

CREDIT MANAGEMENT OF COMMERCIAL BANKS

**(Special Reference to Standard Chartered Bank Nepal Ltd. &
Everest Bank Ltd.)**

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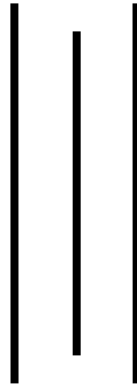
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*In partial fulfillment of the requirement for the degree of
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RECOMMENDATION

This is to certify that the Project Work

Submitted by:

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Entitled:

CREDIT MANAGEMENT OF COMMERCIAL BANKS

**(Special Reference to Standard Chartered Bank Nepal Ltd. &
Everest Bank Ltd.)**

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

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DECLARATION

I hereby declare that the work reported in this Project entitled “**Credit Management of Commercial Banks (Special Reference to Standard Chartered Bank Nepal Ltd. & Everest Bank Ltd.)**” submitted to office of the dean, Faculty of Management, Tribhuvan University, is my original work done in the form of Partial fulfillment of the requirement for the degree of Master of Business Studies (MBS) under the supervision of **Dr. Sushil Bhakta Mathema** of Nepal Commerce Campus.

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Needless to say ‘err is human’ and I cannot to the expectation. For any remaining error in the calculation and the description reported in this dissertation are, of course, entirely my responsibilities, I hope the possible errors would be covered by the subsequent studies in the field in this future.

Mahesh Raj Chalise
Researcher

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ABBREVIATIONS

A.D.	:	Anno Domini
ADB/N	:	Agriculture Development Bank/ Nepal
ATM	:	Automated Machine
B.S.	:	Bikram Sambat
C.V	:	Coefficient of Variation
CBs	:	Commercial Banks
e.t.c	:	Etcetra
EBL	:	Everest Bank Limited
i.e.	:	That is
INGO	:	International non Government Organization
L/C	:	Letter of Credit
NGO	:	Non Government Organization
No.	:	Number
NPA	:	Non Performing Asset
NPL	:	Non Performing Loan
NRB	:	Nepal Rastra Bank
P.Er.	:	Probable Error
r	:	Correlation of Coefficient
r^2	:	Coefficient of Determination
RBB	:	Rastriya Banijya Bank
Rs.	:	Rupees
S.D.	:	Standard Deviation
SCBNL	:	Standard Chartered Bank Nepal Limited
SCT	:	Smart Choice Technology
T.U.	:	Tribhuvan University
UN	:	United Nation

CHAPTER I

INTRODUCTION

1.1 Background of the Study

The speedy development of any nation in this modern era depends largely, on the level of economic activities. Economic activities are guided by financial sector of that nation. The financial sector which covers vast area comprises of banks, co-operatives, financial companies, insurance companies, stock exchange, foreign exchange market, mutual funds etc. The development of these institutions insures for the development of the whole economy of the nation (Economic Survey 2004\2005). These institutions facilitate and improve the distribution of funds, money, and capital by providing services like payment mechanism, security trading, transmutations, risk diversification and portfolio management. Further, these institution mobilize saving and make investment in different types of enterprises of the national economy that consequently help in reducing poverty, raising employment opportunities and thereby developing the society and country as a whole. Removal of financial institution from a modern economy is beyond imagination in the current context. Without them the economy will be drag behind to the period of barter system, where no intermediary, no financial assets, no liability of any kind and hence, no financial institution existed. Even in the least developed economies some forms of transfer of financial resources occur, an economy without financial liabilities there would be no means whereby the ultimate savers could be matched with ultimate investors.

The Wave of rising expectation and ambition of people in the present context of society, realized the need for socio-economic development in the nation building process. The government felt to impart a dynamic role and charge the public sector

with greater responsibility in fulfilling national goals and objectives. With this realization the government mushroomed into a number of establishments like agriculture, industry, commerce, public works, transport, and other sectors. In this circumstance, banking was seen as major industry to uplift the economic conditions of public, and country and the world as well. Therefore the government was forced to adopt a liberal economic policy regarding operation of banks. About the financial liberalization process it and said that "the interest rate deregulation curtailment or elimination of directed credits, lifting entry and exit barriers for financial intermediaries, restructuring of banking system and institution for regulatory and supervisory mechanism is some of the key components of such liberalization". This led to the influx of commercial banks in Nepal.

In spite of these services, economists have expressed diverse opinions on the effectiveness of financial institutions in promoting or facilitating economic development. One group led by J. Schumer among those who studied the relation between the growth of financial institution and economic development regarded financial institution as one of the two key agents, the other being entrepreneurship. Another group led by John G. Gurley did not consider it as highly essential to the growth process. In between these two, lies the opinion of some others like Rondo Cameron who says the true importance of financial institutions lies somewhere between these two extremes. These opinions do differ in the order of merit to the role of financial institution in the process of economic development but they never ignored its significance.

Financial institution occupies an important place in a nation's economy. A financial institution is indispensable in a modern society. It plays a pivotal role in the economy development of a country and forms the core of the money market in an advance country. It has played an immensely valuable role in the economic life of every country big or small. The special interest of economist in the activities of

financial institution is due to the monetary nature of the deposit liabilities of the institution.

According to R. S. Sayers the modern financial system of the world falls in five categories:

- Central Bank
- Commercial Banks
- Finance Companies
- Insurance Companies

Financial institution collects funds mainly from deposits (time and saving deposits) which are ultimately used as a part of capital investment in country. Thus the problem of inadequate of capital formulation is somehow wiping out by collecting more deposits from the savers (households, business and government). More precisely personal saving is the part of disposable income, which is not consumed. Saving equals income minus expenditure. The people having more income save more than the people having less income do. In general, household saves more than that of business and government. For household, saving equals to current income minus current expenditure. For business, sector savings include current earnings retained inside business firms after payment of taxes, stockholder's dividend and other expenses. Government saving arise where there is a surplus of current revenue over expenditure. To induce more saving, financial institution can play a vital role by providing attractive interest rate and offer a different scheme. The people of the least developed countries are not much concerned about saving as most parts of earnings are spent in hand to mouth consumption. Even if some people are able to save their money, they show their interest to invest such surplus funds on non-productive sectors like gold, land, vehicles and so on. Banks and financial companies, as intermediaries, can attract savers to save more by providing them attractive interest rate and accept the deposit. Banks provides loan to borrowers who are in need of money from the

money accumulated in the form of deposit and capital of bank while granting loan. Bank charges a certain percentage of interest to the borrower and borrower has to pay that interest for using banks money. Interest on loan also varies according to the nature of loan, whether loan is of short term or long term. An appropriate interest rate structure greatly affects the collection of deposits, mobilization of saving (only in productive sector) and profit position of any financial institution, which in turn, affects the economy of the whole country.

1.2 Objectives of the Study

The role of commercial banks is mobilizing and utilizing scattered resources of the nation praise worthy one. The basic objective of the study is to find true insight of the commercial banks aspect (practice of disbursing loan and recover) of the Standard Chartered Bank Nepal Ltd and Everest Bank Ltd. This aims to examine its efficiency, effectiveness, systematization and sincerity in disbursing and recovery loan as well as within the directives of Nepal Rastra Bank. This is no doubt that the roles of commercial banks are significant in development of the country. Banks help to develop country by providing credit to necessary sectors. Therefore, the main objective of this study is to find out credit management position of sample banks SCBNL & EBL. The following objectives are also considered in this study:

- To assess credit practices of selected Nepalese commercial banks.
- To evaluate liquidity, activity, profitability ratios and risk ratios.
- To examine the volume of non-performing loan.
- To analyze relationship of loan and advance, total investments with total deposits.

1.3 Concept of Bank

Simply, Bank is financial institutions that accepts deposits and invest the amount in the leading activities and also commercial service

provide. In ancient, the words Bank was emerge from Latin words 'Bancus', French words 'Banque' and Italian words 'Banca', which means a Bench where sitting over there invest exchange and keep record of money and cash. These all functional activity is formed as current banking activities. "A banker or bank is a person or company carrying on the business of receiving money collecting drafts, for customers subject to the obligation of honoring cheques drawn upon them from time to time by the customers to the extent to the amount available on their customer (Shekher & Shekher, 1999:4). Paget state that, "No one can be a banker who does not take deposit accounts, take current accounts, issues and pay cheques of crossed and uncrossed, for his customers. He further adds that if the banking business carried on by any person is subsidiary to some other business he cannot be regarded as a banker" (Paget, 1987:2).The words Bank refer as Central bank, Commercial bank, Development bank, Exchange bank, Saving bank, Cooperative bank, Merchant bank, Housing bank, Equipment bank, Infrastructure bank and Mutual fund etc. they provide financial as well as non-financial services. It is a financial intermediary between depositors or lender and withdrawal or loaner. Bank plays a great role that it helps investors to invest indifferent sector by giving a loan and providing other consultancy and agency services. Thus the words bank its self provided huge sense of banking activities.

1.4 Concept of Commercial Bank

Financial intermediaries play significant role for the development of national economy. They influence savings and surpluses considerably, which results investments. Financial intermediaries collect financial

resources and supply them to the productive sectors that boosts the trade and industry and at last development of the country's economy.

Commercial banks are also financial intermediaries they mediate people who save money and who want to secure the use of money by accepting the deposits, borrowing funds and advancing loans. In addition to these primary functions, commercial banks, collect checks and bills, open letter of the credit, guarantee on behalf of customer, undertake capital and other many activities, exchange foreign currencies etc.

A commercial bank is one which exchanges money, deposits money, accept deposits, grants loan and performs commercial banking functions and which is not a bank meant for co-operative, agriculture industries or for such specific purpose(Nepal Commercial Bank Act,2031:1).

“Commercial Banks are heart of financial system they hold the deposits of many person, government establishment business unit. They make fund available through their lending and investing activities to borrowers, individuals, business firms and services for the producers to customers and the financial activities of the government. They provide the large position of the medium exchange and they are media through which monetary policy is affected. These facts show that the commercial banking system of nation is important to the functioning of the economy”. (Weston and Brigham, 2003)

In the context of Nepal, commercial banks are operated under “Commercial Bank Act 2031 BS”, in addition to Commercial Bank Act, Nepal Rastra Bank also lays down other many directives.

1.4.1 Functions of Commercial Banks

Regarding the function of commercial banks, a commercial Bank Act state that a commercial bank is one that exchanges money, accept deposits, grants loans, and performs commercial banking functions. The functions and services of modern commercial banks are classified under the following headings;

a) Accepting deposits

A commercial bank accepts deposits from customers in the forms of current, saving, fixed, and current call deposits. These deposits are repayable on demand. The depositors other than current account are paid interest.

b) Granting Loans and Deposits

The second main function of the commercial bank is to grant loans and advances to businessman, the industrialist, the individuals, the different organizations etc. in the forms of term loans, cash credit, overdraft, trust receipts, hire purchase loans etc. banks charge interest on such loan and advances, which is the largest source of total revenue.

c) Issuance of Traveler's cheque

The people travelling outside the country want to reduce the fear of getting money stolen during the travel. Bank sells the traveler's cheque. The unique feature of the traveler's cheque is that unless the purchase of traveler's cheque is signed for endorsement it cannot be cashed.

d) Letter of Credit Facility

A letter from a bank guaranteeing that a buyer's payment to a seller will be received on time and for the correct amount is called a letter of credit. Today letter of credit has become very popular in foreign business. The letter of credit is established or opened by the bank on the request of the customers.

e) Agency Service

A modern commercial banks act as an agent of individual customers, business institutions and different organization. The agency services of banks may involve collection of interest and dividends on debt and share capital. A bank buys and sells securities on behalf of the customers .Bank also collects cheques, drafts promissory notes etc and receives their payments. Sometimes, it makes payments of insurance premium, bills of electricity, telephones etc. it takes commission for the services rendered.

f) Remittance Function

Sending and receiving fund to / from various places is the necessary of today. The remittance services of bank have benefited both business and personal customers. Funds transfers are made through various modes like demand drafts, telegraphic payment order, swift, and fax and mail payment orders.

g) Guarantee on Behalf of Customers

The need of bank guarantee arises in business. Generally, business customers enjoy this service. Sometimes, personal customers may also need a bank guarantee. A guarantee is a definite and irrevocable undertaking by a bank on behalf of its customers to make payments up to

a specified sum of money to the beneficiary on demand in case of default by its customers.

h) Other Services

Modern commercial banks are equally important in understanding safe custody of important valuable and documents. Banks also offer some of the bank services at the door of highly valued customers. Few large banks conduct research and survey in the economic conditions and they supply trade statistics and information. In addition to those, banks also inform their customers about the credit standing of other particles.

1.5 Statement of the Problem

Within the sphere of the proposed study, there exist a considerable number of problems regarding the commercial banks, services they offer, and their relationship with the concerned individuals, groups, and organizations.

Credit management is affected due to a host of factors i.e. lack of transparency in the financial statements, permissive banking practices such as multiple banking contributing to diversion of funds, flight of capital, over financing etc., absence of risk based pricing methodologies, customer risk rating models, absence of credit rating agencies, independent credit information bureau, credit risk transfer instruments, lack of transparency among the banks and FIs in exchange of information on the business entities etc. These contributed for higher level of impaired debt specifically in the banking sector.

Commercial banks have to face tough competition due to limited and narrow capital market and investment opportunities. Even the difficult economic environment has reduced the earning capacity of many sectors in the economy,

thereby affecting the overall performance of the commercial banks. The volume of nonperforming loans is rising steadily. This has resulted in constraints in the earning capacity of the banks. It has also reduced the turnover of funds in commercial banking sector thereby failing to generate more business.

There is concentration of credit in certain areas and also limited investment opportunities for the commercial banks. Generally, it is accepted that disadvantages sectors in the economy such as the farmer and the small business have been neglected by the banking industry. In other words, such sectors in the economy are not receiving the financial support as commercial banks hesitate to be involved in these sectors where they do not see adequate profit.

1.6 Research methodology

Research is the process of systematic and in-depth study of any particular subject or to investigation, backed by collection, compilations, presentation and interpretation of relevant data and information. In other words research methodology describes the methods and process applied in the entire aspect of the study. This chapter consists of research design, sample size and selection process, data collection procedure and data processing techniques and tools.

1.6.1 Research Design

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 procedure.

Research design is the plan, structure, and strategy of investigation conceived so as to obtain answer to research question and to control variance. By research design we mean and overall framework or plan for the collection and analysis of data. The research design serves as a framework or plan for the collection and

analysis of data. The research design service as a framework for the study, guiding the collection and analysis of the data then focuses on the data collection methods, the research instruments utilized and the sampling plan to be followed. To achieve desired end, analytical as well as descriptive design are applied.

1.6.2 Population and Sample

Population refers to the entire group of people, events or things of interest that the researcher wishes to investigate. When some of the elements are selected with the intention of finding out something about the population from which they are taken, that group of elements is referred as a sample and the process of selection is called sampling. Simply, speaking the methods of selecting a portion of the universe with a view to draw conclusion about the universe under study is known as sampling. The entire number of commercial banks will be population for the study. There are 33 commercial banks. Study of the whole population may not be possible due to various difficulties so the pioneer two commercial banks have been chosen for the study.

Introduction of Sample Organizations under Study

There are 33 commercial banks currently operating in nation taking “Ka” authorized license. Among them only two banks are taking as a sample. The general introduction of banks is described here below:

A. Standard Chartered Bank Nepal Limited (SCBNL)

In the history of Standard Chartered Bank, it was formed since 1969 merger between the overseas banks: the Standard Bank of British South Africa and the Chartered Bank of India, Australia, and China. In the initial phases most of the profit made from Hong Kong, Korea, and parts of Asia in its market.

Standard Chartered Bank Nepal limited is a subsidiary of Standard Chartered group. It is the largest international commercial Banks of Nepal. It was the joint venture of Standard Chartered Group who has 75% ownership in the company with 25% shares owned by the Nepalese public and operated since 1987 when it was initially registered as a joint-venture operation with initial paid up capital 100 million.

With 17 points of representation, 21 ATMs across the country across the country and with more than 375 local staff, Standard Chartered Bank Nepal Ltd. is in a position to serve its customers through an extensive domestic network. In addition, the global network of Standard Chartered Group gives the bank a unique opportunity to provide truly international banking services in Nepal.

Standard Chartered Bank Nepal Limited offers a full range of banking products and services in whole sale and customer banking catering to a wide range of customers encompassing individuals, mid market, local corporate, multinationals, large public sector companies, government corporations, airlines , hotels as well as the DO segment comprising embassy, aid agencies, NGOs and INGOs.

Promoters and Shareholders

Standard Chartered Grindley’s Bank, Sydney, Australia	50%
Standard Chartered Grindley’s Bank, London, UK	25%
General Public	25%

Shares	Amount(Current Year)
Authorized Capital (20,000,000 ordinary shares @Rs.100)	Rs. 2,000,000,000
Issued Capital (13,984,836 ordinary shares @Rs.100)	Rs. 1,398,483,600
Paid-Up Capital	Rs. 1,398,483,600

(13,984,836 ordinary shares @Rs.100)	
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B. Everest Bank Limited (EBL)

This bank was established on 17 November 1992 A.D. and started its operations from 18th October 1994 A.D. under the company act 2021 B.S. with an objective of carrying out commercial activities under the commercial bank act 2031, from the very beginning of its establishment till November 1996 A.D. It was managed by United Bank of India Limited (UBIL). Later on, UBIL handed over the management to the Punjab National Bank (PNB) India. PNB has been providing top management services and banking expertise to EBL. The bank is currently running its operation with 22 branches around the country with the objective of providing services to both the business community and the common people.

