

CHAPTER ONE

INTRODUCTION

1.1 Introduction/ Background of the Study

Commercial Banks are an integral part of the national financial system that functions on a continuous basis in the open social system. The basic objective of any financial institution is to move scarce resources from those who deposit their idle cash to those who borrow to buy goods and services and to make investments in new equipments and facilities so that the national economy can grow and increase the standard of living enjoyed by its citizens. The proper mobilization and utilization of domestic resources has become indispensable for any developing country aspiring for sustainable economic development. Similarly, integrated and speedy development of the country is possible only when competitive banking and financial service reaches to the nook and corners of the country. Commercial banks have, in the recent years has become a dominant factor in the overall economic development of the country. The main role of these banks lies in the function of banks as the mediator in the deposit and lending of funds to those who are in need of it from those who have disposable amount of funds.

Modern commercial banks are identified with different names such as Business Banks, Retail Banks, Clearing Banks, Joint Venture Banks, Merchant Banks, and Development Banks etc. No matter what name we give to banks, they all perform the same basic function: i.e. They provide a link between lenders, those who have surplus money and do not wish to spend immediately, with borrowers, and those who do not have surplus money but wish to borrow for investment in predicative purposes. Basically, by charging a rate of interest to borrowers slightly higher than pay to lenders, the Bank makes their profit. This is known as financial intermediation.

The financial institutions, on the basis of service they offer have been categorized into three broad groups namely;

- Depository Institution
- Contractual Institution and
- Investment Institutions.

Among the three broad groups, the depository institutions seem to have prominently dominated the national financial system measured by the total assets they hold. These institutions include saving and loan association, credit union, finance companies and commercial banks. Among these different depository institutions, the commercial banks turn out to be the most dominant one in the economy of Nepal as they hold about 82% of total deposits and disburse around 72% of total loans and advances out of the total depository institutions.

Thus, the most dominant financial institution in the economy of Nepal is none other than commercial banks. This institution offers the public both deposits and credit services. In addition, it also provides the customers with newer and more innovative products and services such as investment advice, securities underwriting and many more.

Commercial banks are those financial institutions that deal in accepting deposits from the general public and institutions and providing loan against some secured securities. They provide working capital needs of trade industry and even to agricultural sectors.

Commercial banks furnish credit to finance consumption and investment spending. Credit consists of lending of funds in return for a promise of future

payment. Basically, the principal business of a commercial bank is to make loans to qualified borrowers or at least to assist them to find credit from other sources. Loans are among the highest yielding assets that a bank can add to its portfolio and they often provide the largest portion of traditional banks' operating revenue. Therefore, the most challenging areas for the management of a commercial bank arise in making new loans and managing those loans already on the books. Further, the banks' major risk is also concentrated in the loan portfolio of the banks.

Advances by the commercial banks are made in different forms such as loans, cash credits, overdrafts, bills purchases, bills discounted, etc. Thus, credits by commercial banks can be classified on different basis. On the basis of security, the loan can be classified into secured loans and unsecured (clean) loans. Similarly, on the basis of time frame, loan can be classified into short-term, medium-term and long- term loan.

➤ Term Loan is money lent to the borrower in a lump sum. Generally, subsequent debit in the loan account is not allowed except by way of interest, incidental expenses, insurance premium, expenses incurred for the protection of security. These loans are generally granted for long periods to finance fixed assets and are repayable in installments over the period of loan.

➤ Project Loan is granted to customers on the basis of the viability of the project. The financial institution asks the borrower to invest certain proportion of project from their equity and the rest will be financed as project loan. The debt equity ratio in the project loan should be maintained at 60:40. The project loan includes the term loan for set-up of the project or overdraft loan for working capital requirement.

- Working Capital is the difference between current assets and current liabilities. This type of loan is granted to the customer to meet the working capital gap.

- Priority/ Deprived Sector Loan is granted to agricultural sector, priority sectors and other small industries as per the guidelines provided by Nepal Rastra Bank. Out of the total credit facility of commercial banks, 12% must be extended towards priority sector loan including deprived sector. Loan granted to agricultural sector and service sector up to Rs. 2 million and cottage industry sector up to Rs 2.5 million falls in the priority sector.

- The commercial banks also provide various other types of loan to meet the specific demand of the borrower. The types of facilities are tailored according to the need and demand of the customers.

Among various types of loan, consumer loan which are specifically designed focusing the large group of consumers is one of the most popular facilities that includes Home Loan, Vehicle Loan, Education Loan, Hire Purchase Loan, etc. which is focused on the retail consumers and the fixed income earning group of the community.

Similarly, other loans include Loan against Fixed Deposit Receipt, Cash Credit, Bills Purchasing and Discounting, Bridge Loan, Trust Receipt Loan, Advance on Credit, Packing Credit, Consortium Loan, and the like.

Nowadays, banks have also been observed providing the credit in consumption spending through a number of electronic cards such as credit cards, debit cards and smart cards. Out of these three electronic cards, credit card seems to be the most popular form of installment credit available to the customers. Through the encoded piece of plastic, the consumer has instant

access to credit for any purchase up to a pre-specified limit. In financial language, the credit card has removed the liquidity constraint that restricted the spending power of thousands of customers, democratizing access to credit and spending power.

In the present situation, almost all the commercial banks operating in the country have a written loan policy to individual loan decisions and shape their loan portfolio. A good written loan policy will contain a statement of the institution's goals, spell out who has authority to make loans, describe what procedure is to be followed in soliciting and evaluating each loan request and specify what documents accompany a loan application before it is approved. A written policy might let the public to have services in equitable manner.

Commercial banks generally look into a number of facts and figures about the prospective borrowers before reaching at a decision to grant a loan. Banks analyze all those relevant aspects regarding the credit status of the borrower through a number of formal and informal ways. Such analysis may include information like past records of the borrower, transactions with other banks (if the borrower has availed any credit facility from other banks), cash flow or income from the business (measured against debt and expenditures), collateral security (the accessibility, marketability and ownership) and the present prospect of the industry in the economy as a whole. In addition, the banks also prepare a maturity and repayment schedule that should protect the lender and meet the borrowers' financial needs.

Along with these above mentioned newer and innovative credit services offered by the commercial banks, there is a growing concern today that business loans, particularly of recreational variety, have become more risky

for banks due to high default rates. Being more specific, it is told that the nation's largest industries are owned by a handful of entrepreneurs, and it is also obscure that some of these industries are not functioning well. In such a situation, there should be a proper co-ordination and communication between commercial banks and the industries. Moreover, the diversification of granted funds into other sectors has also posed as a major challenge to the commercial banks in granting loans.

A commercial bank must mobilize its deposits and other funds to profitable, secured, stable and marketable sectors, so that it can earn handsome profit as well as it should be secured and can be converted into cash whenever needed. Investment policy provides the bank several inputs through which they can handle their investment operation efficiently ensuring that maximum returns with minimum risk which ultimately leads the bank to the path of success, reducing their proportion of non-performing loans. Thus, investment is one of the most important functions of commercial banks. It is the long-term commitment of the bank in this uncertain and risky environment. The lending of funds in the market is posed to be a very challenging job, which requires a cautious move ahead in investing the funds in various sectors.

The proper monitoring of loaned funds will certainly help minimize the Non-Performing Assets of commercial banks. One of the main reasons for bad loans is the diversification of borrowed funds from one sector to the other unproductive and speculative sector. The regular monitoring of the borrower and the business is one of the major steps in controlling the loans to go bad. This monitoring enables the bank to evaluate the utilization of funds lent as well as the operation of the business. Further, it also prevents the banks from any unexpected loss. The recent event in Itahari (eastern part of Nepal)

shows the negligence from the part of the banks in proper analysis of the borrower and the assets hypothecated. One of the big business units in the area hypothecated the same machinery to obtain loan in two different banks, and later flew away without paying millions of rupees of bank loan. Now, the question arises which bank should claim its hypothecation over the machine. Hence, regular monitoring is a key to ultimate success of the bank.

On the one hand, the banks should control the diversification of loaned funds but on the other hand, the banks should diversify its investments in various productive sectors of the economy. This is called the loan portfolio of commercial banks. The diversification in the investments is a key to the success of any commercial bank.

Our analysis of portfolio management is the process of selecting a combination of investment alternatives that provides the investor a maximum attainable return for a given level of risk or maximum level of risk for a given level of return. Portfolio management can also be taken as the management of risk and return. It aims to determine an approximate mix of investments that attains optimum level of risk and return depending upon the attitude of the investor.

Investment portfolio is the main backbone of the profits of commercial banks. The banks must make wise decisions in making investment of its funds. It should not invest in securities that requires high amount of depreciation or fluctuations because a little difference could affect dramatically to the profitability of the bank. Moreover, the banks should not invest in speculative business, whose earning prospects depend on speculation. The bank should accept that type of securities, which are

commercial, durable, marketable and transferable in order to secure the amount of depositors.

The definition of various economists on the portfolio is highlighted below:

According to Weston & Brigham, ‘A portfolio simply represents the practices among the investors of having their funds in more than one asset. The combination of investment assets is called a portfolio.’

Similarly, according to Lawrence J. Gitman, ‘Portfolio means a collection or a group of assets.’

According to Raymond Brockington, ‘the term Portfolio means collection of investments. For an investor, portfolio represents the shareholding of different companies acquired through the stock exchange. For a property investor, his portfolio will be a collection of buildings. To a financial manager within an industrial company, his portfolio will be a collection of real capital projects. It is apparent that the actual nature of the components of a portfolio depends on the population of opportunities from which the selection has been made.’

1.1.1 Overview of the Present Economy

The overall global economy has shown increasing trend provided favorable world financial market, significant increase in investment in major industrial economies and Asian economies, the other favorable situation will lead to 4.9 percent growth in the world economy.

Similarly, South Asian nations has shown growth rate of 7.9 percent in 2007 and is estimated to be 7.1 percent in 2008 out of which the economic growth rate of Nepal is 2.7 percent in 2007 and is estimated to be 3.0 percent in 2008. The growth rate of Nepal in this context can be calculated to be in declining trend with respect to the last year, which was 3.8 percent in 2006 and 3.3 in 2005.

The FY 2006/07 was not satisfactory from the standpoint of national economic performance. The drought and untimely rainfall led to unsatisfactory performance in the agricultural sector. In the same way, the non-agricultural sector of the economy was also affected by the poor security situation that led to frequent blockade of the highway posing difficulties in operation of industries and trading activities.

Gross Domestic Product at producers' prices increased by 2.7 percent in the FY 2006/07 and it is expected to grow by only 1.9 percent in FY 2007/08.

The major contributor to GDP is the agricultural sector which has shown declining trend in its growth rate in the recent years. It grew by 3.9 percent in 2005/06 and slipped to 3.0 percent growth rate in the FY 2006/07. It is expected to grow by only 1.7 percent in the FY 2007/08.

The other sector occupying a significant share in GDP is non-agricultural sector and its performance is also deteriorating. It grew by 3.4 percent in the FY 2005/06 and declined to 2.1 percent in FY 2006/07. In the current fiscal year 2007/08, it is expected to improve marginally to register a growth rate of 2.8 percent.

There has been a marked growth in the production of sub-sectors of Electricity, Gas and Water, which grew by 4.8 percent in 2006/07 and is expected to grow by 5.6 percent in FY 2007/08. Similarly, the construction sector that had shown negative growth rate of 0.1 percent in the last fiscal year is set to grow by 4.2 percent because of the increase in the domestic production and import of construction materials.

The contribution to agriculture and non-agriculture sector to total GDP was 39.0 and 61.0 percent respectively for the FY 2006/07. For FY 2007/08, such contributing shares are expected to be 38.8 and 61.2 percent respectively for agricultural and non-agricultural sectors.

In FY 2006/07, the per capita income was Rs 21,091 (USD 297). It is expected to grow 6.9 percent and reach Rs 22,540 (USD 311) in FY 2007/08. In USD terms, per capita income increased by 4.7 percent only. Lower growth rate in per capita income in USD terms is mainly due to the devaluation of Nepalese currency.

1.1.2 Investment Pattern of Nepalese Commercial Banks

The concept of financial institutions in Nepal dated back more than sixty years. In 1994 BS, first commercial bank, Nepal Bank limited was established under the 'Banking Act 1993'. The government provided 51% equity of the bank and the promoters shared the rest. Nepal Rastra Bank, the central bank emerged in 2013 B.S under 'Rastra Bank Act-2012'. Since then, it has been providing policies and guidance to the financial sectors in one hand and is monitoring and controlling them in the other. Realizing the need of adequate banking services for the integrated and speedy development of

industrial sector, Rastriya Banijya Bank came into existence in 2022 BS with 100% government equity.

After the establishment of Agricultural Development Bank in 2024 B.S, growth of banking institutions remained almost stagnant till 2040 B.S. No new banks opened in this period though some branches of previously established bank were extended. Liberalization policy of government formulated in 2038 BS allowed private sectors to open joint venture banks in foreign collaboration. Nepal Arab Bank limited (now it is known as Nabil bank limited) became the first commercial bank to register under new arrangement. The bank started its operation since 2041 B.S. It is an associate of Dubai Bank Limited, UAE and Nepalese promoters. Nepal Indosuez Bank Limited (now is also known as Nepal Investment Bank) and Nepal Grindlays Bank Limited (now it is known as Standard Chartered Bank Limited) was other joint venture Banks established afterwards.

After restoration of multiparty democracy in the country, the government formulated new policies along with the amendment of existing policies so as to accelerate the process of economic liberalization and globalization. As a consequence, other many JVBs came in existence. NMB Bank Ltd has been the youngest one till now. Relating to the commercial banks, they have been altogether twenty-five in number. These banks attempted to introduce foreign management skills, technical know-how and foreign capital. This situation created an environment of healthy competition among the existing financial institutions.

1.1.2.1 Financial System at a Glance

The Nepalese financial system comprises of commercial banks, Development banks, finance companies, co-operatives societies, non-government organizations (permitted to perform limited banking activities), insurance companies, Nepal stock exchange, citizen investment trust, employee's provident fund and postal saving service. However, information in this thesis is necessary about the effort that the commercial banks are contributing to up boost of the Nepalese economy that are under the direct regulation of NRB.

The total capital fund of the whole financial system was Rs. 20,0031.00 million in the mid- July 2005 where as this figure stands to be Rs. 1,474.30 in July 2007. The negative figure for July 2006 is because of Rastriya Banijya Bank's total negative retain earnings, which was not include in previous figures. Out of the total capital fund, commercial banks' share stand at 692.00% (negative) of the total capital fund, followed by development banks 327.40% (positive).

A rising trend in deposit of financial system has been observed during the period mid- July 2005 to mid- July 2006. Total deposits have increased by 13.21% and reached Rs. 2, 85,009.50 million and mid July 2006 from Rs. 2, 51,742.30 million mid July 2005. Out of the total deposits, market shares of commercial banks, development banks, finance companies and co-operatives are 82%, 6.80% and 0.60% respectively.

The liquid fund of the system have increased by 21.70% and reached Rs. 55,761.40% million in mid July 2006 as compared to 45,817.00 million in mid July 2005. Out of the total liquid funds in mid July 2006, commercial banks have the highest share of 83.00% followed by development banks (8.30%), finance companies (8.00%) and co-operatives (0.70%).

Investments of the financial system have shown a rising trend. Total investment was recorded at Rs. 51,457.90 million in mid July 2005, which is increased by 8.60% and reached Rs. 55,903.20 million in mid July 2006. Commercial banks have the highest stake (88.80%) followed by development banks (6.30%) and finance companies (4.50%). Co-operatives societies have a very small investment portfolio.

A rising trend in loans and advances of financial system has been observed during the period mid- July 2005 to mid – July 2006. Total loans and advances of the system is Rs. 1, 73,913.80 million and in mid-July 2005, which increased by 11.30% and have reached Rs. 1, 93,610.30 million in mid- July 2006. Out of the total loans and advances, market share of commercial banks, development banks, finance companies are 72.30%, 17.90%, 9.10% and 0.70% respectively.

1.1.2.2 Commercial Banks Activity at a Glance

There are 25 commercial banks in the country as of mid- July 2008. The list of licensed commercial banks can be shown as below with their date of establishment, operation date and Head Office.

Table: 1.1
List of Licensed Commercial Banks

S.N.	Commercial Banks	Established Date (B.S)	Operation Date (B.S)	Head Office
1.	Nepal Bank Ltd	1994/07/30	1994/07/30	Kathmandu
2.	Rastriya Banijaya Bank	2022/10/10	2022/10/10	Kathmandu
3	Nabil Bank Ltd	2041/03/29	2041/03/29	Kathmandu
4	Nepal Investment Bank Ltd	2042/11/16	2042/11/16	Kathmandu
5	Standard Chartered Bank Ltd	2043/10/16	2043/10/16	Kathmandu
6	Himalayan Bank Ltd	2049/10/05	2049/10/05	Kathmandu
7	Nepal SBI Bank Ltd	2050/03/23	2050/03/23	Kathmandu
8	Nepal Bangladesh Bank Ltd	2050/02/23	2050/02/23	Kathmandu
9	Everest Bank Ltd	2051/07/01	2051/07/01	Kathmandu
10	Bank of Kathmandu	2051/11/28	2051/11/28	Kathmandu
11	NCC Bank	2053/06/28	2053/06/28	Siddharthnagar
12	Lumbini Bank Ltd	2055/04/01	2055/04/01	Narayanghat
13	NIC Bank Ltd	2055/04/05	2055/04/05	Biratnagar
14	Machhapuchhre Bank Ltd	2057/06/17	2057/06/17	Pokhara
15	Kumari Bank Ltd	205/08/24	2057/12/21	Kathmandu
16	Laxmi Bank Ltd	2058/06/11	2058/12/21	Birgunj
17	Siddhartha Bank Ltd	2058/06/12	2059/09/09	Kathmandu
18	Agricultural Development Bank	2025/01/01	2040/01/01	Kathmandu
19	Global Bank Ltd	2063/09/18	2063/09/18	Birgunj
20	Citizen Bank International Ltd	2064/01/16	2064/01/16	Kathmandu
21	Prime Commercial Bank Ltd	2064/06/07	2064/06/07	Kathmandu
22	Bank Of Asia Nepal Ltd	2064/06/25	2064/06/25	Kathmandu
23	Sunrise Bank Ltd	2064/06/25	2064/06/25	Kathmandu
24	Development Credit Bank Ltd	2058/02/01	2065/02/12	Kathmandu
25	NMB Bank Ltd	2065/02/20	2065/02/20	Kathmandu

The size of total assets of commercial banks increased continuously over the last few years. The total asset, which was Rs. 209471.5 million in mid-July 2002, expanded to Rs. 339816.7 million in mid-July 2006 and to Rs. 411033.7 million in mid-July 2007. It expanded on an average 14.43 percent per annum during 2002-07 and increased by 20.96 percent in mid-July 2007 compared to that of mid-July 2006. Loans and advances remained major component in total assets of the commercial banks during 2002-07. However, the share of loans and advances in total assets declined in the recent years. The total loans and advances as percent of total assets was 46.0 percent in mid-July 2002. It decreased to 41.2 percent in mid-July 2006 and 39.8 percent in mid-July 2007. Similarly, the share of liquid funds in total assets declined in the period 2002-07. It dropped to 13.6 percent in mid-July 2006 and from 23.0 percent in mid-July 2002. It further declined to 9.3 percent in mid-July 2007. Unlike the loans and advances and liquid funds, the share of investments in total assets increased in the same period. It increased to 14.6 percent in mid-July 2006 from 8.6 percent in mid-July 2002 and remained more or less at constant level in mid-July 2007.

Deposit liabilities held almost two third of total liabilities over the period 2002-07. Deposits reached to Rs. 252409.8 million in mid-July 2007 from Rs. 233811.2 million in mid-July 2006, with an increased of 8 percent. However, deposits as a percent of total liabilities declined in recent years. It has come down 61.4 percent in mid-July 2007 whereas these figures stood at 68.8 percent in mid-July 2006 and 74.0 percent in mid-July 2002. Exhibiting declining trend, total deposits of the banking system grew at a moderate rate of 10.25 percent per annum during 2002-07. It increased by 8.0 percent in mid-July 2007. The growth rate was 14.7 percent in the last year. Saving deposits, with increasing trend, held major share in total deposits. In mid July 2007, saving deposits gripped 51.50 percent on total deposits followed

by current deposits 13.73 percent, fixed deposits 26.67 percent, call deposits 7.01 percent and other deposits 1.10 percent. All components of deposits experienced healthy growth rate during 2002-07. Call deposits grew with the highest average rate of 36.6 percent followed by saving deposits 14.62 percent, current deposits 11.26 percent and fixed deposits 1.6 percent during last 5 years. As compared to the figures of mid-July 2006, current deposits, saving deposits and fixed deposits increased by 2.72 percent, 13.89 percent and 3.36 percent in mid-July 2007. In 2006, these growth rates were 16.86 percent, 17.38 percent, and 2.91 percent respectively. But call deposits decreased in mid-July 2007 by 2.10 percent as compared to the figure of mid-July 2006, whereas it had increased by 50.16 percent in 2007. Other deposits increased by 55.02 percent in 2007 against the growth rate of 1.65 percent that of 2006.

1.1.3 Profile of the Banks under Study

Under this section, an attempt has been made to furnish the general introduction of the bank under study for easy reference of the samples to the research.

a. Everest Bank Ltd.

As a sequel to the policy of His Majesty's Government to open the banking sector for private and foreign participation starting from mid-eighties, Everest Bank Limited (EBL) came into formal operations from 18th Oct. 1994 (1st Kartik 2051 B.S.). India being the major trade partner of Nepal, the promoters of the bank decided to join hands with an Indian Bank and entered into a joint venture agreement in January 1997 with Punjab National Bank (PNB), one of the largest commercial Banks in India having over 4400

branches and more than 200 foreign correspondents around the globe. PNB has a century old tradition of successful Banking and is known for its financial strength and well laid down modern Banking Systems and Procedures. EBL has the advantage of having not only the financial strength of its partner but also their banking expertise. PNB is providing the top management services to EBL under a Technical Services Agreement signed between the two institutions. PNB has greatly helped EBL in laying down sound systems and procedures. Drawing its strength from its joint venture partner, EBL has been steadily growing in its size and operations ever since its inception and today it has established itself as a leading private sector bank of the nation, reckoned as one of the fastest growing commercial bank of the county.

EBL also has recognition of maintaining net NPA at zero position, which is an achievement in itself considering the present scenario of the country.

The shareholding pattern of EBL is Nepalese Promoters-50%, Punjab National Bank-20% and General Public-30%.

b. Himalayan Bank Ltd.

Himalayan Bank Ltd. was incorporated in 1992 by the distinguished business personality of Nepal in partnership with Employee provident Fund and Habib Bank Limited, one of the largest commercial Bank of Pakistan. Banks operation commenced from January 1992. It is the first commercial bank of Nepal with maximum share holding by Nepalese private sector. Its authorized capital is Rs. 1000 million, issued capital is Rs.650 million and paid up capital is Rs.536.25 million (5362500 shares @Rs.100). Promoter's shareholders 51%, Habib Bank 20%, Employee Provident Fund 14%, and

Nepal Public shareholders 15%. Beside commercial activities, the bank also offers industrial and merchant banking.

