decisions to deal with willful defaulters.

**Other measures:** Other measures focused for maintaining a good asset portfolio comprised various prudential norms. These measures are enhancing the eve if corporate governance, limitation to investment (such as unlisted shares and debentures) and deduction in capital for such activities, monitoring of liquidity gap through asset and liability mismatch, monitoring of foreign exchange exposure etc. (*Source: NRB directives, 2062*)

### **2.2.3 Review of Relevant Articles/Journals**

Christian Conte in his article “North East Florida banks’ nonperforming assets nearly twice state average” published in ‘Jacksonville Business Journal’ on 13 May, 2011 reported that Community banks in Northeast Florida have some of the worst performance measures in the state and a growing number of foreclosed properties on their books, according to reports from accounting firms. The Northeast Florida banks’ nonperforming assets, which consist mostly of bad commercial real estate loans, account for 9.62 percent of total assets, which is second-highest only to Northwest Florida. The state average for nonperforming assets to assets is 5.19 percent, but bankers say healthy banks try to keep that ratio around 2.5 percent normally.

The nine banks in the region had the lowest leverage ratio at 7.1 percent and total risk-based capital ratio at 11.49 percent. Although the regulatory minimum for those performance ratios has historically been 5 percent and 10 percent, respectively, bank regulators are requiring many banks to have ratios much higher, in the 8 percent to 9 percent range for the leverage ratio and 12 percent to 13 percent for the total risk-based capital ratio. Banking industry executives say those three ratios tell of the depressed state of the banking industry in Northeast Florida, which has only had a fraction of the bank failures that other areas of the state have endured.

Mr. Deependra B. Chhetri in his article titled “Non Performing Assets : A need for Rationalization”, published in ‘Nepal Rastra Bank Samachar’ on Baisakh, 2064, attempted to provide connotation of the term NPA and its potential sources, implication of NPA in financial sector in the South East Asian Region. He had also given possible measures to control NPA. “Loans and advances of financial institutions are meant to be serviced either part of principal of the interest of the amount borrowed in stipulated time as agreed by the parties at the time of loan settlement. Since the date becomes past dues, the loan becomes non-performing asset. The book of the account with lending institution should be effectively operative by means of real transaction effected on the part of the debtor in order to remain loan performing.”

As stated by the writer, the definition of NPA differs from country to country. In some of the developing countries of Asia Pacific Economic Cooperation (APEC) forum, a loan is classified as non-performing only after it has been arrear for at least 6 months. Similarly, it is after three months in India. Loans thus defaulted are classified into different categories having their differing implication on the asset management of financial institution. He also stated that NPAs are classified according to international practice into 3 categories namely Substandard, Doubtful and Loss depending upon the temporal position of loan default. “Thus the degree of NPA assets depends solely on the length of time the asset has been in the form of non-obliged by the loanee. The more time it has elapsed the worse condition of asset is being perceived and such assets are treated accordingly.” As per Mr. Chhetri’s view, failure of business for which loan was used, defective and below standard credit appraisal system, credit programme sponsored by Government, slowdown in economy/recession, diversion of fund are some of the factors leading to accumulation of NPAs.

He said that there is serious implication of NPAs, on financial institution. He further added that the liability of credit institution does not limit to the amount declared as NPA but extend to extra amount that requires by regulation of supervisory authority in the form of provisioning as the amount required for provisioning depends upon the level of NPAs and their quality. As per his view, rising level of NPAs create a psyche of worse environment especially in the financial sector. He mentioned that by reviving the activities of the financial institution like waiving interest, rescheduling the loan, writing off the loan,



appointing private recovery agent, taking help of tribunals and law of land etc NPAs can be reduced.

Finally, as per his conclusion, financial institutions are beset with the burden of mounting level of NPAs in developing countries. “Such assets debar the income flow of the financial institution while claiming additional resources in the form of provisioning thereby hindering gainful investment. Rising level of NPAs cannot be taken as stimulus but the vigilance demanded to solve the problem like this, eventually will generate vigour to gear up the banking and financial activities in more active way contributing to energizing growth.”

Mr. Gopal Tiwari in his article “Financial sector hobbled with chaos, fragility”, published in ‘The Himalayan Times’ on July 14, 2007, stated that Nepal’s financial sector is moving like a ‘sinking boat’. As per his view financial institution have failed in delivering beneficial services to needy people by developing credit-giving centers in rural areas without which sustained economic growth is impossible. On the other hand banks and financial institutions have enough liquidity but they are finding it difficult to find suitable places for investment.

He further said, problems such as insecurity lack of market research from banks, low investment opportunities, weak operational policies for carrying out financial transaction, among others have contributed to the problems of this sector. Despite central bank’s directives regulating banks and financial institution, private and government banks are functioning haphazardly. Nepal Bank Limited (NBL) and Rastriya Banijya Bank (RBB), the two largest banks, occupy about 30 percent of the country’s banking assets. Effective reform of these two is the key to improved performance of the whole sector. The process currently underway to reform these two institutions, despite paying huge amounts to foreign experts, has not given expected results. Besides NBL and RBB, the Non Performing Assets (NPA) of some private banks also very high. If the government and central bank allow the financial sector reforms to focus only on RBB and NBL, it might become a futile effort. The current managements of RBB and NBL have not been able to reduce their NPL even after two years, which have crossed over 40%. Earlier KPMG had

calculated NPL at 30-35 percent. The central bank itself says, despite efforts NBL has high NPLs and negative capital of Rs 9.75 billion.

The writer suggested that the forthcoming budget should not remain a document merely but should address financial sectors ills with a wide vision. He further recommended that in order to create a well regulated, prudent, market oriented, competitive and strong financial system in Nepal, the government should look to build upon its indigenous strength and improve upon its regional ties to improve its efficiencies.

“Portion of NPA in Commercial Banks – High in Public, Low in Private”, the article published in ‘Rajdhani’ on May 2006, the writer Mr. Narayan Sapkota stated that the problem of NPL is seen less in private banks in comparison to Public banks. The NPA of two big nationalized banks being about 30% of the total loans is very serious situation. He further mentioned that in order to improve this situation and to make healthy banking environment, financial reform programme has been brought as its consequences, the management of two big banks was handed to foreign company on a contract but the ratio of NPA was not reduced.

Even most of the privately owned banks has NPA within international standard, some privately owned bank’s NPA is higher than international standard. As per international standard 4% NPA is acceptable. He also states that, Nepal’s total NPA of banking sector is 16%, which is very high.

In an article “Is Biz Community Only The Culprits” published in ‘The Kathmandu Post’ on Aug 28, 2006, Arun K. Subedi, Industrialist, Printing and Packaging, Hetauda argues that business community not solely responsible for the growth of NPA but bankers also equally responsible. He says the bankers fail to analyze study the report financially, managerially and technically. He says it is the cash flow that repatriates the loan not the collateral which most bankers rely on. So, existing investigations and analyses must be concentrated on project status. He further states it is the duty and right of the banker to undertake the project before the problems arise because a bank is not only the financier but

also the partner of the project. Hence, the bank must undertake the project and start to recover the loan by operating and managing it. He agrees writing off the loan may be controversial but necessary. He gives a true example of Haratic Wire. It took loan for exporting copper wire to India and at that time wire export to India was free. The company commissioned and started to production. Then India banned the copper wire import and now it is a sick unit and promoters are blacklisted. In such case, bankers together with the promoters have to sell the properties. If it is inadequate for recovery, the loan is to be written off instead of claiming unrelated properties of the promoters. They must not be blacklisted because they could promote other business. He supports liabilities of particular company are to be limited to that company.

Rudra Sharma & Bashu Dev Phulara, in the article titled “Failed State vis-à-vis, Failed Banking System” published in ‘Business Age’, Vol. 5, on February, 2007, stated that banks in Nepal are in poor health and the ill health of the banking system is seen in its worst form in the nationalized & specialized public sector. They have large amount of classified loan burden and hence the survival of the nationalized banks is at stake. They stressed that banking sector is in need of sustained efforts to pull it out of deepening crisis and the laws governing loan recovery should be corrected.

The writers also mentioned that, the directives regarding loan classification and loan loss provisioning is tighter than it was proposed previously. They have also stated that NRB is pressuring banks to enforce prudential norms from which ordinary shareholders and depositors stand to benefit but investors are in risk. Investors want NPAs being recovered. The writers had also cited the quote of Dr. Tilak Rawal “For worse economic crisis is inevitable in the country if leading banks of Nepal fail to introduce immediate reform to counter growing NPAs. NPL is the cause of banking distress.” “Political pressure to lend to un-creditworthy borrowers and poor accounting practices is the main reason why the government owned banks have incurred substantial levels of NPL. In Nepal, NPL have accounted for between 40-50% of total loans of government owned banks. ”

#### **2.2.4 Review of Previous Relevant Thesis**

Prabin Nepal (2008), in his thesis titled “A Comparative Study on NPA Management of Commercial Banks in Nepal” with reference to Nepal Bank Limited, Nabil Bank Limited and Standard Chartered Bank Nepal Limited, has tried to elucidate the different aspect of NPA in the context of Nepalese commercial banking sector. The main objective of his study was to find out the proportion of non-performing loan and to find out the factors leading to accumulation of non-performing loan in commercial banks. Stating the problem, he said “In the present context where Nepalese Banks are facing the problem of increasing NPAs, more amounts have to be allocated for loan loss provision. As earlier mentioned, the provision amount is taken out by deducting from the profit of the bank; the bank’s profit might come down.”

As per his major findings, he said “The analysis of non-performing loans to total loans revealed that, average NPL of NBL, NABIL & SCBNL is 28.05%, 2.50% & 2.87% of total loan respectively. That means 71.95%, 97.50% & 97.13% of total loan of NBL, NABIL & SCBNL is performing loan. Hence NBL has significantly higher proportion of the non-performing loan in the total loans portfolio but this ratio shows decreasing trend, due to hiring the new management team and giving priority to recovery. Loan Loss Provision ratio of NBL is found to be significantly higher, which is around 41.20% in average followed by SCBNL of 3.64% and NABIL of 3.359%. Since higher ratio is an indication of higher non-performing loan in the total loans and advances NBL’s relatively higher ratio is the result of higher proportion of NPL in the total loan.”

He concluded, “Ineffective credit policy, political pressure to lend to un-creditworthy borrowers, overvaluation of collateral are the major causes of mounting non-performing assets in government owned banks like NBL. Other factors leading to accumulation of NPAs are weak loan sanctioning process, ineffective credit monitoring & supervision system, economic slowdown, borrower’s misconduct etc. The present loan classification and provisioning directive seems more stringent than the previous one. As a result more provision has to be apportioned leading to lesser profitability but this kind of negative impact is only for short period. Adequate provisioning strengthens the financial health of the banks and makes them able to face any kind of future contingencies.”

As per his recommendations, he wrote “Hiring Asset Management Company (AMC) is recommended for NBL to resolve the problem of mounting non-performing loan. SCBNL is recommended to increase its investments in productive sector in the form of loans and advances. It is recommended for NBL for exploring new areas of investment. It is recommended for the banks to initiate training and development programme for the employees to make them efficient and professional in credit appraisal, monitoring and proper risk management. It is recommended for all the three banks to take preventive measures before the loan goes to default. All the banks are recommended to have an information system to gather all the possible information and activities about its borrowers so that necessary precautions can be taken in time.”

Kapil Mani Gyawali (2007), in his thesis titled “Impact of NPA on Profitability of Commercial Banks” tried to clarify the main causes and impacts of NPA in the banking sector. His major findings and recommendations are as follows:

Major Findings:

- a. The low ratio, i.e., total assets ratio of SCBL is the indication of risk-averse attitude of the management or they have the policy of investing low in the risky assets like loan & advance. They have the higher proportion of their investment in risk-free assets like treasury bills, national saving bonds etc.
- b. The average ratio of non-performing assets to total loan & advance indicates the proportion of non-performing assets to total loan & advance. RBB has significantly higher proportion of the non performing loan in the total loan portfolio & this ratio, which exhibits the critical condition of the bank.
- c. NPA to total assets shows how much NPA is there in total assets. SCBL has the lower ratio of NPA to total assets & it can be seen that it provides less amount of loan & advance, where as RBB has the highest ratio of NPA to Total Assets because it provides the higher amount of its resources as loan & advances.
- d. High negative correlation of NBL is the result of high non-performing loans in the total loan portfolio.

Major Recommendations:

- a. SCBL has low loan & advances to total deposit ratio, i.e., lower than the standard range. Therefore they should utilize the deposited fund efficiently.
- b. RBB has high level of NPA total assets ratio with comparison to rest banks which reduce the profitability of the banks. Therefore they should reduce the portion of non- performing assets.
- c. Negative return on loan & advances ratio which indicates they are ineffective to employ its resource in the form of loan & advances. Therefore, they should pay attention on the efficiency of their credit department.
- d. Commercial banks should hire Assets Management Company to resolve the problem of NPA.

Kumar Pradhan (2006) conducted thesis titled "A study of Non-Performing Assets of Commercial Banks of Nepal" with reference to Nepal Bank Limited, Rastriya Banijya Bank, Nepal Bangladesh Bank, Everest Bank and Standard Chartered Bank Nepal Limited, with the main objectives to find out the proportion of non-performing loan and the level of NPAs in total assets total deposit and total lending, to evaluate the relationship between loan and loan loss provision, to present the trend line of the non-performing assets, loan and advances, loan loss provision of selected commercial bank.

Pradhan concluded, "Improper credit policy and credit appraisal system, lack of supervision and monitoring, economic slowdown, overvaluation of collateral, borrower's misconduct, political pressure to lend for un-creditworthy parties, etc are the major causes of occurring NPAs. Nepalese banks have to remain focused in their efforts to recover their spiraling bad loans, or non-performing assets, to sustain the positive trend of improving asset quality. Better risk management techniques, compliance with the core principles for effective banking supervision, skill building and training and transparency in transaction could be the solution. Removal of non-performing loans from the banking system even through government or quasi government funds at times, is essential. But official assistance should be so strong as to avoid moral hazard. While NPA cannot be eliminated, but can only be maintained, it has to be done not a heavy cost of provisioning and increasing the portfolio of credit. Along with recovery, fresh inflow of NPA should be brought down at a level much less than the quantum of its exit. If this specific goal is

reached, there is an eventual solution for this problem. Good governance is essential for the success in NPA management"

He recommended, "To reduce the level of NPA , proper financial analysis should be done before lending to the borrowers, banks should take enough collateral, so that they at least are able to recover principle and interest amount in case of being unable to repay by the borrower, to Hire Asset Management Company(AMC) to reduce the non-performing assets, to search new investment areas is important and all banks should provide appropriate training regarding loan management, risk management, credit appraisal etc to the employees."

Dirgha Narayan Kafle (2005), in his thesis titled "Non-Performing Loans Of Nepalese Commercial Banks" aims to study the level of NPL in total assets, total deposits and total lending by Nepalese commercial banks and to find out whether the Nepalese commercial banks are following the NRB directives regarding loan loss provision for NPL or not. He found the level of NPA in Nepalese banking sector to be alarming and increasing. His study is focused only on five banks i.e. Nepal SBI Bank, Nepal Investment Bank, Nepal Bangladesh Bank, Bank of Kathmandu and NABIL Bank Ltd. Levels of NPA in the sample banks are not so alarming and the situation is quite satisfactory. He further states not any bank could meet the requirement of NRB directives. Lack of proper financial analysis, management inefficiency, and lack of proper collateral are the causes of high-level NPA. He has followed descriptive research design with analytical approach. His research is based on secondary data. He has used simple percentage tool like arithmetic tool, Karlpearson co-efficient of correlation and regression analysis for data processing procedures. His research based on research variables like NPL and the level of NPL in different parameter.

So far his major findings, he stated, "The return on assets (ROA) and return on equity (ROE) of the bank somehow depend upon Non Performing Loan. The bank should reduce its NPL to increase ROA and ROE of the bank. Management inefficiency is one of major cause behind high level of NPA of Commercial banks."

Recommendations he suggested are, “Those banks having high level of NPL should take immediate action. The bank should dispose of the collateral taken from the borrower and recover principal and interest amount. Corporate structure of the banks play key role in the effective loan management. There should be separate department for credit appraisal, documentation, disbursement, relationship maintenance and inspections. Maintenance efficiency should be enhanced. Hence necessary trainings should be given to the managers and staffs.”

Dinesh Kumar Khadka (2004) conducted his thesis titled “Non-performing assets of Nepalese commercial banks” with an objective to examine the level of NPAs in total assets, total deposits and total lending of Nepalese commercial banks. He also showed that the effects of non-performing assets on Return on Assets (ROA) and Return on Equity (ROE) of Nepalese commercial banks. According to him, despite of being more profitable, loans and advances create risk of non-payment for the bank. Such risk is known as credit risk or default risk. Therefore, like other assets, the loan and advances are classified into performing and non-performing assets on the basis of overdue schedule. Escalating level of NPAs has been becoming great problem in banking business in the world. In this context, Nepal cannot be run off from such situation. The level of NPAs in Nepalese banking business is very alarming. It is well known fact the problem of swelling non-performing assets and the issue is becoming more and more unmanageable day by day. We are well known from different financial reports, newspaper and news that the total NPA in Nepalese banking system is about 35 billion, while it is very worse in case of two largest commercial banks Rastriya Banijya Bank (RBB) and Nepal Bank Limited (NBL).

He concluded, “The level of NPA in sampled Nepalese Commercial Banks is not so alarming. The situation is quite satisfactory. But the increasing trend remain continue in coming days, the situation will be unmanageable and alarming. The commercial banks could not give full attention toward supervising their lending and towards recovering their bad loans perfectly. Level of NPA has been increasing. The level of NPA of joint venture banks such as Nepal Bangladesh Bank Limited (NBBL) seems very unsatisfactory, if the situation is not handling right now, it will be unmanageable and difficult to handle.”



As per his recommendations, the banks should have to take enough collateral while lending loan, appropriate financial analysis, supervision, monitoring and control should be done. Lastly, those banks having high level of NPA should take immediate action toward recovering their bad loan as soon as possible. In case of default to repay the loan recover principle and interest amount.

### **2.3 Research Gap**

Going through the review of literature, it has been found that some research in the related topic and have already been reviewed which helps to this study but no research was found exactly in detail research and analysis of non-performing assets on five sampled commercial bank, previous study includes only two or three banks. Hence the researcher had attempted to fill this research gap by taking reference of NBL, RBB, NABIL, NIBL and SCBNL. This study will try to portray the present issues, latest information on bank's NPA and their ratios, data and real picture of loan and advances of sampled Nepalese Commercial Banks.

As the latest data of the year 2010/2011 has been taken, the thesis gives the detailed data and information of the recent times and thus helps to be familiar with the current situation related to the NPA of the banking industry of Nepal.

## **Chapter - 3**

# **RESEARCH METHODOLOGY**

### **3.1 Introduction**

Research is a diligent and systematic inquiry or investigation into a subject in order to discover or revise facts, theories, applications etc. Methodology is the analysis of the principles of methods, rules, and postulates followed by a particular discipline. Thus, research methodology is the way how we conduct our research. Research Methodology refers to the various sequential steps to be adopted by the researcher in studying a problem with certain objects in mind. It is the overall framework of the research. It is the process of arriving at the solution of the problems through planned and systematic dealing with the collection, analysis and interpretation of the facts. Research Methodology describes the method and process applied in the entire aspect of the study.

The research methodology adopted in the present study is discussed in this chapter.

### **3.2 Research Design**

Research Design is the overall operational pattern of frameworks of the project that stipulates what information is to be collected, from which source, by what procedures, how to conduct analysis, etc. It is the plan, structure and strategy of investigation conceived so as to obtain answers to research questions and to control variance. It is the specification of methods and procedures for acquiring the information needed. Researcher should make plan of the study before understanding the research work and that plan or blueprint for study is called research design. Research design presents a series of guideposts to enable the researcher to progress in the right direction in order to achieve the goal. It is the arrangement of condition for collection and analysis of data in a manner that aims to combine relevance to research process with economy in process.

This study aims to evaluate the non performing assets (NPA) of commercial banks, analyze the impact of NPA on profitability, NPA and its relationship with NBA (Non-Banking Asset) and influencing factors. This research will follow analytical as well as descriptive research design.

### **3.3 Population and Sample**

In research, the term ‘population’ means all the member of any well defined class of people, event or object. It means the entire group of people, events or things of interest that a researcher wished to investigate. A representative part of population selected from it with the objective of investigating its properties is called sample.

As this study is about analysis of non-performing assets of commercial Banks, the commercial banking industry of Nepal is the population of this research. Currently, there are all together 26 commercial banks operating in Nepal and out of them, following five commercial banks are taken as sample for this study by using judgmental sampling method:

- (i) Nepal Bank Limited (NBL)
- (ii) Rastriya Banijya Bank (RBB)
- (iii) Nabil Bank Limited (NABIL)
- (iv) Nepal Investment Bank Limited (NIBL )
- (v) Standard Chartered Bank Nepal Limited (SCBNL)

### **3.4 Nature and Types of data**

Since this study aims to assess the impact of NPA on the profitability of the bank as well as the influencing variables of NPA, the nature of data is both primary and secondary in nature. For the purpose of analysis in this research, mainly the secondary data will be used. The facts and figures provided by the banks will be taken into consideration. But some data which are not published will be directly collected from the bank. The bank professionals will also be interviewed wherever needed.

### **3.4.1 Sources of Data**

For the analysis of impact of NPA secondary data have been collected from the Annual Reports and the Newsletter published by the concerned banks, Economic Survey published by NRB, Quarterly Economic Bulletin published by NRB, Banking and Financial Statistics published by NRB, different publication by NRB related to the concerned commercial banks, previous published and unpublished dissertations. Similarly, articles published in newspapers, journals, magazines and different websites related to the subject matter are also taken for reference. Different supplementary data have been obtained from other sources like Saraswati Multiple Campus library, Shanker Dev Campus library and TU central library. Likewise for the study of cause of NPA, primary data in the form of questionnaire have been collected from the respondent of sample banks.

### **3.5 Data Collection Procedure**

After the identification of the sources of data, following procedures have been used for the collection of the required data for the study:

- ) First of all, type and nature of the data has been identified.
- ) For the collection of secondary data, Yearly Annual Reports of the sample banks have been taken for the period of five consecutive years i.e. during the fiscal year 2006/07 to 2010/11. Also Annual Reports, Banking and financial Statistics of NRB and other NRB publications have been highly used for the secondary data.
- ) For the collection of the primary data, information has been collected by developing a scheduled questionnaire and distributing the questionnaire to the employees of the banks and requesting them to fill it out. Besides this, junior employees have also being observed and responses have been drawn from them about relevant questionnaire. Also, direct interviews and discussions with the bank official have been conducted for the collection of the necessary information wherever needed.

### **3.6 Data Processing Procedure**

Data initially collected are in the raw form and the raw data should be processed before using it for the study. They should to be recorded, classified, tabulated and presented as per the nature of the study. So, the data, primary as well as secondary, collected from various sources are recorded systematically, classified effectively and presented in appropriate forms of tables and charts and appropriate mathematical, statistical, financial, graphical tools are applied to analyze the data. The computer print outs of financial key figures and the information collected through questionnaire have been processed according to the requirements of the study.