EBL is playing a pivotal role in facilitating remittance to and from across global areas. Being the first Nepalese bank to open a representative office in Delhi (India), the Nepalese in India can open account in Nepal from the designated branches of Punjab National Bank and remit their savings economically through banking channels to Nepal.

The bank in association with smart choice technology (SCT) is providing automatic teller machine (ATM) services for its customers. EBL debit card can be accessed at 33(own) and 651(others) ATMs and over 1391 point of sales across the nation. **Promoters and Shareholders**

Promoters	50%
General Public	30%
Punjab National Bank, India	20%

Shares	Amount(Current
--------	----------------

	Year)
Authorized Capital (2,000,000 ordinary shares @Rs.100)	Rs. 2,000,000,000
Issued Capital (1,050,000 ordinary shares @Rs.100)	Rs. 1,050,000,000
Paid-Up Capital (10,304,673 ordinary shares @Rs.100)	Rs. 1,030,467,300

1.6.3 Data Collection Techniques

Basically this will include the secondary data relating to the investment and policies regarding the credit of the commercial Banks. Primary data will also be used where secondary data are inadequate. Required data is collected from Economic Survey (NRB), financial statement of concerned commercial banks, Bulletin & Reports of periodically published by various organizations, previous thesis and dissertation. The basic sources of data used are as follows:

- a. Annual Reports
- b. Published materials from concerned CBs
- c. Financial statements of concerned CBs
- d. Related books and journals

According to the need and objective of the study, all the secondary data will be observed, processed and tabulated in time series.

1.6.4 Data Analysis Tools

To achieve the objective of this study some statistical and accounting tools have been used. The data extracted from financial statement and other available

information are processed and tabulated in various tables and charts under different heading according to their nature. These data are then used for required calculations like ratio analysis, growth ratio and accounting tools are used to examine the financial strengths and weakness of the bank. Similarly, some statistical tools like graph, percentage coefficient of correlation, regression analysis and the method of least square linear trend are also used in this study. Statistical results help to achieve the objective of the study.

To make the study more specific, reliable, and for comparison between these two commercial banks, the following financial and statistical tools are used for financial analysis:

- Financial tools
- Statistical tools

1.6.4.1 Financial tools

Financial analysis is the process of identifying the financial strengths and weakness of the organization by properly establishing relationship between the items of balance sheet and profit and loss account. Financial analysis can be undertaken by management of the firm or by party outside the organization viz. owners, creditors, investors and others. Ratio analysis is a main tools used for financial analysis.

Financial Ratio Analysis

Ratio analysis is the process of determining and interpreting numerical relationship based on the financial statements. The relationship between two accounting figure, expressed mathematically, is known as financial ratio (or simply ratio) (Pandey, 2000:109)

Financial ratio analysis is designed to determine the relative strength and weakness of business operations. It also provide framework for financial planning

and control. Financial managers need the information provided by analysis both to evaluate the firm's past performance and to map future plans. Financial statement analysis involves a study of relationship between income statement and balance sheet accounts, how these relationship changes overtime and how a particular firm compare with other firms in its industry (comparative ratio analysis)

The usefulness of ratio depends upon the ingenuity and the experience of the financial analyst who employs them. By themselves, financial ratios are fairly meaningless they must be analyzed in comparative basis. Comparison covers the leading clues in evaluating changes and trends in the first financial conditions and profitability. This comparison may be historical, but it may include an analysis of the future based upon projected financial statement (Van Horne and Achowicz, 1998:148)

The qualitative judgment has been done regarding financial performance of the firm with the help of ratio analysis. In this study, following ratio are calculated and analyzed.

A .Liquidity Ratio

The purpose of this ratio is to test the solvency position for the payment of short-term liabilities. Solvency position or liquidity denotes ability for payment of short-term liabilities. Banking image is dependent upon its liquidity position. It should be able to provide demanded cash by its customer as and when necessary. Banking industry has its survival in its ability to create credit creation ability is dependent upon its liquidity ratio. The liquidity ratio of banking industry depends upon the banking habit of the people. Where banking practices is more pre relevant, the low current ratio doesn't necessarily increase its liquidity risk. But, in the economy like ours, here the banking habit of the people is low and the banking industry is just developing, the low liquidity certainly increases the liquidity risk.

The following ratio is evaluated under liquidity ratio:

i) Current Ratio

Current ratio indicates the ability of bank to meet its current obligation. The current ratio measures the extent to which the claims of short-term creditors are covered by short-term assets. Current ratio can be computed as:

$$\frac{\text{Current Assets}}{\text{current liabilities}}$$

Current assets include normally those assets of a firm which could be converted into cash within one year period of time. These assets of firm includes cash, bank balance, and investment in treasury bills, discount ,overdraft, short term advance loans, and foreign currency loan, bills for collections, customer acceptance, stock receivable and prepaid expenses. Similarly, current liabilities includes those liabilities of a firm which are paid within one year period of time, like current payments, cash margins, current deposits, saving deposits, interbank reconciliation account, bills payable, provision for overdrafts, dividend payable, and provision for taxation. Generally a current ratio of 2:1 is considered satisfactory. If less than standard ratio, it shows the solvency position which is not better and vice versa.

ii) Cash and Bank Balance of Total Deposit Ratio

Cash and bank balance are the most liquid current assets. This ratio measures the percentage of liquid fund with the bank to make immediate payment to the depositors. Both higher and lower ratios are not desirable because if the bank maintains higher ratio of cash, it has to pay interest on deposits and some earnings may be lost. In contrast, if a bank maintains low ratio of cash it may fails to make payment for the demands of depositors. So, sufficient and appropriate cash should be maintained properly. This ratio is computed by dividing cash and bank balance by total deposit.

This is computed as:

$$\frac{\text{Cash and Bank Balance}}{\text{Total Deposit Ratio}}$$

Cash and bank balance includes cash in hand foreign cash in hand; cheques and other items balance with domestic bank and foreign bank. The total deposit consists of current deposits and the fixed deposits, money at calls and short notice and other deposits.

iii) Cash and Bank Balance to Current Asset Ratio

This ratio measures the percentage of liquid fund with the current assets. This ratio is computed by dividing cash and bank balance by current assets. Higher ratio indicates the banks sound ability to meet the daily cash requirement of their customer's deposit and vice versa. It can be computed as:

$$\frac{\text{Cash and Bank Balance}}{\text{Current Assets}}$$

iv) Loan and Advances to Current Assets Ratio

It shows the relationship between loan and advances to current assets or shows the capacity of a bank to purchase discount bill and loan, cash credit and overdraft facility to its customer. It can be computed as:

$$\frac{\text{Loan and Advances}}{\text{Current Assets}}$$

Loan and advances represent local and foreign bills discounted and purchased and loan, cash credit and overdraft in local currency as well as inconvertible foreign currency.

B. Assets Management Ratio (Activity Ratio)

Assets management ratio measures the proportion of various assets and liabilities in the balance sheet. Commercial bank should manage its assets and liabilities properly to earn profit. This ratio measures how effectively a firm is managing its assets and whether or not the level of those assets is properly related to the level of operations as measured by sales. So this ratio is also called efficiency ratio or turnover ratio. Because they indicate the speed with which the assets are converted or turn into sales.

i) Loan and Advances to Total Deposit Ratio

This ratio is calculated to find out, how successful the bank is utilizing their total deposition loan and advances for profit generation purpose. Higher the ratio indicates the better utilization of loan and advances out of total deposit.

This is calculated as:

$$\frac{\text{Loan and Advances}}{\text{Total Deposit}}$$

ii) Total Investment to Total Deposit Ratio

Investment is one of the major components of credit created to earn profit. This implies the utilization of firm's deposit on investment in government securities and shares, debenture of other companies and bank. A high ratio is the indicator of high success to mobilize the banking fund as investment and vice versa.

This ratio is calculated as:

$$\frac{\text{Total Investment}}{\text{Total Deposit}}$$

The numerator total investment consists of investment on government securities, investment on debentures, share in other companies and other investment.

iii) Loan and Advances to Total Working Fund Ratio

Loan and advances is the major component in working fund (total assets), which includes the ability of bank to channelize its deposit in the form of loan and advances to earn high return. This can be calculated by dividing loan and advances by total working fund.

This ratio is calculated as:

$$\frac{\text{Loan and Advances}}{\text{Total Working Fund}}$$

C. Profitability Ratio

Profitability ratio is one of the main indicators to analyze the financial performance of the firm. Profitability ratios are calculated to enlighten the end result of business activities, which is the major criterion of the overall efficiency of the business concern. It measures the operating efficiency of the company.

Profitability ratio measures the degree of success in achieving desired level of the firm's profit. Profitability also indicates public acceptance of the product and shows the firm can produce competitively. The ratio can be computed on the basis of either sales or investment.

In this study, this ratio has been computed on the basis of investment so it is also known as return on investment ratio. Profitability ratio of a firm should always be higher.

Profitability position of the firm can be presented through the following different ways.

i) Return on Loan and Advance Ratio

This ratio measures the earning capacity of the bank by how efficiently the bank has utilized its resources in the form of loan and advances. This ratio is calculated by dividing net profit (loss) by total amount of loan and advances. Higher ratio indicates greater success to mobilize fund as loan and advances and vice versa.

This can be calculated as:

$$\frac{\text{Net profit (loss)}}{\text{Loan and advances}}$$

ii) Return on Total Working Fund Ratio (ROA)

This ratio shows the overall profitability of all working fund i.e. total assets, it is also known as return on asset (ROA). A firm has to earn satisfactory return on assets of working fund in order to long –term service. This ratio is calculated by dividing net profit (loss) by total working fund. It can be calculated as:

$$\frac{\text{Net Profit (loss)}}{\text{Total Working Fund}}$$

iii) Total Interest Earned to total Loan and Advances Ratio

Total interest earned to total loan and advances ratio measures the income as interest from total loan and advances. Interest income could be increased by embracing good issuing and recovery credit policy. High return shows the soundness of credit policy.

It can be calculated as:

$$\frac{\text{Total interest earned}}{\text{Total loan and advances}}$$

D. Risk Ratios

Risk means uncertainty, which lies in the banking transaction of credit management. It increases effectiveness and profitability of the bank. These ratios indicate the amount of risk associated with the various harming operations, which ultimately influence the bank's credit and investment policy. Following two ratios are evaluated.

i) Liquidity Risk Ratio

This ratio measures the level of risk associated with the liquid assets i.e. cash, bank balance that are kept in the bank for the purpose of satisfying the deposit demand for cash. Higher ratio shows lower liquidity risk. This ratio is calculated by dividing total cash and bank balance by total deposit.

It can be computed as:

$$\frac{\text{Total Cash and Bank balance}}{\text{Total Deposit}}$$

ii) Credit Risk Ratio and Provisioning

Credit Risk Ratio

This ratio measure the possibility that loan will not be repaid or the investment will deteriorate in quality of going into default with consequently loss to the bank. According to definition, credit risk ratio is expressed as the percentage of non-performing loan to total loan and advances.

This ratio can be computed as:

$$\frac{\text{Non Performing Loans}}{\text{Total Loans and Advances}}$$

Loan Loss Provision to Total Loan and Advances Ratio

This ratio describes the quality of assets that a bank holding. The low ratio indicates the good quality of assets in total volume of loan and advances and high ratio indicates more risky assets in total volume of loan and advances.

The ratio can be computed as follow:

$$\frac{\text{Loan Loss Provision}}{\text{Total Loan and Advances}}$$

E. Adequacy of Loan Loss Provisioning

Nepal Rastra Bank has set up directive regarding the maintenance of loan loss provision for different types of loan of commercial banks. In this way, this analysis comprises the adequacy of loan loss provision as per NRB directives of the sample banks for the study period. Adequacy is measured by computing the ratios of loan loss provisioning to loans and advances of different classified loan.

i) Pass loan provision to total pass loan

This ratio measures whether the sample banks under the study has maintained the pass loan provision of at least 1% of total pass loan according to NRB directive throughout the review period.

The ratio can be computed as;

$$\frac{\text{Pass Loan Provision}}{\text{Total Pass Loan}}$$

ii) Sub-Standard Loan Loss Provision to Total Sub-Standard Loan

This ratio measures whether the sample banks under the study has maintained the sub-standard loan loss provision of at least 25% of total sub-standard loan according to NRB directive throughout the review period.

The ratio can be computed as;

$$\frac{\text{Sub Standard Loan Loss Provision}}{\text{Total Sub-Standard Loan}}$$

iii) Provision for Doubtful Debt to Total Doubtful Debt

This ratio measures whether the sample banks under the study has maintained the provision for doubtful debt of at least 50% of total doubtful debt according to NRB directive throughout the review period.

The ratio can be computed as;

$$\frac{\text{Provision for Doubtful Debt}}{\text{Total Doubtful Debt}}$$

iv) Provision for Bad Debt (Loss) to Total Bad Debt (Loss)

This ratio measures whether the sample banks under the study has maintained the provision for bad (loss) debt of at least 100% of total bad (loss) debt according to NRB directive throughout the review period.

This ratio can be computed as;

$$\frac{\text{Provision for Bad (loss)}}{\text{Total Bad (Loss) debt}}$$

1.6.4.2 Statistical Tools

Some important statistical tools have been used to present and analyze the data for achieving the objective of the study. Simple analytical tools such as graph, percentage, Karl Pearson's coefficient of correlation, method of least square are adopted which are as follows:

i) Standard Deviation (SD)

The measurement of the scatterings of the mass of figures in a series about an average is known as dispersion. The standard deviation measures the absolute dispersion. The greater the amount of dispersion, greater the standard deviation which means a high degree of uniformity of the observation as well as homogeneity of the series, a large standard deviation means just the opposite. In this study standard deviation of different ratios are calculated as under:

$$S. D. = \sqrt{\frac{\sum(X-\bar{X})^2}{N}} \quad \text{Where, } X = \text{variable, } \bar{X} = \text{Mean, and } N = \text{No. of Period}$$

ii) Coefficient of Variation (C.V.)

The coefficient of variation is the relative measure of dispersion, comparable across distribution, which is defined as the ratio of the standard deviation to the mean expressed in percentage. It is independent of units. Hence, it is a suitable

measure for comparing variability of two series with same or different units. A series with smaller C.V is said to be less variable or more consistent or more homogeneous or more uniform or more stable than other and vice versa. It is computed as:

$$C.V. = \frac{S.D.}{Mean} \times 100\%$$

iii) Coefficient of Correlation Analysis

This analysis interprets and identifies the relationship between two or more variables.

- i) Coefficient of correlation between total deposit and loan and advances.
- ii) Coefficient of correlation between Net income and loan and advances
- iii) Coefficient of correlation between interest earned and loan and advances.
- iv) Correlation between Non performing loan and total loan and advances.

The above ratio tool analyzes the relationship between these relevant variables and helps the bank to make appropriate policies regarding deposit collection, fund utilization (loan and advances and investment) and profit maximization.

To find out those relationships, the following formula is used:

$$r = \frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}}$$

Where, r = Coefficient of correlation, x = $(\bar{X}-X)$, and y = $(\bar{Y}-Y)$

The result of coefficient of correlation is always between -1 to + 1, where $r=+1$ means there is a positive relationship between two variables and where $r=-1$, means there is a negative relationship between two variables.

1.6.5 Study Limitations

The report is for the partial fulfillment of Master of Business Studies. The efforts have been made to present & analyze the fact clearly, truly & within the boundary. However, this study is limited by followings:

- This study is mainly concerned about two commercial banks SCBNL & EBL.
- Stipulated time and resources also may have existed as limitation of this study.
- Reliability of this study depends upon the accuracy of published data and the genuineness of respondent.
- The samples have been drawn at random for convenience, so there may exist some sampling error. And the sample size may not be sufficient to generalize the findings.
- This study covers only five (2006/2007 to 2010/2011) fiscal year data.

1.7 Review of Literature

The review of literature is an essential part of planning of the study. The main purpose of literature review is to find out what works have been done in the area of the research problem under study and what has not been done in the field of the research study being undertaken. With reference to the study, credit management in Nepalese commercial banks. This unit of the study tries to describe about the credit. Besides these, this chapter highlights the literature that is available in concerned subject as to my knowledge, research work, relevant study on this topic and review of thesis work performed previously. It is divided into two headings:

- Conceptual review

➤ Review of related studies

1.7.1 Conceptual review

The review of textbooks and other reference materials such as: news paper, magazines, research articles, journals and past thesis have been included in this topic.

“Banking is the business of collecting and safeguarding money as deposits and lending of same. The banker’s business is them to taken the debt of other people to offer his own in exchange and thereby to create money. He may be a dealer in debts, but in distress is only that observe of wealth and it would be equally permissible to describe the banker as a liquefied of wealth” (Chopra, 1989).

“Credit administration involves the creation and management of risk assets. The process of lending takes into consideration the people and system required for the evaluation and approval of loan requests, negotiation of terms, documentation, disbursement, administration of loans and workouts, knowledge of process and awareness or its strength and weakness are important in setting objectives and goals for lending activities and for allocating available funds to various lending functions such as commercial, installment and mortgage portfolios”. (Johnson, 1940:132)

“Monetary policy and Deposit mobilization of the domestic saving is one of the prime objectives of the monetary policy in Nepal. And commercial banks are the most actives financial intermediary for generating resources in the form of deposit of private sectors and providing credit to the investor in the different sectors of the economy”. (Bajracharya, 1999)

A frequently neglected but an important role is the provision of credit. Credit policy is sometimes, omitted entirely from an analysis of marketing mix by academics. This is despite empirical findings that although the credit package is unlikely to be the primary factor in determining overall patronage success. It may serve to clinch a contract when supplier's offerings are otherwise equally attractive. The credit policy cannot be sound unless it is based on clear knowledge of the cost of credit. The cost is determined by the quantity of all the credit sales, average collection period and the opportunity cost of capital.