The bank at present has ten branches in Kathmandu Valley. Besides, it has nine branches outside Kathmandu Valley. The Bank is also operating a counter in the premises of the Royal Palace. The Bank has a very aggressive plan of establishing more branches in different parts of the country in near future.

The bank's business policy seems to extend quality and personalized to its customers. In order to meet the changing customers' needs and requirements, the bank has adopted newer and innovative banking technology. They believe in "customers are the king" and have been contributing to the needs and demands of the customers.

c. Nabil Bank Ltd.

Nabil Bank Ltd. is the first joint venture commercial banks in Nepal, which was established in 1984 under the Company Act 1964. Dubai Bank Ltd. (DBL) was the initial joint venture partner with 50% equity investment. The National Bank Ltd, Bangladesh (NBLB) holds 50% of the entire stocks of Nabil Bank Ltd. Other financial institutions hold 20% of the shares and remaining 30% is issued to the general public.

NBLB is managing the bank in accordance with the technical service agreement signed between NBLB and the bank on June 1995. At present, the bank is operating with 27 branches in the country. The authorized and paid up capital of the bank is Rs 500 million and Rs 491.65 million respectively.

d. Nepal State Bank of India Ltd.

Nepal State Bank of India Ltd. (NSBIL) was established in 1993 under the Companies Act. This bank is performing its operation in Nepal in Joint Venture Arrangement with the State Bank of India and the Nepalese promoters. The ownership structure of NSBIL is- State Bank of India-50.84%, organized institutions-15.25%, Commercial Banks-5.08% and General Public-28.83%.

The bank is operating with 17 branches across the country and 3 extension counters. The authorized capital and paid-up capital of the banks is Rs 1000 million and Rs 424.89 million respectively. The main objective of the bank is to carry out modern banking business in the country under the Commercial Bank Act 1974.

e. Nepal Investment Bank Ltd.

Nepal Investment Bank Ltd. (NIBL) was initially operating as Nepal Indosuez Bank before the shares were sold out by the Indosuez to handover the complete shareholding to the Nepalese Promoters. The bank is operating with a capital fund of Rs 1234.50 million till July 2007. The paid up capital of the bank in the same period was Rs 587.70 million. The bank has proved its significance over the past with satisfactory performance by constantly generating profits as well as maintaining the brand name treasured by the bank since the past. At present ,the bank is operating 20 branches in the country with 8 branches in capital and rest outside capital.

f. Standard Chartered Bank Nepal Ltd.

Standard Chartered Bank Nepal Limited, formerly known as Nepal Grindlays Bank, was established in 1987 A.D. as a second foreign joint venture bank under the company act. It is a joint venture operation registered in Nepal with 50% of the shares held by Standard Chartered Bank, 33% by Nepal Bank Ltd. and 17% by the Nepalese public.

The focus of Standard Chartered group is on projects that assist needy children, particularly in the area of education and environment. The Bank is in a position to service customers through a large domestic network. In addition to which the global network of Standard Chartered Bank, there is an opportunity to provide truly international banking in Nepal. SCBL focuses mainly on corporate and consumer banking, catering to a wide range of customers from individuals, to mid-market local corporate to multinationals and large public sector companies as well as embassies, aid agencies, airlines, hotels, and government corporations.

1.2 Statement of Problem

Various financial institutions have been established to assist the process of economic development of our country. The major problem in almost all underdeveloped countries including Nepal is that capital formation and proper utilization of the resources of existing in the economic system. In the existing scenario, the commercial banks have responsibility to avoid above problems and thereby contribute to the national economy. Various commercial banks have played vital role by accepting deposits and providing various types of loans according to the needs of various types of customers. Despite its regular functions performed by the commercial banks, there exist

a considerable number of problems regarding commercial banks, services they offer, their relationship with the concerned individuals, groups and organizations.

The present status of commercial banks seems to invest their funds in the less risky sectors of the economy, thereby neglecting other sectors of the economy like small business and agriculture. This is mainly due to the lack of sound investment policy of commercial banks and proper portfolio management. The main problem that lies behind this poor loan portfolio is that the activities of commercial banks are dependent upon the instructions and guidelines of Nepal Rastra Bank. The commercial banks do not have their independent investment policy, which may help enhance the profitability of the bank as well as work in the general interest of the economy of the nation.

Nepal is known for its scarcity in capital. It is also believed that Nepal has low rate of income and thereby low rate of savings as a consequence of which there is a low rate of investment. The low rate of investment has constrained the growth rate of GDP of the country. The GDP growth of the country during Ninth Plan is adequately slim from the targeted growth rate of 6%. The economic performance of the country has going from bad to worse. Against the targeted ratio of 17% of gross savings and 25% of gross investment to GDP during the Ninth Plan period, it is estimated that such ratios of gross savings and gross investments would be far below to the tune of 10% and 17% respectively.

The proportion of investment to GDP must be increased to ensure sustained economic growth, but the present rate of high consumption and low savings has exerted a negative impact in this regard. Hence, increasing savings and

investment and reducing the consumption thereby further accelerating the pace of development is the challenge of the country.

Precisely, there exist the following problems with the commercial banks that can be numerically categorized under the following heads:

i. Poorly diversified loan investments:

Diversification in terms of relative rate of return and risk on the banks' loan portfolio is slightly poor. The present trend of the commercial banks is moving towards investment in real estate, especially in the form of home loans; without considering the relevant issues such as the consequence of real estate industry in the future and impact on the loan portfolio of commercial banks.

ii. Low priority to the disadvantaged sectors:

In the context of Nepal, agriculture and small business, that contribute a large portion to the gross GDP is mostly neglected by the commercial banking industry. These sectors are not receiving required financial support as they are expected. The main reason behind neglecting this sector is the low profit potential and the lack of adequate security to the commercial banks.

iii. Lack of proper coordination:

The lack of proper coordination and exchange of information by the government and the joint venture commercial banks has posed to be one of the disadvantages to the commercial banks. This lack of proper coordination

between the government owned banks and the commercial banks has benefited the unfaithful customers by pledging the same collateral security in two different banks for the loan and running away with the loaned funds.

iv. Safety of funds:

The banks are the financial intermediaries whose basic function is the accepting of the deposits of the general public and lend the same funds to the needy persons or firms in the form of loan to earn interest. Thus, the investments and lending pattern of the commercial banks certainly affect the general interest of the lender. But, the various regulations imposed by the central bank from time to time have created a place to doubt for the safety of the funds.

v. Excessive money creation:

Commercial banks are the main source of creation of money in the market. This is because the public readily accept claims against deposits, particularly cheques, and computer entries in payment for goods and services. In addition, the central banks' regulation also requires individual banks to hold only a fraction of the amount of deposits received from the public as cash reserves, thus freeing up a majority of incoming funds for making loans and other investments. The banks can, therefore, invest their money up to their money or deposit multiplier and money created by banks is also instantly available for spending. Therefore, unless careful monitoring is done by the central bank, it can fuel inflation.

1.3 Objectives of the Study

Commercial banks and other financial institutions play a major role in the economic development of the country. The insufficiency in banking and financial facilities leads to slow economic development. The major function of commercial banks is to earn profit through accepting deposits from the public at lower rate of interest and lending the same to the borrowers at a higher rate, thereby earning through the interest rate spread.

The same fund collected from the general public is used for providing various facilities in different forms to the needy persons and firms. Thus, the role of banking sector is highly appreciated, considering the contribution in upliftment of the society. The commercial banks have pivotal role in collection of dispersed savings and transforming them into meaningful capital investment.

But, the tendency of long term lending and proper investment is not found in the commercial banks of Nepal. The main reason behind this lays the fact that the commercial banks have become more profit-oriented than the development of infrastructure. The banks mainly invest on short-term requirements rather than financing the long-term projects, which are comparatively more risky. The banks are found to be much interested in financing in less risky and high liquid sectors of the economy.

Investment decision is one of the major functions of financial management. Under the prevailing competitive environment in financial sector, the commercial banks face so many difficulties to mobilize their deposit funds on profit making investments. With regard to this, the main objective of the study is to analyze, examine and interpret portfolio technique followed by

commercial banks on their investment in various sectors. The main objectives of the study are highlighted as follows:

- a. To analyze the composition of loan portfolio.
- b. To measure the relative rate of return and risk on loan investment portfolio.
- c. To assess the level of Non Performing Assets of commercial banks and their provisions.
- d. To analyze the trend of outstanding interest on advances.
- e. To detect major findings and proper suggestions.

1.4 Test of Hypothesis Questions

Hypothesis is the statement about the relationship between two or more variables, which needs to be investigated for its truth. Hence, some general hypotheses that are related to this study are:

- The higher the level of deposit, the higher the level of investment.
- Portfolio return on investment is higher than the individual return on investment.
- Portfolio risk is lower than individual risk on investment i.e. portfolio management minimizes the investment risk and maximize return.
- Risk can be reduced by investing in more than one security. However, the extent of benefits of portfolio diversification depends on the correlation between return of securities.
- The return on portfolio depends upon the amount of funds invested in each individual asset.
- The ratio of Non Performing Assets is directly proportional to the nature and type of loan sanctioned.

1.5 Assumptions of the Study

The proposed study is based on various assumptions. For example: the study assumes that the sample banks represent all the twenty-five commercial banks operating in the country. Similarly, it has also been believed that the information provided by the commercial banks is true and correct. Further, the study is based on the assumption that all the relevant sources of information respond affirmatively. In addition, it has also been assumed that performance on loan portfolio of a particular bank will generally be represented in its market share price.

1.6 Limitation of the Study

The study is carried in partial fulfillment of the basic requirement for the MBS degree. Thus, this study is not far from reality of its own kind and possesses some of the following limitations:

- a. The study concentrates only on those factors, which are related with investment portfolio analysis, the ratio of their NPA's and available in the form required for analyzing different issues.
- b. The study only analyses simple statistical techniques followed by financial models.
- c. The study has been done with limited time and resource. This study, therefore, does not examine the factors affecting risk and return on investment in different sectors as well as limited factors are selected to examine portfolio behavior.
- d. Due to the lack of easy availability of different data, only six commercial banks are the source of the study.

- e. The study is mainly based on secondary data collected from different sources and the study is also based on the data available for the last five fiscal years.
- f. The qualitative factors such as the growth and expansion policies of the banks, quality and effectiveness of management, etc have been ignored.
- g. Only certain general ratios of commercial banks have been analyzed due to the lack of adequate information.
- h. The study lacks in time and other resources as well.

CHAPTER TWO

REVIEW OF LITERATURE

This chapter provides the foundation for developing a comprehensive theoretical framework and knowledge of the status relevant to the field of research in order to explore true facts for the purpose of reporting. A literature review is an essential part of all studies. It is a way to discover what other researchers have covered and left in the area. A critical review of the literature helps the researcher to develop a thorough understanding and insight into previous research works that relates to the present study. It is also a way to avoid investigation problems that have already been definitely answered. Thus a literature review is the process of locating, obtaining, reading and evaluating the research literature in the area of the student's interest. The purpose of literature review is to find out what research studies have been conducted in one's chosen field of study and what remains to be done. The chapter reviews the literatures related to the portfolio management from various textbooks, journals and related studies. Apart from this, different masters' degree thesis including independent studies carried out by renowned experts and others are also included.

The primary purpose of literature review is to learn not to accumulate. It enables the researcher to know

-) What research has been done in the subject?
-) What theories have been advanced?
-) What are the approaches taken by the other researchers?
-) What are the areas of agreement or disagreement?

J Whether there are gaps that can be filled through the proposed research?

2.1 Review of Relevant Books

The major and the most significant functions of commercial banks is creation of credit and dealing with the credit instruments. Moreover, the existence of banks depends upon the circulation of credit because of the reason that the major portion of income comes from the interest from loans and advances. The banks should, therefore, make thorough analysis and sound decision-making in order to mobilize the funds collected.

Investment is the employment of funds with the aim of achieving additional income or growth in value. It involves the commitment of resources that have been saved or put away from current consumption, in the hope that some benefits will accrue in future.

According to Sharpe and Alexander, “Investment, in its broad sense, means the sacrifice of certain present value for (possibly uncertain) future values.”¹

According to Gitman and Joehnk, “Investment is any vehicle into which funds can be placed with the expectation that it will preserve or increase in value and generate positive returns.”²

¹ Sharpe F William and Alexander J Gordan,(2005) “Investments” 4th.Edition, New Delhi, Prentice Hall of India, p230

² L.J. Gitman and Joehnk,(1990) “Fundamentals of Investing” 4th Edition, New York, The Dryden Press.p348

According to Frank and Railey, “An investment is the current commitment of funds for a period of time to derive a future flow of funds that will compensate the investing unit for the time funds are committed, for the expected rate of inflation and also for the uncertainty involved in the future flow of funds.”³

Similarly, Dr. Preeti Singh has defined investment as, “Investment is the employment of funds with the aim of achieving additional income or growth in value.”⁴

2.2 Portfolio Analysis (Introduction):

A portfolio can be considered as a combination of individual assets or securities.⁵ The main concern of the investor holding diversified portfolio is the return and risk of portfolio rather than individual assets or securities. The portfolio theory provides a normative approach to the investors’ decision to investment in assets or securities under risk.

A portfolio is a collection of investment securities. The portfolios of assets usually offer advantage of reducing risk through diversification. A stock or securities held, as part of a portfolio is less risky than the same stock held in isolation. The objective of portfolio analysis is to develop a portfolio that has the maximum return at whatever level of risk the investor deems appropriate. Portfolio theory deals with the selection of optimal portfolios i.e. portfolios

³ Frank and Reilly.(1997) “Investment”, 6th Edition, New Delhi, The Dryden Press, p227

⁴ Preeti Singh.(2002) “Investment Management”, 5th Edition, Bombay, Himalayan Publishing House, p476

⁵ I.M. Pandey(1997) “Financial Management” 7th Edition, New Delhi, Vikash Publishing House Pvt.Ltd p276

that provide the highest possible return for any specified degree of risk or the lowest possible risk for any specified rate of return.⁶

The purpose of portfolio management is to analyze different individual assets and delineate efficient portfolio. Hence, the portfolio managers' task is to select the investment weights that will result in dominant investment and analyze the risk and return data describing each investment candidates and determine what assets to buy, what not to buy and what to sell short.

Portfolio theory was originally proposed by **Harry M. Markowitz** in 1952.⁷ This theory is based on the selection of optimal portfolio by risk adverse investor. The theory also provided the investor knowledge about how the risk is measured in a portfolio context and the relationship between expected return and risk.

2.3 Portfolio Analysis and Diversification:

Investment risk can be reduced by including more than one alternative category of assets in the portfolio and by including more than one asset from each category of investment. Thus, diversification is essential to the creation of an efficient investment because it can reduce the variability of returns around the expected return. This diversification may significantly reduce the risk without a corresponding reduction in the expected rate of return on the portfolio.⁸

⁶ J.Fred Weston and Thomas E.Copeland(1990) "Managerial Finance", 9th Edition ,New Delhi ,The Dryden Press, p383

⁷ Cheney and Moses(1992) "Fundamentals of Investment", 5th Edition, ,New Delhi ,The Dryden Press, p289

⁸ Jack Clark Francis(2001) "Investment analysis and Management", 8th Edition, New Delhi ,The Dryden Press, p376

Cheney and Moses (1992) defined that risk can be reduced by the portfolio effect. However, the reduction in the volatility occurs when the returns of the two securities do not move together. The relationship of the returns of the two securities can be defined by the correlation coefficient. High negative correlation coefficient only results in significant decrease in the total risk.

The following are the different diversification techniques in order to reduce the portfolio risk:

2.3.1 Simple Diversification:

Simple diversification is the random selection of securities to be added to a portfolio. Simple diversification reduces a portfolio's total diversifiable risk to zero and only the un-diversified risk remains.

Clarkes (n.d.) defined simple diversification as “not putting all eggs in one basket” or “spreading the risks”.

2.3.2 Superfluous Diversification:

The superfluous diversification refers to the investors investing himself in many different investments on his portfolio. The investor finds it difficult to manage the assets on his portfolio because the management of a large number of assets requires knowledge of liquidity of each investment return, tax liability and thus becomes impossible without specialized knowledge.

In this context, Clarkes (n.d.) adds that superfluous diversification usually results in the following portfolio management problems:

- a. Impossibility of good portfolio management.
- b. Purchase of lackluster performers.
- c. High search costs.
- d. High transaction costs

He also described that although more money is spent to manage a superfluously diversified portfolio, there will be no concurrent improvement in the portfolio performance. Thus, superfluous diversification may lower the net return to the portfolio's owners after the portfolio's management expenses are deducted.

2.3.3 Diversification across Industries

Another diversification can be experienced from the combination of the stocks from different industries. The basic principle of diversifying assets across the industries is the losses incurred in one stock can be compensated through the gain realized from the profitable stocks. But since all the industries are highly correlated with one another, diversification across industries are not much better than simply selecting securities randomly. The non-diversification variability can not be diversified away much simply by selecting securities from different industries.

2.3.4 Simple Diversification across Quality Rating Industries

The standard deviation of portfolio of different homogenous quality rating attained different levels of risk. The highest quality portfolio of randomly diversified stocks was able to achieve lower levels of risk than the simply diversified portfolio of lower quality stocks. This result reflects a fact that default risk (as measured by the quality ratings) is a part of total risk. The

findings also suggest that portfolio managers could reduce portfolio risk to levels lower than those attainable with simple diversification by not diversifying across lower-quality assets.

2.3.5 Markowitz Diversification

The first modern portfolio analysis model was introduced by Dr. Harry M. Markowitz, which emanated from a series of propositions concerning rational investor behavior. In the late 1952, he published a landmark paper that is generally viewed as the origin of the modern portfolio theory approach to investing which begins by assuming that an investor has a given sum of money to invest at the present time. Further, he stated that a portfolio is a collection of securities and their division is equivalent to selecting an optimal portfolio from a set of possible portfolios which is referred to as the “Portfolio Selection Problem”⁹ This approach considers the single period rate of return which is simply the total return an investor would receive during the investment period or holding period.

Markowitz Diversification may also be defined as combining assets that are less than perfectly positively risk correlated in order to reduce portfolio risk without sacrificing portfolio returns. It can sometimes reduce risk below the non-diversification level.

The lower the correlation between assets, the more that Markowitz diversification will be able to reduce portfolio risk. Markowitz diversification can lower risk below un-diversification level if the securities analyst find securities whose rates of return have low correlations. Therefore,

⁹ William F. Sharpe, Gordon J. Alexander and Jeffery V. Bailey(2005) “Investments” 6th Edition , New Delhi, Prentice Hall of India Pvt Ltd, p228

using Markowitz diversification requires a data bank of financial statistics for many securities, a computer and some economic analysts.

A portfolio is said to be efficient when it is expected to yield the highest return for the level of risk accepted, or, alternatively, the smallest portfolio risk for a specified level of expected return. To build an efficient portfolio, an expected level of return is chosen and the assets are exchanged or substituted until the portfolio combination with the smallest variance at the targeted return level is found. As this process is repeated for some other expected returns, sets of efficient portfolios are generated.

The portfolio selection model developed by Markowitz¹⁰ is based on the following assumptions regarding investors' behavior, which can be highlighted as follows:

- Investors consider each investment alternative as being represented by a probability distribution of expected returns over some holding periods.
- Investors maximize one period-expected utility and possess utility curve, which demonstrated diminishing marginal utility of wealth.
- Risk is estimated on the basis of the variability of expected return.
- Investors base decisions solely on expected return and variance of returns only.

Markowitz's rule of maximization of expected return implies that the non-diversified single asset portfolio with the highest expected return is the most desirable portfolio buying which an investor can maximize the expected return.

¹⁰ V.K. Bhalla(2001) "Investment Management" 8th Edition, New Delhi, S. Chand & Co. Ltd., p332

The portfolios expected return can be defined in equation as follows:

$$R_p = W_1K_1 + W_2K_2 + \dots + W_nK_n$$

$$\text{Or, } E(R_p) = \sum_{j=1}^n W_j \times E(R_j)$$

Where,

R_p stands for portfolios expected return

W_1 stands for the weight of stock 1

W_2 stands for the weight of stock 2

K_1 stands for the expected return for stock 1

K_2 stands for expected return for stock 2

The goal of portfolio management must always be to minimize the portfolio risk for any level of expected returns; this can thus be done by solving the following equation:

Equation for portfolio variance: two-asset case:

$$\sigma_p^2 = W_i^2 \sigma_i^2 + W_j^2 \sigma_j^2 + 2W_iW_jCV_{ij}$$

2.3.6 The Single Index Model

William F. Sharpe published a model simplifying the mathematical calculations required by the Markowitz Model. However, its applications left behind several limitations. Sharpe assumed that, the return of a security could be regarded as being linearly related to a single index like the market index. The mechanical complexity of the Markowitz's portfolio model kept both practitioners and academicians away from adopting the concept for

practical use. As a result, what is referred to as the Capital Asset Pricing Model (CAPM) was developed.¹¹

The CAPM is based on the following assumptions¹², which are highlighted as follows:

- ii. Investors evaluate portfolios by looking at the expected returns and standard deviations of the portfolio over a one period horizon.
- iii. Investors are never satiated, so when given a choice between two otherwise identical portfolios, they will choose the one with the higher expected returns.
- iv. Investors are risk averse, so when given a choice between two otherwise identical portfolios, they will choose the one with the lower standard deviation.
- v. Individual assets are infinitely divisible, meaning that an investor can buy a fraction of a share if he or she so desires.
- vi. There is a risk free rate at which an investor may either lend or borrow money.
- vii. Taxes and transaction costs are relevant.

To these existing assumptions, the following ones are added:

- viii. All investors have the same one period horizon.
- ix. The risk free rate is same for all investors.
- x. Information is freely and instantly available to all investors.

¹¹ William F. Sharpe,(1964) “Capital Assets Prices: A theory of Market Equilibrium under conditions of risk”, Journal of Finance, p32

¹² William F. Sharpe, Gordon J Alexander and Jeffery V.Bailey(2005) “Investments” 6th Edition , New Delhi, Prentice Hall of India Pvt Ltd, p227

Investors have homogenous expectations, meaning that they have the same perception in regard to the expected returns, standard deviations and covariance of returns.

The equation for the CAPM or the portfolio return is as follows:

$$E(R_p) = R_f + \frac{\{E(R_m) - R_f\}}{b_m} \times b_p$$

Where,

$$b_m = 1 \text{ and } b_p = \sum_{j=1}^n w_j \times b_j$$

Similarly,

R_f = risk free return and $E(R_m)$ = market return.

2.4 Review of Research Works and Articles

In the international context, there are various and varieties of articles and magazines published in the Portfolio Analysis. However, there are no such significant articles or related matters published in Nepal. There are very few independent study carried out in the Portfolio Analysis of Commercial Banks.

The available literature in the “Portfolio Analysis” has been reviewed in this section of research.

The Edward J Kane and Stephen A Buser's Study

The study of The Edward J Kane and Stephen A Buser in title, "Portfolio diversification at Commercial Banks"¹³ deals with how a firm performs useful function by holding a portfolio of efficiently priced securities.

According to them, it is rational for a firm to engage in prior round of asset diversification on behalf of its shareholders even when all assets are priced efficiently and available for direct purchase by shareholders. The systematic pattern observed by large commercial banks in the United States is the interpretation of the evidence that bank shareholders form a relatively uniform diversification clientele. For a firm, marginal benefit from diversification takes reductions in the cost of equity funds offered by its specific clientele of stockholders. To maximize the value of the firm, these benefits must be weighted against the explicit and implicit marginal cost of diversification.