### **3.7 Data Analysis Tools and Techniques**

Presentation and analysis of the collected data is the central part of the research work. The raw data collected from different sources are recorded systematically and identified. The available information is grouped as per the need of the research work in order to meet research objectives. For analysis purpose, different kinds of appropriate mathematical, statistical and financial tools have been used. Further, with the help of diagrams and graphs, the data have been represented in simple form.

#### **3.7.1 Financial Tools**

Financial tools basically help to analyze the financial strength and weakness of a firm. While adopting financial tools, a ratio is used as a benchmark for evaluating the financial position and performance of any firm. “Financial analysis is the process of identifying the financial strength and weakness of the firm by properly establishing relationship between the items of the balance sheet and profit and loss account.”<sup>6</sup>

“Financial analysis is the use of financial statements to analyze a company’s financial position and performance and to assess future financial performance.”<sup>7</sup>

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<sup>6</sup> Pandey I. M., Financial Management, Eighth Edition, (New Delhi :Vikas Publishing House Pvt. Ltd. , 1999), p. 108

<sup>7</sup> John Wild, K. R., Subramanyam, Robert Halsey , Financial Statement Analysis, Eight Edition,( MC Graw Hill.: 2003,) p. 13

To evaluate the financial position and performance of any firm, ratio is used as a key tool of financial analysis.

### **3.7.1.1 Ratio Analysis**

Ratio is the index, proportion or degree of relationship between two items. A ratio is simply one number expressed in terms of another and as such it expresses the numerical or quantitative relationship between two variables. A ratio helps to summarize the large quantities of financial data and to make qualitative judgment about the firm's financial performance. Ratio analysis is a tool of scanning the financial statement of the firm. Ratio analysis is the most effective and widely used tool of financial analysis. Ratio analysis reflects the relative strengths and weakness of any organization and also indicates the operating and financial growth of the organization.

"Ratios help to summarize large quantities of financial data and to make quantitative judgment about the firm's financial performance .The relationship between two accounting figures expressed mathematically is known as financial ratios." (*Pandey, 1999:108*)

Ratio analysis is used to compare firm's financial performance and status that of the other firms or to it overtime. There are so many reasons for selecting different kinds of ratios for different types of situations. Ratios can be categorized into the following major headings:

- (A) Liquidity Ratio
- (B) Asset Management Ratio/ Efficiency Ratio
- (C) Profitability Ratio
- D) Lending Efficiency Ratio

#### **(A) Liquidity Ratio**

Liquidity ratio is used to judge a firm's ability to meet its short-term obligations. In other words, this ratio measures the short-term liquidity position of a firm. It measures the speed with which a bank's asset can be converted in to cash to met deposit withdrawal and other current obligations. The following ratios are developed under the liquidity ratios to identify the liquidity position.

### **(i) Current Ratio**

This ratio examines the extent to which current assets are sufficient to meet liabilities. The more the current ratio a bank has the more liquidity the bank possesses. It is determined by dividing current assets by current liabilities.

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Current assets are those assets which can be converted into cash within a year and so it includes. Current assets include: Cash and bank balance, account receivables, marketable securities, investment in treasury bills, bills purchased and discounted, customer acceptances liabilities, prepaid expenses, inventories, accrued income, bills receivables.

Current liabilities include: current account deposits, saving account deposits, margin deposits, bills payable, sundry creditors, short-term loans, long-term loans, income tax payable, dividend payable, outstanding /accrued expenses, advance income, call deposits, bank overdraft, inter-bank reconciliation account, provisions and customer acceptance liabilities etc.

### **(ii) Quick, Liquid or Acid Test Ratio or Liquid Fund to Current Liability Ratio**

It is the modification of current ratio. Inventories in current ratio create a problem when it cannot be easily changed into cash at their full book value. This is why quick ratio is calculated by excluding the inventories in current ratio. Higher quick ratio indicates an efficient position for meeting the current obligations. It is determined by following equation:

$$\text{Quick Ratio} = \frac{\text{Current Assets} - \text{Inventories}}{\text{Current Liabilities}} = \frac{\text{Quick Assets}}{\text{Current Liabilities}}$$

Or,

$$\text{Liquid Fund to Current Liability Ratio} = \frac{\text{Liquid Fund}}{\text{Current Liabilities}}$$

It indicates the ability of the bank to discharge its liquidity risk. Liquid fund are those assets, which can be converted in to cash within a short period without any decline in their book value.

### **(iii) Cash and Bank balance to Total Deposit Ratio**

Cash and bank balance are the most liquid current assets. This ratio measures the real liquidity of the bank. Both higher and lower ratios are not desirable. The reason is that if bank maintains higher ratio of cash, it has to pay interest on deposits and some earning may be lost. In contrast, if a bank maintains low ratio of cash, it may fail to make payment for the demands of the depositors. So, sufficient appropriate cash reserve should be maintained properly. Higher the ratio shows higher liquidity position and ability to cover the deposits and vice versa. This ratio can be calculated by the following formula:

$$\text{Cash \& bank balance to Total Deposit Ratio} = \frac{\text{Cash \& Bank Balance}}{\text{Total Deposit}}$$

### **(B) Asset Management or Efficiency Ratio**

It is also known as activity or turnover ratio. Asset management ratio measures how effectively the firm is managing its cash. Asset management ratio measures the proportion of various assets and liabilities in balance sheets. The proper management of assets and liability ensures its effective utilization, thereby increasing revenue. The banking business converts the liability into assets by way of its lending and investing functions. So, higher rate of this ratio indicates more efficiency of a firm in managing and utilizing its assets, being other things equal. Various ratios examined under this heading are as follows:

#### **(i) Loan and Advances to Total deposit Ratio (Credit Deposit Ratio - CD Ratio)**

Loan and advances to total deposit ratio shows whether the banks are successful to utilize the outsiders fund (i.e. total deposits) for the profit generating purpose or not. Generally, a high ratio reflects the higher efficiency to utilize outsiders fund and vice versa. The ratio can be calculated by using following formula:

$$\text{Loan \& Advances to Total Deposit Ratio or CD Ratio} = \frac{\text{Loan \& Advances}}{\text{Total Deposit}}$$

#### **(ii) Loan and Advances to Total Assets Ratio**

This ratio measures the ability in mobilizing total assets into loan and advances for profit generating income. A higher ratio is considered as an adequate symbol for effective



utilization of total assets of bank into loan and advances which create opportunity to earn more and more. It is calculated by the following formula:

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

### **(iii) Non-performing Assets to Total Assets Ratio**

It measures the strength and weakness of bank in relation to financial condition. Normally, the more is the ratio, the less is the profit of the bank. The ratio is calculated by using following formula:

$$\text{NPA to Total Assets Ratio} = \frac{\text{Non - performing Assets}}{\text{Total Assets}}$$

### **(iv) Total Investment to Total Deposit Ratio**

A commercial bank may mobilize its deposit by investing its fund in different securities issued by government and other financial and non-financial companies. Effort has been made to measure the extent to which the banks are successful in mobilizing the total deposit on investment. A high ratio is the indicator of high success to mobilize the banking fund as investment and vice versa.

$$\text{Total Investment to Total Deposit ratio} = \frac{\text{Total Investment}}{\text{Total Deposit}}$$

## **(C) Debt Management Ratio or Leverage Ratio**

In contrast to liquidity ratio, debt management ratio measures the ability to meet long term as well as current obligations in using long term debt. This ratio measures the extent to which a firm is using debt financing or financial leverage and the degree of safety afforded to creditors.

The following are some leverage ratios:

### **(i) Total Debt to Total Assets Ratio**

It measures the proportion of debt employed to finance the total assets. A higher debt ratio creates lower credit worthiness in the debt market; therefore a higher debt ratio is not preferable. A decreasing debt ratio is preferable. It is calculated as:

$$\text{Total Debt to Total Assets Ratio} = \frac{\text{Total Debts}}{\text{Total Assets}}$$

### **(ii) Long Term Debt to Total assets Ratio**

It measures the contribution of long term debt to owing total assets. Lower ratio indicates the potentiality of raising funds and more credit worthiness and vice-versa. It is calculated as:

$$\text{Long term Debt to Total Assets Ratio} = \frac{\text{Longterm Debt}}{\text{Total Assets}}$$

### **(iii) Times-Interest-Earned Ratio**

This ratio explains the ability of a firm to meet its current obligations on the basis of operating income (EBIT). Therefore, a higher TIE ratio shows a greater ability to raise funds and vice-versa. It is calculated as:

$$\text{Times Interest Earned (TIE) Ratio} = \frac{\text{EBIT}}{\text{Interest Expenses}}$$

## **(D) Profitability Ratio**

This ratio measures how effectively a firm's management generates profit. Profit is the difference between revenues and expenses over a period of time. A company should earn profit to survive and to grow over a long period of time. So, profitability ratios are used to indicate and measure the overall efficiency of a firm in terms of profit and financial performance. Higher profitability ratio shows the better performance of the firm. The following ratios are calculated under the profitability ratios:

### **(i) Return on Loan and Advances**

This ratio measures the earning capacity of commercial banks through its fund mobilization as loan advances. Here, higher the ratio clear the indication that loan and advances are generating profit. The ratio is calculating by following formula:

$$\text{Return on Loan and Advances} = \frac{\text{Net Profit}}{\text{Loan \& Advances}}$$

**(ii) Return on Total Assets**

This ratio measures efficiency of financial resources invested in a firm's assets to create profitability. The ratio calculates the relationship between the net profit and total assets. Higher the ratio, higher is the efficiency in utilization of assets and vice versa. In this study, net profit/ loss to total assets ratio is examined to measure the profitability of all the financial resources in bank assets and is calculated by applying the following formula:

$$\text{Return on Total Assets (ROA)} = \frac{\text{Net Profit / Loss}}{\text{Total Assets}} = \frac{\text{Net Income}}{\text{Total Assets}}$$

**(iii) Interest income to Total Loan and Advances Ratio**

It is useful to know the fact that whether the loan has given good return or not. We can increase interest income by taking good issuing and recovery credit policy. Higher ratio shows the bank's profitability position. It is calculated by applying the following formula:

$$\text{Interest income to total Loan \& Advances ratio} = \frac{\text{Interest Income}}{\text{Total Loan \& Advances}}$$

**(iv) Earning per share (EPS)**

It is the profit after tax that is divided by the number of common shares to calculate the value of earnings per share. This figure shows the profit to the common shareholder for every share he held have earned. The higher the ratio the better a share earns. The ratio is calculated by the following formula:

$$\text{Earning per share (EPS)} = \frac{\text{Net Profit after Tax}}{\text{No. of Equity Shares}}$$

**(E) Lending Efficiency Ratio**

This ratio is also known as investment management and solvency ratio. These ratios indicate the efficiency of activity of an enterprise to utilize available funds, particularly short-term funds. These ratios are used to determine the efficiency, quality and the contribution of loans and advances in the total profitability. The following are the various types of lending efficiency ratios.

### **(i) Loan loss provision to Total loan and Advances Ratio**

The ratio measures the total loan and its provision. Increase in loan loss provisions results decrease in profit resulting to decrease in dividends but its' positive impact is that it strengthens financial conditions of the bank by controlling the credit risk and reduces the risks related deposits. The low ratio indicates the good quality of assets in total volume of loan and advances. High ratio indicates more risky assets in total volume of loan and advances. It is calculated as follows:

$$\text{Loan Loss Provision to Total Loan \& Advances} = \frac{\text{Loan Loss Provision}}{\text{Total Loan \& Advances}}$$

### **(ii) Non-performing loans to Total Loan and Advances Ratio**

NRB has directed all the commercial banks to create loan loss provision against the doubtful and bad debts. This ratio determines the proportion of non-performing loans in the total loan portfolio. Higher ratio implies the bad quality of assets of banks in the form of loans and advances. Hence lower NPL to total credit ratio is preferred. As per international standard only 5% NPL is allowed but in the context of Nepal 10%. It is calculated as follows:

$$\text{Non-performing Loans to Total Loan \& Advances} = \frac{\text{Non-performing Loans}}{\text{Total Loan \& Advances}}$$

## **3.7.2 Statistical Tools**

The statistical tool is essential to measure the relationship of two or more variable. Statistical tools are the mathematical techniques used to facilitate the analysis and interpretation of numerical data. It also helps to present the data, show the relation and deviations or differences of variables of organizations. "Statistical Analysis is one particular language, which describes the data and makes possible to talk about the relations and the difference of the variables."<sup>8</sup> In this study, following statistical tools have been used:

### **(i) Percentage**

A percent is a number of hundredth parts one numbers to another. Uses of percentages make the data much simpler and grasp. It is the simplest statistical device used in

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<sup>8</sup>Gupta S.P., Statistical Method,( New Delhi: Sultan Chand and Publishers, 1997) p.21

interpretation of phenomenon. It can reduce everything to a common base and thereby helps in meaningful presentation. Mathematically, let A represent the base used for comparison, B represent the given data to be compared with the base, then the percentage of given number in the base may be calculated as:

$$\text{Percentage (P \%)} = \frac{B}{A} \times 100$$

**(ii) Measures of Central Tendency**

Measures of central value are simple statistical treatments of distribution that attempts to find the single figure to describe the entire distribution. It is the best possible value of a group of variables that singly represents to whole group. In the statistical analysis the central value falls within the approximately middle value of the whole data. Among the several tools of measuring central value, the mean has been used in this analysis where and when necessary.

**Mean (Average)**

Mean is defined as sum of observations divided by their number in the selected sample. It is the popular measure for representing the entire data. It is the average of the data. It is further used in many statistical and financial analysis tools. The mean is the arithmetic average of a variable. Arithmetic Mean of a series is given by:

$$\text{Mean } (\bar{X}) = \frac{\sum X}{n} = \frac{X_1 + X_2 + X_3 + \dots + X_n}{n}$$

Where,  $\sum X$  = Sum of Variable ‘X’

n = No. of observation

**(iii) Measure of Dispersion**

Dispersion measures the variation of the data from the central value. The central value alone is not enough to analyze the quality of data regarding its variability. With the light of dispersion, an average becomes more powerful and meaningful. Following tools of measuring dispersion has been used in this study:

**Standard Deviation**

Standard deviation (S.D. or  $\sigma$ ) is the most popular and the most useful measure of dispersion. It indicates the ranges and size of deviance from the middle or mean. It

measures the absolute dispersion. Higher the value of standard deviation higher is the variability and vice versa. It is the positive square root of average sum of squares of deviations of observations from the arithmetic mean of the distribution. It can be calculated as follows:

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

### **Co-efficient of Variation**

The percentage measure of coefficient of standard deviation is called coefficient of variation (C.V.). The less is the C.V the more is the uniformity and consistency and vice versa. Standard deviation gives an absolute measure of dispersion. Hence where the mean value of the variable is not equal it is not appropriate to compare two pairs of variables based in S.D. only. The coefficient of variation measures the relative measures of dispersion, hence capable to compare two variables independently in terms of their variability. It can be calculated as follows:

$$\text{Coefficient of variation (C.V)} = \frac{\sigma}{\bar{X}} \times 100$$

Where,

$\sigma$  = Standard Deviation

$\bar{X}$  = Mean

### **Correlation Coefficient (r)**

Correlation analysis is the statistical tool that we can use to describe the degree to which one variable is linearly related to other variables. Correlation says just the degree of relationship between two or more variables. It does not tell us anything about cause and effect relationship. “Correlation may be defined as the degree of linear relationship existing between two or more variables. Two variables are said to be correlated when the change in the value of one is accompanied by the change of another variable.”<sup>9</sup>

The most widely used in practice for calculating correlation coefficient between two variables is “Karl Pearson’s correlation coefficient.” The correlation coefficient between

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<sup>9</sup> Staphit A.B., Gautam Hiranya , Joshi P.R., Prakash Man Dongol, Statistical Methods, (Kathmandu : Buddha Academic Publishers & Distribution P. Ltd., 2003 )p.362

two variables  $X_1$  and  $X_2$ , usually denoted by  $r(X_1, X_2)$  or  $r_{12}$  or simply  $r$ , is a numerical measure of linear relationship between them and is calculated by using direct method as:

$$r_{12} = \text{Correlation coefficient between } X_1 \text{ and } X_2$$

$$= \frac{n \sum X_1 X_2 - \sum X_1 \cdot \sum X_2}{\sqrt{n \sum X_1^2 - (\sum X_1)^2} \sqrt{n \sum X_2^2 - (\sum X_2)^2}}$$

Where,  $r$  = correlation co-efficient

$n$  = Total no. of observations

$X_1$  = Dependent Variable

$X_2$  = Independent Variable

The value of  $r$  lies between -1 and + 1 symbolically,

$$-1 \leq r \leq +1$$

The correlation coefficient is symmetric in two variables, i.e.  $r_{xy} = r_{yx}$  (It can be verified by exchanging  $X$  and  $Y$  in the formula). It is a pure number independent of the unit of measurement.

### **Interpretation of correlation coefficient:**

- i. When  $r = +1$ , there is perfect positive correlation.
- ii. When  $r = -1$ , there is perfect negative correlation.
- iii. When  $r = 0$ , there is no correlation.
- iv. When  $r$  lies between 0.7 and 0.999 ( $-0.7$  to  $-0.999$ ) there is a high degree of positive (or negative) correlation.
- v. When  $r$  lies between 0.5 and 0.699, there is a moderate degree of correlation.
- vi. When  $r$  is less than 0.5, there is low degree of correlation.

The correlation coefficient gives the actual relationship but sometimes it may give the error. The reliability of the correlation coefficient ( $r$ ) can be checked with the help of probable error (PE).

### **Probable Error (P.E.) of Correlation Coefficient**

The probable error is a measurement of ascertaining the reliability of the value of coefficient of correlation. It is used to test whether the calculated value of sample

correlation coefficient is significant or not. If  $r$  is the calculated correlation coefficient in a sample of  $n$  pairs of observations, then its standard error, usually denoted by  $S.E (r)$  is given by:

$$S.E (r) = \frac{1 Z r^2}{\sqrt{n}}$$

Probable error of the coefficient of correlation can also be calculated from  $S.E$  of the coefficient of correlation by the following formula:

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

Where,  $r$  = correlation coefficient

$n$  = no of observation

The probable error is used to test whether the calculated value of sample correlation coefficient is significant or not. A few rules for the interpretation of the significance of correlation coefficient are as follows:

- (i) If  $r < 6 \text{ P.E. (r)}$ , then the value of  $r$  is not significant (i.e. insignificant) and there is no correlation.
- (ii) If  $r > 6 \text{ P.E. (r)}$ , then  $r$  is definitely significant.
- (iii) In other situations, nothing can be calculated with certainty.

### 3.7.3 Trend Analysis

A series formed from a set of statistical data arranged in accordance with their time of occurrence is said to be a time series. Trend Analysis is one of the statistical tools, which is used to determine the improvement or deterioration of its financial situation. Trend analysis informs about the expected future values of various variables. The Least square method has been adopted to measure the trend behaviors of these selected banks. This method is widely used in practices. The formula of least square method for the straight line is represented by the following formula:

$$Y = a + b X$$

This equation is also known as regression equation.

Where,



$Y = \text{Trend Values}$

$a = Y$  intercept or the computed trend figure of the  $Y$  variable, when  $X = 0$

$b =$  Slope of the trend line of the amount of change in  $Y$  variable that is associated with change in 1 unit in  $X$  variable.

$X =$  Variable that represent time i.e. time variable

The value of the constants “ $a$ ” and “ $b$ ” can be determined by solving the following two normal equations:

$$\sum Y = N a + b \sum X \dots\dots\dots(i)$$

$$\sum XY = a \sum X + b \sum X^2 \dots\dots\dots(ii)$$

Where,  $N =$  number of years

But for simplification, if the time variable is measured as a deviation from its mean i.e. mid point is taken as the origin, the negative value in the first half of the series balance out the positive values in the second half so that ( $\sum X = 0$ ). The values of constant “ $a$ ” and “ $b$ ” can easily be determined by using following formula:

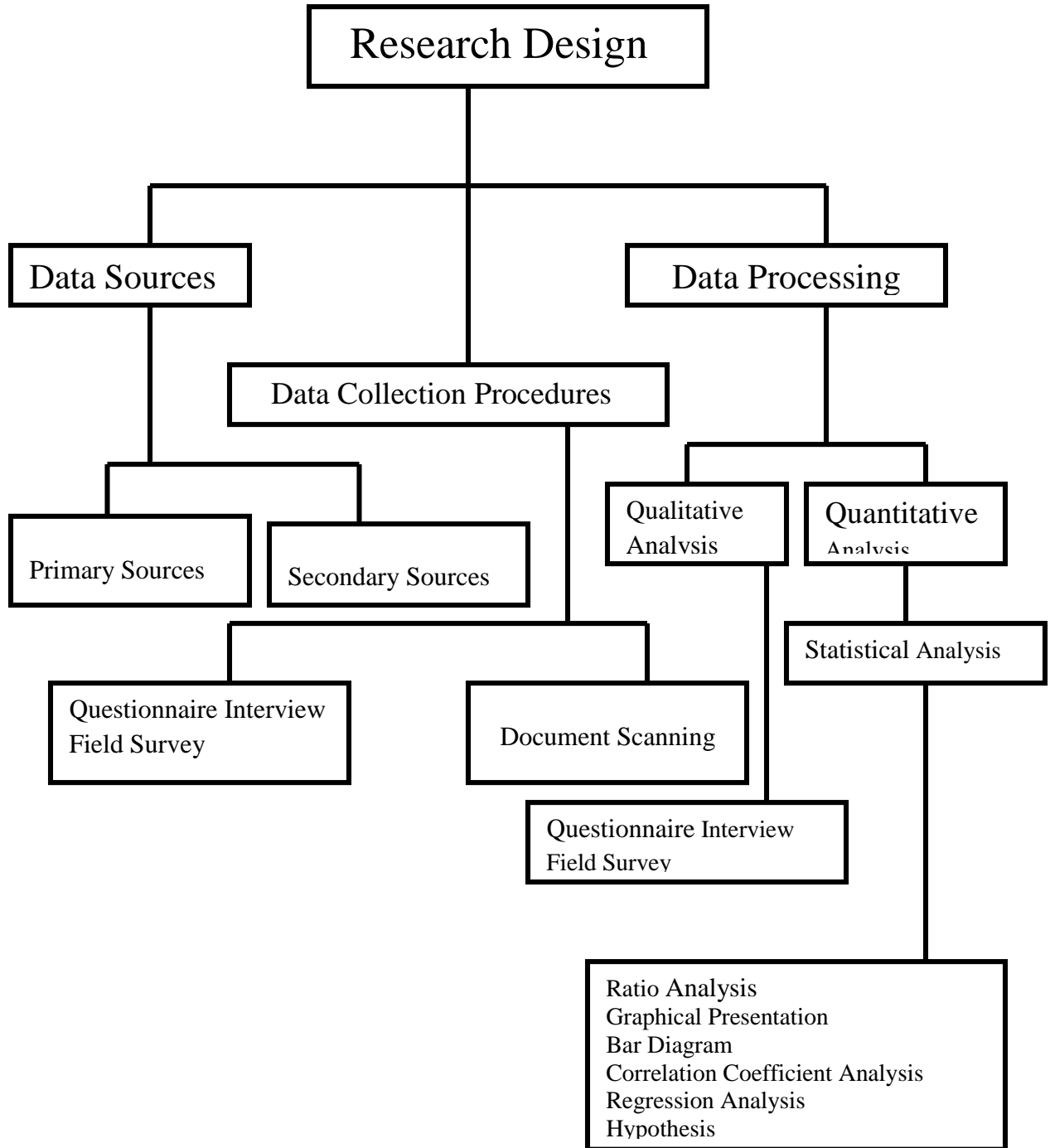
$$a = \frac{\sum Y}{N}$$

$$b = \frac{\sum XY}{\sum X^2}$$

### 3.7.4 Diagrammatic and Graphical Representation

Diagrams and graphs are visual aids that give a bird eye view of a given set of numerical data which show the information in a way that enables us to make comparison between two or more than two sets of data. They represent the data in simple and readily comprehensive form. Hence, bar diagrams, pie charts and graphs have been used for presentation and analysis of data.