Book named "Banking Management" says that in banking sector or transaction, an unavoidable of loan Management and its methodology is regarded very important. Under this management, many subject matters are considered and thought, for example, there are subject matters like the management of loan flow, the document of loan flow, loan administration, audit loan, renewal of loan, the condition of loan flow, the provision of security, the provision of the payment of capital and its interest and other such procedure. This management plays a great role in healthy competitive activities.

"It is very important to be reminded that most of the banks failures in the world are due to shrinkage in the value of loan and advantage. Hence, risk of non-payment of loan is known as credit risk or default risk."(Dahal, 2002:114)

"Portfolio management helps to minimize or manage the credit risk by the spreading over the risk to various portfolios. These method of managing credit risk is guided by the saying do not put all the eggs in a single basket." (Bhandari, 2005:300)

1.7.1.1 Concept of Credit

“Credit is the amount of money lent by the creditor (bank) to the borrower (customers) either on the basis of security or without security. Sum of the money lent by bank, is known as credit” (Oxford Advanced Learners Dictionary; 1992:279). Such transactions normally include the payment of interest to the lender. Credit may be extended by public or private institutions to finance business activities, agricultural operations, customer expenditures, or government projects.

Most modern credit is extended through specialized financial institutions, of which commercial banks are the oldest and most important. In present day industrial economies, the banks are able to extend and increase the supply of credit by the creation of new deposits for their loan customers.

The lender must judge each loan he makes on the basis of the character of the borrower (his intention to repay), his capacity to repay (based on his potential for earning income), and his collateral (property pledged in case of default on the loan). The terms of credit transactions may be publically regulated to prevent abuses by customers and lenders as well as to channel credit into particular sector of the economy.

Credit administration involves the creation and management of risk assets. The process of lending takes into consideration about the people and system required for the evaluation and approval of loan request, negotiation of terms, documentation, disbursement , administration of outstanding loans and workouts, knowledge of the process and awareness of its strength and weakness and important in setting objectives and goals for lending activities and for allocating available funds to various lending functions such as commercial ,installment and mortgage portfolios(Johnson,1944:132)

Banks generally grants credit on four ways (Chhabra, and Taneja, 1991:4)

1. Overdraft
2. Cash credit
3. Direct credit
4. Discounting of bills

1.7.1.2 An Overview of Credit Management

Credit management, to make it simple, refers to fund and working capital management. However, most people have some misconcepts. They only consider credit management is a short-term process. In fact, if it relates to working capital, it may be right. However, if it relates to fund management, it can be a long-term basis. Credit management is the process of mitigating the risk involved in granting the credit. It is a key to successfully utilize credit by minimizing the risks and losses. Credit is regarded as the income generating assets especially in commercial banks.

Credit is regarded as the heart of the commercial banks in the sense that; it covers the main part of the investment, the most of the investment activities based on credit; it is the main factor of creating profitability. It affects the whole economy of the country. In today context, it also affects on national economy to some extent. If the bank provides credit to retailer, it will make the customer status. Similarly, if provides to trade and industry, the government will get tax from them and help to increase the national economy. It is the security against depositors. It is proved from very beginning that credit is the shareholders wealth maximization derivative. However, other factors can also affect profitability and wealth maximization but the most effective factor is regarded as credit. It is the most challenging job because it is the backbone in commercial banks. Thus, effective management of credit should seriously be considered.

Management is the system of, which helps to complete the every job effectively. Credit management is also the system, which helps to manage credit effectively. In other words, credit management refers management of credit exposures are the main source of investment in Commercial Banks and return on such investment is suppose to be main source of income.

Credit management strongly recommends analyzing and managing the credit risks. Credit risk is defined as the possibility that a borrower will fail to meet its obligations in accordance with the agreed terms and conditions. Credit risk is not restricted to lending activities only but includes off balance sheet and inter-bank exposures. The goal of the credit risk management is to maximize a bank's risk adjusted rate of return by maintaining the credit risk exposure within acceptable parameters. For most banks, loan are the largest and most obvious source of credit risk, however, other sources of credit risk exist throughout the activities of a bank, including in the banking book, and in the trading book, and both on and off balance sheet. Banks are increasingly facing credit risk (or counterparty risk) in various financial instruments other than land, including acceptances; interbank transactions, trade financing, foreign exchange transactions and guarantees and the settlement of transactions.

1.7.1.3 Importance of Credit Management

Keeping bank's credit file as clean as possible is very important to ensure that you know what you are going to be able to get in terms of interest rates, available credit and possible house payment as well. With good credit, you can find interest rates are going to be much lower and you stand the chance of being able to really work out a good deal in terms of stretching your finances even further. With bad credit you are charged much higher interest rates, as well as the amount of credit that is available to you is much lower. This makes it much harder to obtain a loan

and work out a satisfactory arrangement when you are trying to buy a car, a house or even apply for a credit card.

Many people do not realize just how dramatically a single bad mark on your credit can alter your ability to obtain good interest rates. The impact is even more dramatic the more negative items appear on your credit file. Someone with bad credit has a very difficult time obtaining credit of any form, including a job at times. Keeping your credit file clean is often one of the only ways to ensure that you will be able to obtain a good job, as well as qualify for the lowest interest possible in order to save money while still purchasing the things you need in life.

While it is possible to survive life with bad credit, it is much harder and purchasing a vehicle or even a home is much more expensive in the increased interest rates along that are charged with programs that offers bad credit loans. If you are interested in qualifying for the lowest interest rates that are offered on vehicles, credit cards and even home mortgage rates, you are going to have to maintain a good credit file with virtually no blemishes to keep those good interest rates. Negative marks on your credit file can increase you interest rates by as little as 1% additional interest and as much as 20% higher.

The increased amount of money charged to people with bad credit just in additional interest charges alone is enough to more than cover most debt payment for someone with good credit. Responsible credit management is very important to saving money and ensuring that you are not overpaying for items that you want. Everyone is capable of making responsible credit decisions if they are careful and select their choices carefully. For all of the wrong credit decisions you can make, there are numerous good credit decisions you can make as well which can help you to ensure you always have multiple options to choose from so you can select the best credit management option for your needs.

1.7.1.4 Types of Credit

1. Overdraft

An instant extension of credit from a lending institution is more precisely a draft for more than the balance in the account on which the draft is drawn. A bank may honor an overdraft, depending on the importance of the customer and on prior arrangements (if any) to cover overdrafts.

2. Cash Credit

Cash credit is a short-term cash loan to a company. A bank provided this type of funding, but only after the required security is given to secure the loan. Once a security for repayment has been given, the business that receives the loan can continuously draw from the bank up to a certain specified amount. This type of financing is similar to a line of credit.

3. Direct credit

a) Term Credit

Term credit is medium and long term credits which are given for the purchase of assets, like land and building, machinery and equipment. The amounts of term credits are fixed primarily in relation to the total costs of the projects.

b) Working Capital Credit

Working capital denotes the difference between current liabilities. It is granted to the customers to meet their working capital gap for supporting everyday production process. A natural process develops in funds moving through the cycle are generated to repay a working capital credit.

c) Priority or Deprived sector Credit

With a view to giving freedom to commercial banks in the selection of their credit portfolio, the NRB has taken a decision to gradually phase out the priority sector-lending program.

d) Hire Purchase Financing (Installment Credit)

Hire purchase credits are characterized by periodic repayment of Principal and interest over the maturity of credit. Hirer agrees to take the goods on hire at a stated rental including their repayment of principle as well as interest with an option to purchase. A recent survey of commercial banks indicates those banks are planning to offer installment credits on a variable rate basis. It can be secured and unsecured as well as direct and indirect installment credits on a variable rate basis. It can be secured and unsecured as well as direct and indirect installment credit.

e) Housing Credit (Real Estate Credit)

Commercial banks also extend housing credit to their customers who have regular income or can earn revenue from housing project itself. It is different types, such as residential building, commercial complex, construction of warehouse etc.

f) Project Credit

Project credit is granted to the customers as per project viability. The borrowers have to invest certain proportion to the project from their equity and the rest will be financed as project credit.

g) Consortium Credit

Two or more institution may consent to grant credit facility to the project of which is baptized as consortium credit. It reduces the risk of project among them, financier's bank equal charge on the project's assets.

h) Letter of credit (L/C)

LC are a means by which non-payment risk in the use of commercial draft may be further reduced by substituting the credit worthiness of a bank for that of the purchaser when, because of the excessive credit risk factors both in the buyer and

in his environment, the buyer bank will for a fee, guarantee payment in the form of L/C.

i) Bank Guarantee

It is used for the sake of the customers in favor of the other party (beneficiary) up to the approval limit. Generally, a certain percent amount is taken as margin from the customer and the customer's margin account is credited.

j) Credit Cards and Revolving Lines of Credit

Banks are increasingly utilizing charge cards and revolving lines of credit to make unsecured consumer credit. Revolving lines credit lowers the cost of making credit since operating and processing cost is reduced. Due to standardization, centralized department process revolving

Credits resulting reduction on administration cost. Continued borrowing arrangement enhances cost advances. Once the credit line is established, the customer can borrow and repay according to his needs and the bank can provide the fund to the customer at lower cost.

k) Off-Balance Sheet Transaction

In fact, bank guarantee and letter of credit refer to off balance sheet transaction of financial institution. It is also known as contingent liability. Contingent liability pinpoints the liability, which may or may not arise during the happening of certain events.

4) Discounting of Bills

It is the main function of commercial banks. Discounting of bills means made payment of bill, which are issued by commercial banks as well as central banks, NRB, before their expiration date or matured time. Therefore, payment should be less than the total amount because of their uncertainty.

1.7.1.5 Principles of Credit Policy

The income and profit of the bank depends upon its credit procedure, credit policy and investment of its fund in different securities. The greater the credits created by the bank, the higher will be the profitability. A sound lending and investment policy is not only pre-requisite for bank's profitability but also crucially significant for the promotion of commercial saving of a backward country like Nepal.

Some necessities for sound lending and investment policies which most of the banks must consider can be explained as under.

1. Principle of Liquidity

Liquidity means the whole money stock in the economy. In the case of Nepal, the money in the accounts of current, saving and fixed period and the money in margin account refers to liquidity. The liquid property means cash stock of the commercial banks the amount of short term, current account and short-term government and business securities and the treasury bills.

A bank should not forget the principle of liquidity while it is following its investment policy. The commercial banks are considered to be as financial mediators. The commercial banks have liability to the deposits and they immediately should give it in time when the depositors asked. For the purpose, the banks should keep adequate liquid funds. And also they should gain the profit by utilizing the deposits as a loan and advances. If the bank can't return the deposit at the time of demand it may lose the customers and their trust. If adequate liquid fund is kept, they can return the deposit at the will of the depositors but such bank can't run for long time. In the same way, if they invest the whole deposit loan and advances, they can't give it at the time of demand by the depositors, so the

commercial bank should try to move the liquidity and profit together. It is a great challenge for the managers of the banks.

The commercial bank should attract deposits because a deposit is called raw materials for the banking, without which a bank can't operate. It is important thing in which sector the amount of deposit is to be invested. The interest is not given for the amount of current account. But as it has to give payment immediately plenty of liquidity is necessary for it. From the view point of the property, loan and advances are more income generating sectors but they are less liquid able. The amount won't be recovered in the time of want. Similarly keeping more cash in a bank is very liquid able, but doesn't generate income to the bank. The quantity of liquidity is less for investment so maintenance of coordination between the property and the liquidity by keeping some parts of its own property as a liquid property to provide loan, and to invest it is the success of the commercial banks. The central banks pay attention to this reality to give direction on liquidity to the commercial banks.

2. Principal of Profitability

The objective of the commercial banks is to earn profit. The bank should follow the objective by focusing it on the sectors in which it can earn much profit. The bank should not keep its means and materials inactive. It should keep investing the means and materials in appropriate and safe area. The banks can gain much profit from the safe and long-term investment. But there is less liquidity in such investment. It may loss the investment in the sector where profit is not gained. Where much risk is there, is much profit. But sometimes it may create a situation where the bank would face the great economic loss, by loss of the investment in such a risky sector. So profit and liquidity are two opposite principles. If bank pays its attention only on profit, the liquidity becomes less, if it pays attention to the liquidity, it can't be a long term investment and the bank doesn't get enough profit. So it should maintain a balance between these two. The profit of a bank is

the interest rate and the bank charge. So the bank should always try to apply an appropriate investment policy in such sectors from which it can earn.

3. Principle of Safety

A bank should pay special on safety. If the invested area is not safe enough the bank may occur loss whether it is huge or small. The bank should be sensible while investing in unsafe sector for gaining much by accepting the security of low quality. To invest large loans against fewer securities by receiving commission, to invest in new places without enough care, observation and to flow the long term loan although with these various reason will make unsafe of the bank's investment. So it should invest in safe sector where the property taken as the security has the value enough towards the loss on investment. Therefore the banks should follow the principle of safety. Should flow the short term loans and invest in a profitable sector. In such circumstances there will be minor possibility of loss. The secured security means the securities of the inland and foreign company's shares, debentures and government bonds etc.

4. Principle in Diversification

The bank should not follow the policy of investment only in one or two sectors further it should invest it in the various sector. The bank by studying and analyzing the different sectors where there is possibility of earning more through small investment should extend its investment. Investing in many sectors helps keep it in balance. Some sector may have huge profit whereas the others may have low profit or even loss, so by embracing the diversification policy on its investment, on the basis of gold, silver, diamond, development bond, share of company, debentures, goods, import and export bills and other appropriate securities, the bank have moved head moved head of their investment policy. The

bank always gets success in their working capacity from such investment. And the bank becomes successful in its goal achievement.

5. Principle of Marketability

A bank should adopt the principle of marketability in investment policy. In a certain way, the bank moves its investment or flows loan against security. To invest the money, the bank should follow the policy of taking the security of high quality as far as possible. Are the goods taken as securities saleable or not in the market? Can the loan be recovered by selling the security or not? The bank should adopt the investment policy by much attention regarding the different aspects; however. It should study the market and evaluate the goods that have been taken as the security. The bank should not invest the money by taking such securities which are not saleable in the market and though they are sold but not fetch the reasonable price. And there is no value of such things.

6. Principles of National Interest

A bank, while it applies its investment policy should give important to principle of national interest: however an application of such policy will not earn much profit. Any organization institution and individual should not forget the liability towards the society. The objective of the bank to gain profit should not go against the national interest and the bank should follow the rules and regulation as well as the policy, directions, instruction given by the Nepal Rastra Bank.

7. Principle of Price Stability

Security of the property which are taken by the bank must be durable otherwise there is the possibility of amount of bank to be sunk in future. But it can't be said that the price stability of any property will always remains the same. Yet, if the property taken as the security keeps the price stable it will be easy for the bank to recover its loan. Sometimes if the price of the securities goes high it will be

beneficial to the bank. But, there will be few possibilities that it will always go high if there is a condition where the securities will not be sold or if it is sold and the proceeds of sale are not equal to recover the loan, the bank suffer from loss. Therefore the bank should make investment by keeping the securities that keep the price stable, should flow the investment also create such situation which keeps the bank free from the fear of losing its loan.

8. Principle of Tax Immunity

As far as possible, a bank should make investment in such sectors which is entitled to the immunity. By increasing the investment to tax immunized sectors the bank can achieve its goal. The tax immunized areas likely treasury bills; national bond development bonds, etc are notable. Example, if it is invested in the priority declared sectors, facility can be achieved therefore, and the bank should make investment in the areas where facility of tax immunity can be received.

1.7.1.6 Lending Criteria or Criteria of Creditworthiness

1. Character

Those mental qualities and action of debtor which impel him to pay his debts; that sense of obligation to fulfill the payment promise; sometimes summarized as “willingness to pay”.

For this analysis, generally the following documents are needed:

- Memorandum and Articles of Association
- Registration certification
- Tax registration certificate (Renewed)
- Resolution to borrow
- Authorization-person authorizing to deal with the bank.
- Reference of other lenders with whom the applicant has dealt in the past or Bank A/C statement of the customer.

2. Capacity

Those means and faculties which provide the funds with which payment is made; resources possessed or incoming; the “ability to pay” even well-founded credit approval may subsequently be resaved by change in the debtor’s ability to fulfill his credit promise. Changes in his employment, earning capacity or indebtedness militate against the integrity of his promise and produce an unexpected specified risk. The documents needed for this analysis are:

- Certified balance sheet and profit loss account for at least past 3 years.
- In case of the personal loan they have to submit the proof sources of income.
- References or other lenders with whom the applicant has dealt in the past or bank account.

3. Capital

Those possessions or equities from which payment might be expected when character and capacity become lacking that from which payment may be taken under dues, if necessary.

Capital as viewed in the appraisal of credit worthies represents a residual of equities available for the payment of debt if other means of payment fail. For capital analysis, financial statements like balance sheet, profit and loss account is the only tools.

4. Collateral

Collateral is the security proposed by the borrower. Collateral may be of either movable or immovable. Special forms of capital which are usually negotiable or readily represented by conveyance of claim or title; specific securities offered for credibility of the credit promise. The banks commonly look to collateral in their

transactions, taking securities, negotiable instruments, post-dated checks, and chattel and real estate mortgage as pledge.

5. Conditions

Once the funding company is satisfied with the character, capacity, capital, and collateral then a credit agreement (Sanction letter) is issued in favor of the borrower stating conditions of the credit to which borrower's acceptance is accepted. Those circumstance external and usually beyond the control of debtors which nevertheless affect their paying behavior.