The Mark Britten Jones' Study

According to Mark Britten Jones in his study, "The sampling errors in Estimation of mean variance Efficient Portfolio weights"¹⁴ the mean variance analysis is important for both practitioners and researchers in finance.

The test that he has presented can be implemented in a simple and intuitive manner that is formally identical to the standard; inference procedures used for OLS regression coefficients.

¹³ The Edward J Kane and Stephen A Buser(1979) " Portfolio diversification at commercial banks", Journal of finance VOL 34 ,p5

¹⁴ Jones Mark Britten(1999) " The sampling errors in estimation of mean variances efficient Portfolio weights" Journal of Finance Vol 54, p32 .

According to Mark Britten Jones study, the composition of an international efficient portfolio is of interest, not only from practical viewpoint of investors seeking to optimize their risk return tradeoff, but also from theoretical viewpoint.

Michael Koehn and Anthony M. Santomero study

In their study entitled, “Regulation of Bank Capital and Portfolio Risk”¹⁵, they examined the portfolio allocation that flows from the portfolio decision of the firm and the effects on bank portfolio risk of a regulatory increase in the minimum capital asset ratio than is acceptable to the supervisory agency. The allocation across assets becomes the choice variable deriving the optimal mean rate of return per unit of capital and the variance of that return. Therefore, the analysis will be developed in terms of risk and return per unit of capital with no loss in generality. According to them, an explicit relationship between risks of the bank portfolio, the amount of bank capital held and the chance of bankruptcy must, therefore, be obtained to evaluate the result of bank capital regulation.

Shiva Raj Sharma study

Mr. Sharma, a senior officer of Nepal Rastra Bank ha presented a short glimpse on the “Portfolio Management in Commercial Banks, Theory and Practice.”¹⁶ According to him, the portfolio management becomes very important for both the individuals as well as institutional investors. The

¹⁵ Michael Koehn and Anthony M. Santomero(1980) “Regulation of Bank Capital and Portfolio Risk” Journal of finance vol. 35, No.5, p67

¹⁶ Shrestha, Shiva Raj, “Portfolio Management in Commercial Banks, Theory and Practice”(1998) Nepal Bank Newsletter, p46

investors would like to select a best mix of investment assets subject to higher returns, good liquidity with adequate safety, capital gains, tax concessions, etc.

Dr. Govinda Bahadur Thapa study

Dr. Thapa has expressed his view that the commercial banks including foreign joint venture banks seem to be doing pretty well in mobilizing deposits. Likewise, loans and advances of these banks are also increasing. But compared to the higher credit needs particularly by the newly emerging industries, the banks still seem to lack adequate funds.

The views generated in his study also suggests that the joint venture commercial banks also pay equal attention towards the off balance sheet items, i.e. the non-fund business of the banks which earns adequate amount of commission income that forms a major part of the earnings of the commercial banks.

The following part of the study is comprised of the review of thesis in the similar topic by different scholars.

Satya Ram Kisi's Study

In his study entitled, "Portfolio analysis of commercial banks in Nepal"¹⁷ he has made an effort to examine the concept of investment and loans and advances of commercial banks. In the study, he has analyzed financial performance and portfolio of commercial banks with ratio analysis, Investment portfolio analysis, and loans and advances portfolio, risk and return analysis and trend analysis.

¹⁷ Satya Ram Kisi,(1999) "Portfolio analysis of commercial banks in Nepal", Masters' degree thesis, Nepal Commerce Campus.

Mukunda Prasad Lamichhane Study

Mr. Lamichhane in his study, “Investment policy of Joint Venture Banks in Nepal” has analyzed between investment policy and different variables like deposits, commission and discount, net profit, interest on loans and investment.

He concluded that there is a significant relationship between deposit and loans and advances as well as outside assets and net profit. Most of the joint venture banks have focused their banking services especially to big clients such as purchase shares and debentures of other financial and non-financial companies.

Nirdosh Sijapati study

In his study titled, “Analysis of loan-investment portfolio of commercial banks”¹⁸, he has analyzed the tendency of loans and advances and investment patterns of commercial banks in Nepal. The analysis on the basis of classification, sector wise advances, etc has been a major analysis of the study.

The conclusion that he has derived from the study is that both the investments and loans and advances of Commercial Banks are in rising trend. Moreover, he has also mentioned in his thesis that the sampled banks are risk adverse nature as they have invested large amount of funds in government securities and least in shares and debentures.

¹⁸ Sijapati Nirdosh (2004) “Analysis of Loan-investment portfolio of Commercial Banks”, Masters Degree Thesis, Nepal Commerce Campus.

Kalpana Khaniya study

Ms Khaniya on her research paper, “Investment portfolio Analysis of Joint Venture Banks”¹⁹ explains that return on commercial banks is affected by their loans and advances portfolio. Stabilized returns can only be achieved by diversifying the loan disbursement sectors.

Similarly, she also mentions that the required rate of return of the commercial banks is less than the expected rate of return. She also concludes that while comparing the investment portfolio of weight set up by the commercial banks on the light of directives given by central bank, the banks have not followed the directives properly.

2.5 Directives Issued by Nepal Rastra Bank

NRB has issued Directive No. 2 dated 15th March 2003 as revised by their circular dated 14th September 2003 wherein fresh guidelines given for the classification of Loans & Advances including bills purchased and discounted. As per the new guidelines all Loans and Advances are to be classified into four categories i.e. Pass, Substandard, Doubtful and Loss.

Last three categories shall be defined as Non-Performing Asset (Loans) and as per the above directives the provisions shall be made on quarterly basis from the 2058-59 financial years. The rate of provisioning will remain as i.e. for Pass (1%), Substandard (25%), Doubtful (50%) and Loss (100%). There is an additional provision of 20% for the loans given only against the

¹⁹ Khaniya, Kalpana(2003) “Investment Portfolio Analysis of Joint Venture Banks”, an unpublished master’s degree thesis Shankar Dev College.

Personal Guarantee. Similarly, in case of the rescheduled/restructured the minimum provision shall be 12.5%.

Loans and Advances shall be classified into the following four categories:

Pass

All Loans and Advances the principal of which are not past due or past due for a period up to 3 (three) months shall be included in this category. These are classified and defined as **Performing Loans**.

Substandard

All loans and advances the principal of which are past due for a period of more than **3 months and up to 6 months** shall be included in this category.

Doubtful

All loans and advances the principal of which are past due for a period of more than **6 months and up to 1 year** shall be included in this category.

Loss

All loans and advances the principal of which are past due for a period of more than **1 (one) year** as well as advances which have least possibility of recovery or considered unrecoverable and those having thin possibility of even partial recovery in future shall be included in this category.

CHAPTER THREE

RESEARCH METHODOLOGY

Research Methodology can also be defined as the process of arriving at a solution of the problem through planned and systematic dealing with the collection, analysis, and interpretation of facts and figures. Research is a systematic method of finding the right solution for the problem whereas research methodology refers to the various sequential steps to be adopted by a researcher in studying a problem with certain objectives in view.²⁰

Research methodology is a systematic way to solve the research problem. In other words research methodology describes the methods and process applied in the entire aspect of the study .research methodology refers to the various sequential steps (along with a rationale of each step) to be adopted by a researcher in studying a problem with certain objectives in view

It describes the method and process applied in the entire subject of the study. It is a systematic way to define the research problem.²¹ It is the plan, structure and strategy of investigation conceived to answer the research questions or test the research hypothesis.²² It includes different dependent and independent variables, types of research design, research questions and hypothesis sample, data collection activities, techniques of analysis, etc.

²⁰ Kothari C.R.(1989) “Research Methodology method and techniques”4th Edition, New Delhi, Willey Easterly Ltd.p132

²¹ Kothari C.R. .(1989) “Research Methodology method and techniques”4th Edition, New Delhi, Willey Easterly Ltd.p133

²² H.K. Wolff and P.R. Pant (2003) “Social Science Research and Thesis Writing”. 3rd edition, Kathmandu, Buddha Academic Publishers and Distributors Pvt Ltd. p34

This part of the study is comprised of five sections in order to analyze the research methods and techniques.

3.1 Research Design

A research design is the specification of methods and procedures for acquiring the information needed. It is the overall operational pattern of framework for the project that stipulates what information is to be collected, from which sources and by what procedures. Thus a research design is a plan for the collection of an analysis of data. For research there exists different types of research design like; Historical research, Descriptive research, Case study research, Field study research, Analytical research, True experimental research and so on. This research attempts to analyze the impact of historical information on the analysis of loans and advances of commercial banks. It can thus, be assumed that the data and information consists of past phenomenon of the performance of the bank because of which this research can also be called the historical research design.

The proposed study is mainly based on two types of research design viz; descriptive and analytical. Descriptive research design describes the general pattern of the Nepalese Investors, business environment, problems regarding portfolio management, etc. Similarly, the analytical research design makes a through analysis of the collected facts and information and also makes a critical evaluation.

“A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedures”.²³

It can thus, be generalized that a good research design is the plan, structure and strategy of investigations conceived to obtain answers to research questions and to control variances.

3.2 Population and Sample

There are 25 commercial banks operating in the country including domestic as well as joint venture banks which accept about 81 percent of total deposits and 71 percent of total loans and advances out of the total financial institutions performing banking operations. Of the 25 commercial banks, only 6 commercial banks have been taken into consideration for the purpose of our study due to the lack of valid and reliable data. The sampling process is based on the principle that a sufficiently large number drawn at random from a population will be representative of the total population.²⁴

The selected sample banks for the analysis are as follows:

- a. Everest Bank Ltd.
- b. Himalayan Bank Ltd.
- c. Nabil Bank Ltd.
- d. Nepal State Bank of India Ltd.
- e. Nepal Investment Bank Ltd.
- f. Standard Chartered Bank Nepal Ltd.

²³ Kothari, C.R.(1992) “Quantitative Techniques”, 4th Edition, New Delhi, Willey Easterly Ltd.p135

²⁴ H.K. Wolff and P.R. Pant (2003) “Social Science Research and Thesis Writing”. 3rd edition, Kathmandu, Buddha Academic Publishers and Distributors Pvt Ltd. p180.

Population size: 25

Sample size : 6

3.3 Sources of Data / Information

This research study is mainly based on secondary data that are available in the published form. The required information for the data has been collected from the required organizations, Nepal Rastra Bank, SEBO, libraries and other various publications. The required information at macro level is collected from relevant institutions, Ministry of Finance, NEPSE, etc. The annual reports of respective commercial banks are the other sources of data presented. Beside this, primary data is also used for the purpose of our thesis .primary data in the form of the information collected through verbal communications with the staffs of related banks has also been used in the research.

The major sources of data and information can be described as follows:

- Annual Report of Everest Bank Ltd.
- Annual Report of Himalayan Bank Ltd.
- Annual Report of Nabil Bank Ltd.
- Annual Report of Nepal SBI Bank Ltd.
- Annual Report of Nepal Investment Bank Ltd.
- Annual Report of Standard Chartered Bank Nepal Ltd.
- NRB directives to commercial banks.
- NRB form No. 3 and 4, from NRB
- Economic Survey, Ministry of Finance.
- Annual Report, SEBO.

- Trading Report, NEPSE.
- Statistics Nirdeshika.
- Banking and Financial Statistics.
- Consortium Financial Directives.
- Economic Review Paper.
- Commercial Banks' supervision.
- Previous research studies, Dissertations and articles on the subject.
- Various websites on related matters.

3.4 Data Collection Procedure and Techniques

The data required for the research is mainly obtained from the secondary sources. Despite the secondary sources of data, high effort and lot of time had to be spent on the collection of the same. The data was obtained after convincing the officials and the staff of the concerned organizations of the subject of the research. The data available from the websites of concerned organizations was not adequate for the purpose of research. Thus, the various organizations had to be visited to collect adequate data. To some extent, informal interview was scheduled and conducted to obtain required information and reality of the published data and other policies of the bank. The main problem that was faced during the data collection process was during the amount and nature of NPA. The bank's officials were extremely cautious on providing the data of NPA of their banks. On continuous persistence and convincing of the same, the data was obtained.

The data obtained were in their original form and was vague from the point of study. Further, they needed to be verified and simplified for the purpose of analysis. Further, the verification of the data was made and were processed, compiled, and tabulated to present the data in a better manner.

3.5 Tools for Analysis and Presentation

Various financial and statistical tools are used in order to analyze the data and present the data in a more reliable and more authentic way. Ratio analysis, correlation coefficient, trend analysis, risks and return, standard deviation, t-test, etc. are used to present the research study.

3.5.1 Financial Tools

The relationship between two accounting figures expressed in mathematical form is called the ratio. Ratio analysis is a measuring rod to compare the financial performance and status of one firm to that of the other.²⁵ Ratio can also be defined as numerical or quantitative relationship between two items or variables. In financial analysis, ratio is used as an index of yardstick for evaluating the financial position and performance of the units.

However, the present study is rotated around the loan portfolio analysis of commercial banks and only those ratios which are relevant to the analysis has been taken into consideration. The following are the main ratios that can be considered for the topic under study.

- **Financial Ratios:**
 - a. Credit diversification (Deprived and priority sector loans).
 - b. Loan classification and provisioning.

²⁵ Gitman, L.J(2003) “ Principle of Management Finance” 3rd Edition ,New Delhi, Prentice Hall of India, p453

- c. Sector-wise loans and advances.
- d. Security-wise loans and advances.
- e. Profitability

3.5.2 Statistical Tools

The statistical tools are one of the major tools in evaluation and analysis of various available data. In this study, statistical tools such as standard deviation, coefficient of correlation between different variables, trend analysis, and coefficient of variation as well as test of hypothesis have been used.

a. Mean, $\bar{x} = \frac{\sum X}{n}$

b. Standard Deviation, $= \sqrt{\frac{\sum (x-x)^2}{n}}$

c. Karl Pearson's Correlation Coefficient:

$$r_{xy} = \frac{n \sum xy - \sum x \cdot \sum y}{\sqrt{[n \sum x^2 - (\sum x)^2] [n \sum y^2 - (\sum y)^2]}}$$

Where,

r_{xy} = correlation coefficient between variables x and y.

n = number of observations

CHAPTER FOUR

ANALYSIS AND PRESENTATION OF DATA

The previous chapters of the study aimed towards introduction, research methodology and the various techniques and methods used in the analysis of loan portfolio of commercial banks. This chapter sheds light on the presentation, interpretation and analysis of the study through definite course of research methodology.

The main topic under study is the analysis of loan and investment portfolio of commercial banks, thus, an attempt has been made to analyze these aspects in detail. The composition of loan investment portfolio, sector-wise loan portfolio, security-wise portfolio, loan classification on the basis of aging, loan provisioning requirements, ratio of NPA of commercial banks, measurement of risk and return on loan- investment portfolio, trend analysis, amount of interest accrued, total provision and net loan are the major courses under study.

Similarly, the above collected data has been analyzed and presented through various financial and statistical tools as discussed in the previous chapters. Further, the data have been presented in a tabular form for easy reference to the data.

This chapter mainly focuses on the analysis of data obtained through various sources.

4.1 Analysis of Composition of Loans and Investments

Loan can be considered as providing credit of funds in return for a certain amount or percentage of interest. It is simply a lending of money with a promise for a future payment. This lending of commercial banks have been found to be diversified into various functioning sectors of the economy like Agriculture, Transportation, Construction, Trading, Hydropower and many such sectors of the economy. In short, it can be said that commercial banks have been meeting the credit requirements of almost all the public; be it construction of a house or owning a car or starting a new business. The availability of funds has been made much easier and convenient by the operations of the commercial banks.

This portfolio maintained by the commercial banks has proved to be an economic booster to the growth of the nation. Similarly, the commercial banks also utilize certain portion of their collected funds in order to strengthen the capital base of the bank and also to increase the profitability of the banks.

The following analysis has been carried out to identify the loan portfolio of commercial banks, the investment pattern of these banks and the ratio of Non- Performing Loans to the total loans of the selected sampled commercial banks.

4.1.1 Loans and Advances Portfolio

The loans and advances occupy the major portion of the assets side of the balance sheet. The lending of banks in almost all the sectors of the economy

is being considered for the purpose of analysis, which also includes the bills purchased and discounted.

The composition of loans and advances of commercial banks can be classified into three major parts. They are namely; Government Sector, Private Sector and Bills Purchased and Discounted.

Table: 4.1

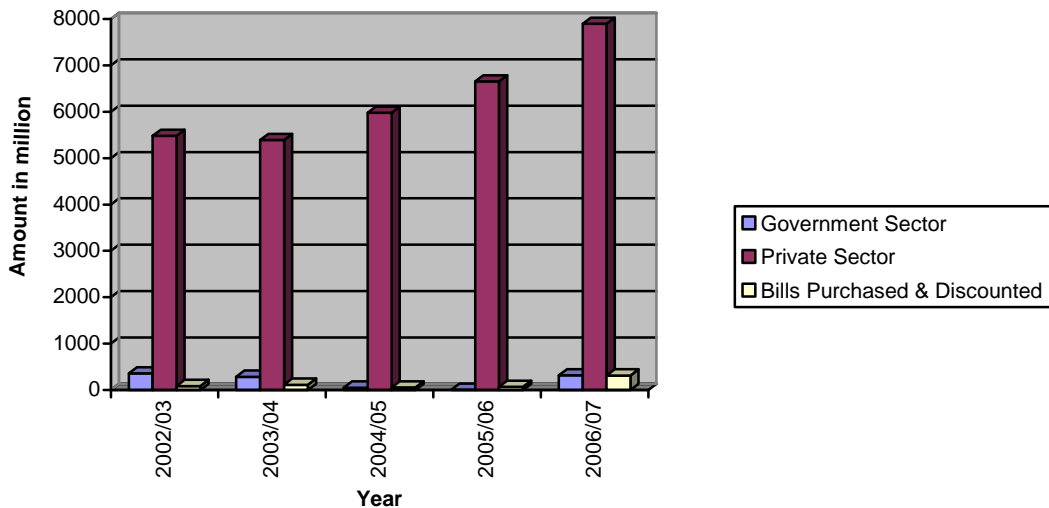
Loans and Advances Portfolio of Standard Chartered Bank Nepal Ltd.

(Rs in Million)

Fiscal Year	Government Sector		Private Sector		Bills Purchased & Discounted		Total
	Amount	%	Amount	%	Amount	%	
2002/03	359.9	6.08	5478.8	92.48	85.4	1.44	5924.1
2003/04	286.2	4.94	5389.4	93.11	112.3	1.94	5787.9
2004/05	51.5	0.85	5977.0	98.29	52.5	0.86	6080.7
2005/06	6.7	0.10	6655.3	98.90	67.6	1.00	6729.6
2006/07	315.0	3.69	7899.0	92.63	313.6	3.68	8527.6

Figure: 4.1

Loans and Advances Portfolio of Standard Chartered Bank Nepal Ltd.



The table is clear in its vision of the amount of loans and advances granted to the private sector of the economy. The amount of loans and advances in the private sector has shown increasing trend and has risen to 98.90% of the total loans and advances in the FY 2004/05. Similarly, the same has been fluctuating around 92 and 93 percent in the different years of observation. The Standard Chartered Bank has shown lukewarm response towards the purchase of bills and lending to the government sector. The same has remained comparatively lower in regard to the total loans and advances of the bank.

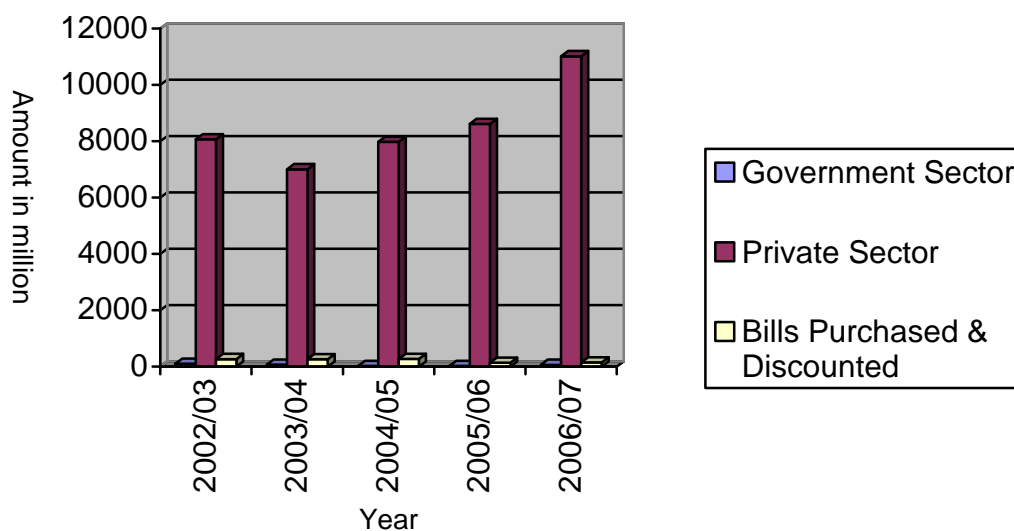
Table: 4.2

Average Loans and Advances Portfolio of Nabil Bank Ltd.

(Rs in Million)

Fiscal Year	Government Sector		Private Sector		Bills Purchased & Discounted		Total
	Amount	%	Amount	%	Amount	%	
2002/03	101.3	1.20	8071.8	95.66	264.5	3.13	8437.6
2003/04	64.7	0.88	7007.3	95.62	256.2	3.50	7328.2
2004/05	20.8	0.25	7976.1	96.47	270.9	3.28	8267.8
2005/06	20.3	0.23	8614.8	98.23	134.6	1.53	8769.7
2006/07	60.0	0.53	11018.0	98.18	144.7	1.29	11222.7

Figure: 4.2

Loan Portfolio Analysis of Nabil Bank Ltd.

The trend of Nabil Bank towards lending has been mainly towards the private sector of the economy. The amount of loans and advances to the private sector of the bank has remained more concentrated and has

maintained its steadiness over the years with more than 95% being lent out to the same. The study over a period of five years has shown declining trend in the loans in the form of Bills Purchased & Discounted. Similarly, the advances to the Government sector have also been discouraging.

Table: 4.3

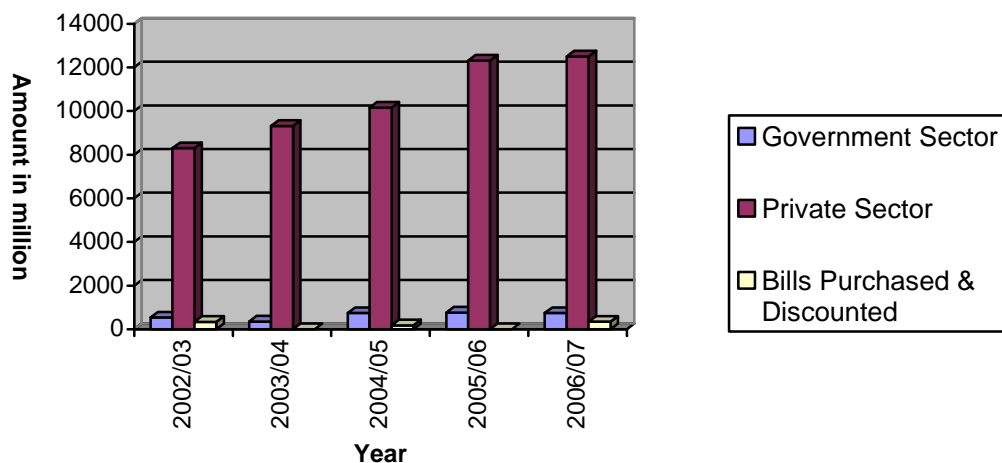
Average Loans and Advances Portfolio of Himalayan Bank Ltd.