Research Methodology in a single schematic diagram is shown as follows:



## **Chapter – 4**

### **DATA PRESENTATION AND ANALYSIS**

This chapter is focused on the presentation and analysis of collected data and is the main part of the research. Raw data collected from various sources are processed and converted into more comprehensive form. Collected data are classified and tabulated as per the requirement of the study and also in accordance to the nature of the collected data. Different statistical and financial tools are used to analyze the collected data for the study. Data are presented with the support of tables and figures also in order to make it clearer and easier to understand. For the purpose of the study, five years data from fiscal year 2005/2006 (Mid July) to 2009/2010 (Mid July) of all the sample banks have been taken into consideration. In this chapter, descriptive analysis of secondary as well as primary data is carried out.

As all the findings, conclusions and recommendations are derived from the calculations and analysis made in this section, this chapter is also considered to be the heart of the study.

#### **4.1 Ratio Analysis**

##### **4.1.1 Loan and Advances to Total Asset Ratio**

This ratio measures the volume of loans and advances in the structure of total assets of a commercial bank. Loans and advances represent the major portion in volume of total assets of any commercial bank. On one side, the high degree of this ratio shows the good performance of the bank in mobilizing its fund by way of lending functions. On the other

side, the high degree of this ratio is representative of low liquidity ratio. There is always a certain degree of risk associated with granting loans and advances. Hence this ratio measures the management attitude towards risky assets. The low degree of this ratio indicates the low productivity and high degree of safety in liquidity and vice versa.

The table (Table 4.1.1) shows the loans and advances to total assets ratio of five banks for five consecutive years. The ratio shows increasing trend in NBL but it is fluctuating in case of RBB, NABIL, NIBL and SCBNL. The ratio is in the range of 27.96% of NBL in 2006 to 70.68% of NIBL in 2010. The mean ratios of NBL, RBB, NABIL, NIBL and SCBNL are 37.80%, 44.70%, 59.84%, 66.5% and 37.53% respectively. Hence among the five banks, NIBL has the highest proportion of loans and advances in the total asset structure followed by NABIL, RBB, NBL and then SCBNL which indicates that mobilization of its fund by NIBL is highly satisfactory than other banks. This also indicates that SCBNL has the lowest degree of investment in risky assets. The management of SCBNL is risk averse as they have invested higher proportion of their asset in risk free or nominally risky assets like treasury bills, debentures, national saving bonds etc.

The standard deviations (SDs) of NBL, RBB, NABIL, NIBL and SCBNL are 8.89%, 1.96%, 2.32%, 4.05% & 2.96% respectively. Coefficient of variations (CVs) of NBL, RBB, NABIL, NIBL and SCBNL are 23.52%, 4.39% & 3.88%, 6.08% and 7.90% respectively. Thus it can be interpreted that NBL has higher deviation with higher coefficient of variation than other banks. This is due to the increasing trend in loan and advances. The RBB has least standard deviation, it has most consistent ratio during the study period. The NABIL has least coefficient of variation.

**Table 4.1.1****Loans & Advances to Total Asset Ratio (%)**

(Rs. In Million)

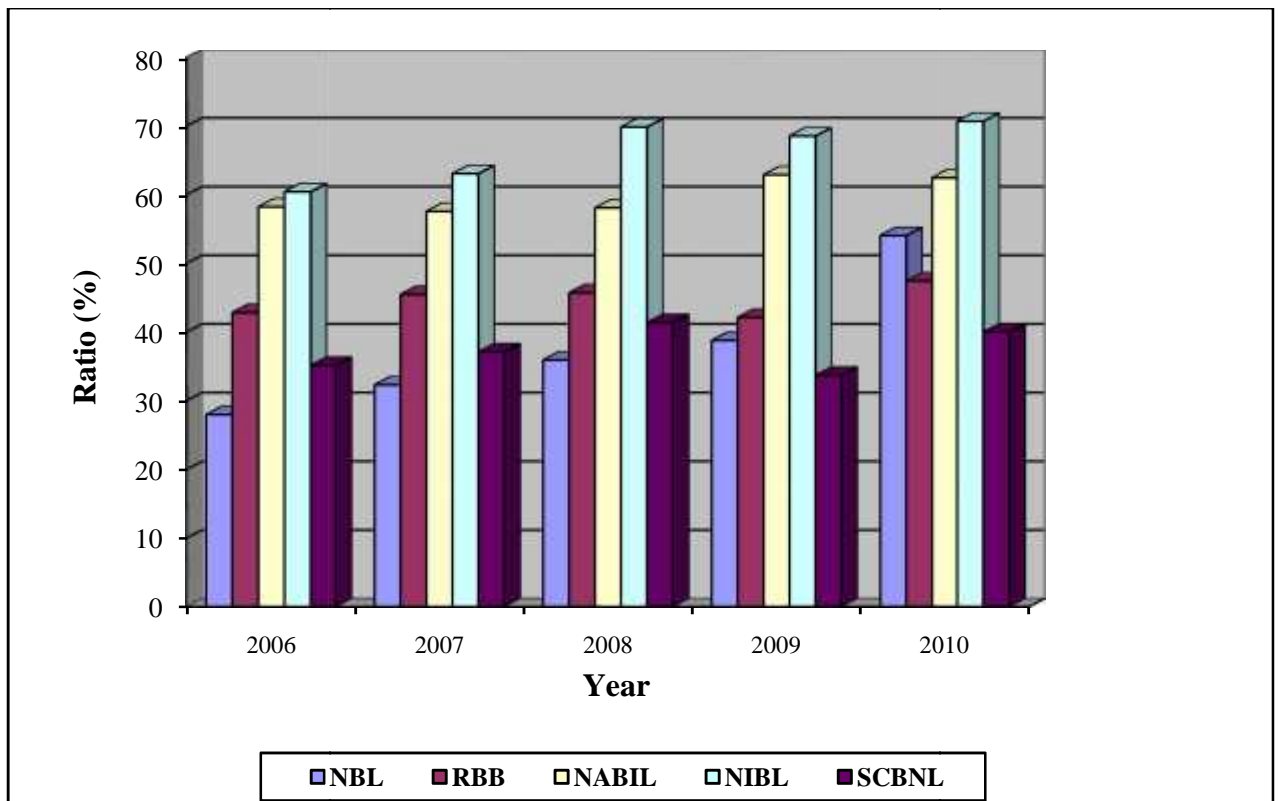
Year (Mid July)	NBL			RBB			NABIL			NIBL			SCBNL		
	Loans & Adv.	Total Asset	Ratio (%)	Loans & Adv.	Total Asset	Ratio (%)	Loans & Adv.	Total Asset	Ratio (%)	Loans & Adv.	Total Asset	Ratio (%)	Loans & Adv.	Total Asset	Ratio (%)
2006	12442	44493	27.96	23101	53966	42.81	13279	22807	58.22	13172	21805	60.41	9206	26192	35.15
2007	13757	42606	32.29	24871	54715	45.46	15903	27630	57.56	17769	28184	63.05	10790	29078	37.11
2008	15771	43909	35.92	27495	60164	45.70	21770	37488	58.07	27529	39409	69.85	13964	33494	41.69
2009	19482	50244	38.77	31607	75043	42.12	27590	43867	62.89	36827	53739	68.53	13680	40587	33.71
2010	25087	46431	54.03	35693	75260	47.43	33031	52910	62.43	40948	57936	70.68	16177	40433	40.01
	Mean		37.80	Mean		44.7	Mean		59.84	Mean		66.5	Mean		37.53
	S.D		8.89	S.D		1.96	S.D		2.32	S.D		4.05	S.D		2.96
	C.V		23.52	C.V		4.39	C.V		3.88	C.V		6.08	C.V		7.9

*(Source: Annual Reports and Website of NRB and Concerned Banks)*

From the figure 4.1.1, it can be interpreted that the NIBL has the highest loan and advance to total assets ratio in the year 2010 and NBL has the least loan and advances to total ratio in the year 2006. The ratio of NBL is in increasing trend during the period. The ratio of NIBL is also in increasing trend during the period except in the year 2009. But at the same time, the ratio of RBB, NABIL and SCBNL show fluctuating trend.

**Figure 4.1.1**

**Loan and Advances to Total Asset Ratio (%)**



**4.1.2 Loan and Advances to Total Deposit Ratio**

This ratio shows whether the banks are successful to utilize the outsiders' funds (i.e. total deposits) for the profit generating purpose or not. Loan and advances to total deposit ratio is also called Credit Deposit Ratio (CD ratio). It is the proportion between the total loan lending and total deposit in the banks. This ratio is calculated to find out how successfully

the banks are utilizing their total deposits on credit or loans and advances for profit generating purpose as loans and advances yield high rate of return.

Generally, a high ratio reflects higher efficiency to utilize outsiders fund and vice versa. Greater CD ratio implies the better utilization of total deposits and better earning, however, liquidity requirements also need to be considered. CD ratio of 70% - 80% is considered to be appropriate. It can be calculated by dividing the total loan and advances by the total deposit amount.

The table (Table 4.1.2) illustrates the loans and advances to total deposit of five banks for five consecutive years. The ratio shows the increasing trend in NBL and NIBL and fluctuating trend in case of RBB, NABIL and SCBNL. The overall ratio of the five banks has been ranged from 34.76% of NBL in 2006 to 81.74% of NIBL in 2010. NIBL has the highest ratio for the whole period. The mean ratios of NBL, RBB, NABIL, NIBL and SCBNL are 42.12%, 49.13%, 70.01%, 76.53% & 42.96% respectively. Hence among the five banks, NIBL has the highest proportion of loans and advances in the total deposit followed by NABIL, RBB, SCBNL and then NBL. It means that NIBL is ahead in utilizing depositor's money on loans and advances with the objective to earn profit. The management of NIBL and NABIL seem to be aggressive as they have higher proportion of loans and advances to total deposit. As per table, NBL and SCBNL have lower investment in the form of loans and advances. The management of NBL and SCBNL is risk averse as they have invested higher proportion of their deposit in risk free or nominally risky assets like treasury bills, debentures, National Saving Bonds etc.

The standard deviations (SDs) of NBL, RBB, NABIL, NIBL and SCBNL are 9.09%, 2.02%, 2.23%, 4.64% & 3.41% respectively. Coefficients of variations (CVs) of NBL, RBB, NABIL, NIBL and SCBNL are 21.58%, 4.10%, 3.19%, 6.07% & 7.94% respectively.

**Table 4.1.2****Loans & Advances to Total Deposit Ratio (%)**

(Rs. In Million)

Year (Mid July)	NBL			RBB			NABIL			NIBL			SCBNL		
	Loans & Adv.	Total Deposit	Ratio (%)	Loans & Adv.	Total Deposit	Ratio (%)	Loans & Adv.	Total Deposit	Ratio (%)	Loans & Adv.	Total Deposit	Ratio (%)	Loans & Adv.	Total Deposit	Ratio (%)
2006	12442	35790	34.76	23101	45820	50.42	13279	19347	68.64	13172	18927	69.59	9206	23051	39.94
2007	13757	39008	35.27	24871	50346	49.40	15903	23342	68.13	17769	24489	72.56	10790	24640	43.79
2008	15771	41789	37.74	27495	57971	47.43	21770	31915	68.21	27529	34452	79.91	13964	29744	46.95
2009	19482	44628	43.65	31607	68096	46.42	27590	37348	73.87	36827	46698	78.86	13680	35872	38.14
2010	25087	42406	59.16	35693	68623	52.01	33031	46406	71.18	40948	50095	81.74	16177	35183	45.98
	Mean		42.12	Mean		49.13	Mean		70.01	Mean		76.53	Mean		42.96
	S.D		9.09	S.D		2.02	S.D		2.23	S.D		4.64	S.D		3.41
	C.V		21.58	C.V		4.10	C.V		3.19	C.V		6.07	C.V		7.94

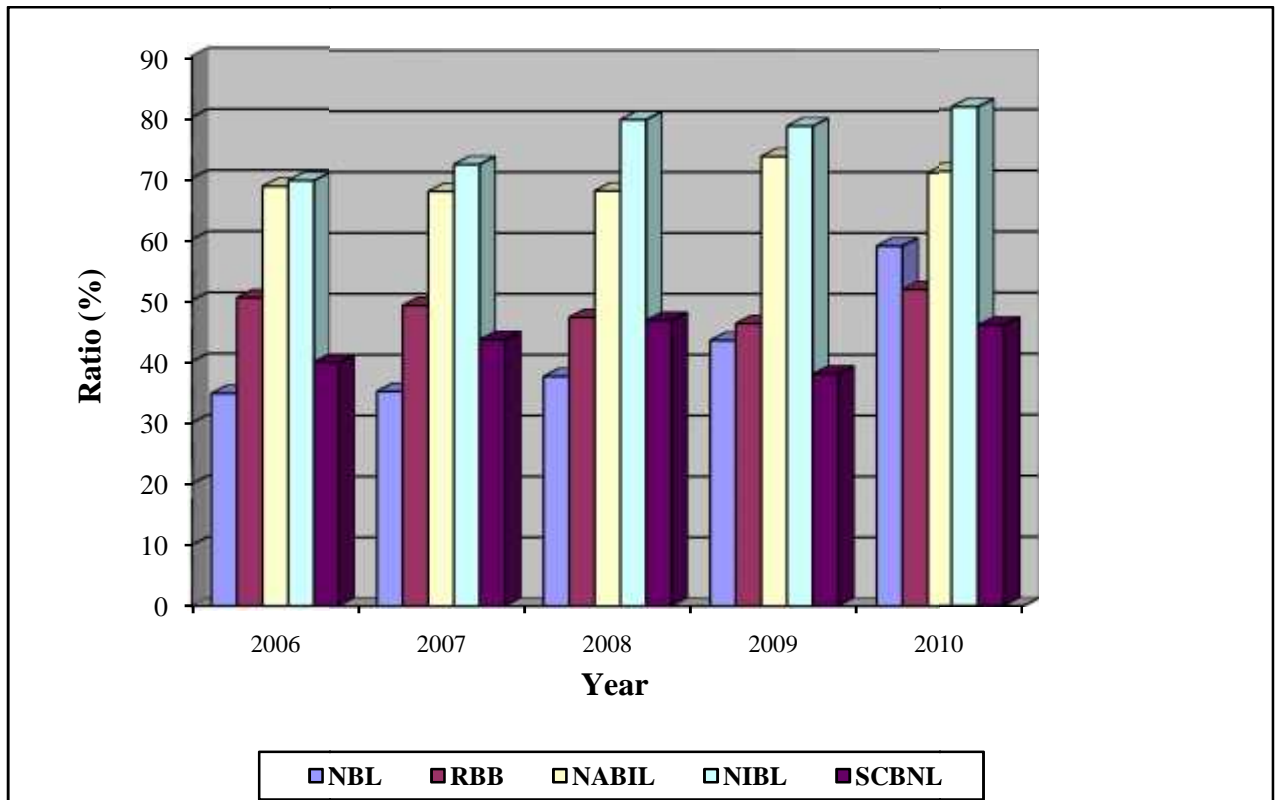
*(Source: Annual Reports and Website of NRB and Concerned Banks)*



Thus it is clear that NBL has higher deviation with higher degree of variation in this ratio. RBB has least deviation but moderate in terms of variation. NABIL is moderate in terms of deviation and has least variability during the study period.

The loan and advances to total deposit ratio can also be presented in bar diagram as in figure 4.1.2:

**Figure 4.1.2**  
**Loan and Advances to Total Deposit Ratio (%)**



From the figure (Figure 4.1.2), it can be inferred that the NIBL has the highest percentage of loan and advances to total deposit ratio. The ratio of NBL shows it is in decreasing trend during the study period. The ratios of RBB and SCBNL show the fluctuating trend over the consecutive year. Among the five banks, the least ratio of NBL indicates that the bank renders low amount of its total deposit in loan and advances. The ratio of NABIL is in second higher position among the five banks which implies the better utilization of total deposits and better earning of the bank.

### **4.1.3 Non Performing Asset to Total Loan and Advances Ratio**

Non Performing Assets (NPAs) to total loan and advances ratio shows the actual figure of NPA over the total lending of bank. It is the base ratio for measuring efficiency of lending department. The ratio is calculated by dividing non performing asset by total loan and advances. This ratio determines the proportion of non-performing loans in the total loan and advances portfolio. As per NRB directives the loans falling under category of substandard, doubtful and loss are regarded as non-performing loan. The higher ratio implies the bad quality of assets of banks in the form of loans and advances. Lower ratio reflects the better quality of assets of banks in the form of loan and advances and higher efficiency to provide good lending. Hence, lower NPA to total credit ratio is preferred. As per international standard only 5 % NPL is allowed but in the context of Nepal, maximum acceptable limit of NPL is 10%.

The Table 4.1.3 demonstrates the ratio of non-performing assets to loans and advances of NBL, RBB, NABIL, NIBL and SCBNL for five consecutive years. The figures in the table show that RBB has the highest ratio throughout the study period. The higher ratios of both RBB and NBL are in decreasing trend which means the banks are improving their efficiency in recovering loans. NABIL shows the least ratio during the study period. The decreasing trend of ratio of NABIL and SCBNL is the result of effective credit management of bank and its efforts of recovering bad debts through establishment of effective recovery cell. NIBL is moderate in this ratio and shows decreasing trend except in the year 2007. The overall ratio has been ranged from 0.14% of NABIL in 2010 to 34.83% of RBB in 2006. The mean ratios of NBL, RBB, NABIL, NIBL and SCBNL are 9.76%, 22.25%, 0.84%, 1.37% and 1.21% respectively. The significantly higher mean ratio of RBB and NBL in comparison to other banks reveals the critical condition of the banks and needs a serious action and attention to reduce this ratio. But NABIL, NIBL and SCBNL have lesser ratios than the acceptable standard of 10% which means these banks are successfully managing to reduce this ratio and maintaining this ratio at minimum level and this is a good sign for the banks' financial health.

**Table 4.1.3**

**Non Performing Assets (NPA) to Total Loans & Advances Ratio (%)**

(Rs. In Million)

Year (Mid July)	NBL			RBB			NABIL			NIBL			SCBNL		
	NPA	Loans & Adv.	Ratio (%)	NPA	Loans & Adv.	Ratio (%)	NPA	Loans & Adv.	Ratio (%)	NPA	Loans & Adv.	Ratio (%)	NPA	Loans & Adv.	Ratio (%)
2006	2262	12442	18.18	8046	23101	34.83	183	13279	1.38	272	13172	2.06	196	9206	2.13
2007	1856	13757	13.49	6877	24871	27.65	178	15903	1.12	422	17769	2.37	197	10790	1.83
2008	1411	15771	8.95	5952	27495	21.65	171	21770	0.79	309	27529	1.12	129	13964	0.92
2009	1151	19482	5.91	4956	31607	15.68	221	27590	0.80	302	36827	0.82	90	13680	0.66
2010	573	25087	2.28	4085	35693	11.44	46	33031	0.14	190	40948	0.46	87	16177	0.54
	Mean		9.76	Mean		22.25	Mean		0.84	Mean		1.37	Mean		1.21
	S.D		5.59	S.D		8.34	S.D		0.42	S.D		0.73	S.D		0.64
	C.V		57.26	C.V		37.48	C.V		49.19	C.V		53.44	C.V		52.86

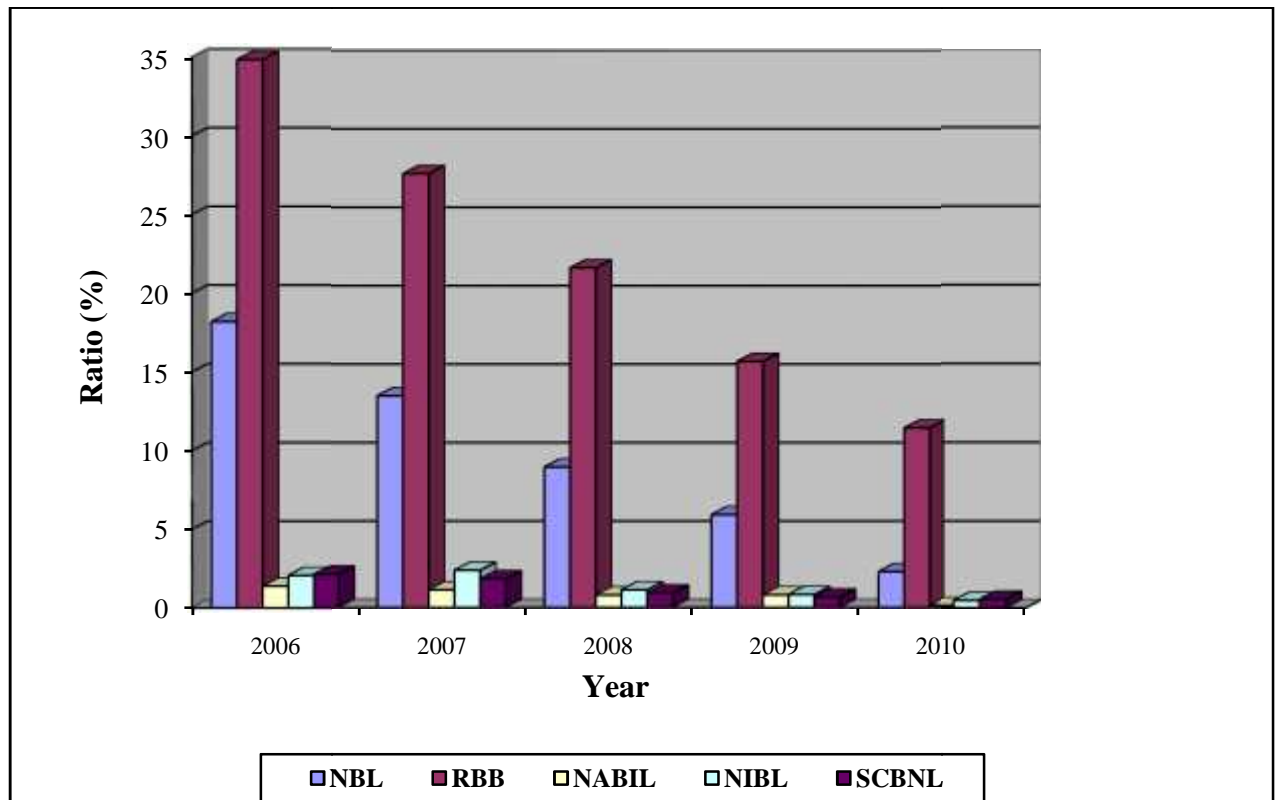
(Source: Annual Reports and Website of NRB and Concerned Banks)

The standard deviations of NBL, RBB, NABIL, NIBL and SCBNL are 5.59%, 8.34%, 0.42%, 0.73% and 0.64% respectively and the coefficient of variations are 57.26%, 37.48%, 49.19%, 53.44% and 52.86% respectively . Thus it is clear that NABIL has the least deviation and also second lower degree of variation in this ratio. Among the five banks, SCBNL and NIBL also have lower deviation but have higher degree of variability of ratio during the study period. Since NPL is one of the causes of banking crisis, RBB and NBL should give serious attention to this matter and try to maintain this ratio at minimum.