1.7.1.7 Steps Involved in Lending

Before issuing of loan commercial banks follow up certain procedures for providing loans. In spite of several technical aids, such as ratio analysis of financial statements, cash flow statements available to the modern banker, the ability to make a correct loan decision very much depends on the shrewd and critical judgment, common sense, perceptive intelligence and discriminating sense of the lending banker. However the usual steps involved in lending are as follow:

1. Loan Application

When a customer needs loan they ask for loan procedure in the bank according to the type of loan which may be a corporate loan or a retail loan. A loan application or a proposal is made if the customer finds all the process and information is reasonable. For corporate loan it becomes necessary to consult loan officer. Loan officer can also contract to big account holder possessing business organization and ask if they are in need of loan.

2. Initial interview with the customer ascertaining the following few criteria

- The character, capacity and integrity of the borrower.
- Prospects of his proposal- whether it will succeed or fail.

- Repayment capacity of the borrower including a consideration of the source of repayment.
- The collateral that being offered as security must be investigated as the following.
 - Whether it is easily marketable
 - Value of the security at present
 - Whether the value is likely to be stable or it is the security such that its value fluctuates considerably and
 - In case of default in payment , it is easily transferable

3. Credit investigation of the Customer

For credit investigation of the customer, the banker looks for:

- Past history of the account.
- Reports from other bankers and people in the same line of business in the case of new customer.
- Search of documents like memorandum of articles, registration papers, annual report available with the Registrar of Joint Stock companies.
- A visit to customer's place of business.
- Analysis of balance sheet and profit and loss account and funds flow analysis in the case of existing companies.
- In case of new companies or new projects which includes the following.
 - Examination of technical feasibility.
 - Whether the project is economically viable
 - The competence of the managerial personnel to successfully complete and run the project.
- Examination of the cash budgets to ensure the repayment programs.

1.7.1.8 Document that are usually required for providing Loans through Commercial Banks

1. Personal Loan

- Registration charge (mortgage) over the fixed assets.
- Demand Promissory Note
- Undertaking to repay loan and/ or personal guarantee

2. Loan to Company /firms

- Personal guarantee of promoters/ shareholders.
- Corporate guarantee of the concerned company/ firm
- General Letter of Hypothecation- Where stocks and/ or machinery are hypothecated and/ or in the case of Working Capital Loan.
- Registered charge (mortgage) over the fixed assets.
- Demand Promissory Note.

3. Loans against cash (account) pledge

- Deed of Pledge of Cash/Cash equivalent.
- Demand Promissory Note.
- Personal guarantee and /or understanding to repay loan.

4. Loans against pledge of share

- Deed of Pledge of shares.
- Demand Promissory Note.
- Personal guarantee and/or undertaking to repay loan.

5. Loan against pledge of saving Bonds

- Deed of pledge of Saving Bonds.
- Demand Promissory Note.
- Personal guarantee and/ or understanding to repay loan.

6. Loan against security of authorization to deduct own or third party's account

- Deed of Authorization to deduct amount
- Undertaking to repay loans and/ or personal guarantee.
- Letter of set off
- Demand promissory note.

1.7.1.9 Credit Risk Management

1. Credit Risk Management Policy

Notwithstanding structural changes that have taken place in business line of the banks, the core business gathering deposit and extending credit-still represents the heart of banking. Nevertheless, disintermediation halted this core business, as both deposits and loans have lost to competing instruments such as Certificate of Deposit, Commercial papers, Bonds, Mutual Funds etc. In addition, by separating the origination of credit from its funding and securitization presents banks with the opportunity to remove credit, liquidity and interest rate risks embedded in their balance sheet.

Credit risk is the most common cause of bank failure, causing virtually all regulatory environments to prescribe minimum standards for credit risk management. The basis of sound credit risk management is the identification of the existing and potential risks inherent in lending activities. Specific credit risk management measure typically includes three kinds of policies like reduce credit risk, asset classification, and loss provisioning.

Yes, of course, liquidity risk has also the almost same degree of bank failure. Liquidity risk management lies at the heart of confidence in the banking system. The importance of liquidity transcends the individual institution, since a liquidity shortfall at a single institution can have system-wide repercussions. Banks transform the term of their liabilities to have different maturities on the asset side of balance sheet. At the same time, banks must be able to meet their commitments

(such as deposits) at the point at which they come due. The contractual inflow and outflow of funds will not necessarily be reflected in actual plans and may vary in different time. A bank may therefore, experience liquidity mismatches, making its liquidity policies and liquidity risk management in its business strategy, The assessment of credit risk management function should consider loans and all other extensions of credit (on and off balance sheet) to ensure that the following factors are considered:

- The level, distribution and severity of classified assets.
- The level and composition of none accruing, non-performing, renegotiated, rolled over, and reduced rates assets.
- The adequacy of valuation reserves.
- Management's ability to administer and collect problem assets.
- Undue concentrations of credit.
- The adequacy and effectiveness of and adherence to, lending policies and credit administration procedure.
- The adequacy and effectiveness of a bank's process for identifying and monitoring initial and changing levels of risk, or associated with approved credit exposure.

2. Credit Portfolio Management

The portfolio risk in turn comprises intrinsic risk and concentration risk. While intrinsic risk is inherent in certain type of lending like credit card etc., the portfolio risk refers to risk exposure due to disproportionate concentration of loans to specific industries, sectors, regions or types. Lenders also take on interest rate and liquidity risks. The symptoms of liquidity crisis in any bank can be traced to excessive credit risk, manifested in heavy loan losses. The credit risk of bank's portfolio depends on two sets of factors external an internal. The external factors are the state of the economy, natural calamities, nationwide strike, Government's

policy, business cycles, sector/industry recession etc. The banks can however, influence the adverse effects of these and attitude towards risk taking (diversified credit portfolio, careful credit analysis, loan syndication, consortium, etc.). Managerial philosophy, loan policy-high ratio of loan to total assets, loan mix, lax procedures and unsound prevention strategies and inexperienced credit officers are the internal factors influencing credit risk. Bank supervisors place considerable importance for formal policies laid down by the board of directions and diligently implemented by management. This emphasis is most critical with regard to the bank's lending function which stipulates that a bank must adopt a sound system for managing credit risk. A lending policy should contain an outline of the scope and allocation of bank's credit facilities and manner in which a credit portfolio is managed, i.e. how loans are originated, serviced, supervised and collected. A good lending policy is not overly restrictive but allows for the presentation of loans to the board that officers believe are worthy of consideration but which do not fall within the parameters of written guidelines. Flexibility must exist to allow for fast reaction and early adaptation to changing conditions in a banks earning assets mix and market environment.

Considering that from the basis for sound lending policies, include the following:

i. Limit on Total Outstanding loans

A limit on the loan portfolio is usually expressed relative to deposits, capital or total assets. In setting such a limit, factors such as credit demand, the volatility of deposits and credit risks should be considered.

ii. Geographical limits

The limit is usually a dilemma. If a bank lacks understanding of its diverse markets and does not have quality management, geographical diversification may become a reason for bad loan problems. On the other hand, the imposition of strict geographical limits can also create problem, particularly in the case of regions with narrow economies. In any case, a bank's business market should be clearly

delineated and commensurate with its market knowledge, managerial and staff experience. Bank's officers should be fully aware of specific geographical limitations for lending purposes, an aspect that is particularly relevant for new banks.

iii. Credit Concentrations

A lending policy should stimulate portfolio diversification and strike a balance between maximum yield and minimum risk. Concentration limits usually refer to the maximum permitted exposure to a single client, connected group and sector of economic activities. This is especially important for small, regionally oriented or specialized banks. A lending policy should also require that all concentrations be reviewed and reported on a frequent basis.

iv. Distribution by category

Limitations based on aggregate percentage of total loans in commercial, real estate, consumer or other credit categories are common. Policies related to such limitations should allow for deviations that are approved by the board.

v. Types of loan

A lending policy should specify the types of loans and other credit instruments that the bank intends to offer to clients and should provide guidelines for specific loans. Decisions about types of credit instruments should be based on the expertise of lending offers, the deposit structure of the bank and anticipated credit demand. Types of credit that have resulted in an abnormal loss should be controlled by senior management or avoided completely.

vi. Maturities

A lending policy should establish the maximum maturity for each type of credit and loans should be granted with a realistic repayment schedule. Maturity scheduling should be determined in relation to the anticipated source of repayment, the purpose of the loan and the useful life of the collateral.

vii. Loan pricing

Rate of various loan types must be sufficient to cover the costs of funds, loan supervision, administration, and probable losses. At the same time, they should provide the reasonable margin of profit. Rates should be periodically reviewed and adjusted to reflect changes in costs or competitive factors. Rates of various loan types must be sufficient to cover the costs of funds, loan supervision, administration and probable losses. At the time, they should provide the reasonable margin of profit. Rates should be periodically reviewed and adjusted to reflect changes in costs or competitive factors. Rates differentials may be deliberately maintained either to encourage some types of borrowers to seek credit elsewhere or to attract a specific type of borrower. Guidelines for other relevant procedures, such as the determination of fees on commitments or penalty interest rates are also an element of pricing policy.

viii. Lending Authority

Lending authority is often determined by size of the bank. In smaller banks, it is typically centralized. In order to avoid delays in the lending process, larger banks tend to decentralize according to geographical area, lending product and types of customer. A lending policy should establish limits for all ending officers. If policies are clearly established and enforced, individual limitations may be somewhat higher than would normally be expected, depending on the officer's experience and tenure with the bank. Lending limits could also be based on group authority which would allow a committee to approve larger loans. Reporting procedures and the frequency of committee meetings should be specified.

ix) Appraisal process

A lending policy should outline where the responsibility for appraisal lies and should define formal, standard appraisal procedures, including reference to reappraisals of renewals or extensions. Acceptable types and limits on the amount of appraisal should be outlined for each type of credit facility. Circumstances requiring appraisals by qualified independent appraisers should also be described. The ratio of the amount of the loan to the appraised value of both the project and collateral, as well as the method of valuation and differences among various types of lending instruments should be detailed. A lending policy should also contain a schedule of down payment requirements, where applicable.

x) Maximum ratio of loan amount to the market value of Pledged Securities

A lending policy should set forth margin requirements for all types of securities that are accepted as collateral. Margin requirements should be related to the marketability of securities. A lending policy should also assign responsibility and establish a timetable for periodic pricing of collateral.

xi) Recognition

A bank should recognize a loan, where original or purchased, in its balance sheet. This should occur as soon as the bank becomes the party to the contractual provisions that apply to the loan. A bank should initially carry the loan at cost.

xii) Impairment

A bank should identify and recognize the impairment of a loan or a collectively assessed group of loans. This should be done whenever it is neither probable nor assured that a bank will be able to collect the amounts due according to the contractual terms of a loan agreement. Impairment can be recognized by reducing the carrying amount of the loan to its estimated realizable value through an

allowances or charge off, or by attributing charges to an income statement during the period in which the impairment occurs.

xiii) Collections

A lending policy should define delinquent obligations of all types and specify the appropriate reports to be submitted to the board. These reports should include sufficient detail to allow for the determination of the risk factor, loss potential and alternative courses of action. The policy should require a follow up collection procedure that is systematic and progressively stronger. Guidelines should be established to ensure that all accounts are presented to and reviewed by the board.

xiv) Financial Information

The safe extension of credit depends on complete and accurate information regarding every detail of the borrower's credit standing. A possible exception to this rule is the case in which a loan was originally approved with readily marketable collateral to be used as the source of repayment. A lending policy should define the financial statement requirements for business and individuals at various borrowing levels and should include appropriate guidelines for audited, non-audited, interim cash flow and other statements. It should include external credit checks required at the time of periodic updates. If the loan maturity is longer than one year, the policy should require that the bank's officers prepare financial projections with the horizon equivalent to the loan maturity, to ensure that the loan can be repaid from cash flow. The assumptions for the projections should be clearly outlined. All requirements should be defined in such a manner that any negative credit data would clearly violate the bank's lending policy.

Finally, a lending policy should be supplemented with other written guidelines for specific departments of the bank. Written policies and procedures that are

approved and enforced in various departments should be referenced in a bank's general lending policy. The absence of written policies, guidelines and procedures is a major deficiency and a sign that a board of directors is not properly executing its fiducially responsibilities.

3. Credit Risk Evaluation

All extensions of credit must be supported by a complete analysis of the proposed credit. A comprehensive and accurate appraisal of risk in every credit exposure of the bank is mandatory. No credit proposal can be put up for approval unless there has been a complete written analysis.

Objectives

The objectives of having written documentation of an analytical nature to credit extensions are:

- To ensure a thorough analysis of all new borrowers.
- To ensure a periodic (at least, once a year) critical review of ongoing borrowing relationships including all aspects of the credit risk, overall profitability to the bank and marketing potential.
- To ensure proper and close evaluation of facility increases and/or significant modifications in existing credit arrangements.
- To facilitate and systemize the credit approval process by providing permanent signed record of approval together with the basis for the decision made.

4. Loan Loss Provisioning Policy

Classification of assets can provide a basis for determining an adequate level of provisions for possible loan losses. In determining an adequate reserve, credit history, collateral and all other significant factors that affect the collectability of the loan portfolio should be considered. These include the quality of credit policies

and procedures, prior loss experiences, loan growth, quality and depth of management in the lending area, loan collection and recovery practices, changes in national and local economic and business conditions, and general economic trends. The asset value assessments should be performed systematically, consistently over time, and in conformity with objective criteria. They have to be supported by adequate documentation.

In many countries, in particular those with fragile economies, regulators have established mandatory levels of provisions that are related to asset classification. The mandatory level of provision is normally determined by certain statistics. The level of necessary loan loss provisions necessarily includes the degree of subjectivity. Management discretion, however, should occur in accordance with established policies and procedures. The following aspects have to be included in analysis of adequacy of the overall allowance for losses:

- A survey of the bank existing provisioning policy and the methodology used to carry it out. In particular the value attributed to collateral and its legal/operational enforceability has to be considered.
- An overview of risk grading (asset classification) procedures and the review process including the time allotted for review.
- Any current factors that are likely to cause losses associated with a bank's portfolio and that differ from the historical experience of loss. These may include changes in a bank's economic and business conditions or in its clients, external factors, or alternative of bank procedures since the last review.
- A trend analysis over a longer period of time, which serves to highlight any increases in overdue loans and the impact of such increases.
- An opinion of the adequacy of the current policy and , on the basis of the loans reviewed, extrapolation of additional provisions necessary to bring

the bank's total loan-loss provisions to a level in line with international accounting standard(IAS)

5. Non-performing Loan Portfolio

Non- performing loans are those not generating income. Loans are normally considered to be non-performing when principal or interest on them is due and left unpaid 90 days or more (this period may vary by jurisdiction). It is an international standard. The introduction of asset classification that entails provisioning requirements is costly to the banking sector. The delinquency period for non-performing assets is therefore typically introduced at 180 days and then tightened to 90 days after a period of time.

The non-performing loan portfolio is an indication of the quality of the total portfolio and ultimately of a bank's lending decisions. Another such indicator is the bank's collection ratio.

When assessed within the context of non-performing loans, the aggregate level of provisions indicates the capacity of a bank to effectively accommodate credit risk. The analysis of a non-performing loan portfolio should cover a number of aspects, like: aging of past due loans, including principal and interest, by more than 30, 90,180, and 360 days. These classifications can be broken down by type of customer and branch of economic activity to determine overall trends and whether or not all customers are affected equally.

Reasons for the determination of the portfolio quality, which can help identify possible measures that can be undertaken by the bank to reverse a given trend.

- A list of non-performing loans, including all relevant details should be assessed on a case to case basis to determine if the situation is reversible, exactly that can be done to improve repayment capacity, and whether or not work out and collection plans have been used.
- Provision level should be considered to determine the bank's capacity to withstand loan defaults.

- The impact of profit and loss account should be considered to determine exactly how the bank would be affected by the deterioration of asset quality.

1.7.1.10 Review of Relevant NRB Directives

NRB issues various directives relating banking regulation and prudential norms. Among various directives issued in 2009 directive no 2 is relating to credit classification and provisioning.

Directive relating to credit classification and provisioning (directive no 2)

Effective F/Y 2058, Act 79 banks shall classify outstanding loan and advance based on aging of principal amount into the following four categories.

Pass

Loans and advances whose principal amount are not past due and past due for a period up to 3 months shall be included in this category. These are classified and defined as performing loan.

Sub standard

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

Doubtful

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

Loss

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

Loans and advances falling in the category of sub-standard, doubtful are classified and defined as non-performing loan.

Additional arrangement in respect of Pass Credit

Loans and advances fully secured by gold, silver, fixed deposit receipt Nepal Government securities shall be included under “Pass” category. However, where collateral of fixed deposit receipt of Nepal Government securities of NRB Bonds is placed as security against loan for other purposes, such loan has to be classified on the basis of ageing. Loans against FDRs or other banks shall also qualify for inclusion under pass credit.

Additional Arrangement in respect of “Loss” Credit

Even if the credit is not past due, loans having any or all of following discrepancies shall be classified as “Loss”.

- No security at all or security that is not in accordance with borrower’s agreement with the bank.
- The borrower has been declared bankrupt
- The borrower is absconding or cannot be found.
- Purchase or discounted bills are not realized within 90 days from the due date.
- The credit has not been used for the purpose originally intended.
- Owing to non-recovery , initiation as to auctioning of the collateral has passed six months and if the recovery process is under litigation
- Loans provided to borrowers included in the blacklist and where the credit information Bureau blacklists the borrower.

Note: bills purchased/discounted are to be classified into Loss Loan where they are not realized within 90 days from due date. This is departure from the normal

classification rules applicable to other credits. Accordingly, if bills would have only two classification i.e. pass and loss.

Additional arrangement in respect of term credit

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

Loan Loss Provisioning

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

S. No.	Classification of credit	Loan loss provision
1	Pass	1%
2	Standard	25%
3	Doubtful	50%
4	Loss	100%

Loan loss provision set aside for performing credit is defined as “General Loan Provision” and loan loss provision set aside for Non Performing loan is defined as “Specific loan Loss provision”.