(Rs in Million)

Fiscal Year	Government Sector		Private Sector		Bills Purchased & Discounted		Total
	Amount	%	Amount	%	Amount	%	
2002/03	536.4	5.85	8300.2	90.45	340.3	3.71	9176.9
2003/04	352.5	3.64	9321.0	96.36	0.0	0.00	9673.5
2004/05	742.7	6.71	10151.5	91.67	180.0	1.63	11074.2
2005/06	766.2	5.86	12315.5	94.14	0.0	0.00	13081.7
2006/07	745.0	5.48	12500.0	91.97	345.9	2.55	13590.9

Figure: 4.3

Loan Portfolio Analysis of HBL



In the trend of lending to the private sector, the Himalayan Bank has also chosen the same path. The loans and advances to the private sector have remained around 90% and higher. The proportion of loans to the government sector occupies a higher position considering the tendency of Standard Chartered Bank and Nabil Bank. The bills purchased have remained more or less at the nominal position.

Table: 4.4

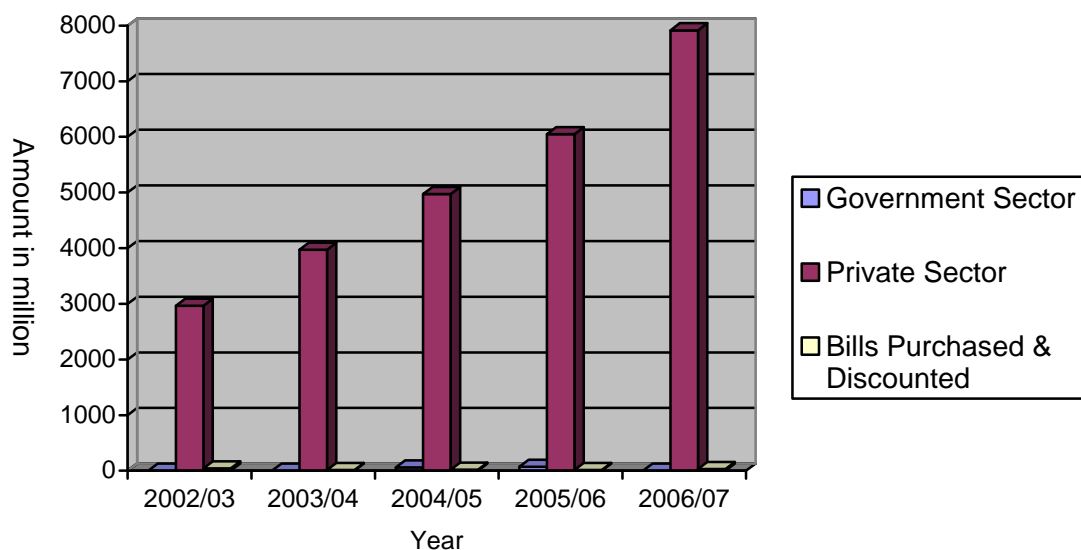
Average Loans and Advances Portfolio of Everest Bank Ltd.

(Rs in Million)

Fiscal Year	Government Sector		Private Sector		Bills Purchased & Discounted		Total
	Amount	%	Amount	%	Amount	%	
2002/03	0.0	0.00	2963.7	98.57	42.9	1.43	3006.6
2003/04	0.0	0.00	3969.6	99.67	13.1	0.33	3982.7
2004/05	60.0	1.19	4970.9	98.44	18.7	0.37	5049.6
2005/06	69.2	1.13	6047.4	98.63	14.5	0.24	6131.1
2006/07	0.0	0.00	7914	99.63	29.7	0.37	7943.7

Figure: 4.4

Loan Portfolio Analysis of EBL



Everest Bank has completely neglected the loans to the government sector and has put its full effort toward the development of private sector of the economy. The lending to the private sector has remained at the highest position revolving around 99% on average. In the FY 2003/04 and 2006/07, the lending of the bank to the private sector is 99.67% and 99.63% respectively. Similarly, the loans in the form of bills have not much been entertained.

Table: 4.5

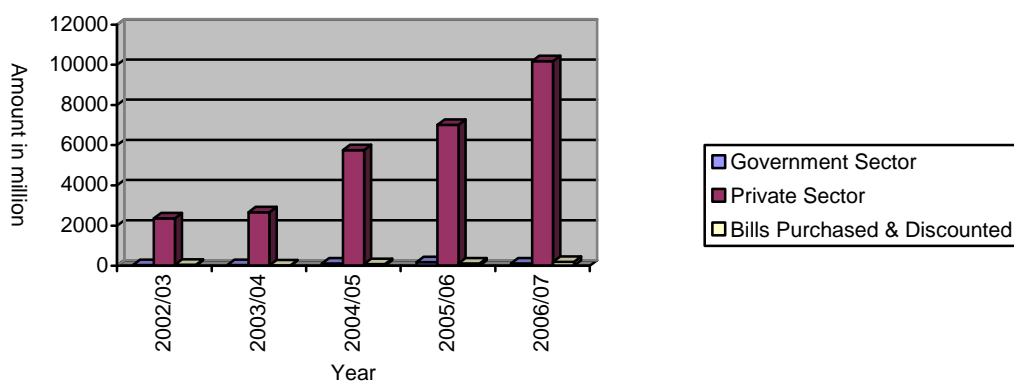
Average Loans and Advances Portfolio of Nepal Investment Bank Ltd.

(Rs in Million)

Fiscal Year	Government Sector		Private Sector		Bills Purchased & Discounted		Total
	Amount	%	Amount	%	Amount	%	
2002/03	25.0	1.03	2360.5	97.09	45.8	1.88	2431.3
2003/04	25.0	0.92	2668.0	98.24	22.7	0.84	2715.7
2004/05	115.0	1.93	5757.6	96.78	76.6	1.29	5949.2
2005/06	170.0	2.33	7004.4	96.08	115.8	1.59	7290.2
2006/07	115.0	1.10	10180.0	97.04	195.0	1.86	10490.0

Figure: 4.5

Loan Portfolio Analysis of NIBL



The amount of funds lent to the private sector of the economy has been in the increasing trend. Although the investment in government securities is found to be in large amount, but the credit to the same sector is very low. Nepal Investment Bank is also not much aggressive towards bills purchased and discounted. The bank is found to be aggressively lending towards the private sector, which can be seen by the amount of growth in loans and advances of the bank. The bank has increased its loans and advances by more than 100 percent in the year ended mid-July 2005. The bank has steadily maintained its growth rate over the years.

Table: 4.6

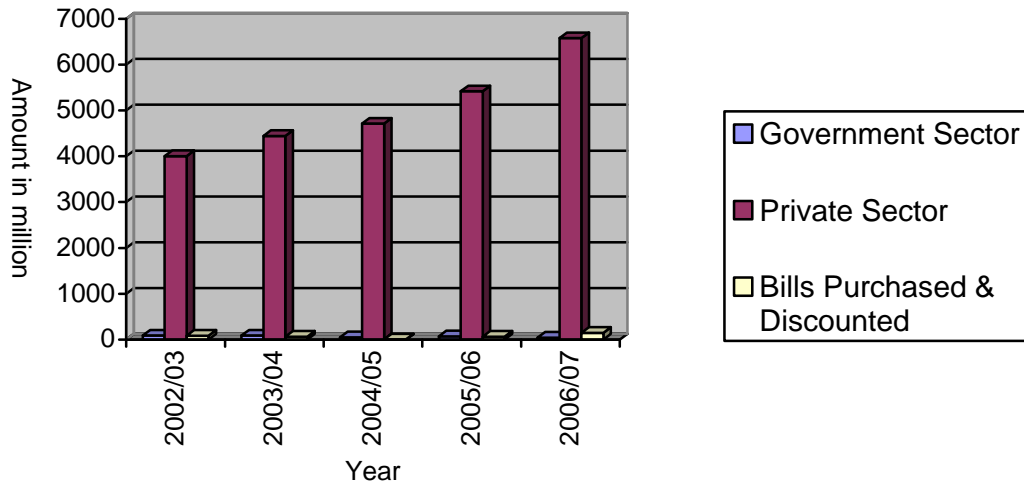
Average Loans and Advances Portfolio of Nepal SBI Bank Ltd.

(Rs in Million)

Fiscal Year	Government Sector		Private Sector		Bills Purchased & Discounted		Total
	Amount	%	Amount	%	Amount	%	
2002/03	88.3	2.11	4002.7	95.84	85.3	2.04	4176.3
2003/04	87.4	1.90	4441.2	96.68	65.3	1.42	4593.9
2004/05	50.0	1.05	4711.1	98.85	5.0	0.10	4766.1
2005/06	72.9	1.31	5418.0	97.58	61.6	1.11	5552.5
2006/07	43.0	0.64	6576.0	97.20	146.1	2.16	6765.1

Figure: 4.6

Loan Portfolio Analysis of NSBIBL



In view of the general trend of almost all the sampled commercial banks, Nepal SBI bank is also found to be running in the same path of lending to the private sector. This can also be considered the main reason for the growth of import business as well as the manufacturing business of private companies, which can be considered as a positive sign towards the development of the entire economy. Nepal SBI bank is found to be advancing more than 95 percent of its total loans and advances to the private sector. The lending to the government sector as well as towards the bills purchased and discounted is found to be in the range of 1 percent to 2 percent of the total loans and advances.

Table: 4.7

**Average Loans and Advances Portfolio of Commercial Banks
(Aggregate)**

(Rs in Million)

Fiscal Year	Government Sector		Private Sector		Bills Purchased & Discounted		Total
	Amount	%	Amount	%	Amount	%	
2002/03	2909.6	2.67	104209.3	95.50	2002.2	1.83	109121.1
2003/04	2651.1	2.34	109043.3	96.35	1480.2	1.31	113174.6
2004/05	2867.7	2.30	120343.4	96.64	1311.3	1.05	124522.4
2005/06	2519.4	1.80	136403.5	97.41	1108.6	0.79	140031.4
2006/07	2442.5	1.49	157198.9	96.12	3909.2	2.39	163550.6

The above table shows the portfolio of loans and advances including Bills Purchased and Discounted of the commercial banks as a whole. The above table clearly suggests that the commercial banks are far from lending to the government sectors. The proportionate share of the lending to the Government sector has remained more or less at 2% of the total loans and advances of commercial banks over the 5 years of study.

The major portion of the lending of commercial banks has been towards the development and upliftment of the private sector of the economy. The main sector demanding loans from commercial banks is the small retailers to the large-scale investors in the private sector. The private sector lending enhances the standard of living of people on the one hand while on the other; it also helps the nation to develop a group of entrepreneurs who can run the nation in the economic field. It can be interpreted as the major portion i.e.

more than 95% in the all the years, the lending is being targeted to the private sector.

Similarly, it can also be observed that the amount of bills purchased and discounted is also extremely low which signifies that the domestic as well as foreign bills are not purchased unless the bank is assured that the bills will be realized. This has indeed helped the bank in the reduction of the bounced bills. The risk return trade off in this case is slightly difficult to analyze depending upon the nature and variability of the bill. However, the entire commercial banks have disregarded the purchase and discount of bills.

The above table of the loans and of commercial banks also suggests one major point that has to be taken into consideration. The total amount of loans and advances of commercial banks has been increasing every year, which suggests that the businesses are on the rise in the country. This increase in the loans and advances of commercial banks is a positive response towards the economic development of the nation. The amount of loans has remained at Rs 109121.1 million in the FY 2003/04, whereas the same has risen to Rs 163550.6 million in the FY 2006/07.

4.1.2 Investment Portfolio

Investment can be defined as the process of exchanging income for an asset that is expected to produce earnings at a later time. An investor refrains from consumption in the present in hopes of a greater return in the future. Investment may be influenced by rates of interest, with the rate of investment rising as interest rates fall. The main source of investment is the savings by the households and the businesses. The savings provide funding

opportunities. Moreover, as investment increases an economy's capacity to produce, it is a factor contributing to economic growth.

The commercial banks' one of the major activities is the investment in the low risk and high yielding securities. The commercial banks have shown more attraction towards the Government Securities, Debentures of commercial banks and NRB Bonds.

Table: 4.8

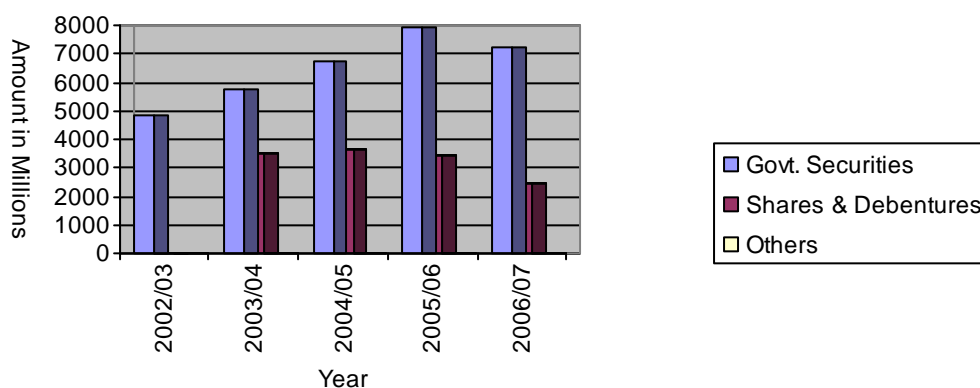
Average Investment Portfolio of Standard Chartered Bank Nepal Ltd.

(Rs in Million)

Fiscal Year	Government Securities		Shares & Debentures		Others		Total
	Amount	%	Amount	%	Amount	%	
2002/03	4811.0	99.77	11.2	0.23	0.0	0.00	4822.2
2003/04	5784.8	62.36	3491.2	37.64	0.0	0.00	9276.0
2004/05	6722.8	64.91	3634.9	35.09	0.0	0.00	10357.7
2005/06	7948.2	69.96	3412.1	30.04	0.0	0.00	11360.3
2006/07	7204.6	74.24	2486.1	25.62	13.4	0.14	9704.1

Figure: 4.7

Investment Portfolio of SCBNL



The above table highlights the nature of investment of Standard Chartered Bank Nepal Ltd. The Government securities are considered to be the safest means of investment. The SCBNL has thus invested major portion of its funds in government securities. It is around 99.77% of total investments in the FY 2002/03. In the consecutive years, it has remained in the range of 65 to 75% of total investments.

The bank has also been investing a portion of its funds in shares and debentures of other financial institutions. In the FY 2003/04, the amount of investments in shares and debentures is 37.64% of total investments and remained constant in the consecutive years before declining to 25.62% in the FY 2006/07. Similarly, the other investment amounting to Rs 13.4 m in the FY 2006/07 includes investments in foreign banks and certificate of deposits.

Table: 4.9

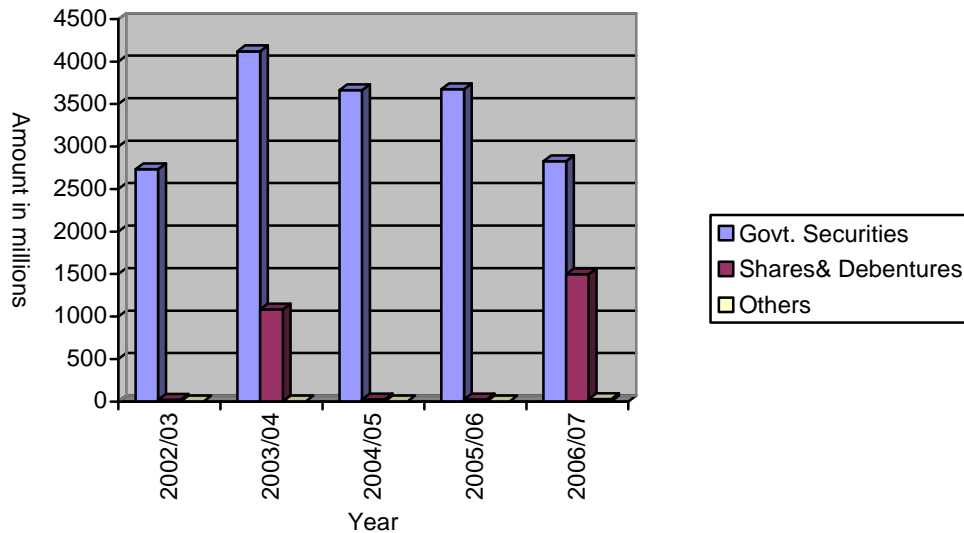
Average Investment Portfolio of Nabil Bank Nepal Ltd.

(Rs in Million)

Fiscal Year	Government Securities		Shares & Debentures		Others		Total
	Amount	%	Amount	%	Amount	%	
2002/03	2732.9	99.28	19.8	0.72	0.0	0.00	2752.7
2003/04	4120.3	79.20	1081.8	20.80	0.0	0.00	5202.1
2004/05	3663.5	99.34	24.3	0.66	0.0	0.00	3687.8
2005/06	3672.6	99.34	24.5	0.66	0.0	0.00	3697.1
2006/07	2826.8	64.93	1497.9	34.41	28.6	0.66	4353.3

Figure: 4.8

Investment Portfolio of Nabil Bank Ltd.



The investment portfolio of Nabil bank is more conservative than that of SCBNL in comparison to the diversification of investments. Nabil Bank has specifically focused on the risk free securities i.e. the government securities. This type of securities bears no risk at all. The bank has been more conservative in the sense that the amount of investment in shares & debentures of other commercial banks and financial institutions is on the lower side. The same has remained less than 1% in the FY 2002/03, 2004/05 and 2005/06. The investments in shares are comparatively higher in the FY 2003/04 and 2006/07 where the proportionate share of the same is 20.80% and 34.41% respectively. Moreover, at all times of the study of five years, the investment in government securities has been maintained at 99% to the least in the FY 2006/07 which is 64.93%.

Table: 4.10

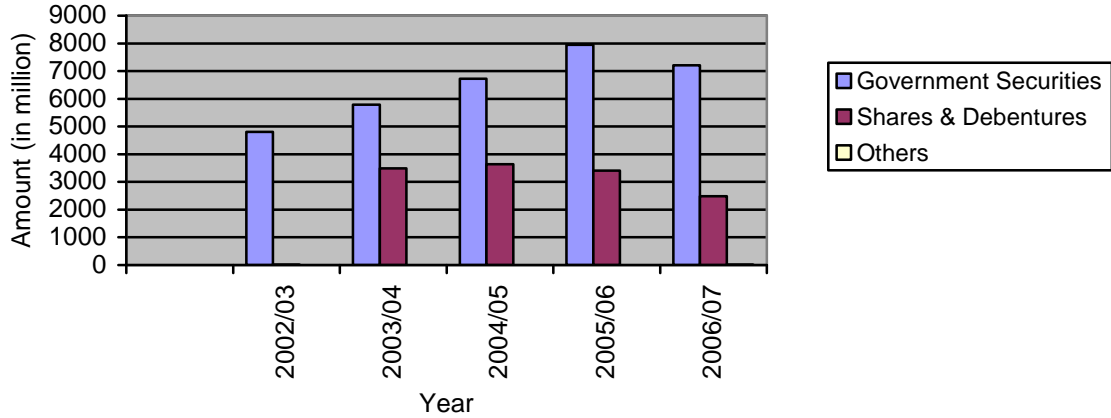
Average Investment Portfolio of Himalayan Bank Nepal Ltd.

(Rs in Million)

Fiscal Year	Government Securities		Shares & Debentures		Others		Total
	Amount	%	Amount	%	Amount	%	
2002/03	2224.3	99.52	10.7	0.48	0.0	0.00	2235.0
2003/04	2588.6	98.69	34.3	1.31	0.0	0.00	2622.9
2004/05	3980.0	99.15	34.3	0.85	0.0	0.00	4014.3
2005/06	2781.7	96.64	96.6	3.36	0.0	0.00	2878.3
2006/07	5469.7	99.28	0.0	0.00	39.9	0.72	5509.6

Figure: 4.9

Investment Portfolio of HBL



Considering the investment of SCBNL, the HBL seems more conservative in terms of diversification of investments. The proportionate share of investments of the bank in government securities as well as shares and debentures are not uniformly distributed. The policy of HBL is more or less similar to that of the Nabil Bank in respect of investment of funds. The

percentage of investments in government securities in the years of study has been more than 95%. The same has risen to 99.52% in the FY 2002/03 and 99.28% in FY 2006/07. Similarly, the investment of shares is fluctuating over the years with 0.48% in FY 2002/03 to 3.36% in FY 2005/06 and it is at nil position in the FY 2006/07.

Table: 4.11

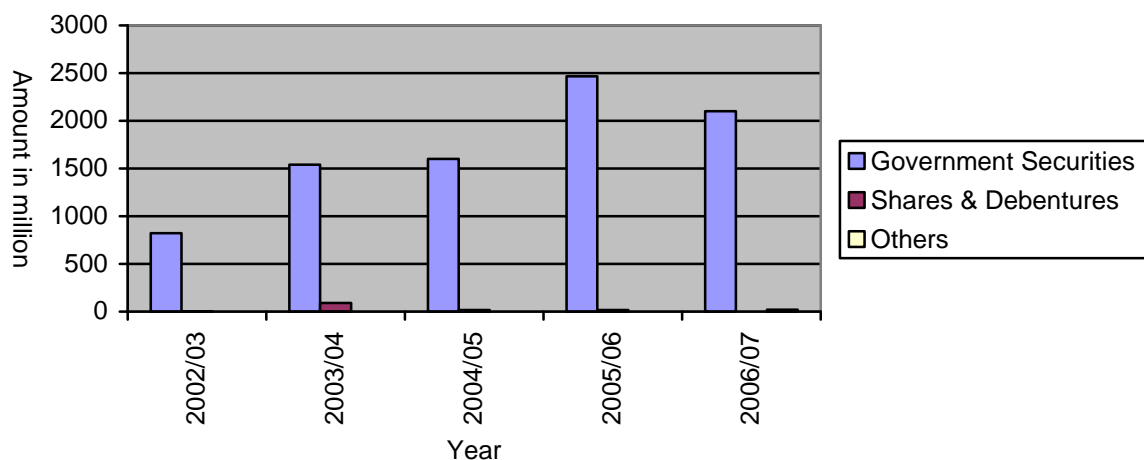
Average Investment Portfolio of Everest Bank Nepal Ltd.