The non-performing asset to total loan and advances ratio can also presented in bar diagram as in figure 4.1.3.

**Figure 4.1.3**

**Non Performing Assets (NPA) to Total Loans & Advances Ratio (%)**



From the Figure 4.1.3, we can deduce that the RBB has the highest NPA to total loan and advances ratio during the study period which is in the decreasing trend. The NBL has the second highest NPAs to total loan and advances ratio during the study period which is also in the decreasing trend. The NABIL has the least ratio during the study period followed by SCBNL and NIBL with fluctuating trend.

#### **4.1.4 Non Performing Asset to Total Asset Ratio**

Non-Performing asset to total asset ratio shows the total default loan out of total assets. It measures the strength and weakness of bank in relation to financial condition. The lower is the ratio, the better is the financial health of the banks, so lower ratio is considered good. Normally, lower ratio reflects more efficiency in granting loan and advances. Higher ratio indicates the inefficiency in recovering the granted loans. According to the Nepal Rastra Bank directives, non-performing assets should be 10% or below of the total assets. The ratio is calculated by dividing the non-performing assets by total assets.

The Table 4.1.4 demonstrates the ratio of non-performing asset to total asset of NBL, RBB, NABIL, NIBL and SCBNL for five consecutive years. The figures in the table show that RBB has the highest ratio throughout the study period and the ratio of NBL is second highest. The higher ratios of both RBB and NBL are in decreasing trend which means the banks are improving their efficiency in recovering loans. SCBNL, NABIL and NIBL show the lower ratios during the study period. The overall ratio has been ranged from 0.09% of NABIL in 2010 to 14.91% of RBB in 2006. The mean ratios of NBL, RBB, NABIL, NIBL and SCBNL are 3.24%, 9.88%, 0.50%, 0.88% and 0.45% respectively. The significantly higher mean ratio of RBB in comparison to other banks reveals the critical condition of the bank and needs a serious action and attention to reduce this ratio to a minimum level. The ratios of RBB exceed the specified limit especially in the year 2006 and 2007. But NABIL, NIBL and SCBNL have lesser ratios than the acceptable standard of 10% which means these banks are successfully managing to reduce this ratio and maintaining this ratio at minimum level. This shows that the banks' financial health is in good condition.

**Table 4.1.4****Non Performing Asset (NPA) to Total Asset Ratio (%)**

(Rs. In Million)

<b>Year</b> <b>(Mid July)</b>	<b>NBL</b>			<b>RBB</b>			<b>NABIL</b>			<b>NIBL</b>			<b>SCBNL</b>		
	<b>NPA</b>	<b>Total Asset</b>	<b>Ratio (%)</b>	<b>NPA</b>	<b>Total Asset</b>	<b>Ratio (%)</b>	<b>NPA</b>	<b>Total Asset</b>	<b>Ratio (%)</b>	<b>NPA</b>	<b>Total Asset</b>	<b>Ratio (%)</b>	<b>NPA</b>	<b>Total Asset</b>	<b>Ratio (%)</b>
2006	2262	44493	5.08	8046	53966	14.91	183	22807	0.80	272	21805	1.25	196	26192	0.75
2007	1856	42606	4.36	6877	54715	12.57	178	27630	0.64	422	28184	1.50	197	29078	0.68
2008	1411	43909	3.21	5952	60164	9.89	171	37488	0.46	309	39409	0.78	129	33494	0.39
2009	1151	50244	2.29	4956	75043	6.60	221	43867	0.50	302	53739	0.56	90	40587	0.22
2010	573	46431	1.23	4085	75260	5.43	46	52910	0.09	190	57936	0.33	87	40433	0.22
Mean			3.24	Mean		9.88	Mean		0.50	Mean		0.88	Mean		0.45
S.D			1.38	S.D		3.55	S.D		0.24	S.D		0.43	S.D		0.22
C.V			42.76	C.V		35.95	C.V		47.86	C.V		48.83	C.V		49.96

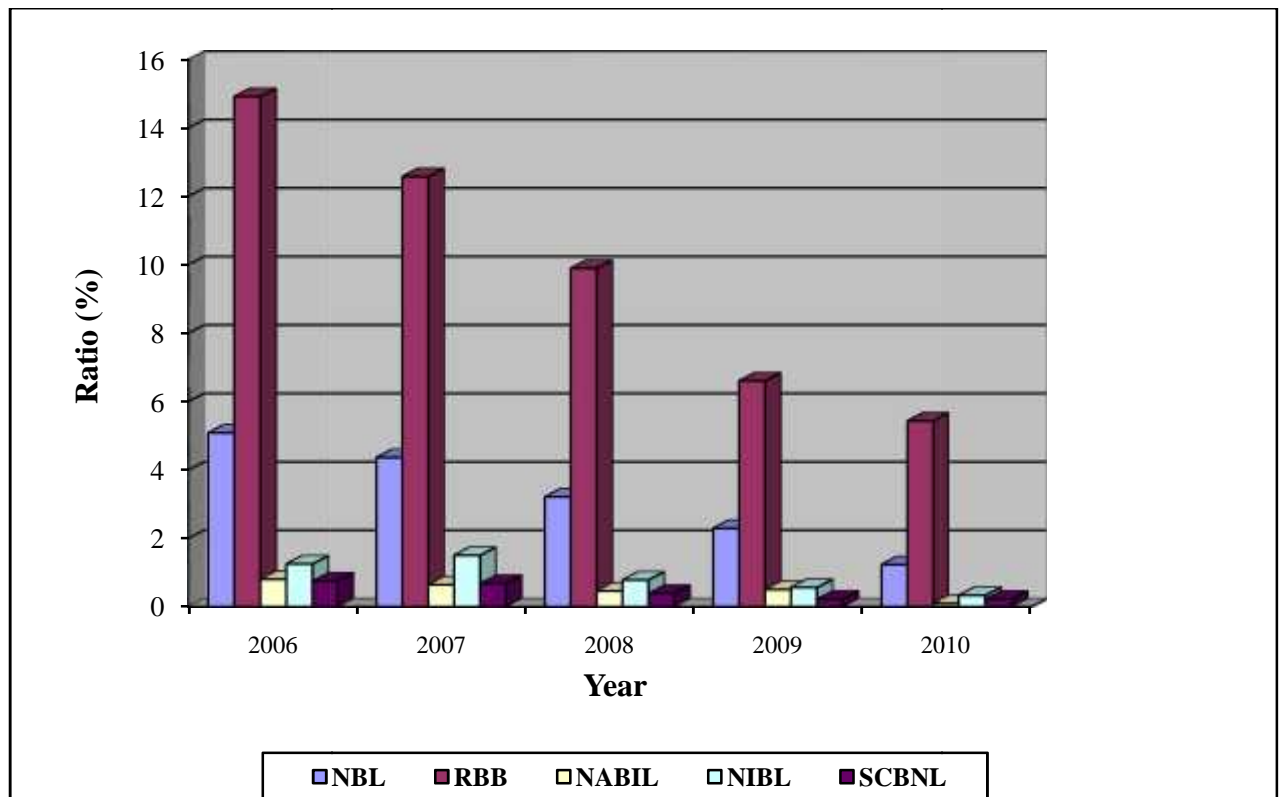
*(Source: Annual Reports and Website of NRB and Concerned Banks)*

The standard deviations of NBL, RBB, NABIL, NIBL and SCBNL are 1.38%, 3.55%, 0.24%, 0.43% and 0.22% respectively and the coefficient of variations are 42.76%, 35.95%, 47.86%, 48.83% and 49.96% respectively. Thus it is clear that SCBNL has the least deviation but highest degree of variation in this ratio. Among the five banks, NABIL and NIBL also have lower deviation but have higher degree of variability of ratio which is slightly lower than the SCBNL during study period. It is important to maintain the NPA level within the minimum range because it is one of the major causes of banking crisis. So, RBB and NBL should try to maintain this ratio and give serious attention to this matter.

The non-performing asset to total asset ratio is also presented in bar diagram in figure 4.1.4. From the Figure 4.1.4, we can deduce that the RBB has the highest NPA to total asset ratio during the study period which is in the decreasing trend. The NBL has the second highest NPAs to total asset ratio during the study period which is also in the decreasing trend. The NABIL has the least ratio in the year 2010 followed by SCBNL and NIBL.

**Figure 4.1.4**

**Non Performing Asset (NPA) to Total Asset Ratio (%)**



#### **4.1.5 Loan Loss Provision to Non Performing Asset Ratio**

The provision held to non-performing assets ratio shows the proportion of loan loss provision to non-performing assets of the banks. This ratio shows the provision made for future loan loss so that the bank can safeguard it from the worst condition and could operate smoothly. In other words, the provision helps to overcome the unnecessary burden of non-performing assets. Every bank should have to make provision for the loan to minimize the risk of not recovering the loan from the customer on time. Thus this ratio measures the extent of risk inherent in NPA covered by the total loan loss provision. Higher ratio implies that the bank is safeguarded against future contingencies that may occur due to non-performing asset. Hence, higher is the ratio better is the financial position of the bank. Here, higher ratio reflects the effectiveness to cope with the future loss but it directly affects the profitability and vice versa.

The table (Table 4.1.5) displays the ratio of provision held to non-performing asset of NBL, RBB, NABIL, NIBL and SCBNL for five consecutive years. The overall ratio has been ranged from 104.74% of NIBL in 2007 to 330.53% of NIBL in 2010. The ratios of all the five banks show the fluctuating trend. The mean ratios of NBL, RBB, NABIL, NIBL and SCBNL are 176.21%, 138.19%, 206.43%, 187.99% and 189.56% respectively. The ratios of all the five banks are significantly high which means that the banks have adequate provision against non-performing asset. The mean ratio of NABIL is significantly higher in comparison to other banks and this indicates that the bank has adequate provision against non-performing loan. The ratio of RBB is comparatively lower.

The standard deviations of NBL, RBB, NABIL, NIBL and SCBNL are 49.53%, 15.39%, 18.57%, 77.49% and 43.42% respectively. The coefficient of variations of NBL, RBB, NABIL, NIBL and SCBNL are 28.11%, 11.13%, 9.0%, 41.22% & 22.91% respectively. This indicates that NIBL has the highest deviation along with the highest degree of variation in this ratio followed by NBL, SCBNL and NABIL. RBB has the lowest deviation with the second lowest variability.



**Table 4.1.5**

**Loan Loss Provision (LLP) to Non Performing Asset (NPA) Ratio (%)**

(Rs. In Million)

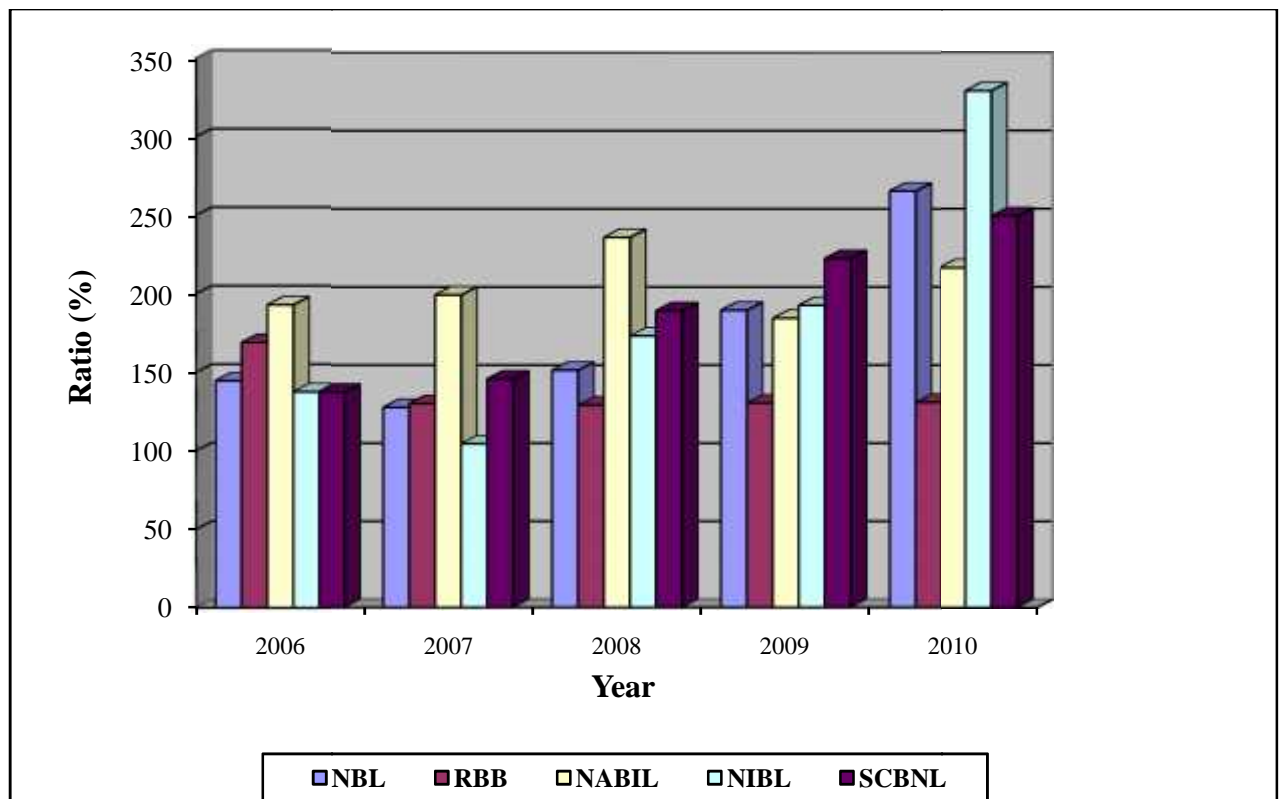
Year (Mid July)	NBL			RBB			NABIL			NIBL			SCBNL		
	LLP	NPA	Ratio (%)	LLP	NPA	Ratio (%)	LLP	NP A	Ratio (%)	LLP	NPA	Ratio (%)	LLP	NPA	Ratio (%)
2006	3270	2262	144.56	13593	8046	168.94	353	183	192.90	374	272	137.50	270	196	137.76
2007	2376	1856	128.02	8986	6877	130.41	356	178	200.00	442	422	104.74	288	197	146.19
2008	2142	1411	151.81	7709	5952	129.52	405	171	236.84	537	309	173.79	245	129	189.92
2009	2189	1151	190.18	6483	4956	130.81	409	221	185.07	584	302	193.38	201	90	223.33
2010	1527	573	266.49	5363	4085	131.29	752	346	217.34	628	190	330.53	218	87	250.57
	Mean		176.21	Mean		138.19	Mean		206.43	Mean		187.99	Mean		189.56
	S.D		49.53	S.D		15.39	S.D		18.57	S.D		77.49	S.D		43.42
	C.V		28.11	C.V		11.13	C.V		9.00	C.V		41.22	C.V		22.91

(Source: Annual Reports and Website of NRB and Concerned Banks)

The provision held to non-performing asset is also presented in bar diagram as in figure (Figure 4.1.5). From the figure (Figure 4.1.5), we can say that NABIL has the highest ratios in the year 2006, 2007 and 2008 and it is showing an increasing trend up to the year 2008 and then decreasing. In the year 2009, SCBNL has the highest ration and in 2010, NIBL has the highest ratio among the five banks. The ratios of SCBNL are showing an increasing trend during the study period. The ratios of NBL and NIBL are showing an increasing trend from the year 2007.

**Figure 4.1.5**

**Loan Loss Provision to Non Performing Asset (NPA) Ratio (%)**



**4.1.6 Loan Loss Provision to Total Loan and Advances Ratio**

The quality of assets in the form of loans and advances that a bank is holding is expressed by this ratio. Because of the risk associated with every loans and advances, as per NRB directives, commercial banks have to classify loans into different categories and make

provision for probable loss accordingly. Loan loss provision works as cushion against future contingency created by the default of the borrower in payment of loans and ensures the continued solvency of the banks. Since high provision has to be made for non-performing loan, higher provision for loan loss reflects increasing non-performing loan in volume of total loans and advances. The low ratio signifies the good quality of assets in the volume of loans and advances. It indicates how efficiently a bank manages loan and advances and makes efforts to cope with probable loan loss. Higher ratio implies, higher portion of NPL in the total loan portfolio.

The table (Table 4.1.6) displays the ratio of loan loss provision to loans and advances of NBL, RBB, NABIL, NIBL and SCBNL for five consecutive years. The figures in the table show that RBB has the highest ratio throughout the study period and NBL has the second highest ratio throughout the study period. SCBNL shows the least ratio during the study period. The ratios of all the banks except NABIL show a decreasing trend. The overall ratio has been ranged from 1.35% of SCBNL in 2010 to 58.84% of RBB in 2006. The mean loan loss ratio of NBL, RBB, NABIL, NIBL & SCBNL are 14.89%, 31.69%, 2.10%, 2.08% and 2.03% respectively. The ratio of RBB and NBL is significantly higher in comparison to other three banks. Higher LLP indicates the poor and ineffective credit policy, higher proportion of non-performing asset and poor performance of the economy. Hence, the higher ratios of RBB and NBL suggest that there is high proportion of NPL in the total loans and advances. But the positive aspect is that both the banks show a decreasing trend of loan loss provision ratio which means both the banks have been trying to reduce its non performing loan resulting to decreasing LLP. Lower ratios of SCBNL, NIBL and NABIL indicate that the banks are efficient and successful in managing the loans and advances.

As per table (Table 4.1.6), the standard deviations of NBL, RBB, NABIL, NIBL and SCBNL are 6.75%, 15.31%, 0.40%, 0.51%, & 0.64% respectively and coefficient of variations are 45.35%, 48.31%, 19.03%, 24.54% & 31.70% respectively. Thus it implies that RBB has highest deviation with highest degree of variation in this ratio. NBL has second highest deviation with second highest degree of variation in this ratio. NABIL,

**Table 4.1.6****Loan Loss Provision (LLP) to Total Loans and Advances Ratio (%)**

(Rs. In Million)

Year (Mid July)	NBL			RBB			NABIL			NIBL			SCBNL		
	LLP	Loans & Adv.	Ratio (%)	LLP	Loans & Adv.	Ratio (%)	LLP	Loans & Adv.	Ratio (%)	LLP	Loans & Adv.	Ratio (%)	LLP	Loans & Adv.	Ratio (%)
2006	3270	12442	26.28	13593	23101	58.84	353	13279	2.66	374	13172	2.84	270	9206	2.93
2007	2376	13757	17.27	8986	24871	36.06	356	15903	2.24	442	17769	2.49	288	10790	2.67
2008	2142	15771	13.58	7709	27495	28.04	405	21770	1.86	537	27529	1.95	245	13964	1.75
2009	2189	19482	11.24	6483	31607	20.51	409	27590	1.48	584	36827	1.59	201	13680	1.47
2010	1527	25087	6.09	5363	35693	15.03	752	33031	2.28	628	40948	1.53	218	16177	1.35
	Mean		14.89	Mean		31.69	Mean		2.10	Mean		2.08	Mean		2.03
	S.D		6.75	S.D		15.31	S.D		0.40	S.D		0.51	S.D		0.64
	C.V		45.35	C.V		48.31	C.V		19.03	C.V		24.54	C.V		31.70

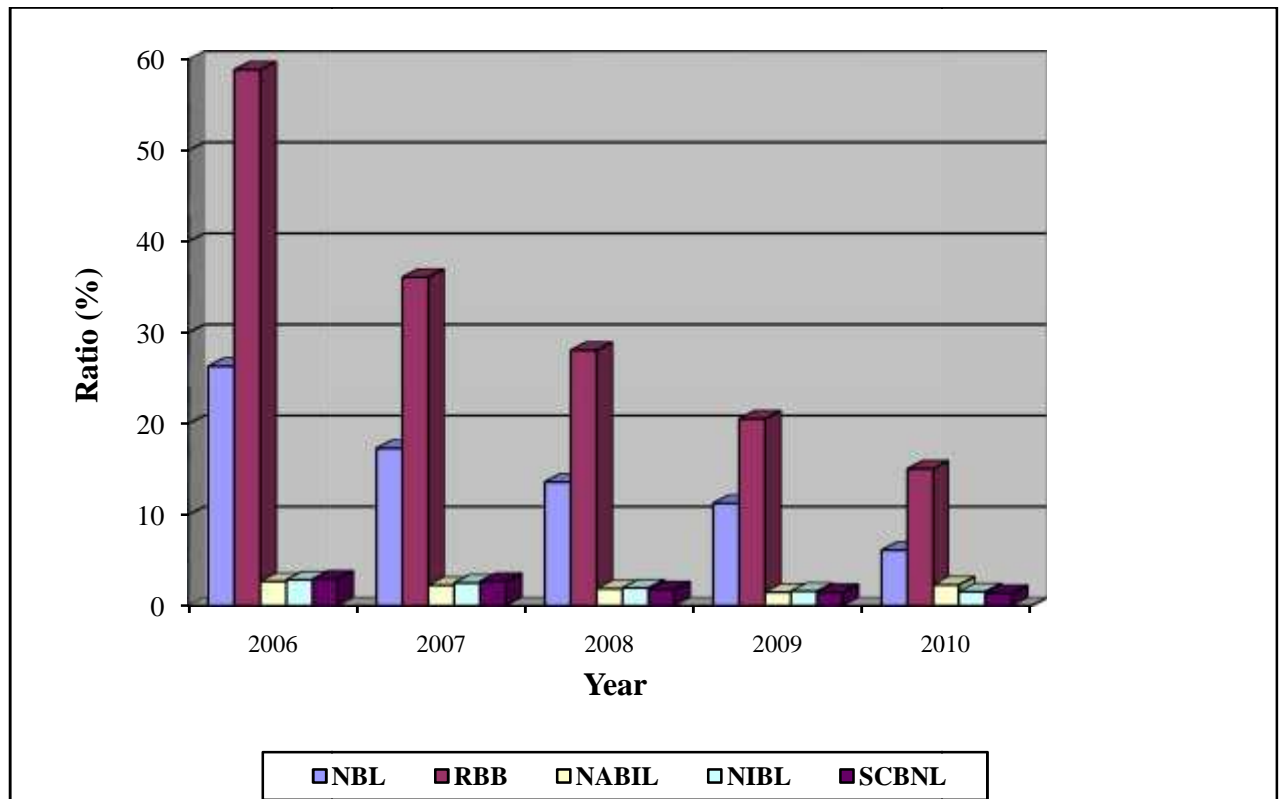
*(Source: Annual Reports and Website of NRB and Concerned Banks)*

NIBL and SCBNL are moderate in terms of deviation and variability of ratio during the study period. Since LLP has direct effect in the profit of the banks, all the banks should give serious attention to decrease the level of NPL especially by RBB and NBL. RBB has the highest degree of risk in comparison to other sampled banks.

The loan loss provision to loan and advances ratio can also be presented in bar diagram as in figure (Figure 4.1.6).

**Figure 4.1.6**

**Loan Loss Provision (LLP) to Total Loans and Advances Ratio (%)**



From the figure (Figure 4.1.6), we can be interpret that the RBB has the highest ratio of loan loss provision to total loan and advance with decreasing trend among the five sampled banks. The ratio of NBL is second higher and showing a decreasing trend. NABIL, NIBL and SCBNL have lower ratios and all are showing decreasing trend except NABIL in the year 2010.