Where the banks provide for loan provisioning in excess of the proportion as required under the directives of NRB the whole amount of such additional provisioning may be included in General Credit Loss Provision under the supplementary capital.

1.7.2 Review of Related Studies

During the study, the previous students have carried out several thesis works. Among them some of thesis is found to be relevant for this study which is presented as below:

- A study on the Investment policy of Nepal Arab Bank Ltd. in comparison to other Joint venture banks of Nepal.
- Investment policy of Commercial Bank in Nepal(A Comparative study of Nepal Bank Ltd & Joint Venture Banks)
- A comparative study on Investment policy of Nepal Bangladesh Bank Limited and other Joint venture Banks(Nabil & NGBL)
- A comparative study on Investment policy of Nepal Bangladesh Bank and other Joint venture Banks(Himalayan Bank Ltd. and Nepal State Bank of Indai Ltd.
- A comparative study on Investment policy of Standard Chartered Bank Nepal Ltd. and Nabil Bank Ltd.
- Investment pattern Analysis of Nepalese Commercial Banks (A Comparative study of Himalayan Bank Ltd. and Nepal Industrial and commercial bank Ltd.)
- Deposit Mobilization of Everest Bank Ltd.

1.7.2.1 Review of Thesis

Lamsal, S. (2004), in his thesis, “Credit practices: a study on NABIL Bank ltd, SCB Nepal Ltd and Himalayan Bank Ltd”, has the major objective of examining the credit management in the selected banks.

The specific objectives:

- To determine the liquidity position, the impact of deposit in liquidity and its effect on credit practices.
- To measure the bank’s lending strength
- To measure the credit performance in quality, efficiency and its contribution in total income.

The research findings:

- The measurement of liquidity has revealed that the mean current ratio of all the three banks is not widely varied. All of them are capable in discharging their current liability by current asset.

- SCBNL's tendency to invest in government securities has resulted with the lowest ratio of loans and advances to total assets ratio whereas NABIL bank ltd has highest due to steady and high volume of loans and advances throughout the years.
- The loans and advances and investment to deposits ratio has shown that NABIL Bank Ltd has deployed the highest proportion of its total deposits in earning activities. This is the indicative of that in fund mobilizing activities NABIL Bank Ltd is significantly better.

Shrestha, N. (2005) entitled with "Effective Implementation of Credit Policy in Nepalese Commercial Banks", has following objectives and major findings:

Objectives:

- To study the relationship between deposits & lending.
- To study the classification, provision for loan/advances & its effect in profitability.
- To identify and analyze the problems and prospects of lending practice of Nepalese Commercial Banks

Major findings:

- Flow of lending depends upon the availability of low cost deposit in the market Consumer financing and loan to manufacturing units are more secured than other sectors
- First preference of the Banks for security to loan is fixed assets collateral followed by Government Bonds Lengthy procedure in loan processing and tedious legal procedures is the key factor affecting growth of lending. Lack in follow ups and irregular site visits lead to generation of NPA.

Bhusal, R. (2006) entitled with "Credit Risk Management of Joint Venture Banks", has following objectives and major findings:

Objectives:

- To determine and analyze credit risk of joint venture banks in Nepal.
- To evaluate strength, weakness, opportunity and threats in credit management in commercial banks
- To provide suggestions & recommendations about credit risk management

Major findings:

- Lending in one lucrative sector and concentration in urban areas only is increasing the risk of loss for the Bank
- Credit policies and practices were found satisfactory. Bank has opportunity to explore the virgin village market and SMEs.
- Most of the customers are satisfied with the Joint Venture Banks in terms of service and Counseling regarding credit facilities.

Nepal, D. (2007) entitled with "Credit management of Commercial Banks in Nepal", has following objectives and major findings:

Objectives:

- To assess the credit practices of selected Nepalese commercial banks.
- To explore the credit efficiency, analyze the industry environment and management quality in terms of credit practices.
- To explore the relationship with loan & advances, NPA and Net profit.

Major findings:

- Repayment is satisfactory in agro based industry and production sector compared to other sectors.
- Management quality and credit efficiency of selected banks found satisfactory as they have standard credit practices.
- Credit disbursement and repayment has significant relationship. Flow of new credit depends upon the recovery status.

- The main statement of his problem is there many banks are mushrooming although banks are not interested to expand their branch in remote rural area.
- There are difficulty and length formality of procedure for long term and medium term as well as short-term loan, Low deposit habit of Nepalese people and lack of strong recovery act of lending and bad debt.

Adhikari, D. (2008), in her thesis, “Credit Management of Siddhartha Vikash Bank Limited”, has the main objective to analyze the credit management of the SVBL are.

Objectives:

- To analyze the trends of deposit collection and credit lending.
- To assess total amount of loan.
- To evaluate the performance of SVNL in terms of liquidity, profitability , sector wise loan, and non-performing loan.
- To analyze the capital adequacy of SVBL

The major findings:

- Deposit collection of SVBL has significantly increasing trend. There is continuous increasing trend from 10% to 100%
- In all year total fixed deposit has more contribution than other deposit. Then more contribution of saving deposit than of current and call deposit.
- Correlation between deposit and loan disbursement is 0.99. This indicates that these two variables relation is highly positive.
- Capital adequacy of the SVBL has sufficient against NRB standard. It indicates that the lending capacity of SVBL is high.

Neupane, A.P. (2009), in his thesis, “Credit Policy Analysis of Commercial Bank with Special reference to Everest Bank Limited”, has the main objective to find out the credit management position of Everest Bank Limited.

The specific objectives:

- To evaluate the various financial ratios of the EBL.
- To determine the impact of deposit in liquidity and its effect on lending practices.
- To analyze trend of deposit utilization towards loan and advances and net profit.

The major findings:

- Cash and bank balance to current deposit of the bank shows the fluctuating trend during the study period. Similarly, cash and bank balance to interest sensitive ratio of EBL is also in fluctuating trend.
- Credit and advance to fixed deposit ratio of EBL is fluctuating trend. The mean is 2.26 times in the study period. However, non- performing assets to total assets of EBL is in declining trend, whose mean ratio is 0.978%.
- The debt to asset ratio of EBL is excessively high or in other words they have excessively geared capital structure. On an average 93% of assets is financial through debt capital that is outsiders cost bearing fund.
- Return on loan and advances of EBL are also fluctuating trend. The mean ratio is 2.2%. This shows the normal earning capacity of EBL.

1.7.2.2 Review of Project Work

Sabita Pokhrel has conducted a Project work on “Deposit Mobilization of Everest Bank Ltd” The basis objectives of the study were as follows:

- To examine the total deposit and the proportion of the fixed deposit.
- To analyze the effectiveness of deposit mobilization of Everest Bank Ltd.

- To examine the procedure and policies relating to fixed deposits of Everest Bank Ltd.
- To Provide suggestion and recommendation to the concerned for the future improvement.

The major findings:

- The liquidity position of Everest Bank Ltd is comparatively worse than other Joint venture banks.
- Everest has utilized more portions of current assets as loan and advances and less portion as investment on government securities.
- The profitability position of Everest Bank is comparatively better than other Joint venture Banks.
- The trend values of loan and advances to total deposit of Everest and other Joint venture Banks are in increasing trend whereas, the trend values of total investment to total deposit of both Everest and other Joint venture are in increasing trend.

1.7.3 Review of Relevant Article and Journal

Ghimire, B.R. (2000) in his article titled “Credit Sector Reform and NRB”. He has tried to highlight the effects of change or amendment in NRB directive regarding loan classification and loan loss provisioning. “Although the circumstances leading to financial problem or crisis in many Nepali banks differ in many respects, what is common across most of the bank is the increased size of non-performing assets (NPAs). To resolve the problem of the losses or likely losses of this nature facing the industry, NRB has, as the central bank, amended several old directives and issued many new circulars in the recent years.

As opined by him, since majority of the loans of most of the commercial banks of the country at present falls under substandard, doubtful and even loss categories, loan loss provisioning now compared to previous arrangements would be dramatically higher. The new classification and provisioning norms are very lendable as they help to strengthen banks finally. He added that we also must remember that the old system remained in force from 1991 to 2001, which was probably the most volatile decade of the business operation of the country. He has indicated that loan loss provisioning as a percentage of the total credit of April 12, 2001 as 5.2% but as April 13 2003, it has jumped to 18.39%. If only private banks are considered, it is 2.12% of April 2001 whereas it is 6.30% April 13 2003. The total increment in LLP is Rs 11,328.11 million and the total increment in credits is only Rs 7,976.70. He has also stated that tightening provisioning requirements on NPL is essential to ensure that banks remain liquid even during economic downturns.

In conclusion he has mentioned that in the recent years, NRB has worked for management and reform of the credit of the financial institution more seriously and NRB has adopted reforms aimed not just at dealing with problem banks but also at strengthening banking supervision to reduce the likelihood of future crisis.

Bhattarai, Rabindra. (2002) in the article “Something is Rotten with the State of Commercial Banking in Nepal” starts with words as NPA, conflict of interest, murky off shore ownership, well connected defaulter, loan swapping and political obstruction to describe the commercial banks in Nepal. Mr. Rabindra Bhattarai quoted the words of the Governor to describe the state of banking sector as “Terrible”. Also, he quotes one of the donor representatives involved in financial reform as “Nepal has the weakest central bank in the developing world.” As per the author, bankers with patronage could get away with getting anything they wanted approved by the regulator. He quotes Mr. Himalayan SJB Rana, the first

governor of NRB,” only 3 out of 12 Governors actually completed their five years terms in its entire history because they were sacked for undefined agencies.” He also quotes Mr. Shovan Dev Pant, the then Executive Director of Nabil, “The financial sector is in appalling state.” Battarai says that all the evidences gathered for his article point to one direction i.e. the regulatory body, NRB not doing its job properly. He explains that the malaise with the financial sector was deep. As an instance, he presents Nabil Bank and its ownership. He bets on the fact that even Nabil Bank Shareholders do not know of the Bank’s owners of the major block of shares. The author expects NRB to disclose this fact if they know about it. Another example Bhattarai presents is on the profitability of the banks in the very first year. He questions their profit figures with the given state of ailing economy, where each sector is showing heavy losses. Also, the increasing trend of Non-Performing Assets (NPAs) is explained by him is a result of scam. A scam process as explained to him by an NRB official goes like this, “You put in Rs. 50 million to promote a bank and then borrow Rs. 500 million from it. They are not opening banks to do banking but to siphon loans for themselves.” However, the author is of a view that the new directives issued on October 2001 shall improve the situation. Here, the author has not clearly mentioned of the research methodology. The conclusions are not well supported by data. The article reflects a one sided biased view of the author and the view of NRB on this has not been taken. The conclusion made by the author has not been tested.

CHAPTER- II

DATA ANALYSIS AND MAJOR FINDINGS

This is the analytical part of the study, this chapter deals with the presentation, analysis and interpretation of the relevant data of SCBNL and EBL in other to fulfill the objective of this study.

The data after collection has to be processed and analyzed in accordance with the outline laid down for the purpose at time of developing the research plan (Kothari, 1990).

The main purpose of this chapter is to analyze and evaluate the data through the major financial and statistical tool.

With the help of this analysis, efforts have been made to highlight credit management of the SCBNL and EBL as well as other cases and problems of the concerned banks. For the analysis, the researcher uses the different types of analytical methods and tools such as financial ratio analysis and statistical analysis.

2.1 Financial Analysis

The balance sheet shows the financial position on a particular date in terms of structure of assets, liabilities and owner's equity, and profit and loss account shows the profit earned and loss sustained during a specific period. The financial analysis helps to obtain better understanding of firm's position and performance. The first step involves selecting the information, second step involves arranging the information in a way to highlight significant relationships, the final step is interpretation and drawing of conclusion.

Under this topic, some financial tools such as liquidity ratio, assets management ratio, profitability ratio, risk ratio, adequacy of loan loss provisioning ratios are used to achieve the objective of the study.

Financial analyses are as follows:

2.1.1 Liquidity ratio

Commercial banks should maintain its satisfactory liquidity position to satisfy the credit needs of the community, to meet demands for deposit, withdraws, pay maturity obligation in time and convert non-cash to satisfy immediate needs without loss to bank and consequent impact in long run profit. The liquidity positions of the commercial banks are comparatively studies through the following ratios:

I) Current Ratio

The current ratio indicates the ability of the bank to meet its current obligation. It measures the liquidity position of financial institutions. Current ratio is calculated by dividing current assets by current liabilities (for details see appendix-A). The current ratio of SCBNL and EBL is under analysis in the following table.

Table 2.1

Current Assets to Current Liability Ratio (Times)

F/Y	SCBNL	EBL
2006/2007	0.14	0.8
2007/2008	0.14	0.12
2008/2009	0.14	0.12
2009/2010	0.14	0.18
2010/2011	0.10	0.2
Mean	0.13	0.14
S.D	0.02	0.05
C.V	0.15	0.36

Source: appendix-A

The above table shows that the current ratio of SCBNL and EBL are in fluctuation trend. The highest ratio of SCBNL is 0.14 times in four successive F/Y 2006/2007 to F/Y 2009/2010 and the lowest is 0.10 times in F/Y 2010/2011. The EBL's highest ratio is 0.18 times in F/Y 2009/2010 and the lowest is 0.2 times in F/Y 2010/2011.

From the mean ratio point of view current liabilities exceeded the current assets of SCBNL, and EBL. Though EBL has the higher mean ratio of 0.14 than SCBNL bank under the study, yet the mean ratio of EBL doesn't meet the optimal standard of current ratio 2:1. Comparing to consistency, SCBNL is much consistency in its ratio with 0.15 & followed by EBL with 0.36.

Though the optimal standard of current ratio should be 2:1, the conventional measure of liabilities is not applicable in banking sector. Banking business holds huge portion of deposit and this deposit remains all the time throughout the years. The core deposit forms the fixed liability on the bank though it is current in nature. So the ratio maintained by commercial banks at the level of around 1:1 can be regarded as good and sufficient to meet the normal contingencies. Therefore, the above current analysis of the banks over the five years period indicates that the banks have satisfactory liability position.

ii) Cash and Bank Balance to Total Deposit Ratio

This ratio measures the availability of bank's highly liquid or immediate funds to meet its unanticipated calls on all types of deposits. This ratio is computed as Cash and Bank Balance divided by Total deposit (for details see appendix-B). A high ratio indicates the greater ability to meet their deposits and vice-versa. The following table shows the cash and bank balance to total deposit ratio of SCBNL and EBL. The ratios are analyzed and presented through the help of following table below:

Table 2.2**Cash and Bank Balance to Total Deposit****Ratio**

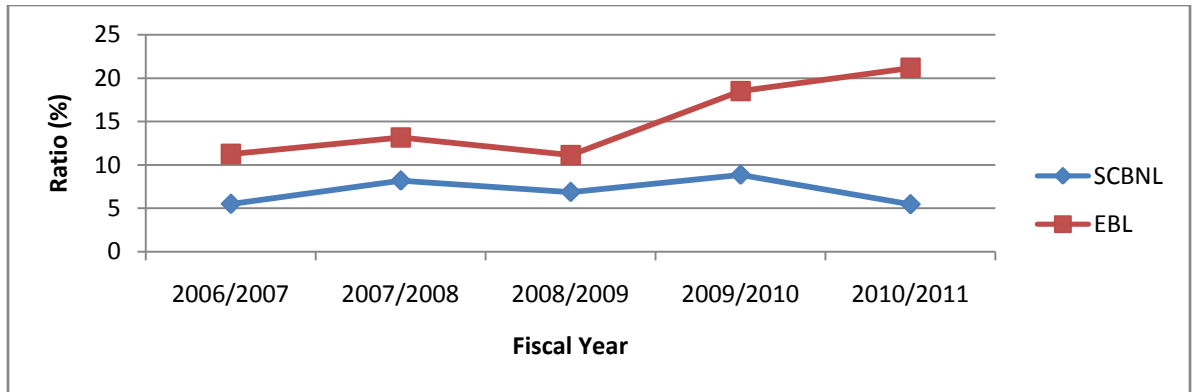
F/Y	SCBNL	EBL
2006/2007	5.53	11.25
2007/2008	8.2	13.15
2008/2009	6.89	11.13
2009/2010	8.87	18.5
2010/2011	5.48	21.17
Mean	6.99	15.04
S.D	1.53	4.55
C.V	0.22	0.30

Source: Appendix-B

The above table shows that the comparative cash and bank balance to total deposit of EBL seems to be in more fluctuating trend from F/Y 2006/2007 to F/Y 2010/2011 than the SCBNL. Among the two banks EBL has the higher mean ratio of 15.04% than SCBNL 6.99%.

Therefore it can be concluded that the cash and bank balance of SCBNL with respect to deposit is better against the readiness to server its customer's deposit than EBL. It implies that better liquidity position of SCBNL. In contrast, a high ratio of non-earning cash and bank balance may unfit, which indicates the bank's unavailability to invest its fund in income generation areas. Thus, SCBNL must invest in more productive sectors like short-term marketable securities, treasury bills etc. insuring enough liquidity which will help the bank to improve its profitability.

Figure 2.1**Cash and Bank Balance to Total Deposit Ratio**



iii) Cash and Bank Balance to Current Assets Ratio

This ratio examines the bank liquidity capacity on the basis of its most liquid assets i.e. cash and bank balance. This ratio reveals the ability of the bank to make quick payments of its customer's deposit. A high ratio indicates the sound ability to meet the daily cash requirement of their customer's deposit and vice versa.