(Rs in Million)

Fiscal Year	Government Securities		Shares & Debentures		Others		Total
	Amount	%	Amount	%	Amount	%	
2002/03	823.0	99.55	3.7	0.45	0.0	0.00	826.7
2003/04	1538.9	94.49	89.7	5.51	0.0	0.00	1628.6
2004/05	1599.4	98.94	17.1	1.06	0.0	0.00	1616.5
2005/06	2466.4	99.31	17.1	0.69	0.0	0.00	2483.5
2006/07	2100.3	99.08	0.0	0.00	19.4	0.92	2119.7

Figure: 4.10

Investment Portfolio of EBL



The nature of EBL also seems similar to the nature of other commercial banks in the country. The major portion of the investment of commercial banks has been towards the government securities. This has been the trend of EBL too. The investment of the bank in government securities was 99.55% in the FY 2002/03 and has maintained its steadiness in the FY 2006/07 with 99.08% investment in government securities. The amount of investment in shares and debentures of other commercial banks and financial institutions has remained more or less that 1%. It was 5.51% in the FY 2003/04 after which it was reduced to 0.69% in FY 2005/06 and 0% in the last fiscal year ended 2006/07. The other investment of 0.92% in the FY 2006/07 is the share of investment in foreign companies.

Table: 4.12

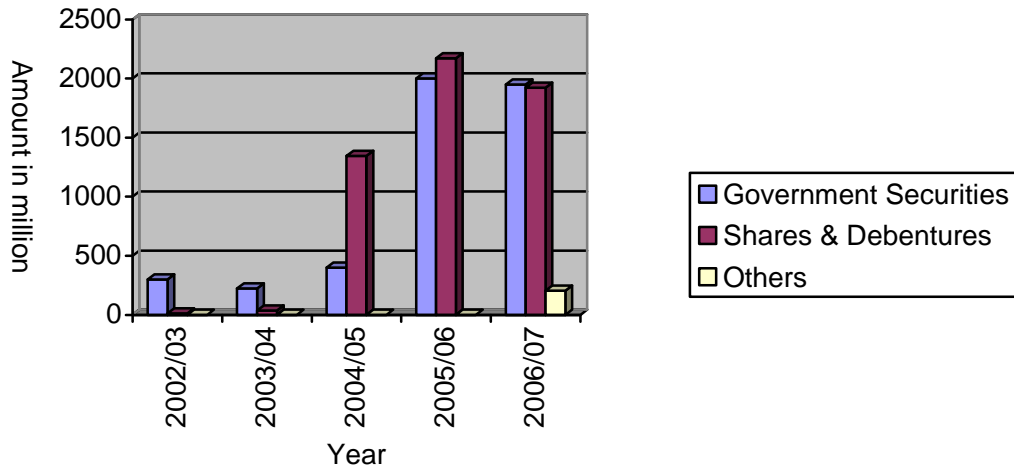
Average Investment Portfolio of Nepal Investment Bank Nepal Ltd.

(Rs in Million)

Fiscal Year	Government Securities		Shares & Debentures		Others		Total
	Amount	%	Amount	%	Amount	%	
2002/03	300.0	95.94	12.7	4.06	0.0	0.00	312.7
2003/04	224.4	85.65	37.6	14.35	0.0	0.00	262.0
2004/05	400.0	22.92	1345.3	77.08	0.0	0.00	1745.3
2005/06	2001.1	47.96	2171.4	52.04	0.0	0.00	4172.5
2006/07	1948.5	47.83	1922.2	47.18	203.5	4.99	4074.2

Figure: 4.11

Investment Portfolio of NIBL



The NIBL has been more flexible in terms of investment policy of the bank. The diversification of funds in terms of investments is found to be more versatile. The proportionate share of investment in government securities of the bank has been maintained at 95.94% in the FY 2002/03 and reduced to 85.65% in the FY 2003/04. The investment in government securities has reduced to 22.92% in the FY 2004/05. The same has again risen to gain its momentum in the range of 47.96 % in the FY 2005/06 and 47.83% in the FY 2006/07. Similarly, the investment in shares and debentures has risen by the same amount. The investment has remained at 4.06% in the FY 2002/03, while it is a much greater figure in the FY 2004/05 which is 77.08% of the total investment of NIBL. The same has remained at 52.04% and 47.18% in the FY 2005/06 and 2006/07 respectively. The investment of Rs 203.5 million in FY 2006/07 is found to be investment in foreign companies and short term securities.

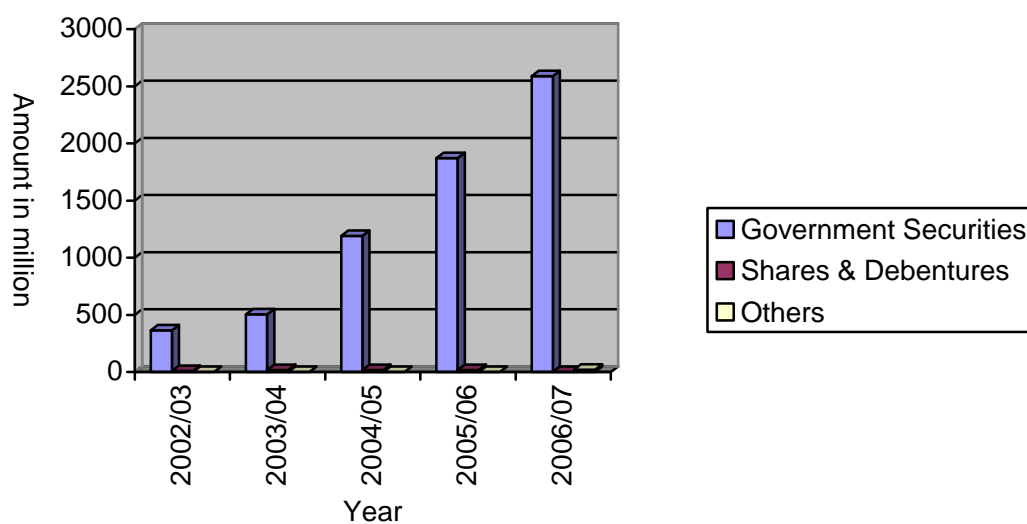
Table: 4.13

Average Investment Portfolio of Nepal SBI Bank Nepal Ltd.

(Rs in Million)

Fiscal Year	Government Securities		Shares & Debentures		Others		Total
	Amount	%	Amount	%	Amount	%	
2002/03	364.7	97.62	8.9	2.38	0.0	0.00	373.6
2003/04	503.2	96.56	17.9	3.44	0.0	0.00	521.1
2004/05	1189.4	98.52	17.9	1.48	0.0	0.00	1207.3
2005/06	1871.5	99.05	17.9	0.95	0.0	0.00	1889.4
2006/07	2588.2	99.25	0.0	0.00	19.5	0.75	2607.7

Figure: 4.12

Investment Portfolio of NSBIL

The tendency of NSBIL also seems to be more conservative. The bank's policy is such that no huge amount to be invested in other than government securities. The major portion of the funds of NSBIL is towards the

government securities. The same has risen from 97.62% in the FY2002/03 to 98.52% in FY 2004/05 and has retained its position in the FY 2006/07, which is 99.25% of the total amount of investment of NSBIL.

Table: 4.14

Commercial Banks' Average Investment Portfolio

Fiscal Year	Government Securities		Shares & Debentures		Others		Total
	Amount	%	Amount	%	Amount	%	
2002/03	25100.9	98.64	345.6	1.36	0.0	0.00	25446.5
2003/04	28573.8	83.53	5636.0	16.47	0.0	0.00	34209.8
2004/05	39045.5	86.03	6340.8	13.97	0.0	0.00	45386.3
2005/06	42384.3	85.33	7284.3	14.67	0.0	0.00	49668.6
2006/07	50822.0	84.45	6467.5	10.75	2891.5	4.80	60181.0

The above table provides us with the clear picture of the investment pattern of the entire commercial banks. The major portion of the investments of commercial banks is towards the government securities which in itself is a very low risk investment sector. However, some portion of investments has also been made towards the shares and debentures of other financial institutions and manufacturing companies.

The entire commercial banking industry has shown aggressiveness towards the investment in government securities. The ratio of the same has remained on the higher side. The proportion of investment in government securities in the FY 2002/03 was 98.64%, which was reduced to 83.53% in the FY 2003/04. The same in the FY 2006/07 in however, maintained at 84.45% of the total investments of commercial banks.

Similarly, the amount of investments in shares and debentures has remained at a moderate position. The 1.36% in FY 2002/03 has been increased to 16.47% in FY 2003/04. The percentage of investments in shares and debentures has been maintained at 14.67% in FY 2005/06 and 10.75% in FY 2006/07.

The banks cannot invest their major portion of funds in the risk free government securities, but must consider the directives issued by Nepal Rastra Bank in this regard. The NRB directives issued for investment in shares and debentures requires that commercial banks should limit their investment within 10% of the paid up capital.

4.1.3 Sector wise Composition of Loans and Advances

The portfolio of commercial banks comprises of a variety of composition of loans and advances granted in different sectors of the economy. The advances in various sectors of the economy have an impact on the overall economic development of the country.

In the present economic scenario, the commercial banks and financial institutions are not being able to grant loans to the Hydropower companies in Nepal, mainly due to the high amount of funds involved as well as the lack of adequate knowledge in the same. Eyeing to this fact, the financial institutions are beginning to show interest in investment in Hydropower projects for which orientation, seminars and expos are being organized to provide knowledge and mode of operation of the Hydropower Projects. The participation of financial institutions and other related companies in the Hydropower Mart organized in the capital recently shows the need for

granting advances in these projects, whose benefit is to the entire economic development of the nation.

In the context of sector-wise loans and advances, the major sectors of the lending of the commercial banks include Agriculture, transportation, Construction, Production, Wholesalers and retailers, etc. The analysis of the proportion of the sector wise loans granted in the different categories can be highlighted as follows:

Table: 4.15

Sector-Wise Classification of loans and Advances

(Rs in Lac)

	SCB	Nabil	HBL	EBL	NIBL	NSBIL
1.Agriculture	3452	519	5167	301	591	1785
2. Mining	221	289	482	40	65	314
3.Manufacturing	23006	44199	56351	22603	42782	27812
3.1 Food Production	4823	3024	8586	4924	6406	5469
3.2 Sugar	459		569	0		451
3.3 Drining Materials	3191		1425	561	1068	483
3.4 Tobaco	10			21	9	
3.5 Sunpat, Textile Product	1529	2462	10131	5261	5094	2111
3.6 Medicine	172	1109	2067	3869	776	2620
3.7 Cement	1265		3131	112	1012	1848
3.8 Metals (Basic iron steel	5425	6697	14322	5523	14742	2602
3.9 Others	6132	30907	16120	2332	13675	12228
4.Construction	11612	6652	2080	11210	2450	5391
5.Metal Products	26	1409	1116	275	654	2701
6.Transport equipment		11037	2261	896	264	46
7.Transport, Communicatio	150	2893	13236	7640	4587	5636
8.Wholesalers and Retailers	13850	19901	20139	21309	23165	9715
9. Finance, Insurance and R	3974	3335	9993	2133	5571	3101
10. Service Industries	6718	13873	14158	5252	11648	8705
11. Consumable loans	526	772	2255	1158	13123	988
12.local government				0		1457
13.others	21741	7348	8671	6622		
Total loan	85276	112227	135909	79437	104900	67651

Source: Banking and Financial statistics, NRB FY 2063/64

The above table shows the amount of loans outstanding in the various sectors of the economy. The figures represent those as at the close of the FY

2063/64. The sampled commercial banks' loans and advances outstanding have been categorized under the sector wise heads. The above analysis has been conducted for the fiscal year ended 2063/64 only, basically because of the unavailability of data for the previous years. However, full effort is being made to get the best out of the data for the last one year.

The sector-wise loans and advances of commercial banks actually signify the portfolio of any financial sector of the economy. This analysis is made by all the institutions involved in the financial sector in order to analyze the loan mix of their particular branch or organization as a whole.

The sampled commercial banks' loans and advances are categorized into 13 broad categories. The major sectors of the economy are being considered for categorization of loans and advances of commercial banks. As far as the sectors of the economy are considered, the above table highlights almost all the sectors of the economy and can be considered as the basis for analysis of study.

The commercial banks have shown great interest to develop the manufacturing sectors of the economy. Out of the total loans outstanding of Rs 85,276 Lac of Standard Chartered Bank, the lending of the bank is mainly focused on the manufacturing sector of the economy, which is approximately 27% of the total loans and advances amounting to Rs 23,006 Lac. The lending in food production companies and other miscellaneous production like paper, leather, plastic, etc occupies the main share of the loans and advances of commercial banks. Similarly, the bank has also made loans to the units producing drinking materials, textiles, cements and metals which is Rs 3191 Lac, Rs 1529 Lac, Rs 1265 Lac and Rs 5425 Lac respectively. The metals production industries are also one of the major sources of income for

the bank considering the amount of investments required for operation of metal industries as well as the amount of funds lent out to the same by different commercial banks.

Similarly, other sampled commercial banks have also been found to be highly aggressive in lending in the manufacturing sector of the economy.

The prevailing security situation and the insurgency existed in the country had made the lenders think of better options and possibilities to earn safe profits. This has led to a dramatic rise in the lending to the wholesalers and retailers in the country. The small loans made to these sectors of the economy are expected to earn better yield as well as they bear less chances of default. Moreover, since the amount of loan disbursed to the wholesalers and retailers are less than or slightly higher in the range of Rs 100 Lac, which has thus proved to be a safe landing of funds for the commercial banks. The total lending of commercial banks to the wholesalers and retailers is Rs 13,850 Lac of the total loan amount of Rs 85,276 Lac. The lending in this sector has been around 16% of the total loan outstanding.

The various unfavorable situations that had been seen over the last few years have given rise to a demand for construction of houses and business complexes. The lack of areas for prospective investment in the country has also been the major cause for dramatic increase in the housing construction business. Moreover, with the rise in Maoist activities in the regions outside the valley, the construction in the valley was extremely high. The SCB could also grab this opportunity of lending in the construction of houses. Out of the total loan, around 14% of the funds are being lent to construction sector of the economy amounting to Rs 11,612 Lac. The banks' business from the same was found to be profitable and that too for a longer period of time.

Similarly, the commercial banks have lent its funds in other different sectors of the economy like Finance, Insurance, Real Estate, which is Rs 3,974 Lac out of the total loans outstanding. The bank has also helped in promoting the deprived sector of the economy vide investment in agriculture to promote the standard of living of the poor people. The investment in mining is another neglected sector of the economy. The percentage of the same is less than 1% by all the commercial banks.

The commercial banking activities are also found to be focused on the wholesale and retail traders in the country. The investment in the same is found to be considerably higher in compared to other sectors of the economy. Standard Chartered Bank has lent around 16% to the wholesalers and retailers of the total loan outstanding of Rs 85,276 Lac. Similarly, the lending to the wholesalers and retailers account for 18% by Nabil Bank, 15% by Himalayan Bank, 27% by Everest Bank, 22% by Nepal Investment Bank and 14 % by Nepal SBI Bank of the total loan portfolio of sampled commercial banks.

The commercial banks have also not neglected the finance and insurance sectors as well as various service oriented industries. The sampled commercial banks have lent less than 10% to the finance, insurance companies. These sectors themselves collect funds from the public and lend them in various sectors. Thus, these companies do not require a large amount of funds. However, eyeing to the need and demand from these service industries, the commercial banks are seen investing in these companies as well.

Similarly, service industries are also one of the important sectors of the economy. The development of service sector can be said to be one step

forward towards the economic development of the country. Thus, greater efforts are required to be made for development of service sector in the country. The commercial banks have also shown positive response towards these sectors considering the amount of funds lent in this sector. Standard Chartered Bank has lent about 8% of the total loan to the service industries. Similarly, the loan portfolio of other sampled commercial banks also includes advances in service sector industries. Nabil Bank has lent around 13% of total loan, Himalayan Bank 10%, Everest Bank 7%, Investment Bank 11% and Nepal SBI Bank has lent 13% of the total loan outstanding to the service sector industries. The lending in service industries has assisted in the economic growth of the country.

The commercial banks have also been lending in the consumable loans like purchase of computers, television, refrigerator, etc. in the form of micro credit lending in the urban areas. Nepal Investment Bank has advanced a sum of Rs 13,123 Lac of the total loan outstanding of Rs 1,049,00 Lac. Similarly, Himalayan bank and Everest Bank are in the row with lending of Rs 2255 Lac and 1158 Lac respectively. The banks have realized that these are the days of consumer satisfaction and that consumer is the king is widely prevalent in the financial sector too. Hence, these products are introduced by the banks to meet the demand of the consumers.

4.1.4 Security-Wise Composition of Loans and Advances:

Table: 4.16

Security-wise Classification of Loans and Advances

(Rs in Lac)

	SCBNL	Nabil	HBL	EBL	NIBL	NSBIL
1..Gold and silver				0	1084	
2 Loan outstanding on security of	11332	2468	2693	1214	201	71
3 .Loan against non government	1589		62	91	1832	900
4 Fixed deposit	3188	2043	4040	2154	934	853
Own	1804	1359	3879	1549	630	847
Others	1384	684	161	605	304	6
5 Property	50933	76582	111072	71498	94734	59528
5.1 Fixed Assets	44728	47639	87343	50511	55182	40620
5.2 current assets	6205	28943	23729	20988	39552	18908
6. Security of Bills	142	15137	5406	1020	1795	2576
6.1 Domestic	142	16	17	150	65	288
6.2 Foreign		15121	5389	870	1730	2288
7 Guarantee	4293	2964	11331	2447	3186	3614
7.1 government's guarantee				0		201
7.2 Institutional guarantee	4042	1573	2673	2339	3045	3330
7.3 Personal guarantee		1	459	108	28	83
7.4 group guarantee		100		0		
7.5 other guarantee	251	1290	8199	0	113	
8. Credit Card	507	442	328	0		
9. Loan for Earthquake victims				0		
10. Others	13292	12591	977	1012	1134	109
total	85276	112227	135909	79437	104900	67651

A bank is a financial institution, the major function of which is to earn profits by providing services in the form of loans and advances. The bank accept deposits from the public providing them a certain percentage of interest and lend the same funds to the other group of people who are in need of funds, thereby charging a certain percentage of interest on the same. The difference in the interest on deposits and the interest on loans is the profit earned by the banks or any other financial institution. The banks have to fulfill all the operating as well as contingent expenses from this portion of profit earned and maintain a net positive profit.

The rate of interest on deposits as well as loans is determined by the amount of liquid funds in the economy as well as the amount of risk involved in the same. Further, the loan is granted only on the satisfactory compliance of the credit requirements of the bank. One of the major and significant requirements for eligibility of loan is the collateral security for the loan. The security offered by the borrower for the loan should be sufficient to cover the exposure for the proposed limit required. The same collateral security is classified in order to determine the loans advanced against the nature of collateral security.

The above table representing security-wise classification of loans and advances provides us with the general ideas regarding loans advanced against different securities. From the above table, Standard Chartered Bank is seen to be aggressive towards lending against government bonds, which is one of the least risky investments as well as advances. The amount of loans against Nepal Government's bonds is Rs 11332 Lac, which is 13.29% of the total loans outstanding of SCB. Similarly, other sampled commercial banks have also shown quite an effect on lending against securities of government bonds. Nabil bank has advanced only 2.20% of the total loans, Himalayan Bank 2%, Everest Bank 1.53%, Nepal Investment Bank and Nepal SBI Bank less than 1%. The amount of loans of other sampled commercial banks is less due to the other banks being more motivated towards lending of other commercial activities.

Similarly, the investment against Fixed Deposits is also quite high considering the strategy of the bank. Standard Chartered Bank occupies the topmost position in lending against Fixed Deposit Receipts. The percentage of total investment lent is around 3% of the total loans and advances.

Similarly, Himalayan Bank and Everest Bank follow the row with lending against Fixed Deposit in the range of 2% of the total loans and advances. Other sampled banks like Nabil Bank, Nepal Investment Bank and Nepal SBI Bank have lending against FDR in the range of 0.86% to 1.82% of the total loans and advances. It can be considered that lending against Fixed Deposit Receipt is one of the less risky lending considering the fact that only 90% of the FD is lent, which leaves a cash margin of 10% at all times.

Collateral Security is the foremost important and mandatory as well in order to grant any loan to the borrower. Nepal Rastra Bank has also imposed strict guidelines regarding collateral security for any loan. Hence, the major portion of loan flow of any commercial banks and financial institutions is backed up by primary as well as secondary collateral security.

The securities can be basically considered to be of two categories: Primary and Secondary Security. Primary security constitutes of those securities against which loan is granted. For example: in case of Overdraft loan facility, the loan is advanced against hypothecation of stocks and receivables of the unit. If the unit is a wholesaler of rice, then the inventory of rice is considered as the primary security for this case. But, due to the impractical situation of any bank to regularly monitor the stock position of the unit, an additional security in the form of land and building is mortgaged in favor of the bank that is known to be secondary security. It can thus be illustrated that the first charge on which the bank can make, if the loan becomes bad, is the primary security.

In another example of Housing Loan Facility, the primary security is the land and building itself, the security of first charge to the bank.

Hence, the mortgage of collateral security is the most important and the most widely used security for lending of loans and advances. It is therefore, evident that major portion of the loans and advances of commercial banks is granted against the collateral security of land and building as well as primary securities of inventory and book debts of the unit or company.

In the similar manner, the commercial banks are also not an exception. Even they have the obligation to follow the guidelines issued by Nepal Rastra Bank as well as secure themselves against the risk of non-performing loans. The strategy of the particular bank is another factor for the value and amount of collateral security mortgaged in the name of the bank. The more strict monitoring ability of the bank, the lesser the amount of collateral security required.

The sampled commercial banks also possess more than 50% of the total loans and advances against the mortgage of collateral security. Standard Chartered Bank has Rs 50,933 Lac of loans and advances against securities in favor of the bank out of the total loans and advances of Rs 85,276 Lac. Out of which, 87.82% of loans is granted against mortgage of land and building as collateral security. The remaining 12.18% of the loans is against current assets only, which can be considered quite risky if there is any lag in proper monitoring of the same. Similarly, the total loans and advances outstanding of Nabil Bank is Rs 11, 22, 27 Lac, of which the loans and advances against securities is Rs 76,582 Lac which is 68.24% of the total loans. And the loans against collateral/ secondary securities are 62.21% of the loans against securities. The remaining 37.79% is against current assets or securities. Likewise, out of the total loans outstanding of Rs 135909 Lac of Himalayan Bank Ltd., the loans against securities are Rs 111072 Lac which is 82% of the total loans of HBL. Similarly, the lending against

collateral securities is Rs 87343 Lac that constitutes around 79% of the loans against securities. The loan portfolio of Everest Bank constitutes 90% of the total loans against securities. Out of the 90% of loan against securities, 70.65% of the loans are advanced against secondary collateral securities. The remaining 29.35% of the loans is strictly against current assets like inventory and receivables. The story of other sampled banks like NIBL and NSBIL also falls in the same category. The investment of Nepal Investment Bank against securities is 90.30% of the total loans and advances of which 58.25% of them are against land and building as collateral securities. Similarly, Nepal SBI Bank has total loans of Rs 59528 Lac of the total loan of Rs 67651 Lac. The loan against collateral securities is Rs 40620 Lac, which constitutes around 68.24% of the loans against securities.

The above table thus suggests the major indication of the process of lending of the commercial banks. It can also be analyzed that whatever the nature of the business, the amount and value of collateral securities is one of the major factors. The recent issues of growing non-performing loans in the traditional commercial banks like Nepal Bank Ltd. and Rastriya Banijya Bank has made alert the other commercial banks towards strict compliance to the mortgage of collateral securities.