#### **4.1.7 Return on Loan and Advances**

The ratio of net profit to total loan and advances indicates the efficiency of the bank in employing its resources in the form of loans and advances. Net profit refers to that profit which is obtained after all types of necessary deductions. Hence this ratio measures bank's profitability with respect to loans and advances. Higher is the ratio better is the performances of bank and vice-versa. This ratio is calculated by dividing net profit of the bank by total loans and advances.

The Table 4.1.7 illustrates the ratio of return on loans and advances of NBL, RBB, NABIL, NIBL and SCBNL for five consecutive years. As per table, NIBL has the highest ratio in the year 2006 and then there is a sharp drop, it is in decreasing trend until 2009. The ratios of RBB and SCBNL show the decreasing trend while that of NBL and NABIL show fluctuating trend. The overall ratio has been ranged from 1.42 % of NBL in 2010 to 10.39% of NIBL in 2006. The mean ratio of NBL, RBB, NABIL, NIBL and SCBNL is 3.55%, 6.51%, 3.94%, 4.28% and 6.73% respectively. Net profit of the SCBNL is the highest among all the five banks, because it has the highest mean ratio. After SCBNL, RBB has the highest net profit followed by NIBL, NABIL. NBL has the lowest ratio among all the five banks. One of the reasons for the decline in profit of the banks may be the rise in NPL level because significant portion of operating profit is sacrificed for maintaining required loan loss provisioning for NPL.

The standard deviations of NBL, RBB, NABIL, NIBL and SCBNL are 1.44%, 0.54%, 0.51%, 3.06% and 0.59% respectively. Similarly, coefficient of variations of NBL, RBB, NABIL, NIBL and SCBNL are 40.63%, 8.34%, 12.91%, 71.52%, and 8.78% respectively. Thus it indicates that NABIL has the least deviation with moderate degree of variation in this ratio. NIBL has the highest deviation with the highest variability of ratio during the study period.

**Table 4.1.7****Return on Total Loans and Advances (%)**

(Rs. In Million)

Year (Mid July)	NBL			RBB			NABIL			NIBL			SCBNL		
	Net Profit	Loans & Adv.	Ratio (%)	Net Profit	Loans & Adv.	Ratio (%)	Net Profit	Loans & Adv.	Ratio (%)	Net Profit	Loans & Adv.	Ratio (%)	Net Profit	Loans & Adv.	Ratio (%)
2006	728	12442	5.85	1688	23101	7.31	630	13279	4.74	1368	13172	10.39	663	9206	7.20
2007	418	13757	3.04	1682	24871	6.76	686	15903	4.31	516	17769	2.90	692	10790	6.41
2008	529	15771	3.35	1771	27495	6.44	750	21770	3.45	698	27529	2.54	814	13964	5.83
2009	794	19482	4.08	2032	31607	6.43	1031	27590	3.74	915	36827	2.48	1028	13680	7.51
2010	357	25087	1.42	2011	35693	5.63	1146	33031	3.47	1266	40948	3.09	1086	16177	6.71
	Mean		3.55	Mean		6.51	Mean		3.94	Mean		4.28	Mean		6.73
	S.D		1.44	S.D		0.54	S.D		0.51	S.D		3.06	S.D		0.59
	C.V		40.63	C.V		8.34	C.V		12.91	C.V		71.52	C.V		8.78

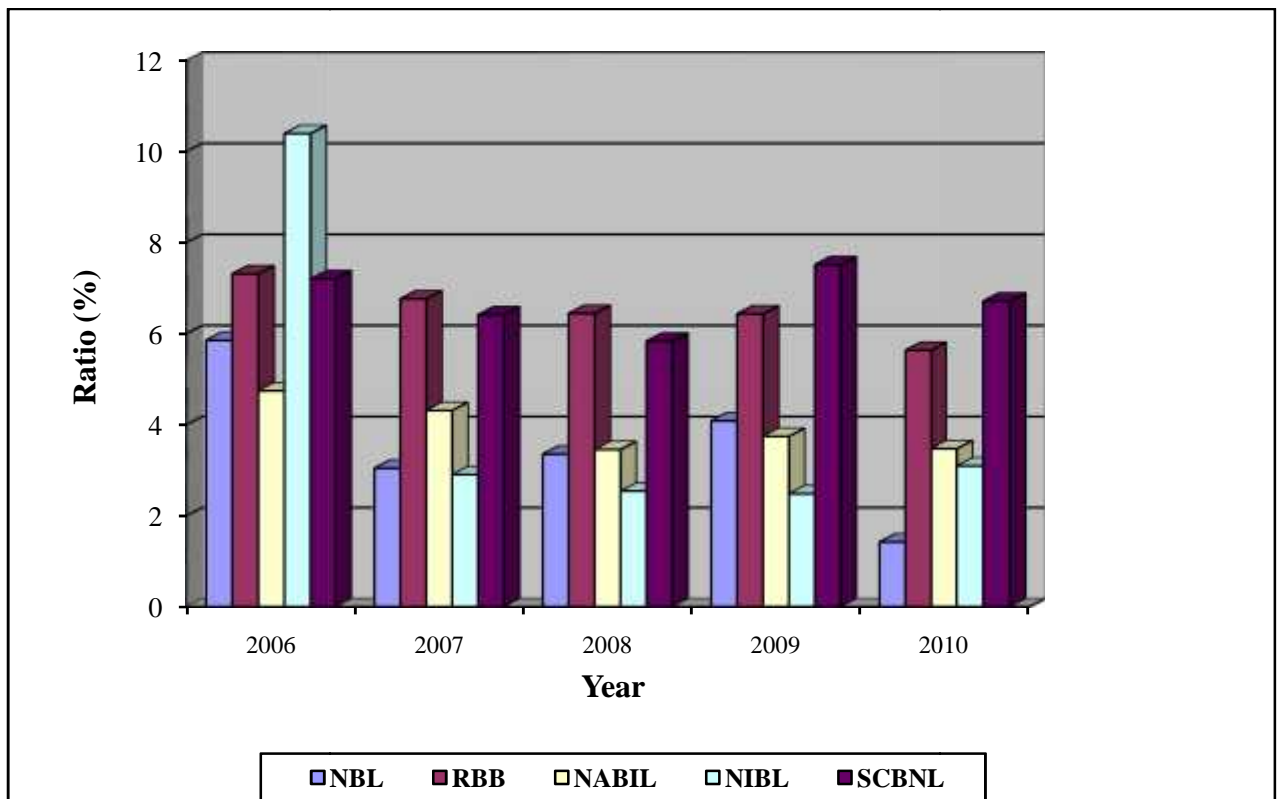
*(Source: Annual Reports and Website of NRB and Concerned Banks)*

The return on total loans and advances ratio can also be presented in bar diagram as in Figure 4.1.7.

From the bar diagram of Figure 4.1.7, it can be interpreted that NIBL has the highest ratio only in the first year and then there is a sharp fall in the ratio of NIBL in second year and it goes on decreasing for two more years. The ratio of RBB indicates the decreasing trend while the ratio of NBL and SCBNL show fluctuating trend. The ration of SCBNL is decreasing for the first three years and then rises in the next year and again falls thereafter.

**Figure 4.1.7**

**Return on Total Loans and Advances (%)**



## 4.2 Correlation Analysis

Correlation may be defined as the degree of linear relationship existing between two or more variables. These variables are said to be correlated when the change in the value of one results change in another variable. The correlation analysis generally used to describe



the degree to which one variable is related to another. In statistics it is used in order to depict the co-variance between two or more variables. Correlation says just degree of relationship between two or more variables. It does not tell anything about cause and effect relationship.

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

This correlation between the loans and advances and total deposits expresses the degree of relationship between these two variables. Deposit is one of the major items of liability side and loan and advances is the major item of assets side of balance sheet of any commercial banks. Banks disburse loans and advances through the funds received from the depositors. In this case, the deposit is the independent variable and loan and advances is the dependent variable. How a unit increase in deposit affects in the volume of the loan and advances is demonstrated by this correlation coefficient.

**Table 4.2.1**

#### **Correlation between Loan and Advances and Total deposit**

<b>Banks</b>	<b>Coefficient of Correlation (r)</b>	<b>Relationship</b>	<b>Probable Error (P.E.)</b>	<b>6 * P.E.</b>	<b>Result</b>
NBL	0.7200	Positive	0.1453	0.8717	Insignificant
RBB	0.9581	Positive	0.0247	0.1484	Significant
NABIL	0.9967	Positive	0.0020	0.0119	Significant
NIBL	0.9989	Positive	0.0007	0.0042	Significant
SCBNL	0.8953	Positive	0.0598	0.3590	Significant

*(Source: Author's Calculation)*

The table (Table 4.2.1) shows the correlation coefficient, PE and six times the value of PE of five sampled banks. It shows there is high degree of positive correlation between loans and advances and deposit in all five sampled banks during the study period. The correlation coefficients of NBL, RBB, NABIL, NIBL and SCBNL are 0.7200, 0.9581, 0.9967, 0.9989 and 0.8953 respectively. The values of probable error (P.E.) of the five banks are 0.1453, 0.0247, 0.0020, 0.0007 and 0.0598 respectively. The correlation coefficients of all the banks, except NBL are more than six times the value of P.E., hence it can be interpreted that the correlation between the two variables in RBB, NABIL, NIBL & SCBNL is certain and significant. This means increase in volume of deposit leads to

increase in loans and advances. Since correlation coefficient of NBL is less than six times the value of P.E., the value of correlation coefficient is insignificant and there is no correlation.

#### 4.2.2 Correlation between Loan Loss Provision and Loans and Advances

The correlation between LLP and loans and advances shows the degree of relationship between these two items. How a unit increase in loans and advances affect the loan loss provision is measured by this correlation. Here loans and advances is independent variable and LLP is dependent variable.

**Table 4.2.2**

#### **Correlation between LLP and Loan and Advances**

<b>Banks</b>	<b>Coefficient of Correlation (r)</b>	<b>Relationship</b>	<b>Probable Error (P.E.)</b>	<b>6 * P.E.</b>	<b>Result</b>
NBL	-0.8583	Negative	0.0794	0.4766	Insignificant
RBB	-0.8768	Negative	0.0698	0.4185	Insignificant
NABIL	0.8254	Positive	0.0961	0.5767	Significant
NIBL	0.9879	Positive	0.0072	0.0434	Significant
SCBNL	-0.7740	Negative	0.1209	0.7257	Insignificant

*(Source: Author's Calculation)*

The above table (Table 4.2.2) demonstrates the relationship between loans and advance and LLP. Here, the correlation coefficients of NBL, RBB and SCBNL are -0.8583, -0.8768, -0.7740 and the values are less than 6 times the value of its P.E., the value of correlation coefficient is insignificant and it shows there is no correlation. It is due to increasing trend in loan and advances and decreasing trend in LLP of those banks. The correlation coefficients of NABIL and NIBL are 0.8254 and 0.9879. The values of P.E. are 0.0961 and 0.0072. The value of correlation coefficient is higher than the value of six times of P.E., hence there is positive correlation between LLP and advances of NABIL and NIBL and also the value of correlation coefficient is significant and reliable.

#### 4.2.3 Correlation between Loan Loss Provision and Non Performing Asset

This correlation describes the relationship between LLP and NPA. How a unit change in NPA affects the LLP is explained by this correlation. Here non-performing asset is

independent variable and LLP is dependent variable. The higher is the NPL, the higher will be the provisioning amount.

**Table 4.2.3**

**Correlation between LLP and NPA**

<b>Banks</b>	<b>Coefficient of Correlation (r)</b>	<b>Relationship</b>	<b>Probable Error (P.E.)</b>	<b>6 * P.E.</b>	<b>Result</b>
NBL	0.9410	Positive	0.0345	0.2073	Significant
RBB	0.9548	Positive	0.0267	0.1600	Significant
NABIL	-0.9245	Negative	0.0438	0.2629	Insignificant
NIBL	-0.4919	Negative	0.2287	1.3720	Insignificant
SCBNL	0.9603	Positive	0.0235	0.1409	Significant

*(Source: Author's Calculation)*

The above table (Table 4.2.3) portrays the relationship between LLP and NPA of the five sampled banks. According to the above table, the correlation coefficients (r) of NBL, RBB and SCBNL are 0.9410, 0.9548 and 0.9603 respectively. This means there is positive relationship between non-performing assets and loan loss provision of these banks. It denotes that if one variable out of them is increased that will increase another variable. Also the value of coefficient of correlation is greater than six times the value of P.E. of these banks, so it can be said that the value of correlation coefficient is significant in case of NBL, RBB and SCBNL.

On the other hand, the correlation coefficients (r) of NABIL and NIBL are -0.9245, -0.4919 respectively. This means there is negative relationship between non-performing assets and loan loss provision of these banks. Also the value of coefficient of correlation is less than six times the value of P.E. of these banks, so it can be said that the value of correlation coefficient is insignificant.

**4.2.4 Correlation between Loans and Advances and Non Performing Asset**

This correlation describes the relationship between loans and advances and NPA. How a unit change in NPA affects the loan and advances is explained by this correlation.

Here non-performing asset is independent variable and loans and advances dependent variable.

**Table 4.2.4**

**Correlation between Loan and Advances and NPA**

<b>Banks</b>	<b>Coefficient of Correlation (r)</b>	<b>Relationship</b>	<b>Probable Error (P.E.)</b>	<b>6 * P.E.</b>	<b>Result</b>
NBL	-0.9681	Negative	0.0190	0.1138	Insignificant
RBB	-0.9782	Negative	0.0130	0.0782	Insignificant
NABIL	-0.5669	Negative	0.2047	1.2282	Insignificant
NIBL	-0.5654	Negative	0.2052	1.2313	Insignificant
SCBNL	-0.9192	Negative	0.0468	0.2806	Insignificant

*(Source: Author's Calculation)*

The table (Table 4.2.4) shows the correlation coefficient, PE and six times the value of PE of five sampled banks. It shows that there is negative correlation between loans and advances and NPA in all five sampled banks during the study period. The correlation coefficients of NBL, RBB, NABIL, NIBL and SCBNL are -0.9681, -0.9782, -0.5669, -0.5654 and -0.9192 respectively. The six times values of probable error (P.E.) of the five banks are 0.1138, 0.0782, 1.2282, 1.2313 and 0.2806 respectively. The correlation coefficients of all the banks are less than six times the value of P.E., hence it can be interpreted that the correlation between the two variables in NBL, RBB, NABIL, NIBL & SCBNL is uncertain and insignificant. This means if one variable is decreased, it affects another variable but in opposite direction i.e. another variable is increased.

**4.2.5 Correlation between Non Performing Asset and Net Profit**

The correlation between non performing asset and net profit shows the degree of relationship between these two items. How a unit increase in non-performing asset affects the net profit is measured by this correlation.

**Table 4.2.5**

**Correlation between NPA and Net Profit**

<b>Banks</b>	<b>Coefficient of Correlation (r)</b>	<b>Relationship</b>	<b>Probable Error (P.E.)</b>	<b>6 * P.E.</b>	<b>Result</b>
NBL	0.3802	Positive	0.2580	1.5482	Insignificant
RBB	-0.9068	Negative	0.0536	0.3217	Insignificant
NABIL	-0.5275	Negative	0.2177	1.3063	Insignificant
NIBL	-0.8393	Negative	0.0892	0.5350	Insignificant
SCBNL	-0.9669	Negative	0.0197	0.1180	Insignificant

*(Source: Author's Calculation)*

The table (Table 4.2.5) shows the correlation coefficient, PE and six times the value of PE of five sampled banks. It shows that there is negative correlation between NPA and net profit all the sampled banks except NBL during the study period. The correlation coefficients of NBL, RBB, NABIL, NIBL and SCBNL are 03802, -0.9068, -0.5275, -0.8393 and -0.9669 respectively. The six times values of probable error (P.E.) of the five banks are 1.5482, 0.3217, 1.3063, 0.5350 and 0.1180 respectively. The correlation coefficients of all the banks are less than six times the value of P.E., hence it can be interpreted that the correlation between the two variables in NBL, RBB, NABIL, NIBL & SCBNL is uncertain and insignificant. It means the NPA and net profit have inverse relationship, i.e. when the NPA is high the net profit will decrease and when the NPA decreases the net profit increases.

### **4.3 Trend Analysis**

It is a statistical tool which facilitates in forecasting the future values of different variables on the basis of past tendencies of variable. Trend analysis notifies about the expected future values of variables. With the help of trend analysis, the tendency of variables over the period can be seen clearly. Amongst the various methods to determine trend the least square method is widely used in practices. However trend analysis is based on the assumption that past tendencies continues in the future. Under this heading the effort has been made to conduct the trend analysis of loan and advances, non-performing asset, loan loss provision and net profit.

### 4.3.1 Trend Analysis of Loan and Advances

The calculated values of average loans and advances (a), rate of change of loans and advances (b) and trend values ( $Y = a + b X$ ) of loans and advances of five sampled banks for ten years from mid July 2006 to Mid July 2015 are as follows:

**Table 4.3.1**

#### Trend Values of Loan and Advances

(Rs. in Million)

Year (Mid July)	NBL a =17307.80 b =3101.50	RBB a =28553.40 b =3192.00	NABIL a =22314.60 b =5119.10	NIBL a =27249.00 b =7461.00	SCBNL a =12763.40 b =1683.20
2006	11104.80	22169.40	12076.40	12327.00	9397.00
2007	14206.30	25361.40	17195.50	19788.00	11080.20
2008	17307.80	28553.40	22314.60	27249.00	12763.40
2009	20409.30	31745.40	27433.70	34710.00	14446.60
2010	23510.80	34937.40	32552.80	42171.00	16129.80
2011	26612.30	38129.40	37671.90	49632.00	17813.00
2012	29713.80	41321.40	42791.00	57093.00	19496.20
2013	32815.30	44513.40	47910.10	64554.00	21179.40
2014	35916.80	47705.40	53029.20	72015.00	22862.60
2015	39018.30	50897.40	58148.30	79476.00	24545.80

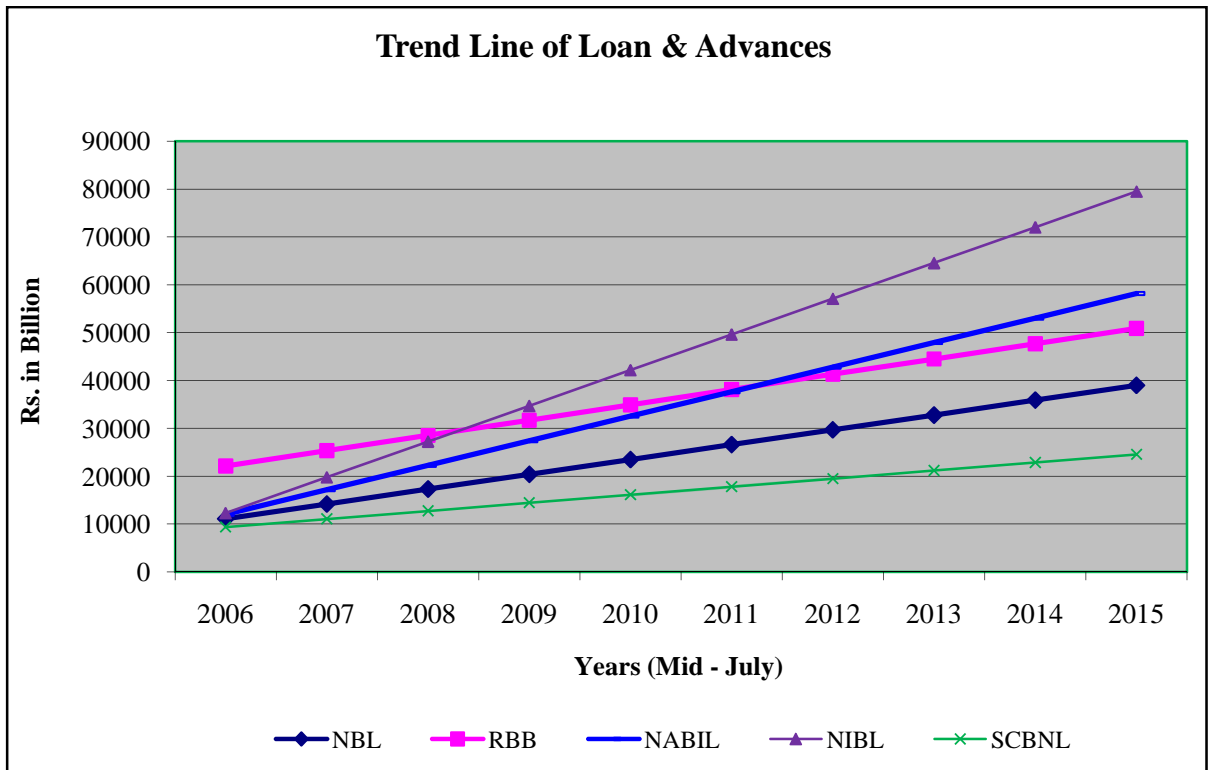
(Source: Author's Calculation)

The Table 4.3.1 reflects the loan and advances trend of NBL, RBB, NABIL, NIBL and SCBNL from the year 2006 to 2015 (mid-July). The table shows that all the sampled banks have the increasing trend of loans and advances. The average loan and advances of NBL is Rs 17307.80 million and increasing every year at the rate of Rs 3101.50 million. Hence expected loan and advances of NBL is supposed to increase from Rs 26612.30 million in 2011 to Rs 39018.30 million in 2015. The average loan and advances of RBB is Rs 28553.40 million and rate of change is Rs 3192.00 million every year. Similarly, the average loans and advances of NABIL, NIBL and SCBNL are Rs 22314.60, Rs 27249.00 and Rs 12763.40 million respectively and rates of change in loan and advances of these sampled banks are Rs 5119.10, Rs 7461.00 and Rs 1683.20 million respectively. According to table, rate of change in loans and advances of NIBL is the highest and is expected to increase from Rs 49632.00 million in 2011 to Rs.79476.00 million in 2015.

Trend line of loans and advances of these five banks show the increasing trend in which NIBL has highest rate of increment and SCBNL has the lowest rate of increment of loan and advances. The rate of increment in loans and advances of SCBNL is lower in comparison to other banks which indicate that SCBNL has the policy of low investment in loan and advances than other four banks.

The Figure 4.3.1 represents the trend line of loans and advances of the five sampled banks for ten consecutive years.