The ratio is calculated by dividing cash and bank balance by current assets (for detail see Appendix- C). The comparative ratios are presented in the following table:

Table 2.3
Cash and Bank Balance to Current Assets

Ratio

F/Y	SCBNL	EBL
2006/2007	0.39	0.96
2007/2008	0.53	1.00
2008/2009	0.48	0.89
2009/2010	0.60	1.00
2010/2011	0.54	1.00
Mean	0.51	0.96

S.D	0.08	0.06
C.V	0.16	0.06

Source: Appendix- C

Analyzing the above ratios it clears that cash and bank balance to current asset ratio of SCBNL has increased for first two years according to the study period of F/Y 2006/2007 then fluctuating up to the study period, where as EBL ratio seems to be fluctuating.

On the basis of mean ratio EBL has higher ratio of 0.96% than the SCBNL of 0.51%. It shows that SCBNL has not successful in maintaining its higher cash and bank balance to current asset ratio in comparison to EBL.

iv) Loan and Advances to Current Asset Ratio

Loan and advances to current assets of commercial bank, which includes loan and advances, cash, credit, loan and foreign bills purchased, overdraft and discount. A commercial bank should not keep its all connected fund as cash and bank balance but they should be invested as loan and advances to customers because they must earn high profit by mobilizing funds long life banking. They should pay interest on these deposit funds even they don't generate loan and advances and may lose some earning. However, high loan and advances may be harmful, since they need sufficient liquidity.

The ratio is calculated by dividing loan and advances by current assets (for detail see Appendix-D). The ratio are analyzed and presented through the help of following table below:

Table 2.4
Loan and Advances to Current Asset Ratio

F/Y	SCBNL	EBL
2006/2007	2.75	6.26
2007/2008	2.78	5.89

2008/2009	3.23	6.25
2009/2010	2.63	3.97
2010/2011	4.43	3.6
Mean	3.16	5.19
S.D	0.74	1.30
C.V	0.23	0.25

Source: Appendix-D

The above comparative table shows that both the banks SCBNL & EBL has fluctuating trend of loan and advance to current asset ratio during the study period. The highest ratio of SCBNL is 4.43% in F/Y 2010/2011 and the lowest is 2.63% in F/Y 2009/2010 whereas, 6.26% is the highest in F/Y 2006/2007 and 3.6% is the lowest in F/Y 2010/2011 of EBL.

From the mean ratio point of view EBL has higher ratio of 5.19% than 3.16% of SCBNL. The SCBNL seems to be more consistency than the EBL with its loan and advances to current assets ratio which is 0.23%.

The loan and advances to current assets ratio of SCBNL and EBL has been graphically presented below:

2.1.2 Asset Management Ratio

This ratio measures how effectively the commercial banks are managing its assets and whether or not the level of those assets is properly related to the level of operations as measured by sales. In other words commercial banks should be able to manage its assets properly to earn high profit maintaining the appropriate level.

The following ratios are measured for the assets management ratio of the SCBNL, and EBL in comparison.

i) Loan and Advances to Total Deposit Ratio

This ratio measures the bank’s success to mobilize their funds on loan and advance for the purpose of income generation.

A high ratio indicates better mobilization of collected deposit and vice-versa. But, it is known that high ratio may not be better from the liquidity point of view. This ratio is computed by dividing loan and advances by total deposit.

This ratio is calculated by dividing loan and advances by total deposit (for details see Appendix-E). The following table shows the loan and advances to total deposit of the sample bank.

Table 2.5
Loan and Advances to Total Deposit Ratio

F/Y	SCBNL	EBL
2006/2007	0.39	0.73
2007/2008	0.43	0.77
2008/2009	0.46	0.79
2009/2010	0.38	0.73
2010/2011	0.45	0.76
Mean	0.42	0.76
S.D	0.04	0.03
C.V	0.09	0.04

Source: Appendix-E

The above table reveals that the total investment to total deposit ratio of SCBNL and EBL have in fluctuating trend during the study period. The highest ratio of SCBNL is 0.46% in the F/Y 2008/2009 and the lowest is 0.38% in the F/Y

2009/2010 whereas EBL highest ratio is 0.79% in 2008/2009 and 0.73% is the lowest in F/Y 2006/2007 & 2009/2010.

In mean ratio point of view EBL has higher with 0.76% than SCBNL with 0.42%. Similarly, observing through the coefficient of variation of the ratios, we can conclude that EBL has seen more consistent than the SCBNL with the lowest C.V of 0.04%

From the above analysis we can conclude that EBL is more successful to mobilize its total deposit as loan and advances and acquiring high profit. Whereas high ratio is not better from the point of view of liquidity as the loan and advances is not as liquid as cash and bank balance.

ii) Total Investment to Total Deposit Ratio

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

The ratio is computed by dividing total investment by total deposit (for details see Appendix-F) this ratio is computed in reference to SCBNL, EBL, and the Banking Industry as a whole in the following table.

Table 2.6

Total Investment to Total Deposit Ratio

F/Y	SCBNL	EBL
2006/2007	0.56	0.30
2007/2008	0.55	0.27
2008/2009	0.47	0.21
2009/2010	0.57	0.18
2010/2011	0.56	0.14
Mean	0.54	0.22
S.D	0.04	0.07
C.V	0.07	0.32

Source: Appendix-F

The above table reveals that the total investment to total deposit ratio of SCBNL and EBL both have fluctuating trend throughout the review period. The highest ratio of SCBNL is 0.57% in F/Y 2009/2010 and the lowest is 0.47% in F/Y 2008/2009. Similarly 0.30% is the highest ratio of EBL in F/Y 2006/2007 and 0.14% lowest in F/Y 2010/2011.

From mean ratio point of view, SCBNL's capacity to mobilize their deposit on total investment is higher than the EBL with the mean ratio 0.22%. On the other hand, observing the coefficient of variation of the ratio, we can conclude that SCBNL has seen more consistent than EBL with the lower C.V. of 0.07%.

Total deposit, loan and advances and total investment of SCBNL and EBL and the banking industry are presented in the bar diagram as follows:

Figure 2.2

Total Investment, Total Deposit and Loan & Advances of SCBNL

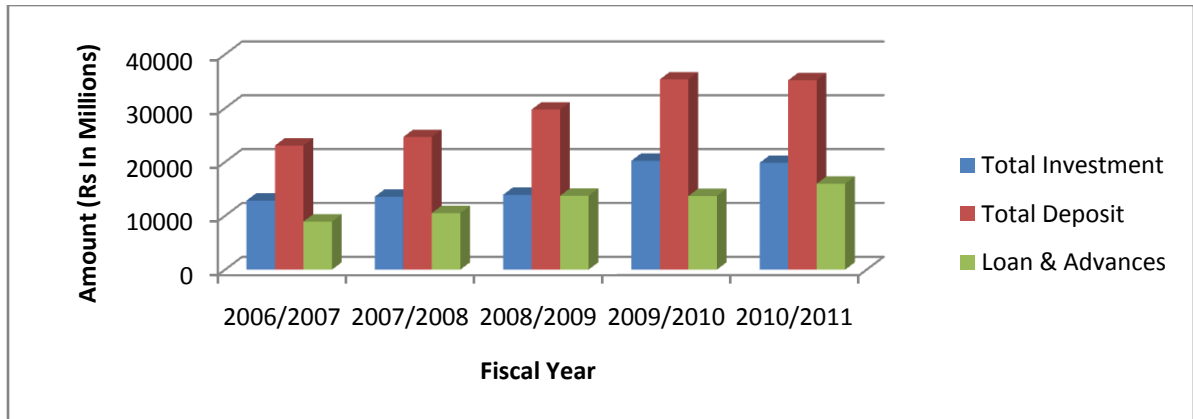
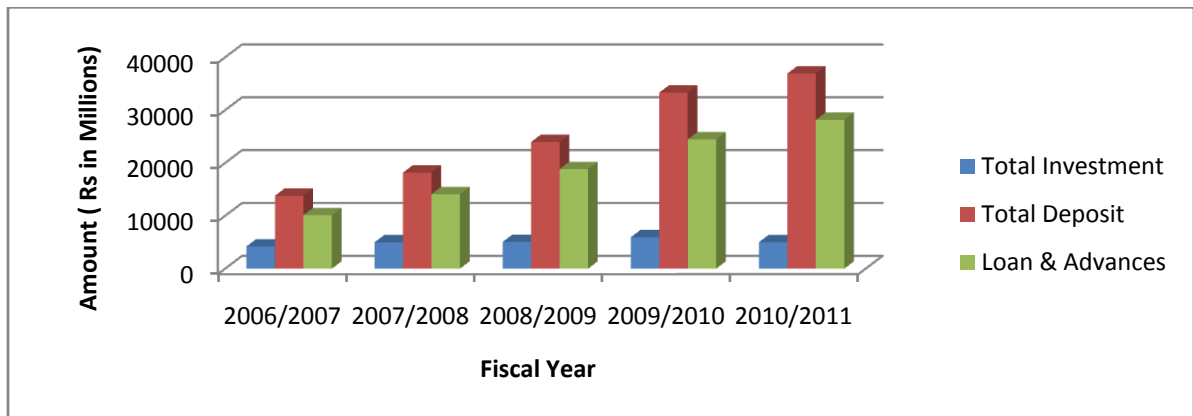


Figure 2.3

Total Investment, Total Deposit and Loan & Advances of EBL



iii) Loan and Advances to Total Working Fund Ratio

Loan and advances of any commercial bank represent the major portion in the volume of total working fund. This ratio measures the volume of loan and advances in the structure of total assets. The high degree of this ratio indicates the good performance of the bank in mobilizing its funds by the way of lending function for the purpose of income generation. However, in its reserve side, the low degree of this represents low liquidity ratio.

This ratio is calculated by dividing loan and advances by total working fund (for details see Appendix-G). The ratio of SCBNL and EBL has been presented in the following table.

Table 2.7

Loan and Advances to Total Working Fund Ratio

F/Y	SCBNL	EBL
2006/2007	0.35	0.62
2007/2008	0.37	0.64
2008/2009	0.41	0.68
2009/2010	0.34	0.65
2010/2011	0.39	0.67
Mean	0.37	0.65
S.D	0.03	0.02
C.V	0.08	0.03

Source: Appendix-G

The above table shows that both SCBNL and EBL's ratio have in increasing trend from F/Y 2006/2007 to F/Y 2008/2009 thereafter in fluctuating trend. The highest ratio of SCBNL is 0.41% in F/Y 2008/2009 and lowest is 0.35% in F/Y 2006/2007 whereas 0.68% is the highest of EBL in F/Y 2008/2009 and 0.62% is lowest in F/Y 2006/2007.

On the basis of mean ratio of loan and advances to total working fund, it can be said that EBL has the higher mean ratio of 0.65% with compare to SCBNL 0.37%. This mean EBL has strong position to mobilize its working fund as loan and advance for generating income than SCBNL. EBL is more consistence than SCBNL which has lower C.V of 0.03%.

2.1.3 Profitability Ratio

Profit is the most for any bank for its survival. And the profitability ratio helps to measure and indicate how efficient the bank is in profit generation. A higher ratio shows the higher efficiency of the bank. The following ratio has been computed under this profitability ratio type.

i) Return on Loan and Advances Ratio

This ratio measures the earning capacity of the commercial banks through its fund mobilization as loan and advances. A high ratio indicates greater success to mobilize fund as loan and advances and vice-versa.

This ratio is calculated by dividing loan and advances by net profit (for details see Appendix-H). This ratio has been presented through the help of the following table:

Table 2.8

Return on Loan and Advances Ratio

F/Y	SCBNL	EBL
2006/2007	7.37	2.34
2007/2008	6.59	2.10
2008/2009	5.97	2.40
2009/2010	7.49	2.61
2010/2011	6.8	2.95
Mean	6.84	2.48
S.D	0.62	0.32
C.V	0.09	0.13

Source: Appendix-H

From the above comparative table, both the banks SCBNL and EBL's ratios are in fluctuating trend up to the study period. SCBNL has the highest ratio of 7.49% in F/Y 2009/2010 and the lowest is 5.97% in F/Y 2008/2009. Whereas the EBL has the highest ratio of 2.95% in F/Y 2010/2011 and the lowest ratio is 2.10% in F/Y 2007/2008.

Comparing the mean ratio SCBNL has higher mean ratio of 6.84% than 2.48% of EBL. The mean ratio specify that SCBNL has been successful in maintaining its higher return on loan and advances in comparison to EBL under study. Even though, SCBNL seems to have more consistency with 0.09% than EBL with 0.13%.

ii) Return on Total Working Fund Ratio

Return on total working fund (ROA) ratio measures the profitability with respect to each financial resource investment of bank's total working fund is well managed and effectively utilized, the return on such assets will be higher. The ratio is calculated by dividing Net profit by total working fund assets.

This ratio is calculated by dividing total working fund by net profit (for detail see Appendix-I). The following table has been presented in order to show the profitability position with respect to total assets of SCBNL & EBL.

Table 2.9

Return on Total Working Fund

Ratio

F/Y	SCBNL	EBL
2006/2007	2.56	1.46
2007/2008	2.42	1.35
2008/2009	2.46	1.63
2009/2010	2.56	1.70
2010/2011	2.70	1.98
Mean	2.54	1.62
S.D	0.12	0.24
C.V	0.05	0.15

Source: Appendix-I

The above table reveals that the return on total assets of SCBNL and EBL are in increasing trend from F/Y 2007/2008 to F/Y 2010/2011. The highest ratio of SCBNL is 2.70% in F/Y 2010/2011 and lowest is 2.42% in F/Y 2007/2008. Whereas, the highest of EBL is 1.98% and lowest is 1.35% in F/Y 2010/2011 and F/Y 2007/2008 respectively.

In the perspective of mean ratio SCBNL has higher than that of EBL with 2.54%. From this analysis it seems that SCBNL with its higher mean than EBL is able to earn high profit on total working fund assets. And also have more consistency with C.V 0.05% than that of EBL with 0.15%.

Conclusively, from the above analysis of Return on Total Working Fund ratio, we can say that SCBNL has higher return on Total Working Fund.

iii) Total Interest Earned to Total Loan and Advances Ratio

Total interest earned to total loan and advances ratio measures the income as interest from total loan and advances. Interest income could be increased by embracing good issuing and recovery credit policy. High return shows the soundness of the credit policy.

This ratio is calculated by dividing total interest earned by total loan and advances (for details see Appendix-J). The following table has been presented in order to show the total interest earned with respect to total loan and advances of SCBNL and EBL.

Table 2.10
Total interest earned to total loan and advances ratio

F/Y	SCBNL	EBL
2006/2007	13.31	7.60
2007/2008	13.44	6,87
2008/2009	11.60	7.06
2009/2010	13.80	7.57
2010/2011	12.80	9.95
Mean	12.99	7.81
S.D	0.86	1.24
C.V	0.07	0.16

Source: Appendix-J

The above table reveals that the total interest earned to total loan and advances ratio of both bank have fluctuating trend. The highest ratio of SCBNL is 13.80% in F/Y 2009/2010 and lowest is 11.80% in F/Y2008/2009. On the other hand, 9.95% is the highest ratio in F/Y 2010/2011 and 6.87% is the lowest in F/Y 2007/2008 of EBL.

Comparing the mean ratio, SCBNL has the highest mean total interest to total loan and advances ratio of 12.99% than the EBL 7.81%. That means SCBNL is successful for generating more income through loan and advances than EBL.

2.1.4 Risk Ratio

The possibility of risk makes bank's investment a challenging task. Bank has to take risk to get return on its investment. Higher the risk higher will be the return on investment. So banks operating for high profit have to accept the risk and manage it efficiently

2.1.4.1 Liquidity Risk Ratio

The liquidity risk of the bank defines liquidity need for its deposit. The ratio of cash and bank balance to total deposit is the indicator of bank liquidity need.

The ratio is computed by dividing liquid assets or cash and bank balance by total deposit (for detail see Appendix -K). Through the help of following table cash and bank balance to total deposit ratio has been presented.

Table 2.11

Cash and bank balance to total deposit ratio

F/Y	SCBNL	EBL
2006/2007	5.53	11.25
2007/2008	8.20	13.15
2008/2009	6.89	11.12
2009/2010	8.87	18.50
2010/2011	5.48	21.17
Mean	6.99	15.04
S.D	1.53	4.55
C.V	0.22	0.30

Source: Appendix -K

The above table shows that the comparative liquidity risk ratio of SCBNL and EBL banks have fluctuating trend from the study period. The highest liquidity risk ratio of SCBNL is 8.87% in F/Y 2009/2010 and lowest is 5.48% in F/Y 2010/2011 whereas EBL's highest ratio is 21.17% in F/Y 2010/2011 and lowest is 11.12% in F/Y 2008/2009. EBL has the higher mean liquidity ratio of 15.04% than 6.99% of SCBNL which would obviously result lower profit than SCBNL. From the perspective of coefficient of variation, SCBNL has the consistent ratio than EBL.

2.1.4.2 Credit risk Ratio and Loan Loss Provisioning

i) Credit Risk Ratio

Bank utilizes its collected fund in providing credit to different sectors. While making the investment, bank examines the credit risk involved in the project which may be risk of default or the non-payment of loan.

The credit risk ratio is computed by dividing NPL by Total Loans and Advances (for details see Appendix L). The following table has been presented for the comparative credit risk ratio of the SCBNL and EBL under study period.