The other important part of commercial banks in lending of loans and advances is against guarantee. In the present scenario, the trend of the same has significantly decreased but still there exists a scene of lending against personal or institutional guarantee. The personal guarantee is basically granted against the goodwill of very reputed business tycoons. But the amount of risk involved in such loans is quite high considering the fact that no other securities as such is mortgaged or hypothecated in favor of the bank. However, institutional guarantee is still in existence for acceptance as

additional security besides the regular collateral security of fixed as well as current assets. The institutional guarantee is more secured compared to that of personal guarantee in respect to the probability of recovery of loans.

The commercial banks are also found to lend against institutional guarantee rather than personal guarantee or other guarantees. Although, the lending against personal as well as institutional guarantee is nominal but the trend of the same still exists. The lending of Standard Chartered Bank against personal guarantee is Rs 4042 Lac, which is only 4.74% of the total loans and advances. Similarly, other banks are also lending a small portion of the loans and advances against personal and other guarantees. The amount of loans against personal guarantees of Nabil Bank is Rs 1573 Lac of the total loan of Rs 112227 Lac. Likewise, Himalayan Bank, Everest Bank, Nepal Investment Bank and Nepal SBI Bank has lent Rs 2673 Lac, Rs 2339 Lac, Rs 3045 Lac and Rs 3330 Lac respectively.

The above table also shows that the commercial banks, other than Standard Chartered Bank has lent against personal guarantees. Himalayan Bank and Everest Bank has loans of Rs 459 Lac and Rs 108 Lac respectively, but the other sampled commercial banks have very limited lending against personal guarantee like Nabil Bank Rs 1.00 Lac, Nepal Investment Bank Rs 28.00 Lac and Nepal SBI Bank Rs 83.00 Lac only. This also suggests that the banks today are more cautious towards lending on unsecured basis, where the level of risk significantly rises.

The 21st Century can also be said to be the age of electronics. The foreign companies are working harder and harder to simplify the traditional banking habits. The introduction of debit card in the recent years has enhanced the banking habits of the customers. The facility of easy and convenient

withdrawals of cash is one major step towards the development of banking sector. Similarly, the recent introduction of credit card is another form of loan that is in existence today. Although the use of credit cards is wide in the international market, but Nepal has not been able to gain that popularity still today. Only a few selected groups of people are using this credit facility. This is also the reason that only a few commercial banks are providing this facility. Out of the sampled commercial banks, only three of them are issuing such credit facility to the customers. Standard Chartered Bank, Nabil Bank and Himalayan Bank are advancing loans in the form of credit cards. The amount of loans of these banks is Rs 507 Lac, Rs 442 Lac and Rs 328 Lac respectively. The other problem in issue of the same is the lack of strict monitoring features, which has further created problems in recovery of the same.

Thus, from the above table it can be analyzed that the major portion of loans and advances are granted against collateral securities as well as current assets as stipulated by Nepal Rastra Bank via various directives. Besides, the banks are also involved in certain amount of risk by lending against personal as well as institutional guarantees. It is therefore, felt the need for strict compliance to the credit and lending strategies of the bank and the regulations and guidelines of Nepal Rastra Bank so that the lending of the banks falls in the right hands and the deposits of the public are well utilized.

4.1.5 Deprived and Priority Sector Statement of Commercial Banks

The deprived and priority sector investment of commercial banks are one of the most important lending of commercial banks which is directly associated with the development of under-developed country like Nepal. Moreover, the lending in the same has also been made compulsory by Nepal Rastra Bank.

According to the directives issued by Nepal Rastra Bank, the commercial banks must provide at least 4 percent to the priority sector and 0.25 to 3 percent to the deprived sector out of their total loans outstanding.

The commercial banks have invested to the tune of Rs 13499.24 million in mid-July 2007. Similarly, the investment of commercial banks to the deprived sector of the economy is Rs 4367.91 million in mid-July 2007. The investment in priority sector has increased by 49.79 percent as compared to the same period in mid-July 2006. Similarly, deprived sector lending increased by 55.62 percent as compared to mid-July 2006.

The table below shows the position of sampled commercial banks' lending in the priority and deprived sector as at the close of mid-July 2007:

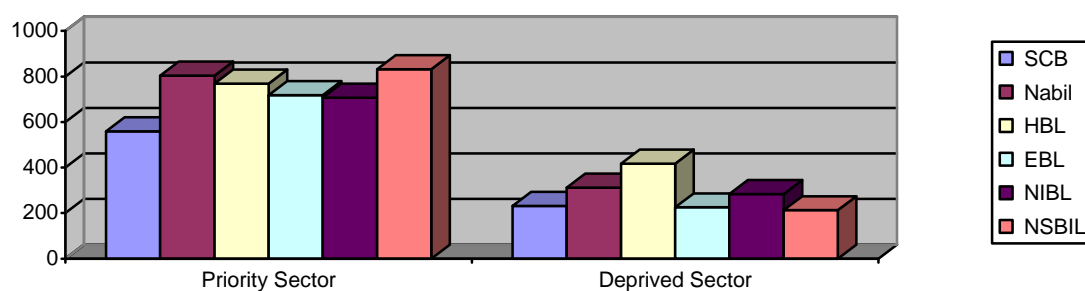
Table: 4.17

Priority and Deprived Sector Loan Statement

(Rs in million)

Sectors	Banks					
	SCBNL	Nabil	HBL	EBL	NIBL	NSBIL
1. Priority Sector	559.6	803.2	769.0	718.5	706.3	831.3
(A) Direct Investment	391.3	507.7	479.0	524.9	393.5	553.8
- Agriculture	94.4	47.3	15.8	18.0	10.7	69.0
- Domestic Industries	49.7	79.8	73.3	182.2	115.1	100.2
- Services	247.2	297.8	389.9	324.7	187.0	367.6
- Power Sector	0.0	82.9	0.0	0.0	80.7	17.0
- Machines & Import of Raw Materials	0.0	0.0	0.0	0.0	0.0	0.0
(B) Indirect Investment	168.3	295.5	290.0	193.6	312.8	277.5
2. Deprived Sector	232.0	311.1	416.9	225.1	282.96	212.5
(A) Direct Investment	63.7	15.6	0.0	31.5	0.16	0.0
- Agriculture	2.6	5.7	0.0	11.5	0.0	0.0
- Domestic Industries	2.6	0.0	0.0	0.04	0.0	0.0
- Services	58.5	9.9	0.0	19.9	0.16	0.0
(B) Indirect Investment	168.3	295.5	416.9	193.6	282.8	212.5

Figure: 4.13

Priority & Deprived Sector Loans and Advances

Nepal is an under-developed country with majority of population lying below the line of poverty. This has further pushed the country towards lack of development and further increase in poverty. The self-help development programs introduced by various NGO's and INGO's have helped to enhance the standard of living of the rural people. With further funds flow from the commercial banking industry to the deprived population, the rate of poverty is expected to decrease significantly. The commercial banks have felt their social responsibility by providing credit to the priority and deprived sectors of the economy. In this process, Nepal SBI Bank and Nabil Bank have provided maximum amount of credit to the private sectors of the economy. They have lent Rs 831.3 million and Rs 803.2 million respectively. Similarly, Himalayan Bank, Everest Bank and Nepal Investment Bank fall in the next category with investment amounting to Rs 769.0 million, Rs 718.5 million and Rs 706.3 million respectively. Similarly, Standard Chartered Bank has lent least amount to the prioritized sector as compared to the other sampled commercial banks to the tune of Rs 559.6 million only.

Similarly, the lending of commercial banks towards the deprived sector is also praise-worthy. The lending by the commercial banks to the deprived sector has increased significantly despite the insurgency and state of war prevailing in the country during the period of FY ending mid July 2007. Himalayan Bank and Nabil Bank have made maximum amount of credit to the deprived sector in the tune of Rs 416.9 million and 311.1 million respectively. Similarly, other sampled commercial banks have also advanced credit in the range of Rs 250.0 million to the deprived sector of the economy. The amount of funds advanced also includes the funds lent through various rural microfinance institutions.

From the table, it can also be seen that the banks have lent most of the funds in the service sector of the economy. The amount of funds invested in agriculture and other domestic industries like power and domestic production units is found to be nominal, considering the amount of funds advanced as credit.

4.2 Classification of Loans and Advances

The classification of loans and advances does not simply refer to the classification of loans and advances on the basis of sector-wise or security-wise classification. It also refers to the classification on the basis of performing and non-performing loans.

Loan simply refers to the credit of funds in return for a promise to pay back in the future. During this period, the borrower pays the interest on the sum borrowed and before the maturity of the loan; the principal amount is paid back with accrued amount of interest at that point of time. In this mechanism of lending and borrowing, there is a possibility of the borrower going bankrupt as a result of which, the principal amount of funds along with lent could not be paid back. Thus, the apex bank of Nepal, Nepal Rastra Bank has classified the borrowers on the basis of the payment of principal. Nepal Rastra Bank has classified the same as Performing Loans and Non-Performing Loans.

4.2.1 On the basis of Aging, Classification-wise Average Loan Outstanding

The classification of loan is made not only for the purpose of analysis, but to safeguard the bank and financial institutions against the occurrence of any

irregularities against the loan. On the basis of this classification of loans, the provision is made from the profits of the bank so that in case the loan goes bad, the bank does not have to bear the entire amount of principal and interest in one stroke. The provision amount thus maintained by the bank helps the bank in adjusting the loss thus acquired.

The detailed study of the same is as follows:

4.2.1.1 Performing Loans

The performing loans can be classified on the basis of the regularity of the loan as well as the principal amount due of the loan. The loans are granted for a specified period of loan. Thus, the renewal of the same or payment of loan is required as soon as the loan is expired. All the credit norms of the bank are thereby to be fulfilled before the loan is finally renewed. Hence, depending upon the nature of the loan, the renewal process as well as the payment mechanism varies. For example: in case of Overdraft loan, the maturity of the loan is 1 year. If the same is not renewed within one three months of expiry of the loan, the loan can be classified under other head than the performing loans. Similarly, the loan that is based on EMI, on the other hand needs the regular payment of interest. In this case, the non-fulfillment of repayment obligations shall categorize the loan under sub-standard, doubtful or bad loan.

4.2.1.1.1 Pass Loan

Loans and advances whose principal amount are not past due and past due for a period up to 3 (Three) months shall be included in this category. These loans are classified as performing loans. Under the pass loan category, a

provision of 1% is required to be maintained by the commercial banks. This means that entire loans outstanding shall be maintained at least 1%, if the entire loan falls in the Pass Category.

4.2.1.2 Non-Performing Loans

The non-performing loan can be categorized as the loans, which are not performing well, and principal of the loan is past due for a period of more than three months. The loans falling under this category should be viewed suspiciously and with caution until the amount of interest and principal is recovered or the loan is again categorized as performing loans. The non-performing loans are further classified into sub-categories depending upon the age of principal amount due of the loan.

4.2.1.2.1 Sub-Standard

The sub-standard loan is the first type in the non-performing loans category. All loans and advances the principal of which are past due for a period of more than **3 months and up to 6 months** shall be included in this category. The percentage of provision required in this case is 25% of the total loans outstanding that falls in this category.

4.2.1.2.2 Doubtful

As the name itself suggests, this loan should be considered very carefully and with caution to prevent it from being loss of entire loan to the bank. All loans and advances the principal of which are past due for a period of more than **6 months and up to 1 year** shall be included in this category. The amount of provision required to be made in doubtful loan is 50% of the loan outstanding.

4.2.1.2.3 Loss

All loans and advances the principal of which are past due for a period of more than **1 (one) year** as well as advances which have least possibility of recovery or considered unrecoverable and those having thin possibility of even partial recovery in future shall be included in this category. These loans are a threat to the performance of the bank and the same shall be disposed of as soon as possible. The provision of 100% shall be made in this loan where the possibility of recovery of the loan is almost nil.

Besides, the above-mentioned classification of loans and advances of performing and non-performing loans, the loans and advances of commercial banks and other financial institutions can also be classified as Reschedule/ Restructure of loans.

The Reschedule/ Restructure of loan occur in case of term loans having a long and fixed maturity period. In case of term loans, the maturity of the loan is more than one year where the repayment of the loan is made on monthly or quarterly basis as required by the borrower. On a later date, if the borrower is unable to fulfill the monthly repayment obligations and requires

the loan to be further extended for another few years or months, then that is the case of rescheduling of loans. In case of rescheduling of loans, the bank must recover from the borrower at least 20% of the interest accrued at the time of reschedule. This type of loan falls in between the Performing and Non-Performing Loans category.

Similarly, the restructuring of loan takes place under similar circumstances but in case of restructuring, the nature of the loan is changed due to the inability of the borrower to repay the obligations. This is similar to the rescheduling of loans and falls in the same category.

The following table gives a picture of the non-performing loan to total loans status of sampled commercial banks.

Table: 4.18

Ratio of Non-Performing Loans to Total Loans

(In percent)

Banks	Mid-July 2005	Mid-July 2006	Mid-July 2007
SCB	4.13	3.77	2.69
Nabil Bank	5.54	3.35	1.32
HBL	10.08	8.88	7.44
EBL	2.20	1.72	1.63
NIBL	1.98	2.47	2.69
NSBIL	11.71	6.25	6.54

4.2.2 On the basis of Aging, Classification-wise Loan Loss Provisioning

On the basis of the matters discussed earlier, the commercial banks and financial institutions are required to maintain a certain percentage of provision for their loans outstanding in case if there is any losses. These provisions are made on the basis of aging of loans outstanding. It requires that longer the age of the loans outstanding, the higher the percentage of provisioning required.

The loan loss provision maintained by the commercial banks has a dual effect on the profitability of the bank. On the one hand, they act as a burden to the banks in the sense that they increase expenses, raise liabilities, reduce profits and eventually turn into losses. While on the other hand, they act as a risk-sharing device in the long run when the loss loans finally do not realize. At this point of time, the banks are free from booking extra losses since the provision for the same loan has already been maintained.

In order to properly analyze and compare on these issues of commercial banks an attempt has been made to look in to some of the selected commercial banks' classification-wise loan provisioning, which is presented in the following table.

Table: 4.19

Statement of Loan Loss Provisioning

(Rs in million)

Banks Classification	SCBNL	Nabil	HBL	EBL	NIBL	NSBIL
	1.Performing Loans	16.30	-26.10	0.00	27.80	21.30
2. Non-Performing Loan	13.80	51.70	0.00	56.70	17.30	121.10
2.1 Sub-Standard	0.00	36.40	0.00	3.70	3.10	2.90
2.2 Doubtful	0.00	-30.70	0.00	-11.90	4.00	-32.00
2.3 Loss	13.80	46.00	0.00	64.90	10.20	150.20

4.2.3 Partitioning of Total Loan as Total Loan Loss Provision and Net Loan

Commercial Banks' Loans and Advances that include Bills Purchased and Discounted are also composed of loan loss provision and net loan. The real or the actual amount of loans and advances of commercial banks can only be assessed if the amount of net loan excluding loan loss provision could be determined. This can be done by subtracting loan loss provision from the total loans and advances. The value thus derived is the net loan or the real value of loans granted.

In an attempt to analyze these aspects of the selected commercial banks and to compare one another, the following table is believed to be helpful.

Table: 4.20

Total Loan Outstanding as composed of Total Provision and Net Loan.

(Rs in million)

S.No.	Banks	Net Loan	Total Provision	Total Loan
1.	Standard Chartered Bank Nepal Ltd. (SCBNL)	8249.9	277.7	8527.6
2.	Nabil Bank Ltd. (Nabil)	10830.7	392.0	11222.7
3.	Himalayan Bank Ltd. (HBL)	12653.8	937.1	13590.9
4.	Everest Bank Ltd. (EBL)	7626.0	317.7	7943.7
5.	Nepal Investment Bank Ltd. (NIBL)	10233.8	256.2	10490.0
6.	Nepal SBI Bank Ltd. (NSBIL)	6367.80	397.3	6765.1

The above table highlights the loan loss provision of the sampled commercial banks and the amount of net loan of commercial banks after the provision for loan loss. The table also depicts the healthy position of commercial banks, where the loan loss provision of commercial banks is well below 10%. This shows that the sampled commercial banks are found to be lending with caution and care making sure that the funds are not lent out carelessly.

Standard Chartered Bank Ltd. has a total loan amount of Rs 8527.60 million out of which Rs 277.70 million is provisioned for loan loss. This amounts to 3.26% of the total loans and advances.

Similarly, Nabil Bank is found to be making a loan loss provision of Rs 392.0 million out of a total loan amount of Rs 11222.7 million. The percentage of loan loss provision out of the total loan is 3.49%, which can be considered satisfactory.

Himalayan Bank holds the status of provisioning highest percentage of loan loss provision among the sampled commercial banks. The percentage of loan loss provision is 6.90% amounting to Rs 937.10 million out of the total loan amount of Rs 1359.9 million.

Similarly, Everest Bank and Nepal SBI Bank is found to be making loan loss provision of 4% and 5.87% out of the total loan amount of Rs 7943.70 million and 6765.10 million respectively.

Nepal Investment Bank Ltd. is the one with the least amount of loan loss provision among the sampled commercial banks. The percentage of the same is 2.44% out of the total loan amount of Rs 10490.0 million.

Thus, the above analysis shows that Nepal Investment Bank is in the most desirable position with the least amount of loan loss provision and holding 97.56% of the total loans and advances, whereas Himalayan Bank in the least desirable position with 93.10% of net loans.

4.3 Analysis of Commercial Banks' Interest Accrued

The amount of interest accrued of the commercial banks is found to be in the increasing trend over the years. The main reason for this is the increase in the loans and advances of commercial banks as well as the policy of Nepal Rastra Bank, which is flexible considering the leakage in the income

realization of commercial banks. The interest accrued on commercial banks has been found to be increasing on an approximate average of 17% per annum from the fiscal year 2002-07. The amount of interest accrued of entire commercial banks in mid-July 2003 was Rs 19888.5 million, which has increased to a huge figure of Rs 38786.5 million in mid-July 2007.

The interest accrued on loans and advances reduces the quality of banks' loan portfolio, increases the overall risk and reduces profit as interest accrued can not be credited in the profit and loss account.

In order to analyze the details of interest accrued; the following table is found to be helpful.

Table: 4.21

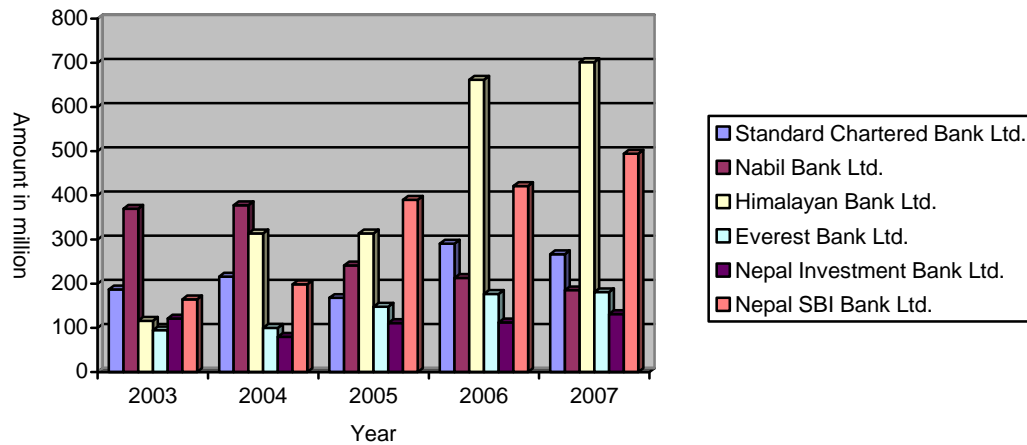
Commercial Banks' Amount of Interest Accrued

(Rs in million)

S.N	Name of the Bank	2003	2004	2005	2006	2007
1.	Standard Chartered Bank Ltd.	186.6	216.0	167.6	290.7	266.6
2.	Nabil Bank Ltd.	369.5	377.3	241.2	212.7	185.0
3.	Himalayan Bank Ltd.	115.5	313.4	313.5	661.9	701.4
4.	Everest Bank Ltd.	94.3	99.8	147.6	176.6	180.6
5.	Nepal Investment Bank Ltd.	120.6	79.3	110.6	112.0	131.2
6.	Nepal SBI Bank Ltd.	164.6	198.5	389.7	421.2	494.0

Figure: 4.14

Commercial Banks' Amount of Interest Accrued



The above table clearly shows the position of interest accrued of the sampled commercial banks over a period of five years from mid July 2003 to mid July 2007. During the period of study, the amounts of interest accrued of sampled commercial banks are found to be fluctuating over the years.

Considering the individual banks in this regard, Standard Chartered Bank has Rs 186.60 million of interest accrued in mid-July 2003. The same has increased to Rs 216.00 million in mid-July 2004, decreased to Rs 167.60 million in mid-July 2005 and increased to Rs 290.70 million in mid-July 2006 and again decreased to Rs 266.60 million in mid-July 2007. This shows that the credit risk position of SCB is minimized each year by maintaining the amount of interest accrued. The banks seem to focus on reducing the amount of interest accrued every year it is one the rise.

Similarly, Nabil Bank has shown similar trend over the period of study. The amount of interest accrued in mid-July 2003 was Rs 369.50 million, which

increased to Rs 377.30 million in mid-July 2005. The interest accrued of the bank has then been in declining trend with Rs 241.20 in mid-July 2005, Rs 212.70 million in mid-July 2006 and the least in mid-July 2007 with interest accrued amount of Rs 185.00. The bank has maintained the amount of interest accrued despite the increase in total loans and advances of the bank. This also signifies that major portion of interest accrued in the particular year is already realized on cash basis, with least amount of accrued interest on risky loans remaining outstanding.

On the other hand, Himalayan Bank has shown upside-down position in the nature of interest accrued with respect to Nabil Bank. The amount of interest accrued of Himalayan Bank over the period of 2003 to 2007 is found to be in increasing trend. The amount has significantly increased each year with increase in loans and advances of the bank.

On the other hand, the amount of interest accrued of Everest Bank is found to be in increasing trend over the years of study. The amount of interest is Rs 94.30 million in mid-July 2003. The same is increasing each year with amount Rs 99.80 million, Rs 147.60 million, Rs 176.60 million and Rs 180.60 million in the year mid-July 2004 to mid- July 2007.

Similarly, Nepal Investment Bank has shown the trend of fluctuating amount of interest accrued over the last five years of study. The amount of interest accrued was initially recorded at Rs 120.60 million in mid-July 2003. The same declined to Rs 79.30 million in mid-July 2004, after which the interest accrued is shown to be in increasing trend as Rs 110.60 million, Rs 112.00 million and Rs 131.20 million in the consecutive years from mid-July 2005 to mid-July 2007. This shows that the risk of the business could be

diversified along with the amount of interest accrued and the portfolio of loans could be increased.

Nepal SBI Bank has a similar trend of increasing amount of interest accrued; showing a high amount of interest accrued in comparison to that of the other banks. Moreover, the amount is also on the higher side considering the amount of loans and advances. The same is found to be Rs 164.60 million, Rs 198.50 million, Rs 389.70 million, Rs 421.20 million, Rs 494.00 million in the years of study from mid-July 2003 to mid-July 2007.