**Figure 4.3.1**



### 4.3.2 Trend Analysis of Non Performing Asset

The calculated values of average non-performing assets (a), rate of change of non-performing assets (b) and trend values ( $Y = a + b X$ ) of non-performing assets of five sampled banks for ten years from mid July 2006 to Mid July 2015 are as follows:

**Table 4.3.2**

#### **Trend Values of Non Performing Assets**

(Rs. in Million)

<b>Year (Mid July)</b>	<b>NBL</b> a =1450.60 b = -408.30	<b>RBB</b> a = 5983.20 b = -984.30	<b>NABIL</b> a = 159.80 b = -23.10	<b>NIBL</b> a = 299.00 b = -28.40	<b>SCBNL</b> a = 139.80 b = -32.50
2006	2267.20	7951.80	206.00	355.80	204.80
2007	1858.90	6967.50	182.90	327.40	172.30
2008	1450.60	5983.20	159.80	299.00	139.80
2009	1042.30	4998.90	136.70	270.60	107.30
2010	634.00	4014.60	113.60	242.20	74.80
2011	225.70	3030.30	90.50	213.80	42.30
2012	-182.60	2046.00	67.40	185.40	9.80
2013	-590.90	1061.70	44.30	157.00	-22.70
2014	-999.20	77.40	21.20	128.60	-55.20
2015	-1407.50	-906.90	-1.90	100.20	-87.70

(Source: Author's Calculation)

The Table 4.3.2 shows the trend of non-performing assets of NBL, RBB, NABIL, NIBL and SCBNL for ten years from 2006 to 2015 (mid-July). The table shows that all the five banks have decreasing trend of NPA. The average NPA of NBL is Rs 1450.60 which is decreasing at the rate of Rs 408.30 million every year. Non-performing asset of NBL is expected to decrease from Rs 225.70 million in 2011 to negative value or Rs 0 million in 2015. The average NPA of RBB is Rs 5983.20 which is decreasing at the rate of Rs 984.30 million every year. Non-performing asset of NBL is expected to decrease from Rs 3030.30 million in 2011 to negative value in 2015. Similarly, the average NPAs of NABIL, NIBL

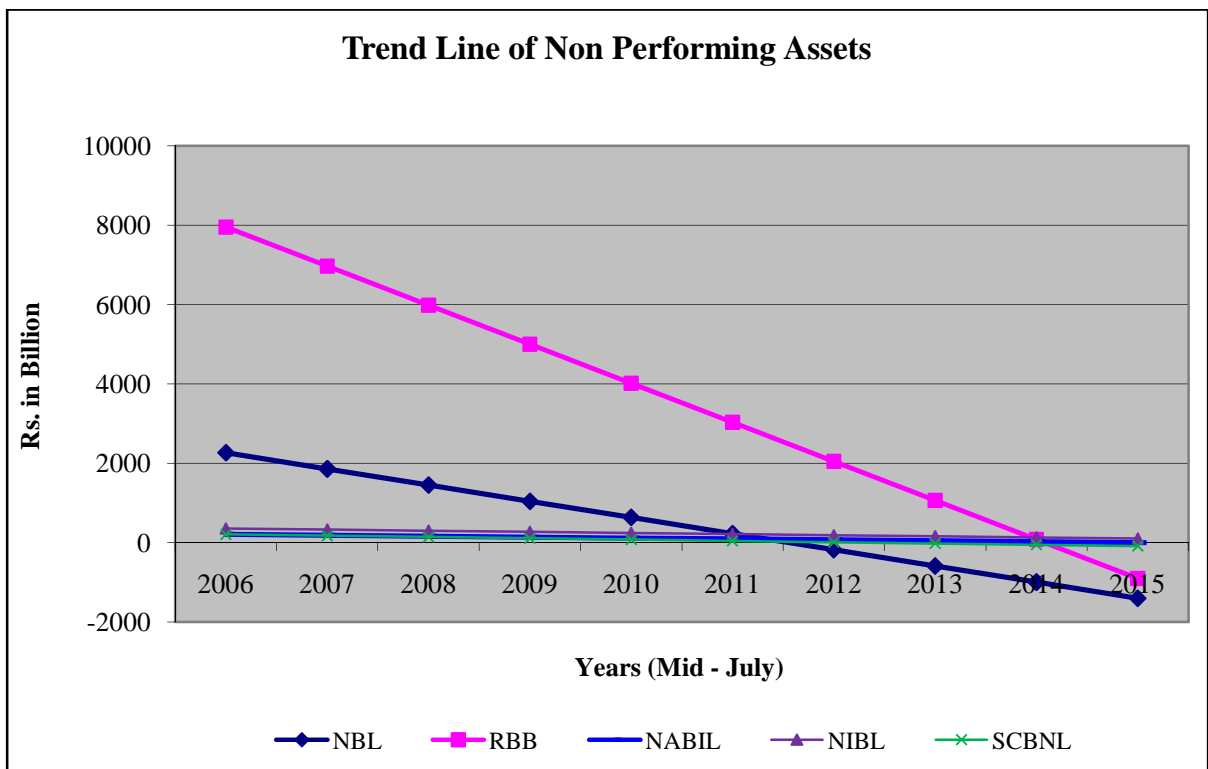


and SCBNL are Rs 159.80, Rs 299.00 and Rs 139.80 respectively and rates of change of NPA per year are Rs 23.10, Rs 28.40 and Rs 32.50 respectively. NPAs of all these banks are expected to be at negative value by the year 2015.

RBB has significantly high non-performing asset in the total volume of loans and advances but its rate of decrease is also very high. If this trend continues, it would be able to decrease its NPA dramatically. Both RBB and NBL are concentrating more on recovering bad debts than the further investment in the form of loans and advances, so their rate of decrease in NPA is also higher. Rate of change in NPA of NABIL, NIBL and SCBNL is comparatively lower than RBB and NBL. Decreasing trend of NPA of all the sampled banks may be due to good credit control system.

Figure 4.3.2 represents the trend line of non-performing asset of five banks for 10 consecutive years.

**Figure 4.3.2**



### 4.3.3 Trend Analysis of Loan Loss Provision

The calculated values of average loan loss provision (a), rate of change of loan loss provision (b) and trend values ( $Y = a + b X$ ) of loan loss provision of five sampled banks for ten years from mid July 2006 to Mid July 2015 are as follows:

**Table 4.3.3**

#### Trend Values of Loans Loss Provision

(Rs. in Million)

Year (Mid July)	NBL a = 2300.80 b = -367.30	RBB a = 8423.20 b = -1894.50	NABIL a = 455.00 b = 84.10	NIBL a = 513.00 b = 65.00	SCBNL a = 244.40 b = -19.10
2006	3035.40	12212.20	284.80	383.00	282.60
2007	2668.10	10317.70	369.90	448.00	263.50
2008	2300.80	8423.20	455.00	513.00	244.40
2009	1933.50	6528.70	540.10	578.00	225.30
2010	1566.20	4634.20	625.20	643.00	206.20
2011	1198.90	2739.70	710.30	708.00	187.10
2012	831.60	845.20	795.40	773.00	168.00
2013	464.30	-1049.30	880.50	838.00	148.90
2014	97.00	-2943.80	965.60	903.00	129.80
2015	-270.30	-4838.30	1050.70	968.00	110.70

(Source: Author's Calculation)

The above table (Table 4.3.3) shows the trend of loan loss provision of NBL, RBB, NABIL, NIBL and SCBNL for ten years from 2006 to 2015 (mid-July). The table shows that NBL, RBB and SCBNL have decreasing trend of LLP while NABIL and NIBL have increasing trend. The average LLP of NBL is Rs 2300.00, which is decreasing at the rate of Rs 367.30 million every year. LLP of NBL is expected to decrease from Rs 1198.90 in 2011 to negative value in 2015. The average LLP of RBB is Rs 8423.20, which is decreasing at the rate of Rs 1894.50 million every year. LLP of RBB is expected to decrease from Rs 2739.70 in 2011 to negative value in 2015. SCBNL has the lowest rate of change. The average LLP of SCBNL is Rs 244.40 which is decreasing at the rate of Rs 19.10 million every year. LLP of SCBNL is expected to decrease from Rs 187.10 in 2011 to Rs 110.70 million in 2015. Accordingly, NABIL and NIBL have the average LLP of Rs 455.00 and Rs 513.00 and have the rate of change of Rs 84.10 and Rs 65.00 per year. LLP

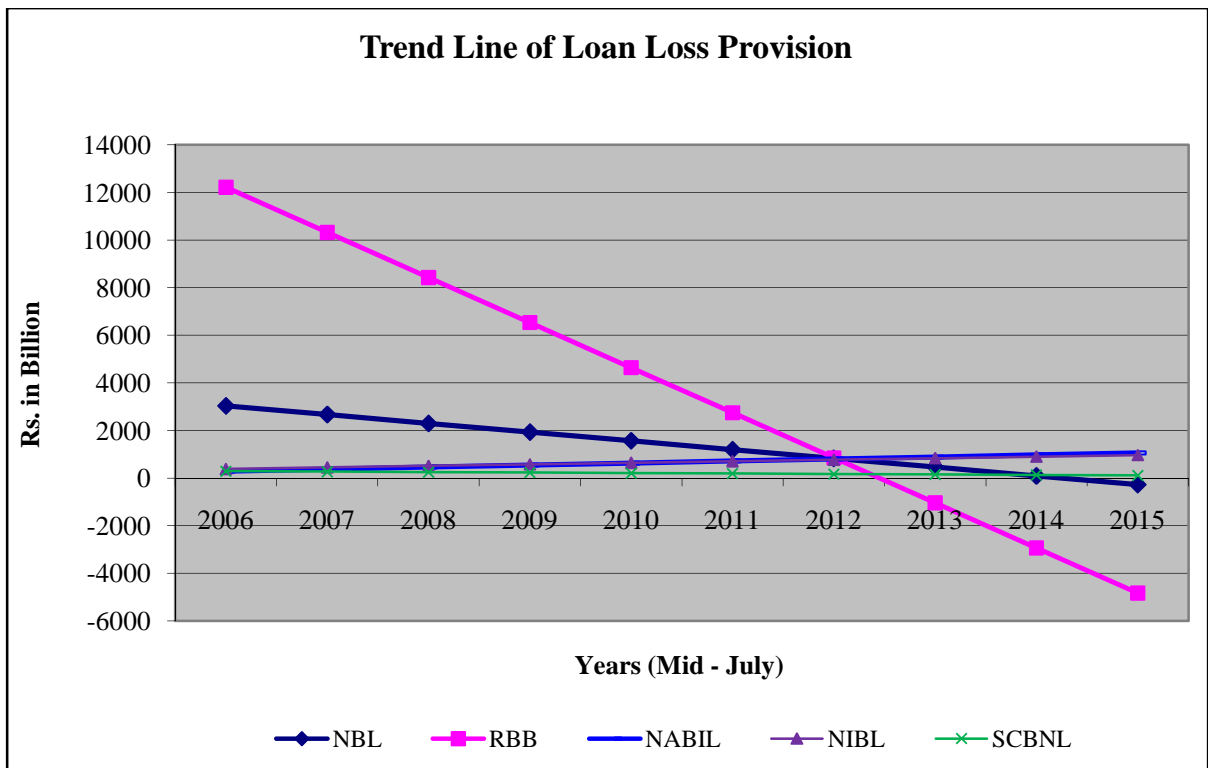
of NABIL is expected to increase from Rs 710.30 in 2011 to Rs 1050.70 million in 2015. Similarly, LLP of NIBL is supposed to increase from Rs 708.00 in 2011 to Rs 968.00 million in 2015. The increasing trend of LLP of NABIL and NIBL is due to the increasing trend of loans and advance in total asset.

As we know that higher is the NPL, the higher will be the LLP. Decreasing trend of LLP of RBB, NBL and SCBNL shows that these banks are successful in reducing the non performing loan. The increasing trend value of LLP of NABIL and NIBL indicates the increment of NPA in total asset quality.

As RBB is concentrating to recover the bad debt and also able to decrease the amount of NPL, its' decreasing rate of LLP is very high. As shown on the above table, the LLP amount of RBB is expected to be negative after 2013. But it is not practically possible for LLP to be negative or zero because according to the rule of Nepal Rastra Bank the provision should be done in every loan either they are good or bad.

The Figure 4.3.3 represents the trend line of Loan Loss Provision of five banks for 10 consecutive years.

**Figure 4.3.3**



#### 4.3.4 Trend Analysis of Net Profit

The calculated values of average net profit (a), rate of change of net profit (b) and trend values ( $Y = a + b X$ ) of net profit of five sampled banks for ten years from mid July 2006 to Mid July 2015 are as follows:

**Table 4.3.4**

#### **Trend Values of Net Profit**

(Rs. in Million)

<b>Year (Mid July)</b>	<b>NBL</b> a = 565.20 b = -36.60	<b>RBB</b> a = 1836.80 b = 99.60	<b>NABIL</b> a = 848.60 b = 137.70	<b>NIBL</b> a = 952.60 b = 19.50	<b>SCBNL</b> a = 856.60 b = 118.20
2006	638.40	1637.60	573.20	913.60	620.20
2007	601.80	1737.20	710.90	933.10	738.40
2008	565.20	1836.80	848.60	952.60	856.60
2009	528.60	1936.40	986.30	972.10	974.80
2010	492.00	2036.00	1124.00	991.60	1093.00
2011	455.40	2135.60	1261.70	1011.10	1211.20
2012	418.80	2235.20	1399.40	1030.60	1329.40
2013	382.20	2334.80	1537.10	1050.10	1447.60
2014	345.60	2434.40	1674.80	1069.60	1565.80
2015	309.00	2534.00	1812.50	1089.10	1684.00

(Source: Author's Calculation)

The above table (Table 4.3.4) shows the trend of net profit of NBL, RBB, NABIL, NIBL and SCBNL for ten years from 2006 to 2015 (mid-July). The table shows that RBB, NABIL, NIBL and SCBNL have increasing trend of net profit but NBL has decreasing trend of net profit.

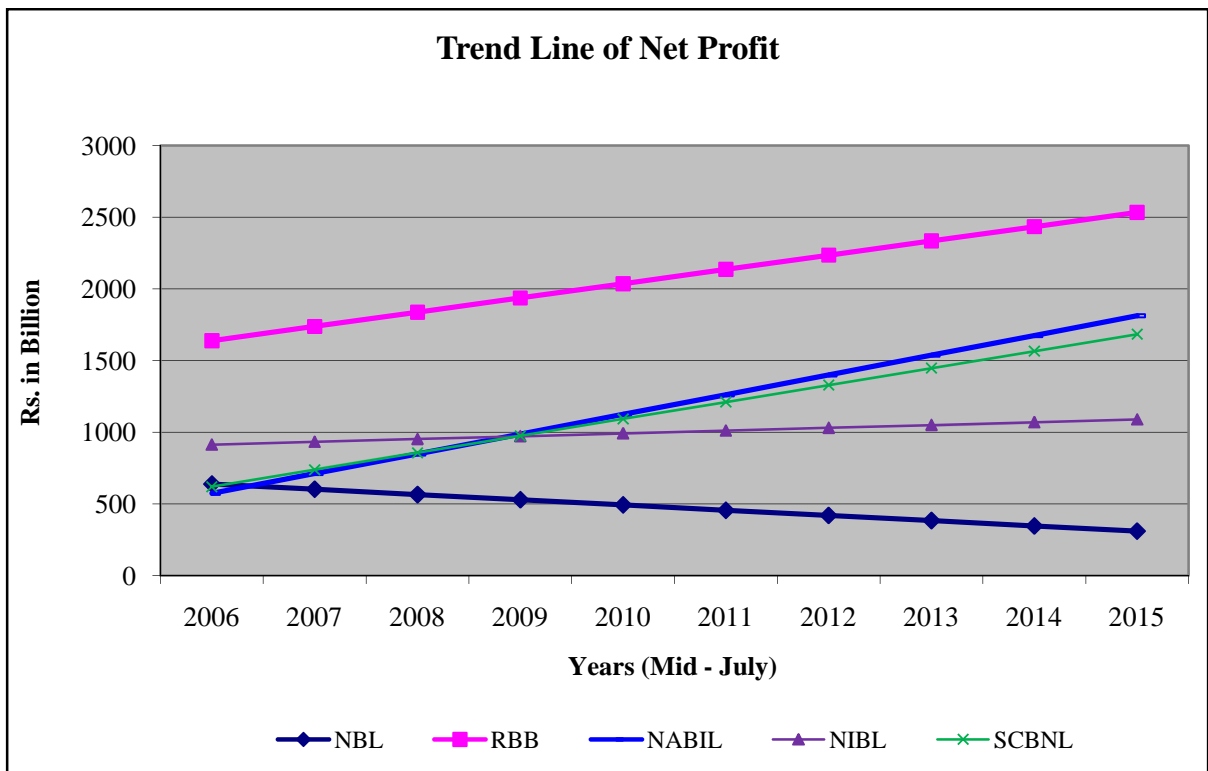
The average net profit of NBL is Rs. 565.20 million which is decreasing every year at the rate of Rs. 36.60 million. Hence the expected net profit of NBL is supposed to decrease from Rs 455.40 million in 2011 to Rs 309.00 million in 2015. The average net profit of RBB is Rs. 1836.80 million which is increasing every year at the rate of Rs. 99.60 million. Hence the expected net profit of RBB is supposed to increase from Rs 2135.60 million in 2011 to Rs 2534.00 million in 2015. The average net profit of NABIL is Rs. 848.60 million which is increasing every year at the rate of Rs. 137.70 million. Hence the expected

net profit of NABIL is supposed to increase from Rs 1261.70 million in 2011 to Rs 1812.50 million in 2015. The average net profit of SCBNL is Rs. 856.60 million which is increasing every year at the rate of Rs. 118.20 million. Hence the expected net profit of SCBNL is supposed to increase from Rs 1211.20 million in 2011 to Rs 1684.00 million in 2015.

As per the figures in the table, it can be said that RBB is ahead in generating net profit and its rate of increment of net profit is also second higher. NABIL has the highest increasing rate of net profit and NIBL has the lowest increasing rate of net profit.

Figure 4.3.4 represents the trend line of net profit of five banks for 10 consecutive years.

**Figure 4.3.4**



#### 4.4 Analysis of Loan Loss Provisioning as per NRB Directives

Rises of non-performing loans increase their provisions to shore up their reserves for loan losses. As a result the net profit is going to be negative by contributing great portion of gross profit in loan loss provision. Nepal Rastra Bank (NRB), central bank of Nepal, issues and amends various directives regarding banking regulation from time to time in order to streamline the financial activities and rescue the banks from financial crisis. According to NRB's directives for the commercial banks, banks should maintain certain percent of the different class loan as a loan loss provision. As per this directive, loans and advances are to be classified into four categories namely Pass, Substandard, Doubtful and Loss Loan with provisioning 1%, 25%, 50%, 100% respectively on the basis of ageing past dues.

The study is focused on to find whether the sampled banks have maintained required percentage of loan loss provision as directed by NRB for their pass, substandard, doubtful and bad loan or not.

##### 4.4.1. Loan Loss Provisioning of Nepal Bank Limited

The loan loss provision maintained by Nepal Bank Limited (NBL) is presented in the following table:

**Table 4.4.1**  
**Loan Loss Provision of Nepal Bank Limited**

Types of Loan	LLP Requirement	Loan Loss Provisioning By the Bank (%)				
		2006	2007	2008	2009	2010
Pass Loan	1% of Pass Loan	1.12	4.75	1.15	1.55	1.21
Substandard Loan	25% of Substandard Loan	24.31	28.12	26.22	25.50	25.70
Doubtful Loan	50% of Doubtful Loan	48.05	69.45	55.21	49.58	49.67
Bad Loan	100% of Bad Loan	94.86	115.96	98.05	99.45	102.56

*(Source: Annual Reports)*

Above table (Table 4.4.1) displays the loan loss provision maintained by NBL for different types of loan in five consecutive years. NBL has met the provision requirement for pass

loan throughout the study period which was enough than the requirement (i.e. more than 1%). But while considering the provision required for substandard loan, it should be 25% but it has failed to meet in 2006 and maintained only 24.31 % which is slightly lower than that the requirement. But, from year 2007, loan loss provisions are more than requirement.

Similarly, bank is required to maintain 50 % loan loss provision for its doubtful loan. But except in 2007 and 2008, it has failed to meet the provision for doubtful loan, which is required. It has made the provision of 69.45% and 55.21% in the year 2007 and 2008 which I more than the requirement. But it has provisioned 48.05%, 49.58% and 49.67 % in year 2006, 2009 and 2010 respectively which are slightly lower than specified in the directives. Likewise, 100 % loan loss provision is must for bad loan. The bank has maintained the provisioning required as per directives in the year 2007 and 2010. But it is found that the bank has not maintained loan loss provision as per requirement in the year 2006, 2008 and 2009 which is 94.86%, 98.05% and 99.45% respectively. In other word, Loan loss provision made by the bank for bad loan does not exactly meet the NRB's directives.

#### 4.4.2 Loan Loss Provisioning of Rastriya Banijya Bank

The loan loss provision maintained by Rastriya Banijya Bank (RBB) is presented in the following table (Table 4.4.2)

**Table 4.4.2**  
**Loan Loss Provision of Rastriya Banijya Bank**

Types of Loan	LLP Requirement	Loan Loss Provisioning By the Bank (%)				
		2006	2007	2008	2009	2010
Pass Loan	1% of Pass Loan	3.19	3.08	1.79	2.14	1.09
Substandard Loan	25% of Substandard Loan	23.89	21.96	23.98	24.26	23.85
Doubtful Loan	50% of Doubtful Loan	45.36	48.46	49.6	47.55	48.63
Bad Loan	100% of Bad Loan	94.69	95.57	96.63	97.84	96.35

(Source: Annual Reports)

Above table (Table 4.4.2) displays the loan loss provision maintained by NBL for different types of loan in five consecutive years. Each bank requires maintaining loan loss provisioning for its outstanding loans as per stated in NRB directives.

RBB has maintained more than 1 % loan loss provisioning for pass loan during the study period. The above figure indicates that the RBB failed to maintain provision for substandard loan. It has made the provision of 23.89%, 21.96%, 23.98%, 24.26% and 23.85% in the year 2006, 2007, 2008, 2009 and 2010 respectively which is slightly lower than as stated in NRB's directives.

Similarly, in relation to doubtful loan, RBB is found to be unable to maintain the provision from the year 2006 to 2010. It is below 50% in all the five years. Likewise, the bank is unable to maintain 100% provision for bad loan in all the five years. The bad loan provision maintained by the bank is 94.69%, 95.57% 96.63%, 97.84% and 96.35% for the year 2006, 2007, 2008, 2009 and 2010 respectively which are slightly lower than NRB's directives. So, in all the cases, the bank fails to obey the NRB's directives properly.

#### 4.4.3 Loan Loss Provisioning of Nabil Bank Limited

The loan loss provision maintained by Nabil Bank Limited (NABIL) is presented in the following table:

**Table 4.4.3**  
**Loan Loss Provision of Nabil Bank limited**

Types of Loan	LLP Requirement	Loan Loss Provisioning By the Bank (%)				
		2006	2007	2008	2009	2010
Pass Loan	1% of Pass Loan	1.01	1.12	1.25	1.30	1.15
Substandard Loan	25% of Substandard Loan	67.93	47.31	25.60	27.96	25.03
Doubtful Loan	50% of Doubtful Loan	47.00	49.19	48.95	49.79	48.36
Bad Loan	100% of Bad Loan	94.55	86.46	97.65	98.52	96.87

(Source: Annual Reports)



The table (Table 4.4.3) displays the loan loss provision maintained by NABIL for different types of loan in five consecutive years. NABIL has maintained more than 1 % loan loss provisioning for pass loan during the study period. Also NABIL has successfully maintained more than 25% loan loss provisioning for substandard loan during the study period. It has made the provision of 67.93%, 47.31%, 25.60%, 27.96% and 27.96% for substandard loan in the year 2006, 2007, 2008, 2009 and 2010 respectively which is higher than as stated in NRB's directives.

Similarly, in relation to doubtful loan, NABIL is found to be unable to maintain the provision from the year 2006 to 2010. It is below 50% in all the five years. Likewise, the bank is unable to maintain 100% provision for bad loan in all the five years. The bad loan provision maintained by the bank is 94.55%, 84.46% 97.65%, 98.52% and 96.87% for the year 2006, 2007, 2008, 2009 and 2010 respectively which are lower than NRB's directives. So, in the case of doubtful and bad loan, the bank fails to obey the NRB's directives properly.