Table 2.12

Nonperforming loans to total loans and advances ratio

F/Y	SCBNL	EBL
2006/2007	2.19	1.27
2007/2008	1.88	0.80
2008/2009	0.94	0.68
2009/2010	0.67	0.48
2010/2011	0.62	0.16
Mean	1.26	0.68
S.D	0.73	0.41
C.V	0.58	0.60

Source: Appendix- L1

The above table reveals that the both bank's credit risk ratios are in decreasing trend from F/Y 2006/2007 up to study period. The highest ratio of SCBNL is 2.19% in F/Y 2006/2007 and lowest is 0.62% in F/Y 2010/2011 whereas 1.27% is the highest in F/Y 2006/2007 and 0.16% is the lowest in F/Y 2010/2011 of EBL bank.

From the mean ratio point of view, SCBNL has higher NPL to total loans and advances ratio with 1.26% in comparison to EBL with 0.68% and more consistency.

ii) Loan Loss Provision to Total Loan and Advances Ratio

Loan loss provision to total loan and advances describes the quality of assets that a bank holding. The amount of loan loss provision is balance sheet refers to general loan loss provision. The provision for loan loss reflects the increasing probability of non-performing loan. The increment in loan loss provision result a decreased profit and thereby decrease in dividend payment but its positive impact is that it strengthens financial conditions of the banks by controlling credit risks related to deposits. The low ratio indicates the good quality of assets in total volume of loan and advances and high ratio indicates more risky assets in total volume of loan and advances.

The ratio is computed by dividing loan loss provision by loan and advances (for details see Appendix L2). The loan loss provision to loan and advances ratio has been presented through the help of the following table:

Table 2.13

Loan loss provision to total loan and advances ratio

F/Y	SCBNL	EBL
2006/2007	3.03	3.30
2007/2008	2.74	2.97
2008/2009	1.79	2.64
2009/2010	1.47	2.39
2010/2011	1.38	2.13
Mean	2.08	2.69
S.D	0.76	0.46
C.V	0.37	0.17

Source: Appendix- L2

The above table reveals that both the banks are in decreasing trend. The highest ratio of SCBNL is 3.03% in F/Y2006/2007 and the lowest ratio is 1.38% in F/Y 2010/2011. Whereas the highest ratio of EBL is 3.30% in F/Y 2006/2007 and lowest is 2.13% in 2010/2011.

Through the mean ratio point of view, EBL has higher loan loss provision to total loan and advances ratio of 2.69% than 2.08% of SCBNL. Though, EBL is the least consistency than SCBNL.

Following figure represents five years Performing Loans, Non Performing Loans and Loan loss Provision of SCBNL & EBL.

Figure 2.4

Performing Loan, Non-performing Loan and Loan Loss Provision of SCBNL

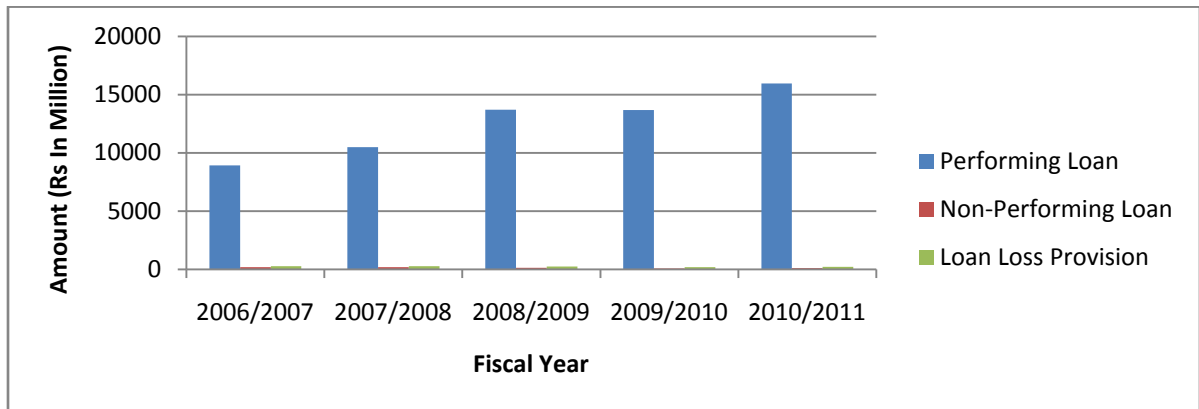
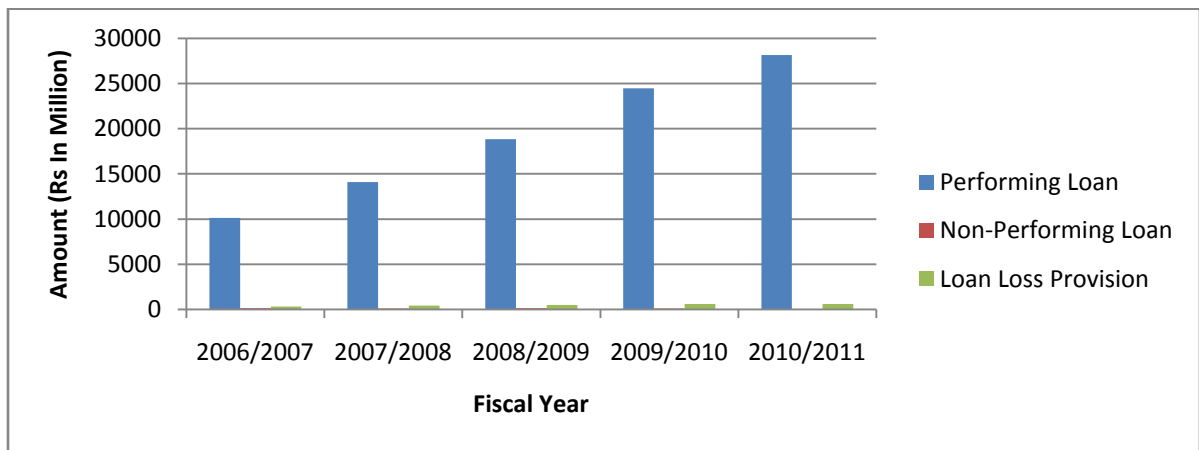


Figure 2.5

Performing Loan, Non-performing Loan and Loan Loss Provision of EBL



2.1.4.3 Adequacy of Loan Loss Provisioning

Nepal Rastra Bank has set up directives regarding the maintenance of loan loss provision for different types of loan of commercial banks. In this way, this analysis comprises the adequacy of loan loss provision as per NRB directives of the sample banks for the study period. Adequacy is measured by computing the ratios of loan loss provisioning to banks and advances of different classified loan.

i) Pass Loan Provision To Total Pass Loan Ratio

The pass loan provision to total pass loan ratio shows that whether the Banks under study are complying with the directives issued by the Nepal Rastra Bank. This ratio is computed by dividing pass loan provision by Total pass Loan (for details see Appendix M)

Table 2.14

Loan and Advances to Total Pass Loan Ratio

F/Y	SCBNL	EBL
2006/2007	1.00	0.99
2007/2008	1.00	1.00
2008/2009	1.00	0.99
2009/2010	1.00	1.00
2010/2011	1.00	1.03
Mean	1	1.00
S.D	0	0.02
C.V	0	0.02

Source: Appendix-M

The above table shows the ratios of total pass loan provision to total loan of SCBNL and EBL for five financial years starting from F/Y 2006/2007 to F/Y 2010/2011 which shows both banks have maintained the pass loan provision of at least 1% of total pass loan according to NRB directive throughout the review period.

From the mean ratio point of view both of the banks have able to maintain the pass loan provision of at least 1% of total pass loan. The level of consistency of these banks under study has been different. SCBNL's ratio is much more consistent with 0.00% than that of EBL with 0.02%.

Overall with all the analysis which has been made above, we could conclude that NABIL, SCBNL have been able to maintain the pass loan provision of at least 1% of total pass loan as according to NRB directives.

ii) Substandard Loan Loss Provision to Total Substandard Loan Ratio

The substandard loan loss provision to total substandard loan ratio shows that whether the banks under study are complying with the directives issued by the Nepal Rastra Bank. This ratio is computed by dividing Substandard Loan Loss provision by Total Substandard loan (For details see Appendix N)

Table 2.15
Substandard Loan Loss Provision to Total Substandard Loan Ratio

F/Y	SCBNL	EBL
2006/2007	24.98	25.02
2007/2008	24.98	24.88
2008/2009	25.01	25.04
2009/2010	25.01	25.00
2010/2011	25.00	25.05
Mean	25.00	25.00
S.D	0.02	0.07
C.V	0.00	0.00

Source: Appendix-N

The above table depicts the ratio of substandard loan loss provision to total substandard loan of SCBNL and EBL for five financial years starting from F/Y 2006/2007 to F/Y 2010/2011 in fluctuating trend. The highest ratio of SCBNL is 25.01% and lowest is 24.98%. Whereas the highest ratio of EBL is 25.05% in F/Y 2010/2011 and lowest is 24.88% in F/Y 2007/2008.

From mean ratio point of view, EBL & SCBNL has been able to maintain the sub standard loan loss provision of at least 25% of total substandard loan according to the directives of NRB. However, both banks ratios are consistent.

Concluding the above analysis two banks SCBNL and EBL have been able to meet the standard set by the NRB.

iii) Provision for Doubtful Debt to Total Doubtful Debt Ratio

The provision for Doubtful Debt to Total Doubtful Debt Ratio shows that whether the banks under study are complying with the directives issued by the Nepal Rastra Bank. This ratio is computed by dividing Provision for Doubtful Debt by Total Doubtful Debt (For details see Appendix O)

Table 2.16

Provision for Doubtful Debt to Total Doubtful Debt Ratio

F/Y	SCBNL	EBL
2006/2007	95.72	50
2007/2008	95.33	50.21
2008/2009	93.75	49.33
2009/2010	81.69	50.01
2010/2011	50.00	50.04
Mean	83.30	49.92
S.D	19.49	0.34
C.V	0.23	0.007

Source: Appendix-O

The above table depicts the provision for Doubtful Debt to Total Doubtful Debt Ratio of NABIL, SCBNL for five financial years starting from F/Y 2006/2007 to F/Y 2010/2011. The provision for Doubtful Debt Ratio of SCBNL has decreasing trend from F/Y 2006/2007 up to F/Y 2010/2011 its highest ratio is 95.72% in

F/Y2006/2007 and the lowest is 50% in F/Y 2010/2011. Though, EBL has fluctuating trend up to study period. Its highest ratio is 50.04% in F/Y 2010/2011 and lowest is 49.33% in F/Y 2008/2009.

From mean ratio point of view all two banks EBL & SCBNL has been able to maintain the provision for doubtful debt of at least 50% of total doubtful debt according to the directives of NRB.

Concluding the above analysis on average all the two banks EBL & SCBNL has been able to meet the standard set by the NRB.

iv) Provision for Bad Debt to Total Bad Debt Ratio

The provision for Bad Debt to Total Bad Debt Ratio shows that whether the banks under study are complying with the directives issued by the Nepal Rastra Bank or not. This ratio is computed by dividing Provision for Bad Debt by Total Bad Debt (for details see Appendix P)

Table 2.17

Substandard Loan Loss Provision to Total Substandard Loan Ratio

F/Y	SCBNL	EBL
2006/2007	100	100
2007/2008	100	100
2008/2009	100	100
2009/2010	100	100
2010/2011	100	100
Mean	100	100
S.D	0	0
C.V	0	0

Source: Appendix P

The above table depicts the provision for Doubtful Debt to Total Doubtful Debt Ratio of NABIL, SCBNL for five financial years starting from F/Y 2006/2007 to F/Y 2010/2011 which have constant ratio 100%.

From mean ratio point of view all two banks EBL & SCBNL has been able to maintain the provision for doubtful debt of at least 100% of total doubtful debt according to the directives of NRB.

Concluding the above analysis on average all the two banks EBL & SCBNL has been able to meet the standard set by the NRB.

2.2 Statistical Analysis

Under this topic, some statistical tools such as co-efficient of correlation analysis between different variables, trend analysis of deposit, loan and advances, investment and net profit are used to achieve the objectives of the study.

2.2.1 Co-efficient of Correlation Analysis

Under this heading, Karl Pearson's co-efficient of correlation is used to find out the relationship between total deposit and loan and advances, total deposit and total investment, interest earned to Total loan and advances and loan advances to total assets.

i) Co-efficient of correlation between Total Deposit and Loan and Advances

The co-efficient of correlation between total deposit and loan and advances measures the degree of relationship between two variables. In our analysis, total deposit is independent variables(X) and loan and advances is the dependent variables(Y). The main objective of computing "r" between these two variables is

to justify whether total deposit are significantly used as loan and advances in proper way or not.

The following table shows the value of 'r, r², P.Er and 6 P.Er between total deposit and loan and advances of EBL & SCBNL during the study period. (For details see Appendix Q1 & Q2).

Table 2.18
Correlation between Total Deposit and Loan and Advances

Bank	Evaluation Criteria			
	r	r ²	P.Er	6P.Er
SCBNL	0.92	0.85	0.05	0.30
EBL	0.99	0.98	0.006	0.04

Source: Apendix-Q1 & Q2

The above table reveals that the coefficient of correlation between total deposit and loan and advances of SCBNL is 0.92, which we can say that there is the positive relationship between these two variables. Moreover, the value of coefficient of determination (r²) is 0.85 which means 87% of variation is dependent variable i.e. loan and advances has been explained by the independent variable i.e. total deposit. Similarly, considering the value of 'r' which has been computed as 0.92 and comparing it with six times of probable error which is 0.56, it could be said that the value of 'r' is significant. Moreover it could be said that there is a significant relationship between total deposit and loan and advances of SCBNL.

Similarly, coefficient of correlation between deposit and loan and advances of EBL is 0.99, which we can say that higher positive relationship almost equal to perfect correlation between these two variables. Accordingly, the value of coefficient of determination (r²) has been computed as 0.98, which reveals that 98% in the dependent variables has been explained by the independent variables. Similarly, considering the 6P.Er. which is 0.04, we can say that the relationship between the total deposit and loan and advances is significant.

From the above analysis, we can conclude that there is the positive relationship between the total deposit and loan and advances of SCBNL, and EBL. It shows good percentage of dependency. It indicates that the increase in loan and advances is due to increase in deposit or successful mobilization of deposit in both the banks and other factors have nominal role in increment of loan and advances as compare to deposit.

i) Co-efficient of correlation between Net Income and Loan and Advances

The correlation coefficient between Net Income and Loan and Advances measures the degree of relationship between these two variables. Here Net Income is dependent variable (X) and loan and advances is the independent variable (Y). The objective of computing 'r' between these two variables is to justify the significant of loan and advances to generate Net Income.

The following table shows the value of 'r, r^2 , P.Er and 6 P.Er between Net Income and loan and advances of SCBNL and EBL during the study period (For details see Appendix R1, and R2)

Table 2.19
Correlation between Net Income and Loan and Advances

Bank	Evaluation Criteria			
	r	r ²	P.Er	6P.Er
SCBNL	0.91	0.84	0.048	0.29
EBL	0.99	0.98	0.006	0.04

Source: Apendix-R1&R2

The above table reveals that the coefficient of correlation between Net Income and loan and advances of SCBNL is 0.91, which we can say that positive relationship between these two variables. Moreover, the value of coefficient of determination (r^2) is 0.84 which means 84% of variation is dependent variable i.e. Net Income has been explained by the independent variable i.e. loan and advances. Similarly, considering the value of 'r' which has been computed as 0.84 and comparing it with six times of probable error which is 0.29, it could be said that the value of 'r' is significant. Moreover it could be said that there is a significant relationship between Net Income and loan and advances of SCBNL.

Similarly, coefficient of correlation between Net Income and loan and advances of EBL is 0.99, which we can say that higher positive relationship almost equal to perfect correlation between these two variables. Accordingly, the value of coefficient of determination (r^2) has been computed as 0.98, which reveals that 98% in the dependent variables has been explained by the independent variables. Similarly, considering the 6P.Er. which is 0.04, we can say that the relationship between the Net Income and loan and advances is significant.

From the above analysis, we can conclude that there is the positive relationship between Net Income and loan and advances of SCBNL and EBL. The relationship between the Net Income and loan and advances is significant in case of these two banks. However, the value of ' r^2 ' is different in both cases. In case of EBL the value of ' r^2 ' comparatively high than that of SCBNL, but yet it shows good percentage of dependency.

ii) Correlation between Interest Earned and Loan and Advances

The correlation of coefficient between interests earned and loan and advances measures the degree of relationship between these two variables. Here interest earned is dependent variable (X) and loan and advances is the independent variable (Y). The objective of computing 'r' between these two variables is to justify the significance of loan and advances to earn interest.

The following table shows the value of 'r', r^2 , P.Er and 6 P.Er between interest earned and loan and advances of SCBNL and EBL during the study period (For details see Appendix S1, and S2)

Table 2.20

Correlation between Interest Earned and Loan and Advances

Bank	Evaluation Criteria			
	r	r²	P.Er	6P.Er
SCBNL	0.95	0.902	0.03	0.18
EBL	0.96	0.92	0.024	0.14

Source: Apendix-S1 & S2

The above table reveals that the coefficient of correlation between interest earned and loan and advances of SCBNL is 0.95, which we can say that there is the positive relationship between these two variables. Moreover, the value of coefficient of determination (r^2) is 0.90 which means 90% of variation in dependent variable i.e. interest earned has been explained by the independent variable i.e. loan and advances. Similarly, considering the value of 'r' which has been computed as 0.95 and comparing it with six times of probable error which is 0.18, it could be said that value of 'r' is significant. Moreover it could be said that there is a significant relationship between interest earned and loan and advances of SCBNL.

Similarly, coefficient of correlation between interest earned and loan and advances of EBL is 0.96, which we can say that positive relationship between these two variables. Accordingly, the value of coefficient of determination (r^2) has been

computed as 0.92, which reveals that 92% of variation of the dependent variable i.e. interest earned has been explained by the independent variable i.e. loan and advances. . Similarly, considering the value of ‘r’ which has been computed as 0.96 and comparing it with six times of probable error which is 0.14. We can say that the relationship between interest earned and loan and advances of EBL is significant.