Thus, the amount of interest accrued of different sampled commercial banks is found to be in different trend. Some of the banks are found to be more prone to interest risk whereas some are paying more attention to the risk and making efforts to minimize the same. In totality it can be said that the commercial banks are more focused on income generation of the bank, despite a nominal amount of risk involved. Thus, from the table above, it can be seen that Nabil Bank is in the finest position with negative growth in the amount of interest accrued whereas Himalayan Bank is the one with highest growth of 507% in comparison to the amount of interest accrued in mid-July 2003 and mid-July 2007.

4.4 Statistical Analysis

This section of analysis performs the statistical analyses of the selected commercial banks using statistical tools such as the Coefficient of Correlation between loans & advances and interest accrued growth on annual loan loss provision and total loans and advances outstanding of the selected commercial banks. Moreover, the mean growth on loans and advances is also analyzed by another statistical tool called the test of hypothesis which

assumes that the mean growth of sampled commercial banks is alike. This hypothesis is tested to obtain the results.

4.4.1 Coefficient of Correlation Analysis

This analysis uses the Karl Pearsons' coefficient of correlation to find out the relationship between selected variables. Correlation analysis describes the relationship between variables that could be positive or negative. In other words, it helps to determine whether:

- A positive or negative relationship exists.
- The relationship is significant or not.
- It can establish cause and effect relationship or not.

A simple correlation uses the following properties to properly analyze and interpret in decision-making:

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

Correlation Coefficient between loans and advances and interest accrued.

The correlation coefficient between loans and advances and interest accrued measures the degree of relationship between two variables; x and y. The analysis of correlation coefficient takes into account the two variables of which loans and advances is the independent variable (x) and interest accrued is the dependent variable (y). The basic reason for the computation of correlation coefficient is to determine whether the interest accrued is dependent on the amount of loans and advances or not. This analysis also determines whether there is significant relationship between these two variables.

In order to measure the actual relationship between the two variables, the probable error of correlation coefficient is also used. The Probable Error is an old measure of ascertaining the reliability of the value of Personian Coefficient of Correlation. 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 $r < P.E. (r)$, then the value of r is not significant.
- ii. If $r > 6 * P.E. (r)$, then r is definitely significant.
- iii. In other situations, nothing can be calculated with certainty.

The following table has been derived by calculating the Karl Pearsons' coefficient of Correlation between loans and advances and interest accrued of SCBNL, Nabil, HBL, EBL, NIBL, NSBIL The number of years under study is for the last five fiscal years up to FY ended 2007.

Table: 4.22

**Correlation Coefficient between Loans and
advances and Interest Accrued**

Banks	Base of Evaluation			
	(r)	(r ²)	P.E. (r)	6*P.E. (r)
SCBNL	0.64	0.4096	0.1781	1.0686
Nabil	(0.73)	0.5329	0.1409	0.8454
HBL	0.99	0.9801	0.0060	0.0360
EBL	0.93	0.8649	0.0407	0.2444
NIBL	0.62	0.3844	0.1857	1.1141
NSBIL	0.87	0.7569	0.0733	0.4399

The above table includes the value of correlation coefficient (r), the coefficient of determination (r²), the probable error (6*P.E. (r)). From the above presented data, the analysis of the relationship between loans and advances (independent variable) and interest accrued (dependent variable) has been made easy. The analysis of study takes into consideration of the values for the last five years from FY 2002/03 to FY 2006/07.

The correlation coefficient of HBL, EBL and SBI banks lies in the range of 0.7 to 0.999, which suggests that there is a high degree of correlation between loans and advances and interest accrued of these banks. Similarly, the coefficient of correlation of SCB and NIBL lies in the range of 0.5 to 0.699, which gives a clear picture that there exists a moderate degree of relationship between the two variables. Similarly, the correlation coefficient of Nabil bank is negative, which suggests that there is negative relationship between loans and advances and interest accrued. This means the increase in

loans and advances of the bank does not increase the amount of interest accrued.

Similarly, the coefficient of determination, (r^2), has been calculated to explain further minute relationship between the two variables. The value of (r^2) of 0.4096 suggests that 40.96% of variation in dependent variable (interest accrued) has been explained by the independent variable (loans and advances). Moreover, the probable error of the sampled commercial banks has been derived to verify the value of correlation coefficient. The values of correlation coefficient (r) of the sampled commercial banks are 0.64, -0.73, 0.99, 0.93, 0.62, and 0.87 respectively of SCB, Nabil, HBL, EBL, NIBL and SBI banks. The probable errors ($6*P.E. (r)$) of the same in the same order are 1.0686, 0.8454, 0.0360, 0.2444, 1.1141 and 0.4399. These data gives clear picture of the relationship between loans and interest accrued of sampled commercial banks.

From the above analysis, it can be seen that the value of r is less than the value of probable error, so the relation between the two variables is insignificant i.e. the increase in the value of independent variable (loans and advances) does not necessarily increase the value of the dependent variable (interest accrued). Similarly, the value of r for HBL, EBL and SBI are greater than the value of probable error, which means that there is a significant relationship between the two variables i.e. the increase in the value of loans and advances increases the value of interest accrued.

Thus it can be concluded by the study of correlation coefficient that the value of interest accrued is not necessarily dependent on the value of loans and advances. With the change in the policy and directives issued by Nepal Rastra Bank to realize the interest on cash basis, the relation between loans

and advances at the end of the Fiscal Year may further be seen as insignificant.

4.4.2 Test of Hypothesis

Testing of hypothesis is a process of testing the significance of population parameters on the basis of sample statistics. It consists of decision rules required for drawing probabilistic inferences about the population parameters. It can also be called as an assumption that is made about the population parameter and then its validity is tested. Test of hypothesis can also be defined as the procedure to access the significance of a statistic or difference between two independent statistics. The main goal of testing of hypothesis is to test the characteristics of hypothesized population parameter based on sample information whether the difference between the population parameter and sample statistic is significant or not. This process of statistical analysis makes an effort to test the significance difference between two independent means. Under is test of hypothesis, it has been assumed that mean growth of loans and advances of Standard Chartered Bank and mean growth on loans and advances of other sampled commercial banks are alike. In the process of this test, the samples have been drawn from two normal populations having same mean, t-test for difference of means has been used.

The test of significance for difference between two independent means is based on the following assumptions:

) The populations from which the samples have been drawn are normally distributed.

) The two samples are random samples and have been drawn independently.

The test of significance or the test of hypothesis is one of the measures for analyzing the two independent variables, which should be conducted on methodical manner. The following are the steps that are required to be followed to test a hypothesis:

- a. Set up the Hypothesis i.e. Null or Alternative Hypothesis.
- b. Compute appropriate test statistic.
- c. Choose level of significance.
- d. Find critical value of test statistic.
- e. Make conclusion.

As mentioned above, the following test of hypothesis is conducted on the assumption that mean growth on loans and advances of Standard Chartered Bank is similar to that of the other sampled banks.

Let, mean growth on loans and advances of Standard Chartered Bank (SCBNL) be “x” and that of Nabil, Himalayan Bank (HBL), Everest Bank (EBL), Nepal Investment Bank (NIBL) and Nepal SBI Bank (NSBIL) be “y”.

4.4.2.1 Test of Hypothesis on Mean Growth of Loans of SCB and Nabil

Null Hypothesis (H_0): $\mu = \mu_y$, i.e. There is no significant difference between mean growth on loans and advances of SCB and Nabil.

Alternative Hypothesis (H_1): $\mu \neq \mu_y$, (two-tailed) i.e. there is significant difference between mean growth on loans and advances of SCB and Nabil.

Computation of sample statistics

Table: 4.23

Test of Hypothesis on Mean Growth of Loans and Advances of SCBNL and Nabil

(In percent)

Year	SCBNL		Nabil	
	X	$d_1^2 = (X - \bar{X})^2$	Y	$d_2^2 = (Y - \bar{Y})^2$
2002/03	19.50	57.28	15.21	29.44
2003/04	(2.30)	202.45	(13.15)	525.95
2004/05	5.06	47.20	12.82	9.22
2005/06	10.67	1.58	6.07	13.80
2006/07	26.72	218.70	27.97	330.73
Total	X = 59.65	$d_1^2 = 527.21$	X = 48.93	$d_2^2 = 909.14$

X

$$\bar{X} = \frac{\sum X}{n} = \frac{59.65}{5} = 11.93\%$$

n

$$\bar{Y} = \frac{\sum Y}{n} = 48.93 / 5 = 9.79\%$$

$$S^2 = \frac{1}{\{(n_1 + n_2) - 2\}} (d_1^2 + d_2^2)$$

$$= \frac{1}{8} (527.21 + 909.14) = 179.54$$

Test Statistic, under H_0 :

$$t = \frac{\bar{X} - \bar{Y}}{S^2 / n_1 + S^2 / n_2} = 2.14 / 8.47 = 0.253$$

The tabulated value of “t” (two-tailed test) for 8 degree of freedom (df) at 5% level of significance is 2.306

Decision:

Since the calculated value of “t” is less than tabulated value, the null hypothesis (H_0) is accepted. Thus, it can be concluded that there is no significance difference between the mean growth of loans and advances of Standard Chartered Bank and Nabil Bank.

4.4.2.2 Test of Hypothesis on Mean Growth of Loans of SCB and HBL

Null Hypothesis (H_0): $\mu = \mu_y$, i.e. There is no significant difference between mean growth on loans and advances of SCB and HBL.

Alternative Hypothesis (H_1): $\mu \neq \mu_y$, (two-tailed) i.e. there is significant difference between mean growth on loans and advances of SCB and HBL.

Computation of sample statistics

Table: 4.24

Test of Hypothesis on Mean Growth of Loans & Advances of SCBNL & HBL

In percentage

Year	SCBNL		HBL	
	X	$d_1^2 = (X - \bar{X})^2$	Y	$d_2^2 = (Y - \bar{Y})^2$
2002/03	19.50	57.28	23.62	110.62
2003/04	(2.30)	202.45	5.41	59.2
2004/05	5.06	47.20	14.48	1.88
2005/06	10.67	1.58	18.13	25.21
2006/07	26.72	218.70	3.89	84.91
Total	X = 59.65	$d_1^2 = 527.21$	X = 65.54	$d_2^2 = 281.84$

X

$$\bar{X} = \frac{\sum X}{n} = \frac{59.65}{5} = 11.93\%$$

Y

$$\bar{Y} = \frac{\sum Y}{n} = \frac{65.54}{5} = 13.11\%$$

$$S^2 = \frac{1}{\{(n_1 + n_2) - 2\}} (d_1^2 + d_2^2)$$

$$= \frac{1}{8} (527.21 + 281.84) = 101.13$$

Test Statistic, under H_0 :

$$t = \frac{\bar{X} - \bar{Y}}{S^2/n_1 + S^2/n_2} = -1.18/5.03 = -0.234$$

The tabulated value of “t” (two-tailed test) for 8 degree of freedom (df) at 5% level of significance is 2.306

Decision:

Since the calculated value of “t” is less than tabulated value, the null hypothesis (H_0) is accepted. Thus, it can be concluded that there is no significance difference between the mean growth of loans and advances of Standard Chartered Bank and Himalayan Bank.

4.4.2.3 Test of Hypothesis on Mean Growth of Loans of SCB and EBL

Null Hypothesis (H_0): $\mu = \mu_y$, i.e. There is no significant difference between mean growth on loans and advances of SCB and EBL.

Alternative Hypothesis (H_1): $\mu \neq \mu_y$, (two-tailed) i.e. there is significant difference between mean growth on loans and advances of SCB and EBL.

Computation of sample statistics

Table: 4.25

Test of Hypothesis on Mean Growth of Loans and Advances of SCBNL and EBL

In percentage

Year	SCBNL		EBL	
	X	$d_1^2 = (X - \bar{X})^2$	Y	$d_2^2 = (Y - \bar{Y})^2$
2002/03	19.50	57.28	32.44	15.23
2003/04	(2.30)	202.45	32.47	15.45
2004/05	5.06	47.20	26.79	3.05
2005/06	10.67	1.58	21.42	50.65
2006/07	26.72	218.70	29.56	1.06
Total	X = 59.65	$d_1^2 = 527.21$	X = 142.67	$d_2^2 = 85.45$

$$\bar{X} = \frac{\sum X}{n} = \frac{59.65}{5} = 11.93\%$$

$$\bar{Y} = \frac{\sum Y}{n} = \frac{142.67}{5} = 28.53\%$$

$$S^2 = \frac{1}{\{(n_1 + n_2) - 2\}} (d_1^2 + d_2^2)$$

$$= \frac{1}{8} (527.21 + 85.45) = 76.58$$

Test Statistic, under H_0 :

$$t = \frac{\bar{X} - \bar{Y}}{S^2/n_1 + S^2/n_2} = -16.60 / 4.375 = -0.87$$

The tabulated value of “ t “ (two-tailed test) for 8 degree of freedom (df) at 5% level of significance is 2.306

Decision:

Since the calculated value of “t” is less than tabulated value, the null hypothesis (H_0) is accepted. Thus, it can be concluded that there is no significance difference between the mean growth of loans and advances of Standard Chartered Bank and Everest Bank.

4.4.2.4 Test of Hypothesis on Mean Growth of Loans of SCB and NIBL

Null Hypothesis (H_0): $\mu = \mu_y$, i.e. There is no significant difference between mean growth on loans and advances of SCB and NIBL.

Alternative Hypothesis (H_1): $\mu \neq \mu_y$, (two-tailed) i.e. there is significant difference between mean growth on loans and advances of SCBNL and NIBL.

Computation of sample statistics

Table: 4.26

Test of Hypothesis on Mean Growth of Loans and Advances of SCBNL and NIBL

In percentage

Year	SCBNL		NIBL	
	X	$d_1^2 = (X - \bar{X})^2$	Y	$d_2^2 = (Y - \bar{Y})^2$
2002/03	19.50	57.28	17.38	652.04
2003/04	(2.30)	202.45	11.70	974.57
2004/05	5.06	47.20	119.07	5799.04
2005/06	10.67	1.58	22.54	415.13
2006/07	26.72	218.70	43.89	0.95
Total	X = 59.65	$d_1^2 = 527.21$	X = 214.58	$d_2^2 = 7841.73$

X

$$\bar{X} = \frac{\sum X}{n} = \frac{59.65}{5} = 11.93\%$$

Y

$$\bar{Y} = \frac{\sum Y}{n} = \frac{214.58}{5} = 42.92\%$$

1

$$S^2 = \frac{1}{\{(n_1 + n_2) - 2\}} (d_1^2 + d_2^2)$$

1

$$= \frac{1}{8} (527.21 + 7841.73) = 1046.12$$

Test Statistic, under H_0 :

$$t = \frac{\bar{X} - \bar{Y}}{\sqrt{S^2/n_1 + S^2/n_2}} = -30.99/20.46 = -1.51$$

The tabulated value of “ t “ (two-tailed test) for 8 degree of freedom (df) at 5% level of significance is 2.306

Decision:

Since the calculated value of “t” is less than tabulated value, the null hypothesis (H₀) is accepted. Thus, it can be concluded that there is no significance difference between the mean growth of loans and advances of Standard Chartered Bank and Nepal Investment Bank.

4.5.2.5 Test of Hypothesis on Mean Growth of Loans of SCB and NSBIL

Null Hypothesis (H₀): $\mu = \mu_y$, i.e. There is no significant difference between mean growth on loans and advances of SCB and NSBIL.

Alternative Hypothesis (H₁): $\mu \neq \mu_y$, (two-tailed) i.e. there is significant difference between mean growth on loans and advances of SCB and NSBIL.

Computation of sample statistics

Table: 4.27

Test of Hypothesis on Mean Growth of Loans and Advances of SCBNL and NSBIL

(In percent)

Year	SCBNL		NSBIL	
	X	$D_1^2 = (X - \bar{X})^2$	Y	$D_2^2 = (Y - \bar{Y})^2$
2002/03	19.50	57.28	17.31	11.76
2003/04	(2.30)	202.45	10.00	15.05
2004/05	5.06	47.20	3.75	102.63
2005/06	10.67	1.58	16.50	6.87
2006/07	26.72	218.70	21.84	63.36
Total	$\Sigma X = 59.65$	$\Sigma d_1^2 = 527.21$	$\Sigma Y = 69.36$	$\Sigma d_2^2 = 199.67$

X

$$\bar{X} = \frac{\Sigma X}{n} = \frac{59.65}{5} = 11.93\%$$

Y

$$\bar{Y} = \frac{\Sigma Y}{n} = \frac{69.36}{5} = 13.88\%$$

1

$$S^2 = \frac{1}{\{(n_1 + n_2) - 2\}} (\Sigma d_1^2 + \Sigma d_2^2)$$

1

$$= \frac{1}{8} (527.21 + 199.67) = 90.86$$

Test Statistic, under H_0 :

$$t = \frac{\bar{X} - \bar{Y}}{S^2/n_1 + S^2/n_2} = -1.95/6.03 = -0.32$$

The tabulated value of “ t “ (two-tailed test) for 8 degree of freedom (df) at 5% level of significance is 2.306

Decision:

Since the calculated value of “t” is less than tabulated value, the null hypothesis (H₀) is accepted. Thus, it can be concluded that there is no significance difference between the mean growth of loans and advances of Standard Chartered Bank and Nepal SBI Bank.

4.5 Major Findings of the Study

The previous chapters of the study mainly focused on the presentation and analysis of data derived from various primary and secondary sources. This section is mainly introduced to conclude the major findings of the study from this chapter.

The study and analysis of commercial banks show that the loans and advances of commercial banks are found to be in increasing trend. The entire commercial banking industry as well as the sampled commercial banks shows the upward movement in all the major indicators of balance sheet. This poses a positive impact on all the depositors as well as the stakeholders of the respective banks and the banking industry as a whole.

Loans and advances remained major component in total assets of the commercial banks during the years 2002-07. However, the share of loans and advances in total assets declined in the recent years. The total loans and advances as percent of total assets was 46% in mid-July 2002. It decreased to 41.2% in mid-July 2006 and 39.8% in mid-July 2007. But, unlike the loans and advances, the share of investments in total assets increased in the same period. It increased to 14.6% in mid-July 2006 from 8.6% in mid-July 2002 and more or less at constant level in mid-July 2007.

From the above analysis and observation, it can also be seen that growth of total loans and advances remained moderate in the last five years. Total loans and advances registered an average growth rate of 11.19 percent per annum during 2002-07 and reached to Rs 163718.18 million in mid-July 2007. The outstanding amount of loans and advances in mid-July 2006 was Rs 140031.4 million and Rs 96324.9 million in mid-July 2002.

Similarly, loans to private sector always dominated on the overall outstanding figure of loans and advances. Of the total outstanding loans and advances of Rs 163718.18 million, 96.02 percent was allocated to private sector, 1.5 percent to Government enterprises, 2.39 percent to bills purchased and discount and 0.10 percent against bills in mid-July 2007.

Major portion of the loan portfolio of the banking system was distributed to productive sector and wholesale and retail business sector. Credit to productive sector alone stood at Rs 53743.5 million (33.73 percent of total loans and advances) and credit to wholesale and retail business was Rs 34412.3 million (21.60 percent) in mid-July 2007. Agricultural sector was only able to tap 2.77 percent of total credit in this period. Other major credit distributed sectors included service industries (9.41 percent), construction (5.47 percent) and transportation, communication and public services (5.65 percent).

With 49.79 percent increase, priority sector credit reached to Rs 13499.24 million in mid-July 2007 from Rs 9012.3 million in mid-July 2006. Priority sector credit, as percent of total credit stood at 8.25 percent in mid-July 2007 and 6.44 percent in mid-July 2006. Similarly, deprived sector credit increased by 55.62 percent and reached to Rs 4367.91 million in mid-July 2007 as compared to 2806.8 million in mid-July 2006. It had grown by 21.74 percent in mid-July 2006 as compared to the same period in 2005. Deprived sector credit amounted to 2 percent of total credit in mid-July 2007.

Credit-deposit ratio of commercial banking industry did not undergo a noteworthy change during 2002-07. It remained around 60% during 2006 and increased to 65 percent in mid-July 2007.

The sampled commercial banks under study also showed similar nature and performance over the period of study. From the tables above, the loans and advances of sampled commercial banks, the entire loans and advances figure of the commercial banks are found to be in increasing trend. The portfolio of the same is also found to be diversified into more than one type. The investment of commercial banks is found to be in the range of agriculture to

mining and from construction to transport to wholesalers and service sector industries. As stated above, the major portion of the credit of commercial banks is directed towards the productive sector of the economy. The average amount of credit towards the productive sector of SCBNL is 26.98 percent of total loans and advances outstanding. Similarly, other banks like Nabil, HBL, EBL, NIBL and NSBIL have invested in 39.38 percent, 41.46 percent, 28.45 percent, 40.78 percent and 41.11 percent respectively of the total loans and advances outstanding of the respective banks. The sampled commercial banks have advanced credit in the productive sector in the range of 36 percent of total loans and advances.

The tables depicting Loan Portfolio of Commercial Banks show the trend of fluctuation in Government sector lending and Bills Purchased and Discounted. The figures are found to fluctuate over the years of study. However, the lending of respective banks in Private sector is found to be increasing simultaneously from mid-July 2003–mid-July2007. This signifies that despite the insurgency and state of war prevalent in the country, the private sector has been growing. Similarly, the banks are found to be shy in lending to Government sector industries or lending against bills, which can be justifiable considering the performance and recovery of the advanced loans through the same.

In the similar manner, when we consider the investment pattern of commercial banks, the figures clearly express the tendency of commercial banks in safeguarding of the their funds. The entire investment of commercial banks is directed towards the Government securities, which is safe in comparison to the shares and debentures of other financial institutions. Moreover, the short term Treasury bill issued by Nepal Rastra

Bank is also one of the major sources of investment of commercial banks mainly due to the liquidity nature of the same.

The sampled commercial banks under study are also found to be falling in the category of the entire commercial banking industry. The investments of sampled commercial banks are more or less focused in the Government securities rather than shares and debentures of other financial institutions. The figures of investment in Government securities are found to be increasing over the years, with a minor fluctuation in some years of study. The banks are shyer towards investment in shares and debentures which is depicted by the figures which are in decreasing trend. Similarly, the investments in other securities are nominal except for a few amount of investment in other securities.

Referring to the table of sector-wise classification of loans and advances, the table shows the different areas where the commercial banks have advanced the loans. From the table, it can be analyzed that the commercial banks are concentrated on the development of entire sectors of the economy of the country. The sector-wise lending of commercial banks can be considered a very useful tool for determination of the portfolio of loans and advances. The larger the portfolio, the more diversified is the risk. Despite the social obligations of the commercial banks, the banks have also been maintaining its profitability by lending in the interest earning sectors like the private sector; basically the manufacturing sector. The manufacturing sector, on the one hand, is a part of raising the economic stability of the country and the other; this sector can also be considered as the major source of income for the banks.

Similarly, the entire banking industry has realized potentiality of consumer lending prevailing in the current market scenario. The consumer lending or retail lending is becoming one major tool for the banks to sustain in the market as well as create its goodwill in the market. The days are gone when the people used to save money for whole of their lives and build one small house at the age when they have become old. The banking habit in general people is growing in the today's scenario. The people are more conscious of the various lending schemes of commercial banks and financial institutions which provide them with the required amount of funds to construct a house or own a car. This has indeed given a boost to the retail loans of the commercial banks. As a result of which, the lending of commercial banks in the construction sector is growing every year.