#### **4.4.4 Loan Loss Provisioning of Nepal Investment Bank Limited**

The loan loss provision maintained by Nepal Investment Bank Limited (NIBL) is presented in the following table:

**Table 4.4.4**  
**Loan Loss Provision of Nepal Investment Bank Limited**

<b>Types of Loan</b>	<b>LLP Requirement</b>	<b>Loan Loss Provisioning By the Bank (%)</b>				
		<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
Pass Loan	1% of Pass Loan	1.00	1.00	0.99	1.02	1.01
Substandard Loan	25% of Substandard Loan	25.00	25.36	25.20	25.18	25.30
Doubtful Loan	50% of Doubtful Loan	50.00	50.07	51.26	50.09	50.11
Bad Loan	100% of Bad Loan	99.00	99.07	98.90	99.60	99.45

*(Source: Annual Reports)*

The Table 4.4.4 displays the loan loss provision maintained by NIBL for different types of loan in five consecutive years. NIBL has maintained more than 1 % loan loss provisioning for pass loan except in the year 2008. NIBL has successfully maintained more than 25% loan loss provisioning for substandard loan during the study period. It has made the provision of 25.00%, 25.36%, 25.20%, 25.18% and 25.30% for substandard loan in the year 2006, 2007, 2008, 2009 and 2010 respectively which is slightly higher than as stated in NRB's directives.

Similarly, in relation to doubtful loan, NIBL is found to be successful in maintaining the provision from the year 2006 to 2010. It is above 50% in all the five years. But the bank is unable to maintain 100% provision for bad loan in all the five years. The bad loan provision maintained by the bank is 99.00%, 99.07% 98.90%, 99.60% and 99.45% for the year 2006, 2007, 2008, 2009 and 2010 respectively which are lower than NRB's directives. So, in the case of bad loan, the bank fails to obey the NRB's directives properly.

#### **4.4.5 Loan Loss Provisioning of Standard Chartered Bank Nepal Limited**

The loan loss provision maintained by Standard Chartered Bank Nepal Limited (SCBNL) is presented in the following table:

**Table 4.4.5**  
**Loan Loss Provision of Standard Chartered Bank Nepal Limited**

Types of Loan	LLP Requirement	Loan Loss Provisioning By the Bank (%)				
		2006	2007	2008	2009	2010
Pass Loan	1% of Pass Loan	1.08	1.02	99.56	99.67	1.05
Substandard Loan	25% of Substandard Loan	25.12	26.50	25.40	25.30	26.01
Doubtful Loan	50% of Doubtful Loan	52.00	50.12	51.23	52.50	51.70
Bad Loan	100% of Bad Loan	98.45	101.23	101.55	102.65	101.80

*(Source: Annual Reports)*

Above table (Table 4.4.5) displays the loan loss provision maintained by SCBNL for different types of loan in five consecutive years. SCBNL has met the provision requirement for pass loan except in the year 2008 and 2009. Considering the provision required for substandard loan, it should be 25% and the bank has successfully met the requirement for provisioning in all the years. The provisions by the bank in the year 2006, 2007, 2008, 2009 and 2010 are 25.12%, 26.50%, 24.50%, 25.30% and 26.01% respectively which are slightly higher than as stated in NRB directives.

Similarly, bank is required to maintain 50 % loan loss provision for its doubtful loan. SCBNL has successful maintained the loan loss provision for doubtful loss which are 52.00%, 50.12%, 51.23%, 52.50% and 51.70% in the year 2006, 2007, 2008, 2009 and 2010 respectively. Likewise, 100 % loan loss provision is must for bad loan. The bank has maintained the provisioning required as per directives in all the years except 2006. The bank has maintained loan loss provision as per requirement in the year 2007, 2008, 2009 and 2010 which is 101.23%, 101.55%, 102.65% and 101.80% respectively.

From above analysis, as a whole, it can be said that the banks are not able to maintain loan loss provision perfectly in all categories of loans in accordance to NRB's directives. The banks have maintained the provisioning higher than requirements for one class of loan while lower for another class of loan. Therefore the bank should give priority to maintain loan loss provision appropriately as per NRB's directives. The banks should abide by the NRB's rules and regulations. It can be concluded that Nepalese commercial bank did not following NRB's directives properly and perfectly regarding loan loss provision till now. Such results raise questions, whether the NRB fails to implement its directives or not? Therefore, regular supervision and control over the Nepalese commercial banks by NRB becoming very essential for proper and systematic growth and survival of the banks.

#### **4.5 Analysis of Questionnaire**

Primary data collected through questionnaire from the respondent or the employees of the sampled bank for analysis. Nepalese banking sector was taken as the population of the study. NBL, RBB, NABIL, NIBL and SCBNL selected as the sample for the study. The questionnaire was distributed to the employees of the banks. Directives regarding to loan

loss classification and provisioning and external and internal contributing factors on NPA were raised as issues to ask the respondents. The questionnaires were distributed to 35 employees, 7 from each bank, but only 30 respondents returned the filled-up questionnaire. After collecting the questionnaire they were tabulated in simple form. For each question the responses were converted to percentage based on the total number of respondents. From the percentage analysis of questionnaire following results were derived:

**Question No. 1**

When asked about the importance of the directives related to loan classification and provisioning, 99% of the respondents agreed that the directives are very important but 1% said as less important.

**Question No. 2**

When asked about whether present directive regarding loan classification and provisioning is appropriate and better than the previous one, 96% of the respondent believed that it is much better than the previous one while 4% believed that it is little bit better.

**Question N. 3**

When asked about the impact of new directives on provision for loan loss of commercial bank, 100% of the respondents are of the view that newly issued directives regarding loan classification and provisioning will increase the provision for loan loss.

**Question No. 4**

When asked about the impact of new directives regarding loan classification & provisioning of on the credit exposure of the bank, 72% of the respondents were of the view that there will be no impact on credit exposure but 28 % believed that the credit exposure of the bank will decrease.

**Question No. 5**

When asked about the effect of present loan classification & provisioning directive on the shareholders of the bank, 100% of the respondents think that they shareholders will enjoy lesser dividend and will have their EPS decreased however everyone believes that it is only for short term.

### **Question No. 6**

In this question it was asked how the new directive would affect the three factors of the banks, liquidity, profitability & operational procedure. 95% of the respondents were of the view that, liquidity & profitability will decrease and operational procedure would increase but remaining 5% were of the view that there would be no effect on all these three factors.

### **Question No. 7**

This question was posed mainly to find out which alternative the banks are pondering to cope with the problem brought about by the amendment in loan loss provisioning directive. 100% of the respondents said that, they would control credit disbursement by being more stringent and would strengthen the monitoring and follow-up procedures.

### **Question No. 8**

When asked about to what extent today's banking industry is effected by problem of NPA, 89% of the respondents were of the view that it is moderately affected while 11% were of the view that today's banking industry is severely affected by the problem of NPA.

### **Question No. 9**

When asked about the best measure to resolve the problem of NPL, 92% respondents were of the view that setting up a recovery cell is the best measure to confront the problem on NPL while 8% were of the view that hiring Asset Management Company is the best measure.

### **Question No. 10**

When asked to rate the major internal and external factors leading to NPL, 87 % of the respondent rated as below:

Internal Factors:

1. Improper Credit appraisal system
2. Ineffective credit monitoring and supervision system
3. Weak management
4. Bad intention of the borrower
5. Weak legal provision
6. Improper portfolio management

External Factors:

1. Economic and industrial slowdown/recession
2. Lack of strong and timely monitoring system of the government
3. Weak law enforcement system of the government
4. Political and bureaucratic unfair pressure
5. Ineffective and inconsistent government policy
6. Inappropriate loan loss provisioning requirement

And rest 13% respondent rated it bit differently, it means that their rating was slightly up-down.

### Question No. 11

The view of the respondents related to the external factors that may cause NPA growth are expressed in the Table 4.5.1.

**Table 4.5.1**  
**Analysis of External Causes of NPA Growth**

Range	Economic and Industrial recession		Inconsistency on government policy		Conservative provisioning requirement		Monitoring and control system		Weak legal system		Political and bureaucratic pressure	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Strongly Agreed	10	33.3	4	13.3	3	10.0	15	50.0	6	20.0	3	10.0
Agreed	16	53.3	12	40.0	4	13.3	10	33.3	18	60.0	9	30.0
Neutral	4	13.4	12	40.0	12	40.0	3	10.0	4	13.3	12	40.0
Disagree	---	---	2	6.7	8	26.7	2	6.7	2	6.7	3	10.0
Strongly Disagree	---	---	---	---	3	10.0	---	---	---	---	3	10.0
Total	30	100	30	100	30	100	30	100	30	100	30	100

(Source: Field Survey, 2011)

From the Table 4.5.1, it can be said that 26 out of 30 or 86.67% respondents are strongly agreed and agreed that economic and industrial recession is the cause of NPA growth. However 50% respondents are strongly agreed and 33.3% are agreed that lacking monitoring and control system of NRB is the cause of NPA growth. But there are 10% and 6.7% respondents who have ranked neutral and disagreed for the cause of NPA growth is monitoring and control system. 80% respondents agreed that weak legal system is the cause of NPA growth.

It, therefore, can be generalized that economic and industrial recession, weak monitoring and control system and weak legal system are the major external factors that have major contribution for the increasing level of NPA.

#### **4.6 Major Findings of the Study**

The major findings from the analysis of the data are as follows:

1. The average loans and advances to total assets ratios of NBL, RBB, NABIL, NIBL and SCBNL are 37.80%, 44.70%, 59.84%, 66.5% and 37.53% respectively. The ratio shows increasing trend in NBL but it is fluctuating in case of RBB, NABIL, NIBL and SCBNL. NIBL has the highest proportion of loans and advances in the total asset structure followed by NABIL, RBB, NBL and then SCBNL which indicates that mobilization of its fund by NIBL is highly satisfactory than other banks. The relatively low ratio of SCBNL is the indication of risk adverse attitude of the management. The management of SCBNL is risk averse as they have invested higher proportion of their asset in risk free or nominally risky assets like treasury bills, debentures, national saving bonds etc. NBL shows higher deviation with higher coefficient of variation than other banks. The RBB has least standard deviation, it has most consistent ratio during the study period. The NABIL has least coefficient of variation.

2. The ratio of loans and advances to total deposit ratio or simply CD ratio measures how effectively a bank is able to mobilize the funds obtained from the depositors. The average CD ratio around 70-80 % is considered as appropriate. The average CD ratios of NBL,

RBB, NABIL, NIBL and SCBNL are 42.12%, 49.13%, 70.01%, 76.53% & 42.96% respectively. NIBL is ahead in utilizing depositor's money on loans and advances with the objective to earn profit. The management of NIBL and NABIL seem to be aggressive as they have higher proportion of loans and advances to total deposit. NBL and SCBNL have lower investment in the form of loans and advances. The management of NBL and SCBNL is risk averse as they have invested higher proportion of their deposit in risk free or nominally risky assets. NBL has higher deviation with higher degree of variation in this ratio. RBB has least deviation but moderate in terms of variation. The ratios of NBL, RBB and SCBNL indicate that the ratios of these banks are below the appropriate standard.

3. The analysis of the ratio of non-performing assets to loans and advances reveals that RBB has the highest ratio throughout the study period. The higher ratios of both RBB and NBL are in decreasing trend which means the banks are improving their efficiency in recovering loans. NABIL shows the least ratio during the study period. The decreasing trend of ratio of NABIL and SCBNL is the result of effective credit management of bank and its efforts of recovering bad debts through establishment of effective recovery cell. NIBL is moderate in this ratio and shows decreasing trend except in the year 2007. The average ratios of NBL, RBB, NABIL, NIBL and SCBNL are 9.76%, 22.25%, 0.84%, 1.37% and 1.21% respectively. The significantly higher mean ratio of RBB in comparison to other banks reveals the critical condition of the bank and needs a serious action and attention to reduce this ratio. But NABIL, NIBL and SCBNL have lesser ratios than the acceptable standard of 10%. RBB has the least variation and NBL has the highest variation in this ratio throughout the study period.

4. The average ratios of non-performing asset to total asset of NBL, RBB, NABIL, NIBL and SCBNL are 3.24%, 9.88%, 0.50%, 0.88% and 0.45% respectively. The significantly higher mean ratio of RBB in comparison to other banks reveals the critical condition of the bank and needs a serious action and attention to reduce this ratio to a minimum level. The ratios of RBB exceed the specified limit especially in the year 2006 and 2007. But NABIL, NIBL and SCBNL have lesser ratios than the acceptable standard of 10% which means these banks are successfully managing to reduce this ratio and maintaining this ratio at minimum level.



5. The average ratio of provision held to non-performing asset of NBL, RBB, NABIL, NIBL and SCBNL are 176.21%, 138.19%, 206.43%, 187.99% and 189.56% respectively. The mean ratio of NABIL is significantly higher in comparison to other banks and this indicates that the bank has adequate provision against non-performing loan. The ratio of RBB is comparatively lower. . The ratios of all the five banks are significantly high which means that the banks have adequate provision against non-performing asset. NIBL has the highest deviation along with the highest degree of variation in this ratio followed by NBL, SCBNL and NABIL. RBB has the lowest deviation with the second lowest variability.

6. Loan loss provision to loan and advances ratio indicates that RBB has the highest ratio throughout the study period and NBL has the second highest ratio throughout the study period. The average loan loss ratio of NBL, RBB, NABIL, NIBL & SCBNL are 14.89%, 31.69%, 2.10%, 2.08% and 2.03% respectively. The ratio of RBB and NBL is significantly higher in comparison to other three banks. Higher LLP indicates the poor and ineffective credit policy, higher proportion of non-performing asset and poor performance of the economy. Hence, the higher ratios of RBB and NBL suggest that there is high proportion of NPL in the total loans and advances.

7. The ratio of return on loans and advances ratio indicates how efficiently the bank has employed its resources in the form of loans and advances. The average ratios of NBL, RBB, NABIL, NIBL and SCBNL are 3.55%, 6.51%, 3.94%, 4.28% and 6.73% respectively. Net profit of the SCBNL is the highest among all the five banks, because it has the highest mean ratio. After SCBNL, RBB has the highest net profit followed by NIBL, NABIL. NBL has the lowest ratio among all the five banks. One of the reasons for the decline in profit of the banks may be the rise in NPL level because significant portion of operating profit is sacrificed for maintaining required loan loss provisioning for NPL.

8. While analyzing correlation between loans and advances and deposit, it has been found that NBL, RBB, NABIL, NIBL and SCBNL all have high degree of positive correlation between these two variables. The correlation coefficients of all the banks, except NBL are more than six times the value of P.E., hence it can be interpreted that the correlation between the two variables in RBB, NABIL, NIBL & SCBNL is certain and significant.

9. The correlation coefficients between loans and advance and LLP of NBL, RBB and SCBNL are -0.8583, -0.8768, -0.7740 and the values are less than 6 times the value of its P.E., the value of correlation coefficient is insignificant and it shows there is no correlation. It is due to increasing trend in loan and advances and decreasing trend in LLP of those banks. The correlation coefficients of NABIL and NIBL are 0.8254 and 0.9879. The values of P.E. are 0.0961 and 0.0072. The value of correlation coefficient is higher than the value of six times of P.E., hence there is positive correlation between LLP and advances of NABIL and NIBL and also the value of correlation coefficient is significant and reliable.

10. The correlation between LLP and NPL revealed that there is positive correlation between non-performing assets and loan loss provision of NBL, RBB and SCBNL. The correlation coefficients (r) of NBL, RBB and SCBNL are 0.9410, 0.9548 and 0.9603 respectively. It denotes that if one variable out of them is increased that will increase another variable also. Also the value of coefficient of correlation is greater than six times the value of P.E. of these banks, so it can be said that the value of correlation coefficient is significant in case of NBL, RBB and SCBNL. On the other hand, the correlation coefficients (r) of NABIL and NIBL are -0.9245 and -0.4919 respectively. This means there is negative relationship between non-performing assets and loan loss provision of these banks.

11. There is negative correlation between loans and advances and NPA in all five sampled banks during the study period. The correlation coefficients of NBL, RBB, NABIL, NIBL and SCBNL are -0.9681, -0.9782, -0.5669, -0.5654 and -0.9192 respectively. The six times values of probable error (P.E.) of the five banks are 0.1138, 0.0782, 1.2282, 1.2313 and 0.2806 respectively. The correlation coefficients of all the banks are less than six times the value of P.E., hence it can be interpreted that the correlation between the two variables in NBL, RBB, NABIL, NIBL & SCBNL is uncertain and insignificant.

12. Trend analysis has been done based on the data of past five years and forecast has been made for next five years. All the sampled banks have the increasing trend of loans and advances. The average loan and advances of NBL is Rs 17307.80 million and increasing every year at the rate of Rs 3101.50 million. Hence expected loan and advances of NBL is supposed to increase from Rs 26612.30 million in 2011 to Rs 39018.30 million

in 2015. The average loan and advances of RBB is Rs 28553.40 million and rate of change is Rs 3192.00 million every year. Rate of change in loans and advances of NIBL is the highest and is expected to increase from Rs 49632.00 million in 2011 to Rs.79476.00 million in 2015.

13. The trend analysis of non-performing assets in NBL, RBB, NABIL, NIBL and SCBNL shows that all the five banks have decreasing trend of NPA. The average NPA of NBL is Rs 1450.60 which is decreasing at the rate of Rs 408.30 million every year. Non-performing asset of NBL is expected to decrease from Rs 225.70 million in 2011 to negative value or Rs 0 million in 2015. The average NPA of RBB is Rs 5983.20 which is decreasing at the rate of Rs 984.30 million every year. NPAs of all these banks are expected to be at negative value or Rs 0 by the year 2015. RBB has significantly high non-performing asset in the total volume of loans and advances but its rate of decrease is also very high. If this trend continues, it would be able to decrease its NPA dramatically. Both RBB and NBL are concentrating more on recovering bad debts than the further investment in the form of loans and advances, so their rate of decrease in NPA is also higher.

14. The trend analysis of loan loss provision of NBL, RBB, NABIL, NIBL and SCBNL shows that NBL, RBB and SCBNL have decreasing trend of LLP while NABIL and NIBL have increasing trend. The average LLP of NBL is Rs 2300.00, which is decreasing at the rate of Rs 367.30 million every year. The average LLP of RBB is Rs 8423.20, which is decreasing at the rate of Rs 1894.50 million every year. SCBNL has the lowest rate of change. The average LLP of SCBNL is Rs 244.40 which is decreasing at the rate of Rs 19.10 million every year. As we know that higher is the NPL, the higher will be the LLP. Decreasing trend of LLP of RBB, NBL and SCBNL shows that these banks are successful in reducing the non performing loan. The increasing trend value of LLP of NABIL and NIBL indicates the increment of NPA in total asset quality.

15. The trend analysis of net profit shows that RBB, NABIL, NIBL and SCBNL have increasing trend of net profit but NBL has decreasing trend of net profit. The average net profit of NBL is Rs. 565.20 million which is decreasing every year at the rate of Rs. 36.60 million. Hence the expected net profit of NBL is supposed to decrease from Rs 455.40 million in 2011 to Rs 309.00 million in 2015. The average net profit of RBB is Rs. 1836.80 million which is increasing every year at the rate of Rs. 99.60 million. Hence the

expected net profit of RBB is supposed to increase from Rs 2135.60 million in 2011 to Rs 2534.00 million in 2015. The average net profit of SCBNL is Rs. 856.60 million which is increasing every year at the rate of Rs. 118.20 million. Hence the expected net profit of SCBNL is supposed to increase from Rs 1211.20 million in 2011 to Rs 1684.00 million in 2015. The high rate of net profit earning is due to more investment in less risky asset resulting low NPL and hence less loan loss provision.

16. From the analysis of NRB's directives regarding loan loss provision, it is found that no one bank has been properly following NRB's directives regarding loan loss provision. No one bank has maintained loan loss provision perfectly as per the requirement of NRB's directives from the year 2006 to 2011. It is observed that sampled banks have maintained higher than requirement for one category of loan whereas made lower for another type of loan category. If the banks continue this trend the bank may have to face different legal hassle regarding its lending in future. The main reason may be the over provision create inadequacy of capital and less provision create legal hassle to the bank.

17. In regard to the internal responsible factors that contribute turning good loan into bad loan, some alternatives were on the questionnaire which has been filled by respondents. It is found that improper credit appraisal system, ineffective credit monitoring and supervision system, weak management and bad intention of the borrower are the most responsible factor for NPA growth. In connection to the external factors, it has been found that economic and industrial recession is the major cause of NPA growth. Lacking on monitoring and supervision from NRB and absence of strong legal provision for loan recovery have been identified by respondents as second and third major factors for increasing NPA. Likewise, respondents gave least emphasis to high and conservative provisioning requirement as a reason for the increment of NPA.

## **Chapter - 5**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

In this last chapter, an attempt is made to include the summary of the whole study, conclusion of the study and the recommendations to overcome the problems found by the researcher.

#### **5.1 Summary**

Financial system contributes to economic development through an efficient allocation of resources. Financial markets build in many ways the backbone of an economy. A well-regulated financial sector leads to an efficient transformation of saving to investment, ensuring that resources are deployed where they earn the highest returns. In the context of Nepal, commercial banks are playing crucial role in the growth of the economy and making a significant contribution to the promotion of financial market. In the context of Nepal, as of Mid – July 2010 statistics of NRB, Commercial Banks hold more than 76 percent of the total assets and liabilities of the financial system.

The research is aimed at analyzing the non-performing assets of the commercial banks. A non-performing asset is an asset which ceases to generate profit for the bank. Proper management of NPA has always been a great challenge for the banks. Various research methodologies were used for the study. Basically, research methodologies here signifies the research design, sources of data, population and sample of data, data collection procedure, data collection tools and techniques employed etc. Out of the total population of 30 commercial banks, five banks were taken as sample by using judgmental sampling method. Nepal Bank Limited (NBL) and Rastriya Banijya Bank (RBB) are selected from public sector banks and three major banks, Nabil Bank Limited (NABIL), Nepal Investment Bank Limited (NIBL) and Standard Chartered Bank Nepal Limited (SCBNL) were selected from private sector banks. Primary data have been used in the study. The data collected from various sources are recorded systematically and presented in appropriate forms of tables and charts. Appropriate mathematical, statistical, financial,

graphical tools have been applied to analyze the data. The data of five consecutive years of the three selected banks have been analyzed to meet the objective of the study. The researcher tried to analyze the comparative position of bank in terms of non-performing asset and its impact.

NIBL has the highest proportion of the loans and advances in the total asset structure followed by NABIL, RBB and NBL. SCBNL has the lowest loans and advances in the total asset structure. The credit deposit ratio also shows almost the same result. This indicates the attitude of the management of SCBNL which is risk adverse. There is higher proportion of non-performing loan (asset) in the total loans and advances of RBB, which comes around 22.25% on average, which is very much higher than the acceptable standard of minimum 10%. This forces the bank to increase the loan loss provision. But the positive sign is that non-performing loan of RBB is in the decreasing trend. The non-performing loan in total loans and advances of NABIL, NIBL and SCBNL are 0.84%, 1.37% and 1.21% respectively which is quite less than the acceptable standard of 10%. This is the result of proper and effective management of NPL by these banks. The ratio of provision held to NPL of NABIL is the highest followed by SCBNL, NIBL, NBL and then RBB.

Although, NBL, NABIL and NIBL have used the higher portion of their investment in the most income-generating asset i.e. loans and advances, the banks are unsuccessful in generating anticipated returns as per investment. Most of the loans of these banks have become non-performing and hence it is not generating any income, instead demanded high provision for probable loss. On the other hand, NABIL and RBB have higher rate of return on investment due to proper lending and monitoring function with low cost of fund, high fee based income etc.

The correlation between loans and advances and deposit shows the positive relationship in all the sampled banks. It means that when the deposit amount increases the loan and advances also increases. There is negative correlation between LLP and loans and advances in NBL, RBB and SCBNL but shows the positive correlation in case of NABIL and NIBL. The correlation coefficients are negative as the loans and advances are increasing but LLP is decreasing. The positive correlation in NABIL and NIBL is due to decrement of non-performing loan of NBL. Amount to be provisioned depends upon the non-performing loan and its quality. Higher LLP provision has to be made for higher NPL.

The correlation between NPA and net profit shows the positive correlation in all the sampled banks except NBL.

The trend analysis of loans and advances shows increasing trend in all the five sampled banks. The trend analysis of non-performing assets shows decreasing trend in all the five sampled banks. The trend analysis of loan loss provision in NBL, RBB and SCBNL shows the decreasing trend in the coming years. This is due to bank's recovery efforts towards reducing NPL through establishment of Recovery cell. But NABIL and NIBL have increasing trend of loan loss provision in coming years. The trend analysis of net profit exhibits that all the sampled banks except NBL have increasing trend of profit in coming year.

As per the NRB directives regarding loan classification and provisioning, loans and advances have to be categorized into four types namely pass, substandard, doubtful and loss with respective provisioning of 1%, 25%, 50% and 100%. The loan falling under pass category is regarded as performing loan and that which falls under remaining three categories is regarded as non-performing loan. It was found that none of the sampled banks maintained the provision exactly as per the directives. They have maintained higher than requirement for one type of loan whereas lower for another class of loan category. Though the loan loss provision made by banks were not perfectly as per the directives, this was not highly unsatisfactory and was not the serious matter, only little attention is needed to manage LLP of each loan category. In the same way, effective supervisory role of NRB is essential in this matter. Regular supervision and control over the Nepalese commercial bank by NRB, whether they are implementing NRB's directive perfectly or not, is very important.

The NPA has inverse relation with profitability and performance of the banks. Today's banking industry is severely affected by the setback of NPA. In Nepal, the increase in NPA is especially due to the willful defaulters. Ironically big house and big companies are the major source of NPA of commercial banks. They take loan misusing their reputation, connection to political parties and make unhealthy influence. The political instability and the political pressure for sanction of loan are also major causes. Lack of proper law and the lack of willingness in the Government has been the main barrier in taking action against defaulters. Government unwillingness to punish defaulters also plays vital role in increase

of NPA in Nepal and the political interference is making the acting government bodies helpless, which is one of the major causes of this problem.

It should, however, be kept in mind that NPAs are an integral part of the business financial sector and the players are in as they are in the business of taking risk and their earnings reflect the risk they take. They operate in an environment, where there would be defaults as well as deterioration in portfolio value, as market movements can never be predicted with certainty. It is in this context, that countries have adopted regulatory measures and the guiding structure has been provided by the Basel guidelines.

## **5.2 Conclusion**

A healthy financial system is the one that effectively fosters resource mobilization for capital accumulation and determines efficient allocation of resources. A strong and sound financial system can provide economic growth, mobilize and allocate resources efficiently, make capital more productive and create jobs. It lessens vulnerability to financial crisis and defrays the social and economic costs that accompany financial disruption. Since the financial system performs the crucial task of raising funds for, and channeling funds to productive investments, successful financial liberalization is normally a significant constituent of a country's strategy for economic growth. In Nepal, the pace of financial liberalization started in the mid 1980s when the government allowed the entry of commercial banks in joint venture with foreign banks. Since then, the Nepalese financial system has undergone rapid structural changes, with a large number of financial institutions rendering an array of financial products and services. While the increased competition has been instrumental in enhancing efficiency in the financial sector, new challenges have also emerged. A case in point is the outreach by the financial service providers to poor and low income households which remains limited.

Along with the increasing number of financial institutions, Nepalese banking industry is faced with variety of serious problems and challenges, the prominent being the



management of large volume of non-performing assets and the development of corporate values and ethics among the stakeholders in the banking industry. Increasing non-performing asset (NPA) is the serious problem of the banking sector in Nepal. Non-performing assets hinder the income flow of the bank while claiming additional resources in the form of provisioning and obstruct further gainful investments by decreasing the loan-able fund. It also hampers the good will and reputation of the organization.

Internal factors that contribute NPA growth or turning good loan into bad loan are bad intention of borrowers, weak monitoring system, poor risk management system, poor internal control system and lack of proper financial analysis of the borrower by the banks. Similarly, weak legal provision and credit concentration are found as the least preferred factor in turning good loan into bad. Some factors such as lack of portfolio analysis, not having effective credit policy and shortfall on security were identified as having average effect on NPA growth.

In connection to the external factors, economic and industrial recession is the cause of NPA growth. Lacking on monitoring and supervision from NRB, excessive political interference and absence of strong legal provision for loan recovery has been identified as major factors for increasing NPAs. Likewise, least emphasis is given to high and conservative provisioning requirement as a reason for the increment of NPA.

The NPA has many unpredictable effects, not only to the lending bank but also to the whole society and economy of the nation. The NPA germinate from the time of analysis period during the lending process. Hence to decrease level of Non Performing Assets, the banks should be aware from the time of lending and the project should be analyzed carefully for its validity. The lending team should be given necessary training, full authority and should also be made responsible. Their morale should be raised. They should not be enforced or make them to sanction loan in pressure. The bank should also visit the customer regularly, analyze their performance, their status should be revised in periodic basis and should also give financial guidance if necessary.

It has been found that NBL and RBB, two public sector banks have very high portion of non-performing asset or loan resulting to higher provision. Hence, even the banks have the highest investment in the most income generating asset i.e. loans and advances, its return is

comparatively lower. Among the five banks SCBNL has the least NPL and LLP and also the ratio of net profit to loans and advances is highest among the five banks. From the above indicators it can be said that SCBNL is the best among the five banks in terms of NPL, LLP and net profit.

It has been found that the effective credit management and efforts of recovering bad debts through establishment of recovery cell; all the five sampled banks have been successful to decrease in the level of NPL during the study period resulting in less provisioning. All the sampled banks are successful to increase loan and advances and total deposit. The net profit of NABIL and SCBNL is increasing each year. The result is due to the recovery of the bad debt, reduction in operating cost and better management.

The problematic issue of NPA cannot be avoided rather should be handled in a wise way. Default culture is not a new dimension in the arena of investment. Rather in the present economic structure, it is an established culture. A high level of NPAs in the banking system can severely affect the economy in many ways. Management and financial resources of the banking system are diverted to resolution of NPA causing an opportunity loss for productive use of resources. Large scale NPAs, when left unattended, cause continued economic and financial degradation. This results in a credit crunch and generally signals adverse investment climate.

The quality of loan has a direct bearing on the bank's financial health. The banks are required to develop reserves and provision in accordance to the quality of loans. A rapidly deteriorating loan portfolio is a huge drain on the bank's profitability and subsequently on the capital adequacy. Continual review and classification of loans enables banks to monitor quality of their loan portfolios and to take remedial action to counter deterioration in credit quality. In addition to this establishing recovery cell, hiring Asset Management Company are also measures to resolve the problem of NPA. At the same time, NRB has to be very watchful towards the activities and performance of the banking industry so as to take corrective measures if necessary in creating and maintaining a stable and a sound banking industry for a sound economy of the country.

To conclude, the issue of Non-Performing Assets (NPAs) in the financial sector has been an area of concern for all economies and reduction in NPAs has become synonymous with

functional efficiency of financial intermediaries. Although NPAs are a balance sheet issue of individual banks and financial institutions, it has wider macroeconomic implications. It is important that, if resolution strategies for recovery of dues from NPAs are not put in place quickly and efficiently, these assets would deteriorate in value over time and only scrap value would be realized at the end. Commercial banks of Nepal have made significant contribution to the economy. They however need to multiply their contribution for overall economic development of the country. As the country offers multitude of opportunities amidst various adversities, the banks have to plan their operation meticulously to tap the opportunities. Commercial banks of Nepal are found conscious regarding the non-performing assets. Though it is in the decreasing trend, still RBB has the NPA level higher than the standard level. The NPA of other four banks also has the decreasing trend and NPA is within the international level. They have been giving full effort to decrease and minimize the level of NPA which have been accumulated for years. They have gained significant achievement in this regard as well. The commercial banks should give full attention towards supervising their lending and recovering their bad loans perfectly. There should be special effort also from the side of government and private sector to minimize the NPA and to recover the bad loans which will lead towards the stable and sound health of the banking industry. There are various reasons for assets turning non-performing and there can be alternative resolution strategies. Identification of the reasons and timely action are the key to improved profitability of financial sector intermediaries.

### **5.3 Recommendations**

Though NPAs are an integral part of the business financial sector, a high level of NPAs in the banking system can severely affect the economy in many ways. NPA epitomizes bad investment. The negative effects of NPAs are not only limited to the banks and banking sector, but also to the whole society and economy of the nation. Following are some recommendation to minimize the level of NPA in Nepalese commercial banks:

- Corporate structure of the bank plays key role in the effective management of loan. Loan being a risky asset, efforts should be made to have proper control in every steps

of loan management. The banks should establish separate department for credit appraisal, documentation, disbursement, inspection and recovery of loan. The main factors which leads to increase in NPA are improper credit appraisal system, ineffective credit monitoring and supervision system etc. Bad intension, weak monitoring & mismanagement at top level are the major internal reasons turning good loan into bad loan, therefore commercial bank should take corrective action immediately. The accounting policies must be transparent & must follow best auditing practices. Hence, all the banks are recommended to be more cautious and realistic in this direction.

- Lack of proper financial analysis of the borrower's capacity by the banks is one of the major causes behind increasing NPA of Nepalese Commercial Banks. Thus proper financial analysis should be done before lending to the borrowers. Loan should be given if the banker is satisfied that the borrower can repay money from the cash flow generated from operating activities. Banks should take enough collateral so that the bank at least can be able to recover its principle and interest amount in case of being unable to repay by the borrower.
- There should be strong follow-up system in commercial banks for the recovery of due loans. Strict monitoring and control system should be there for timely recovery of their loan. It is required to have general practice of follow-up before the loan term into bad loans. Banks should have the proper attention towards the business position of the borrower while floating loan.
- The high portion of non-performing loan accompanied by higher provision of RBB indicates that the bank's credit portfolio needs serious attention. It is recommended to RBB to make serious action to recovering the bad loan (NPA). And also should make curative action for new loans from turning them into NPL from now. The average ratio of NPA to total loan is above the standard level in case of RBB. Hiring assets management company (AMC) is recommended to RBB to reduce the current non-performing assets. Increase in NPA decreases the profitability and decrease in NPA

increases the profitability of the banks because of loan loss provision. Therefore, all banks should minimize its NPA level so that they can increase their profitability.

- The contribution of SCBNL towards loans and advances is relatively low. Entire economy is largely dependent upon the proper execution of lending function by commercial banks. Low level of lending means, low level of investment resulting to low level of productivity, which may ultimately affect negatively on the national economy. Loans and advances on one hand is the highest income-generating asset and on the other hand it also helps to upgrade the economic health of the country. Hence, SCBNL is recommended to increase its investments in productive sector in the form of loans and advances.
- In commercial banks, there should be approach of portfolio management. Lending towards the single sector of economy may create higher level of risk, thus it is recommended that the credit should be floated to the different sectors of economy. If there is recession to the any specify sectors, other remaining sectors of economy may function well and there may not be severe impacts on the whole lending part of the commercial banks.
- It is recommended for the banks to initiate training and development programme for the employees to make them efficient and professional in credit appraisal, monitoring and proper risk management. The bank should use the state- of- art computerized information system to maintain the information of credit and creditors for effective management of the bank.
- All the banks are recommended to have sound information system to gather all the possible information about its borrowers so that necessary precautions can be taken in time. Because this is an age of information so banks should be updated with various business related information.
- Government has to formulate strong legal system to support the loan recovery process of commercial banks. Willful defaulters should be punished under legal framework and government should help the commercial banks for the recovery of due loans. An

explicit provision in the act is a must as to charging of various expenses incurred in course of auction of the property to the borrowers' account. The Tribunal constituted under the Bank and Financial Institution's Loan Recovery Act, 2058 should pay special attention while translating the provision of the act into practice.

- Political influences in the loan disbursement should be avoided as it may lead to worse condition to the bank as it may increase the non performing loan of the bank. Also, there should come, the commitment from the side of the political parties not to protect the defaulters.
- Efforts should be made in the direction of establishment of Asset Management Company (AMC) and Asset Reconstruction Company (ARC). Focused institutions such as AMC and ARC could be helpful to manage the high risk assets of the banks and financial institutes and reduce the level of NPL. Nepal does not have such type of institution; therefore, such type of institution should be established as soon as possible.
- Additional legislative support is required to deal with banking problems. Debt Recovery Tribunal (DRT) and Affiliate Court have been established as per Debt Recovery Act 2002. But the acute problem of high risk associated with banking business is demanding some other kind of institutions to support them. Effective and Efficient notary public office could solve the problems associated with negotiable instruments and bills. Similarly financial legislation should be strengthened by promulgating bankruptcy law, banking fraud control law, AMC law, Asset Securitization law and Trustee law etc.
- NRB is the supervisory body responsible to maintain sound, stable and competitive financial system. Therefore, the capacity, professionalism and skill of the staffs of these institutions should be enhanced to cope up with the development in the financial system. In order to smooth operation of banking industry, only imposing policy would not be sufficient, implementing them is necessary. NRB should play supportive and informative role. NRB is recommended to strengthen Credit Information Bureau (CIB) so that banks can get required credit information about the borrowers on time. In addition, NRB should establish a NPA management cell which may deal with NPA of all commercial banks.

- Following the directives of NRB and acting upon it also reduce many of the credit risk. Besides there are penalty implication on non-compliance of the directives. Hence all the three banks are recommended to stick to the directives and they are also suggested to come up with a stronger internal audit department to ensure that the directives are properly implemented.
  
- Efforts should be made towards enhancing better relationship between the bank and the borrower. This is a crucial issue that is not being developed, as it should be in the economy. Sometimes, banks are fully against the defaulters of all types and do not hear their problems. Some borrowers only blame the bank instead of showing their genuine constraints and convincing the banks. The bank and borrowers have the equal role in the financial system. Without borrowers the bank cannot survive and without bank the borrowers cannot expand their activities. A good co-ordination and healthy environment should be created by both the parties.

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## APPENDIX - 1

### Calculation of Mean, S.D & C.V. of Loans and advances to Total Asset Ratio of NBL Bank

(Sample Calculation)

Year (Mid July)	Ratio (X)%	(X- $\bar{X}$ )	(X- $\bar{X}$ ) <sup>2</sup>
2006	27.96	-9.83	96.65
2007	32.29	-5.51	30.32
2008	35.92	-1.88	3.53
2009	38.77	0.98	0.96
2010	54.03	16.24	263.59
N=5	X=188.98		(X- $\bar{X}$ ) <sup>2</sup> =395.05

We have,

$$\text{Mean } (\bar{X}) = \frac{\sum X}{N} = \frac{188.98}{5} = 37.80\%$$

$$\text{Standard Deviation } (\sigma) = \sqrt{\frac{\sum(X-\bar{X})^2}{N}} = 8.89\%$$

$$\text{Coefficient Variation (C.V)} = \frac{\sigma}{\bar{X}} \times 100 = 23.52\%$$

Similarly, the Mean, S.D and C.V. of other ratios of five sampled banks have been calculated.

## APPENDIX - 2

### Calculation of Correlation Coefficient between Total loan and advances and NPAs of RBB (Sample Calculation)

Year	Loan & Advances (x <sub>1</sub> )	NPA (x <sub>2</sub> )	X <sub>1</sub>	X <sub>2</sub>	X <sub>1</sub> <sup>2</sup>	X <sub>2</sub> <sup>2</sup>	X <sub>1</sub> X <sub>2</sub>
2006	23101	8046	23.101	8.046	533.656	64.738	185.871
2007	24871	6877	24.871	6.877	618.567	47.293	171.038
2008	27495	5952	27.495	5.952	755.975	35.426	163.650
2009	31607	4956	31.607	4.956	999.002	24.562	156.644
2010	35693	4085	35.693	4.085	1273.990	16.687	145.806
			X <sub>1</sub> =	X <sub>2</sub> =	X <sub>1</sub> <sup>2</sup> =	X <sub>2</sub> <sup>2</sup> =	X <sub>1</sub> X <sub>2</sub> =
n=5			142.767	29.916	4181.191	188.707	823.009

Now, Coefficient of Correlation,

$$r = \frac{n \sum X_1 X_2 - \sum X_1 \cdot \sum X_2}{\sqrt{n \sum X_1^2 - (\sum X_1)^2} \sqrt{n \sum X_2^2 - (\sum X_2)^2}} = -0.9782$$

Now, Probable Error,

$$P.E. = 0.6745 \times \frac{1 - r^2}{\sqrt{n}} = 0.0130$$

$$6 \times P.E. = 0.0780$$

Similarly, the Coefficient of Correlation and Probable Error for other variables of the five sampled banks have been calculated.

## APPENDIX - 3

### Calculation of Trend Values of Loans and Advances of NIBL

#### (Sample Calculation)

(Rs. In Million)

Year (Mid July) (t)	Loans & Advances(Y)	Deviation From Mid July X= t-2008	X×Y	X <sup>2</sup>	Y <sub>c</sub> = a+bX Y <sub>c</sub> =27249+ 7461×X
2006	13172	-2	-26344	4	12327.00
2007	17769	-1	-17769	1	19788.00
2008	27529	0	0	0	27249.00
2009	36827	1	36827	1	34710.00
2010	40948	2	81896	4	42171.00
N=5	Y=136245	X=0	XY=74610	X <sup>2</sup> =10	

Here,

When X=0, from the two normal equations,

$$a = \frac{\sum Y}{N} = 27249$$

$$b = \frac{\sum XY}{X^2} = 7461$$

Thus,

Average Loans & Advances (a) = Rs. 27249

Rate of change of loans and advances (b) =Rs. 7461

Hence the equation of straight line trend is

$$Y_c = a + bX$$

$$Y_c = 27249 + 7461 \times X$$

Expected trend values of Loans and Advances (2011-2015)

<b>Years (Mid July) (t)</b>	<b>Deviation From Mid July X = t - 2008</b>	<b><math>Y_c = a + b \times X</math> <math>Y_c = 27249 + 7461 \times X</math></b>
2011	3	49632
2012	4	57093
2013	5	64554
2014	6	72015
2015	7	79476

Similarly, the Trend Values of different Variables of the five sampled banks have been calculated.



## **APPENDIX - 4**

### **Questionnaire**

Dear Respondent,

The undersigned enclosed herewith the questionnaire prepared for facilitating the research titled “Analysis of Non-Performing Assets of Commercial Banks” to be conducted for the partial fulfillment of the requirement for the MBS degree. You are cordially requested to go through the questionnaire, kindly put your views and hand over to the undersigned duly after completion.

The views collected from you will only be used for the purpose of this study. The views will be kept confidential and will not be publishing anywhere. Your valuable cooperation will be contributing a lot for the complete success of the study.

I hope you will consider my request and act accordingly. Your cooperation in this matter will be highly appreciated.

Thanking you.

Yours Sincerely,

Prakash Pradhan

Saraswati Multiple Campus

Roll No. : 27/2064

## Questionnaire (Opinion Survey)

Date:

Name : \_\_\_\_\_

Institution : \_\_\_\_\_

Designation : \_\_\_\_\_

Address : \_\_\_\_\_

Here are questions supplied with the multiple answers, please tick mark the option/s you think is/are the best. Also, rank in order of the importance and give your opinion as said in the question where necessary.

Q. N. 1. How important do you think is the directives related to loan classification and provisioning for a commercial bank?

- Very Important
- Less Important
- Not Important

Q. N. 2. What do you think, the present directives related to loan classification & provisioning is appropriate and better than the previous one or not?

- Much Better
- Little bit Better
- Less Better

Q. N. 3. What will be the impact of new directives on provision for loan loss of commercial banks?

- Will increase provision for loan loss.
- Will decrease provision for loan loss.
- Will have no impact.
- Others \_\_\_\_\_

Q. N. 4. What will be impact of loan loss provision on the credit exposure of bank?

- Will increase credit exposure.
- Will decrease credit exposure.

- Will have no Impact.
- Others\_\_\_\_\_

Q. N. 5. How do you think the shareholders of the bank are going to be affected by the present loan classification and provisioning directive?

- Will enjoy lesser dividend.
- Will have their EPS decreased.
- Will not be affected at all.
- Others\_\_\_\_\_

Q. N. 6. How do you think the following aspects of bank will be affected because of the changes brought in loan classification and provisioning directives?

Liquidity

- Increase.
- Decrease.
- No effect

Profitability

- Increase.
- Decrease.
- No effect

Operational Procedure

- Increase.
- Decrease.
- No effect

Q. N. 7. How do you think, will the banks cope with the problem brought about by this amendment of loan classification and provisioning directives? Specifically what are the alternatives your management is pondering to cope with the problem thus created?

- Will control the credit disbursement by being more stringent.
- Will strengthen the monitoring and follow-up procedures.
- Will negotiate with Nepal Rastra Bank on the directives.
- Others\_\_\_\_\_

Q. N. 8. To what extent, today's banking industry is effected by the problem of NPA?

- Not affected.
- Nominally affected.
- Moderately affected.
- Severely affected.

Q. N. 9. Which measure is the best option to resolve the problem of NPA?

- Setting up recovery cell.
- Hiring Asset Management Company (AMC)
- Others \_\_\_\_\_

Q. N. 10. What are the major factors, which lead to increasing NPA? (Please Rate)

Internal Factors:

- Weak management ( )
- Bad intention of the borrower ( )
- Ineffective credit monitoring and supervision system ( )
- Improper portfolio management
- Weak legal provision ( )
- Improper Credit appraisal system ( )

External Factors:

- Economic and industrial slowdown/recession ( )
- Ineffective and inconsistent government policy ( )
- Political and bureaucratic unfair pressure ( )
- Weak law enforcement system of the government ( )
- Lack of strong and timely monitoring system of the government ( )
- Inappropriate loan loss provisioning requirement ( )

Q. N. 11. The external factors that may cause for NPA growth are given below. Please give your view with tick mark on any one of following according to their significance in your organization.

Range	Strongly Agreed (1)	Agreed (2)	Neutral (3)	Disagreed (4)	Strongly Disagreed (5)
a. Economic and industrial recession is the cause of increasing NPA					
b. Inconsistency in government policy is one of the cause for NPA increment					
c. High and conservative provisioning requirement has caused for increment on NPA level					
d. Lacking of monitoring and supervision from NRB has played significant role on NPA increment					
e. In absence of strong legal provision for loan recovery, there is some lacking which ultimately leads to high NPA					
f. Due to political, bureaucratic and external pressure, loan is being floated without being choosy and this has caused NPA to increase.					

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