The profitability of the banks is also dependent upon the wholesalers and retailers who have been provided with the short term demand loans at comparatively better rates of interest. The banks are also the main reasons for the wholesalers, dealers and retailers to grow their business. Thus, from the table of sector-wise classification of loans and advances, it can be seen that a large amount of loans and advances has been granted towards the wholesalers, retailers and dealers of various consumable and non-consumable goods.

Similarly, the banks have also granted loans and advances in the sectors like service industries, transport and communication, financial sectors, real estate, etc. More or less, it can also be concluded that the banks are basically focused on the profit earning sectors of the economy. Besides, it has also been fulfilling its social responsibility by granting loans and advances in different forms to the deprived and service oriented organizations as well.

The commercial banking industry in Nepal is not as developed as the banks in other developed countries. The banking habits of the people of the country needs a major change. This is mainly due to the fact that collateral security of land and building has become a must for any type of loans and advances. This can be illustrated by the figures from the table of security-wise classification of loans and advances. From the table above, it can be easily analyzed that major portion of loans and advances is granted against security of fixed assets, which is the main source of secondary security. The basic reason for this is also due to the percentage of bad loans in the Government owned banks like Nepal Bank Ltd. and Rastriya Banijya Bank.

Security-wise classification of loans and advances is necessary in view of the fact that not even a single penny is granted unless the advance is backed up by a strong security. The fixed assets and current assets in the form of stocks, book debts are the basic source of security backup for the commercial banks. Besides, guarantee has also become one of the security measures for the commercial banks to safeguard the loans advanced. Similarly, in the case of bills purchased and discounted, the bills itself act as the security for the loan because the advance against bills never exceeds the total amount of the bill, thereby leaving a margin for the bank to secure its loans against bills purchased. The Fixed Deposit receipt of commercial banks is also another safest security for the banks. The loans granted against the fixed deposit receipt are up to 90 percent, thereby leaving a zero percent risk of the loan being bad.

The statistical analysis conducted during the study also gives some picture of the position of loans and advances outstanding with respect to the relationship between interests accrued. The correlation coefficient, calculated above, is the base for determining that a certain degree of relation exists between loans and advances and interest accrued. In the study of 6 sampled

commercial banks, some banks show a high degree of relation whereas some of them show a moderate degree of correlation. However, with change in the NRB guidelines, the same may not be applicable considering the interest to be realized on cash basis which means that there should be no amount of interest accrued at the end of the quarter.

Further, the test of hypothesis is another statistical analysis which studies whether the growth on loans and advances of one bank is in any way related with other bank or not. The study conducted above, suggests that the growth on loans and advances of one bank is not in any way related with the growth in other bank. The above relation has been compared between Standard Chartered Bank and other sampled commercial banks like Nabil Bank, Himalayan Bank, Everest Bank, Nepal Investment Bank and Nepal SBI Bank.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary and Conclusion

This section attempts to summarize the study conducted of the few sampled commercial banks. The study was basically focused on the loan portfolio of commercial banks and their nature of investments as well as the classification of loans and advances of commercial banks on the basis of aging and performance.

The above study has highlighted on different aspects of the performance of the banks and we can draw different conclusions from it. From the above analysis, it has come to be known that Himalayan Bank has the highest amount of loans and advances disbursed during the last year ended mid-July 2007. The total amount of loans and advances comes to Rs 13590.9 million, followed by Nabil Bank with Rs 11222.7 million and Nepal Investment Bank Rs 10490.0 million. Although the amount of loans and advances of these banks are high, the amount of interest accrued of these banks is not with relation to the amount of loans and advances. The result varies with the correlation analysis, on the basis of which the amount of interest accrued is not related with the amount of loans and advances.

Similarly, the proportion of Non-Performing Loans is also one of the major aspects of the study. Although the amount of loan loss provision is directly proportional to the amount of loans and advances, the proportion of NPA is an independent entity which does not vary with the amount of loans and advances. The calculation of the ratio of NPA to total loans shows that Nabil

Bank and Everest Bank Ltd occupy the prestigious position of holding the least NPA of 1.32 percent and 1.63 percent respectively. Similarly, the Standard Chartered Bank and Nepal Investment Bank come in a row with 2.69 percent each of NPA. Himalayan Bank, despite being the bank with the highest loans and advances, has not been able to maintain its loan properly which has given rise to a NPA of 7.44 percent which is the highest of the sampled commercial banks. In the same way, the management of Nepal SBI Bank also falls under the suspicious with the high ratio of NPA with respect to the loans.

The objective of the study was also to analyze the portfolio of loans and advances, which has been presented in the table above. From the study, it has come to our knowledge that the commercial banks have advanced their credit in different sectors of the economy. The private sector economy, which is in the boom phase, is the main attraction of the commercial banks. The lending to the private wholesalers and retailers by the sampled commercial banks is found to be Rs 108,079.00 Lac which is around 31 percent of the credit advanced of the entire commercial banking industry. Similarly, the sampled banks are also seen aggressive towards the development of manufacturing industries in Nepal where the total credit advanced is Rs 216,753.00 Lac. The entire commercial banks have advanced Rs 547,435.00 Lac. The loans advanced by the sampled commercial banks to the manufacturing industry alone come to 40% of the total loans in the same sector. Similarly, the construction sector has also been lent in large amount. Out of the total lending by commercial banks of Rs 87,227.00 Lac in construction, the sampled banks have advanced credit to the tune of Rs 39,395 Lac which is around 45% of the banking advances. Other sector of the economy is also being lent proportionately, thereby not leaving any sector neglected. Out of the sampled commercial banks, Himalayan Bank Ltd. is found to rank at the

top in the amount of loans and advances, which is followed by Nabil Bank and Nepal Investment Bank.

The study of security-wise loans and advances of the sampled commercial banks has also been carried which clearly depicts the picture of lending against primary as well as secondary collateral securities. Due to the lack of proper monitoring techniques and sufficiency of manpower with the private commercial banks, the loans are granted against sufficient primary and secondary collateral security of land and building. The banks are also providing non-funded credit facility in the form of Guarantee and Letter of Credit to import goods and machineries. This has indeed facilitated the customers in regard to convenience and transparency of the business.

Similarly, a study has also been conducted to find the pattern of lending to the priority sector loans as well as deprived sector loans. During the study, it has become evident that the commercial banks are lending to the priority and deprived sector loans as required by Nepal Rastra Bank from time to time. However, with lack of adequate manpower and credit monitoring tools, the commercial banks are lending via different microfinance institutions as well as rural development agencies. However, despite all odds, the banks have been maintaining its social responsibility by proper lending to promote domestic industries and agriculture.

The study regarding classification of loans and advances of commercial banks has also been conducted. The study reveals satisfactory results of the commercial banks. The banks have been able to maintain its major portion of loan under the performing loans category. In the same way, the loans going bad cannot be neglected. The position of non-performing loans to total loans shows the position of commercial banks in maintaining the loans advanced.

The classification of loans and advances on the basis of aging shows the healthy position of the bank with major portion of the loans under the Performing Loan Category, which can be considered a major accomplishment of the private sector commercial banks.

Finally, the statistical analysis is made of the mean growth loans and advances of Standard Chartered Bank with the other sampled commercial banks. The test of hypothesis suggests that the mean growth of loans and advances of commercial banks is not related to each other. The growth on loans of all the banks is independent and does not affect in any way to the other bank.

Thus, the study could be concluded by generalizing that almost all of the sampled commercial banks have followed the central banks' rules and regulations regarding the management of loans and advances portfolio. Their performance on loans and advances has been observed around the performance of industry average.

5.2 Recommendations

The study did not find any major mismanagement on the sampled commercial banks' loans and advances which would require significant recommendations. However, the following suggestions and recommendation could be useful.

The composition of these banks' investments is highly dominated by the government securities which reflect that they are of risk adverse nature. Since government securities are default free securities, they do not generate adequate return for the banks. Therefore, in order to increase the return on

investments, they should compile an optimal portfolio of different securities. In other words, it is recommended that they should increase the ratio of shares and debentures and lower the ratio of government securities.

From the analysis of loans and advances portfolio of commercial banks, it has come to be known that the banks have advanced majority of their funds to the private sector. This is beneficial to both the concerned parties as well as for the health of the economy. However, for stable and safety returns, in terms of default risk, they should increase their loans and advances to the government enterprises also. Similarly, it is also recommended that the banks increase their loans and advances against purchase of foreign bills which generates adequate amount of commission income.

The sector-wise composition of loans and advances of the sampled commercial banks have revealed that they have lent most of their funds in the production sector. On the one hand, the increase in production sector shall benefit the economy to a great extent, thereby helping to reduce imports. On the other hand, the banks should also pay more attention towards the development of hydropower, service industries, communications and consumable loans, which is the highest income generating source as well as the fastest growing industries in this 21st century. Thus, banks should analyze the profitability in these industries and increase its amount of loans and advances in the same.

Similarly, the security-wise composition of loans and advances suggest that the banks have granted almost all the loan against mortgage of collateral security. This is considered as the traditional way of lending. The main reason behind this is the lack of tools and techniques of monitoring the loans granted. The banks are recommended to device tools for credit monitoring

and mobilize them in the convenience of the customers. Moreover, the banks should also focus on the non-fund based businesses like Letter of Credit and issue of Guarantee, which is the major source of commission based-business. This can play a great role in the ultimate profitability of the bank with the least amount of cost involved.

The classification of loans and advances on the basis of aging gives us a picture of doubtful and loss loans position of the commercial banks which is at a lower position. The banks are recommended to maintain its position of performing loans and thereby further reduce its position of doubtful and loss loans. The above analysis suggests that Himalayan Bank and Nepal SBI Bank are the two sampled banks which are bearing the highest percentage of non-performing loans. Other banks like Nabil Bank, Everest Bank, Standard Chartered Bank and Nepal Investment Bank are in the satisfactory position of their NPA in the range of 1-3 percent which can be considered reasonable looking into the amount of loans and advances figures of these banks. The two banks holding the highest amount of NPA are recommended to run a campaign against their non-performing loans and reactivate the loan collection programs. In order to succeed in the long-run, they have to re-energize their lending policies and procedures and re-negotiate with the borrowers about the terms and conditions of the agreement as well. The restructuring and rescheduling of loans and offering discounts to the defaulters could be a major reform program for the banks.

The loan loss provision also suggests that the banks have been maintaining a large amount as loan loss provisions. Such huge amount of loan loss provision is a burden for the bank which increases the liability and reduces the operating profit of the banks. Thus, the banks should prioritize to reduce its non-performing loans into performing loans thereby reducing the amount

of loan loss provision. Similar is the case with the amount of interest accrued. The amount of interest accrued has been found to be higher in relation to the amount of loans and advances outstanding. Nabil Bank, Everest Bank and Nepal Investment Bank are found to be more-or-less maintaining their amount of interest accrued over the years, but the position of Himalayan Bank and Nepal SBI Bank is found to be more critical with huge increase in the amount of interest accrued as compared to the increase in loans and advances. These banks are suggested to implement some effective measures for recovery of bad loans and formulate strategies and policies for the same.

Thus, the study could be concluded that two of the sampled banks, Himalayan Bank and Nepal SBI Bank, should focus more on reducing the amount of non-performing loans and loan loss provision so that the depositors and other stakeholders of the bank are safe-guarded. Similarly, other sampled commercial banks like Nabil Bank, Everest Bank, Standard Chartered Bank and Nepal Investment Bank should try and maintain its position of performing loans besides providing service to the customers. It can further be said that increasing of loans is not that big deal but reducing of bad loans should be a job of first priority for the banks.

Bibliography

Books

Bexley, James B. (1987). *Banking Management*: New Delhi: Sujeet Publication:

Copper, Kerry S. & Fraser Donald R. (1983). *The Financial Market Place*: London: Addison Wesley publishing Company:

Gupta, S.C. (2002). *Fundamental of Statistics*: Bombay: Himalayan Publishing House.

Hornby, A (2005). *Oxford Advanced Learner's Dictionary of Current English*: United Kingdom: Oxford University Press

.

Jhingan, M.L. (1997). *Advance Economic Theory*: New Delhi: Konark Publisher Pvt. Ltd.

Joshi, P.R. (2002). *Research Methodology*: Kathmandu: Buddha Academic Publishers and Distributors Pvt. Ltd. .

Khan, M . (1999). *Financial Institutions and Markets*: New Delhi: Tata McGraw Hill Publishing Co. ltd. .

Kothari, C.R. (1994). *Research Methodology, Methods and techniques*: New Delhi: Vikash Publication House Pvt. Ltd.

Rose, Peter S. (1997) . *Money and Capital Markets* : Singapore: McGraw Hill Co.

Sayers, R. S. (1978). *Modern Banking* : New Delhi: Oxford University Press.

Sharma, P.K. and Chaudhari, A.K.(2001). *Statistical Methods*: Kathmandu: Khanal Books Prakashan.

Weston, J.F, Besley S and Brigham E F.(1996). *Essentials of Managerial Finance* : Chicago: The Dryden Press

Weston, J. Fred and Thomas, E. Copeland.(1992). *Managerial Finance*: New York: The Dryden Press.

Wolff, K. Howard and Pant, P.R. (2003). *A Hand Book for Social Science Research and Thesis Writing*: Kathmandu: Buddha Academic Publishers and Distributors Pvt. Ltd.

Journal/Magazines

Banking and Financial Statistics.(2007). Nepal Rastra Bank,.

Facts About Nepalese Economy (1998). *Joint Venture Banks In Nepal*: Nepal Society For Applied Economics.

“*Nepal Rastra Bank Samachar*(2007). Annual publication: Nepal Rastra Bank.

Pradhan, K.(1991). *Nepal Ma Baniya Banking –Upalabdhi Tatha Chunauti*:Kathmandu.

Quarterly Financial Highlights of Commercial Banks (2007). Nepal Rastra Bank.

Shrestha, Shiba Raj,(1998) *Portfolio Management in Commercial Bank, Theory and Practice*: Kathmandu: Nepal Bank Patrika.

Thesis

Basnet Jagadish(1998). *Portfolio Management of Joint Venture Banks in Nepal*: Master Degree Thesis ,Shankar Dev Campus, Kathmandu

Pandey, Basu (2000). *A Study of Financial Analysis of HBL*: Master Degree Thesis , Nepal Commerce Campus, Kathmandu.

Shrestha, Anurodh (1999) *Portfolio Management in Nepal- A Case Study of Listed Commercial Banks in NEPSE* : Master Degree Thesis , Shankar Dev Campus, Kathmandu.

Shrestha, Prakash(2004) *Portfolio Analysis on Investments of Nepalese Commercial Banks*: Master Degree Thesis, Nepal Commerce Campus, Kathmandu.

Sijapati, Nirdosh (2004) *Analysis of Loan-Investment Portfolio of Commercial Banks*: Master Degree Thesis , Nepal Commerce Campus, Kathmandu.

Newspapers

Gorkhapatra.(2008, August 21).p.2

The Kathmandu Post. (2008, March 24).p.5

Annexure VII
Calculation of Correlation Coefficient of SCBNL

Year	x_1	x_2	d_1	d_1^2	d_2	d_2^2	$d_1 \cdot d_2$
2003	5924.10	186.60	(685.88)	470,431.37	(38.90)	1,513.21	26,680.73
2004	5787.90	216.00	(822.08)	675,815.53	(9.50)	90.25	7,809.76
2005	6080.70	167.60	(529.28)	280,137.32	(57.90)	3,352.41	30,645.31
2006	6729.60	290.70	119.62	14,308.94	65.20	4,251.04	7,799.22
2007	8527.60	266.60	1917.62	3,677,266.46	41.10	1,689.21	78,814.18
Total	33049.90	1127.50	(0.00)	5,117,959.63	(0.00)	10,896.12	151,749.21

$$\text{Mean, } \bar{x}_1 = \frac{\sum x_1}{n} = 6609.98$$

$$\bar{x}_2 = \frac{\sum x_2}{n} = 225.50$$

$$d_1 = x_1 - \bar{x}_1$$

$$d_2 = x_2 - \bar{x}_2$$

We have,

Karl Pearsons' coefficient of Correlation,

$$r_{12} = \frac{n \sum x_1 x_2 - \sum x_1 \sum x_2}{\sqrt{[n \sum x_1^2 - (\sum x_1)^2][n \sum x_2^2 - (\sum x_2)^2]}}$$

$$= 0.64$$

Annexure VIII
Calculation of Correlation Coefficient of Nabil

Year	x_1	x_2	d_1	d_1^2	d_2	d_2^2	$d_1 \cdot d_2$
2003	8,437.60	369.50	(367.60)	135,129.76	92.36	8,530.37	(33,951.54)
2004	7,328.20	377.30	(1,477.00)	2,181,529.00	100.16	10,032.03	(147,936.32)
2005	8,267.80	241.20	(537.40)	288,798.76	(35.94)	1,291.68	19,314.16
2006	8,769.70	212.70	(35.50)	1,260.25	(64.44)	4,152.51	2287.62
2007	11,222.70	185.00	2,417.50	5,844,306.25	(92.14)	8,489.78	(222,748.45)
Total	44,026.00	1385.70	-	8,451,024.02	-	32,496.37	(383,034.54)

$$\text{Mean, } \bar{x}_1 = \frac{\sum x_1}{n} = 8805.20$$

$$\bar{x}_2 = \frac{\sum x_2}{n} = 277.14$$

$$d_1 = x_1 - \bar{x}_1$$

$$d_2 = x_2 - \bar{x}_2$$

We have,

Karl Pearson's coefficient of Correlation,

$$r_{12} = \frac{n \sum x_1 x_2 - \sum x_1 \sum x_2}{\sqrt{[n \sum x_1^2 - (\sum x_1)^2][n \sum x_2^2 - (\sum x_2)^2]}}$$

$$= (0.73)$$

Annexure IX
Calculation of Correlation Coefficient of HBL

Year	x_1	x_2	d_1	d_1^2	d_2	d_2^2	$d_1.d_2$
2003	9,176.90	115.50	(2,142.54)	4,590,477.65	(305.64)	93,415.81	654,845.93
2004	9,673.50	313.40	(1,645.94)	2,709,118.48	(107.74)	11,607.91	177,333.58
2005	11,074.20	313.50	(245.24)	60,142.66	(107.64)	11,586.37	26,397.63
2006	13,081.70	661.90	1,762.26	3,105,560.31	240.76	57,965.38	424,281.72
2007	13,590.90	701.40	2,271.46	5,159,530.53	280.26	78,545.67	636,599.38
Total	56,597.20	2,105.70	-	15,624,829.63	-	241,513.22	1,919,458.23

$$\text{Mean, } \bar{x}_1 = \frac{\sum x_1}{n} = 11,319.44$$

$$\bar{x}_2 = \frac{\sum x_2}{n} = 421.14$$

$$d_1 = x_1 - \bar{x}_1$$

$$d_2 = x_2 - \bar{x}_2$$

We have,

Karl Pearsons' coefficient of Correlation,

$$r_{12} = \frac{n \sum x_1 x_2 - \sum x_1 \sum x_2}{\sqrt{[n \sum x_1^2 - (\sum x_1)^2][n \sum x_2^2 - (\sum x_2)^2]}}$$

$$= 0.99$$

Annexure X
Calculation of Correlation Coefficient of EBL

Year	x_1	x_2	d_1	d_1^2	d_2	d_2^2	$d_1 \cdot d_2$
2003	3,006.60	94.30	(2,216.14)	4,911,276.50	(45.48)	2,068.43	100,790.05
2004	3,982.70	99.80	(1,240.04)	1,537,699.20	(39.98)	1,598.40	49,576.80
2005	5,049.60	147.60	(173.14)	29,977.46	7.82	61.15	(1,353.95)
2006	6,131.10	176.60	908.36	825,117.89	36.82	1,355.71	33,445.82
2007	7,943.70	180.60	2,720.96	7,403,623.32	40.82	1,666.27	111,069.59
Total	26,113.70	698.90	-	14,707,694.37	-	6,749.97	293,528.29

$$\text{Mean, } \bar{x}_1 = \frac{\sum x_1}{n} = 5222.74$$

$$\bar{x}_2 = \frac{\sum x_2}{n} = 139.78$$

$$d_1 = x_1 - \bar{x}_1$$

$$d_2 = x_2 - \bar{x}_2$$

We have,

Karl Pearson's coefficient of Correlation,

$$r_{12} = \frac{n \sum x_1 x_2 - \sum x_1 \sum x_2}{\sqrt{[n \sum x_1^2 - (\sum x_1)^2][n \sum x_2^2 - (\sum x_2)^2]}}$$

$$= 0.93$$

Annexure XI
Calculation of Correlation Coefficient of NIBL

Year	x_1	x_2	d_1	d_1^2	d_2	d_2^2	$d_1.d_2$
2003	2,431.30	120.60	(3,343.98)	11,182,202.24	9.86	97.22	(32,971.64)
2004	2,715.70	79.30	(3,059.58)	9,361,029.78	(31.44)	988.47	96,193.20
2005	5,949.20	110.60	173.92	30,248.17	(0.14)	0.02	(24.35)
2006	7,290.20	112.00	1,514.92	2,294,982.61	1.26	1.59	1,908.80
2007	10,490.00	131.20	4,714.72	22,228,584.68	20.46	418.61	96,463.17
Total	28,876.40	553.70	-	45,097,047.47	(0.00)	1,505.91	161,569.17

$$\text{Mean, } \bar{x}_1 = \frac{\sum x_1}{n} = 5775.25$$

$$\bar{x}_2 = \frac{\sum x_2}{n} = 110.74$$

$$d_1 = x_1 - \bar{x}_1$$

$$d_2 = x_2 - \bar{x}_2$$

We have,

Karl Pearson's coefficient of Correlation,

$$r_{12} = \frac{n \sum x_1 x_2 - \sum x_1 \sum x_2}{\sqrt{[n \sum x_1^2 - (\sum x_1)^2][n \sum x_2^2 - (\sum x_2)^2]}}$$

$$= 0.62$$

Annexure XII
Calculation of Correlation Coefficient of NSBIBL

Year	x_1	x_2	d_1	d_1^2	d_2	d_2^2	$d_1.d_2$
2003	4,176.30	164.60	(994.48)	988,990.47	(169.00)	28,561.00	168,067.12
2004	4,593.90	198.50	(576.88)	332,790.53	(135.10)	18,252.01	77,936.49
2005	4,766.10	389.70	(404.68)	163,765.90	56.10	3,147.21	(22,702.55)
2006	5,552.50	421.20	381.72	145,710.16	87.60	7,673.76	33,438.67
2007	6,765.10	494.00	1,594.32	2,541,856.26	160.40	25,728.16	255,728.93
Total	25,853.90	1,668.00	-	4,173,113.33	-	83,362.14	512,468.66

$$\text{Mean, } \bar{x}_1 = \frac{\sum x_1}{n} = 5170.78$$

$$\bar{x}_2 = \frac{\sum x_2}{n} = 333.60$$

$$d_1 = x_1 - \bar{x}_1$$

$$d_2 = x_2 - \bar{x}_2$$

We have,

Karl Pearsons' coefficient of Correlation,

$$r_{12} = \frac{n \sum x_1 x_2 - \sum x_1 \sum x_2}{\sqrt{[n \sum x_1^2 - (\sum x_1)^2][n \sum x_2^2 - (\sum x_2)^2]}}$$

$$= 0.87$$