From the above analysis, we can conclude that there is the positive relationship between interest earned and loan and advances of SCBNL and EBL. The relationship between the interest earned and loan and advances is significant in case of these two banks. It shows good percentage of dependency. It indicates that the increase in interest income is due to increase in loan and advances and other factors have nominal role in increment of as compare to loan and advances.

iv) Correlation between Nonperforming Loan and Total Loan and Advances

The coefficient correlation between NPL and loan and advances measures the degree of relationship between these two variables. Here NPL is the dependent variable (X) and loan and advances is the independent variable (Y). The objective of computing ‘r’ between these two variables is to justify how unit increment in loan and advances affect in the unit of non-performing loan.

The following table shows the value of ‘r, r², P.Er and 6 P.Er between nonperforming loan and loan and advances of SCBNL and EBL during the study period (For details see Appendix T1, and T2

Table 2.21
Correlation between Nonperforming Loan and Total Loan and Advances

Bank	Evaluation Criteria			
	r	r ²	P.Er	6P.Er
SCBNL	-0.92	0.85	0.045	0.27

EBL	-0.71	0.50	0.151	0.90
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Source: Apendix-T1 & T2

The above table reveals that the coefficient of correlation between NPL and loan and advances of SCBNL is -0.92, which we can say that there is the negative relationship between these two variables. Moreover, the value of coefficient of determination (r^2) is 0.85 which means 85% of variation in dependent variable i.e. NPL has been explained by the independent variable i.e. loan and advances. Similarly, considering the value of 'r' which has been computed as -0.92 and comparing it with six times of probable error which is 0.27, it could be said that value of 'r' is not significant. Moreover it could be said that there is a significant relationship between NPL and loan and advances of SCBNL due to the value of 'r' is greater than six times P.Er i.e. $0.92 < 0.27$

Similarly, coefficient of correlation between NPL and loan and advances of EBL is -0.71, which we can say that negative relationship between these two variables. Accordingly, the value of coefficient of determination (r^2) has computed as 0.50, which reveals that 50% of variation of the dependent variable i.e. NPL has been explained by the independent variable i.e. loan and advances. . Similarly, considering the value of 'r' which has been computed as -0.71 and comparing it with six times of probable error which is 0.90. We can say that the relationship between interest earned and loan and advances of EBL is not significant due to the value of 'r' is greater than six times P.Er i.e. $0.71 < 0.90$.

From the above analysis, we can conclude that there is the negative relationship between non performing loan and loan and advances of SCBNL and EBL. The relationship between the nonperforming loan, and loan and advances is different in case of these two banks. SCBNL has good percentage of dependency than the EBL.

2.2.2 Trend Analysis and Projection for Next Five Years

The objective of this analysis is to analyze the trend of deposit collection, its utilization and net profit of SCBNL, and EBL. Granting loan and advances and investing some of the fund in government securities, share and debenture of other companies by the commercial banks is the utilization of deposit. The topic analyzes the trend of loan and advances, deposit, net profit and Non-performing Loan are forecasted for next five years.

The projections are based on the following assumptions:

- The main assumption is that other things will remain unchanged.
- The forecast will be true only when the limitation of least square method is carried out.
- The bank will run in present stage.
- The economy will remain in the present stage.
- NRB will not change its guidelines to commercial banks.

i) Trend value of Loan and Advances

The following table shows the trend value of loan and advances for 10 years mid-July 2007 to 2016 of SCBNL, and EBL. (For details see Appendixes U1 and U2).

Table 2.22
Trend value of Loan and Advances of SCBNL & EBL (Rs. in Millions)

Year	Trend Value of SCBNL	Trend Value of EBL
2007	9114.64	9850.80
2008	10836.66	14493.53
2009	12558.68	19136.26
2010	14280.70	23778.99
2011	16002.72	28421.72

2012	17724.74	33064.45
2013	19446.76	37707.18
2014	21168.78	42349.91
2015	22890.8	46992.64
2016	24612.82	51635.37

Source: U1 & U2

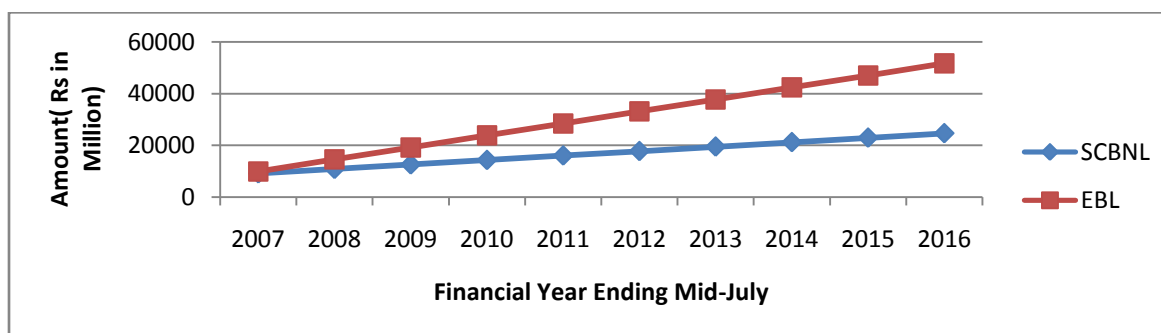
The above table reveals the trend value of loan and advances of SCBNL and EBL are in increasing trend. If other thing remains the same, loan and advances of SCBNL in mid-July 2016 will be Rs 24612.82 million. Similarly, EBL's loan and advances for mid-July 2016 has been forecasted to be Rs 51635.37 million.

From the above analysis, we can conclude that EBL's utilization of deposit in terms of loan and advances is comparatively higher than that of SCBNL.

The calculated trend values of loan and advances of SCBNL and EBL are plotted in the trend lines given as below:

Figure 2.6

Trend value of Loan and Advances of SCBNL & EBL (2007-2016)



ii) Trend value of Total Deposit

The following table shows the trend value of Total Deposit for 10 years mid-July 2007 to 2016 of SCBNL, and EBL. (For details see Appendixes V1 and V2).

Table 2.23

Trend value of Total Deposit of SCBNL & EBL (Rs. In Millions)

Year	Trend Value of SCBNL	Trend Value of EBL
2007	22607.68	12964.72
2008	26102.40	19104.37
2009	29597.12	25244.02
2010	33091.84	31383.67
2011	36586.55	37523.32
2012	40081.27	43662.97
2013	43575.99	49802.62
2014	47070.71	62081.92
2015	50565.43	62081.92
2016	54060.14	68221.57

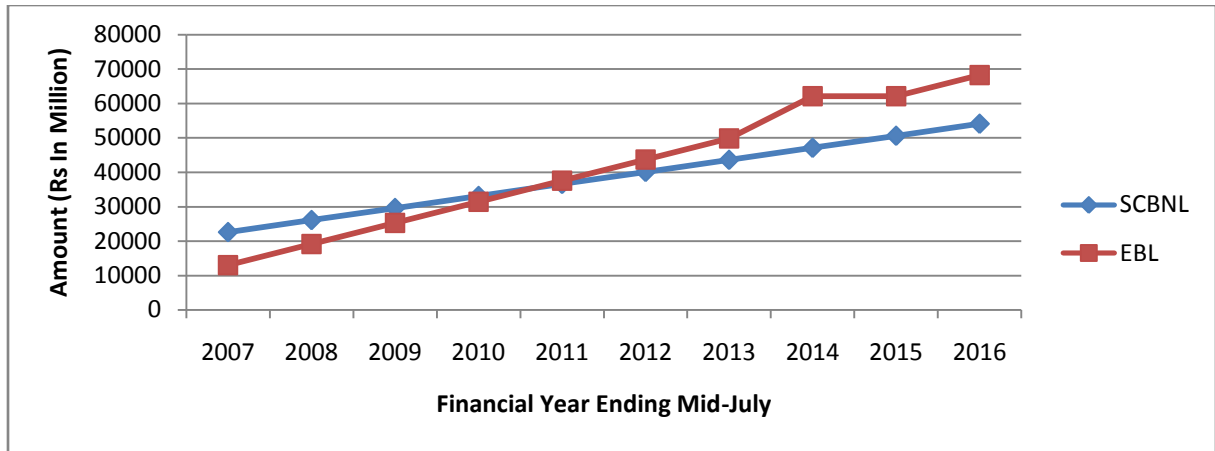
Source: VI & V2

The above table shows that total deposit of SCBNL and EBL are in increasing trend. If other thing remains the same the total deposits of SCBNL and EBL for the mid-July 2016 has been forecasted to be Rs 54060.14 million and 68221.57 million respectively.

The above analysis reveals that the deposit positions of SCBNL and EBL are increasing in the same proportion. Yet EBL will be the more successful than the SCBNL to deposit huge amount.

The calculated trend values of Total Deposit of SCBNL and EBL are fitted in the trend lines given as follows:

Figure 2.7
Trend value of Total Deposit of SCBNL & EBL (2007-2016)



iii) Trend value of Net Profit

The following table shows the trend value of Net Profit for 10 years mid-July 2007 to 2016 of SCBNL, and EBL. (For details see Appendixes W1 and W2).

Table 2.24

Trend value of Net Profit of SCBNL & EBL (Rs. in Millions)

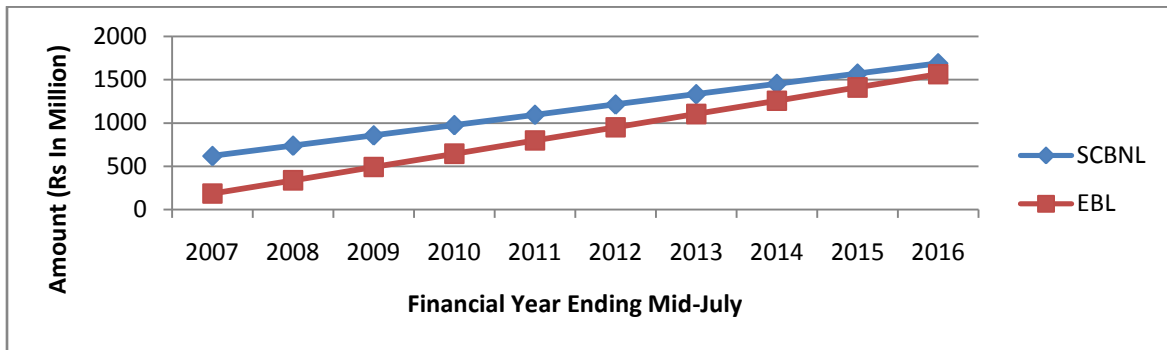
Year	Trend Value of SCBNL	Trend Value of EBL
2007	618.53	184.76
2008	737.30	337.91
2009	856.07	491.06
2010	974.83	644.21
2011	1093.60	797.36
2012	1212.36	950.51
2013	1331.13	1103.66
2014	1449.90	1256.81
2015	1568.66	1409.96
2016	1687.43	1563.11

Source: W1 & W2

The above table shows that Net Profit of SCBNL and EBL are in increasing trend. If other thing remains the same the Net Profit of SCBNL and EBL for mid-July 2016 has been forecasted to be 1687.43 million and 1563.11 million respectively. The above table depicts that SCBNL's rate of generating net profit is higher than the EBL.

The calculated trend values of Net Profit of SCBNL and EBL are fitted in the trend lines given as follows:

Figure 2.8
Trend value of Net Profit of SCBNL and EBL (2007-2016)



iv) Trend value of Nonperforming Loan

The following table shows the trend value of Nonperforming Loan for 10 years mid-July 2007 to 2016 of SCBNL, and EBL. (For details see Appendixes X1 and X2).

Table 2.25
Trend value of Nonperforming Loan of SCBNL and EBL (Rs. in Millions)

Year	Trend Value of SCBNL	Trend Value of EBL
2007	202.48	138.91
2008	172.33	122.65
2009	142.17	106.40
2010	112.01	90.14
2011	81.86	73.88
2012	51.70	57.63
2013	21.55	41.37
2014	-8.61	25.11
2015	-38.77	8.85

2016	-68.92	-7.40
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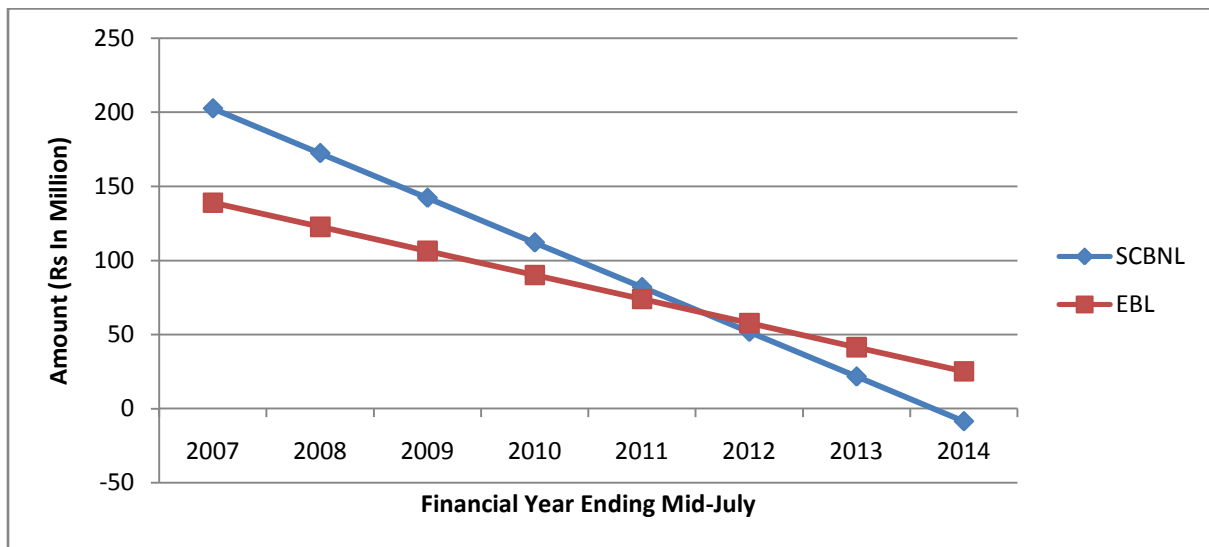
Source: X1 & X2

The above table shows that SCBNL and EBL have decreasing trend in Non-performing loan. The average NPL of SCBNL is Rs 66.78 million which is decreasing every year. The average NPL of EBL is Rs 65.75 million which is also decreasing every year. SCBNL decreasing rate in NPL is much higher than that of EBL.

The calculated trend value of Non-performing loan of SCBNL and EBL are fitted in the trend lines as follows:

Figure 2.9

Trend value of Nonperforming Loan of SCBNL and EBL (2007-2016)



2.3 Major Findings of the Study

The major findings of the study are divided on the basis of financial and statistical data of SCBNL, and EBL, which are given below:

2.3.1 Liquidity Ratio

- From the mean current ratio of EBL is computed as 0.14 times which is slightly higher than that of SCBNL' 0.13 times. Likewise, variability of ratios of SCBNL is 0.15% and EBL's is 0.36%. From which we can say that SCBNL's ratios are more uniform than that of EBL in comparison.
- On average of 5 years of review period, cash and bank balance to total deposit ratios of SCBNL, and EBL are 6.99%, and 15.04% respectively. EBL's liquidity position is better than that of SCBNL. But in the terms of consistency, SCBNL has higher consistency ratio than that of EBL.
- The mean ratio of cash and bank balance to current asset ratio of SCBNL is 0.51% and EBL is 0.96%. The mean ratio of cash and bank balance to current assets of EBL is higher and also more consistency ratio than that of SCBNL.
- The mean ratio of loan and advances to current asset of EBL has higher ratio of 5.19% than 3.16% of SCBNL. The SCBNL seems to be more consistency than the EBL with its loan and advances to current assets ratio which is 0.23%.

2.3.2 Assets Management Ratio

- The mean ratio of loan and advances to total deposit of SCBNL, and EBL are 0.42%, and 0.76% respectively. The utilization of Total deposit as loan and advances of EBL seems to be higher than that of SCBNL. Likewise from the perspective of consistency EBL has the higher consistency in its ratio with 0.04% followed by SCBNL 0.09%.
- The mean ratio of Total Investment to Total Deposit of SCBNL, and EBL are 0.54%, and 0.22% respectively. The utilization of Total Deposit as Investment in different types of securities issued by government and other financial and non-financial companies of SCBNL seems to be much higher

than that of EBL. Likewise from the perspective of consistency of SCBNL has higher consistency in its ratio with 0.07% than 0.32% of EBL.

- The mean ratio of Loan and Advances to Total Working Fund of SCBNL, and EBL are 0.37%, and 0.65% respectively. EBL seems to have much higher mean ratio than that of SCBNL under the study. Likewise from the perspective of consistency, EBL has higher consistency in its ratio with 0.02% followed by SCBNL with 0.03%.

2.3.3 Profitability Ratio

- The mean ratio of return on Loan and Advances of SCBNL, and EBL are computed as 6.84%, and 2.48% respectively. SCBNL seems to have much higher return from loan and advances than EBL. Likewise from the perspective of consistency in Return on loan and advances ratio SCBNL has higher consistency in its ratio with 0.09% than 0.13% of EBL.
- The mean ratio of return on Total Working Fund of SCBNL, and EBL are computed as 2.54%, and 1.62% respectively. SCBNL seems to have higher return from total working fund than EBL. Likewise from the perspective of consistency in return on total working fund ratio of SCBNL seems to have higher mean ratio with 0.05% than 0.15% of EBL.
- The mean ratio of Total Interest Earned to Total Loan and Advance of SCBNL, and EBL are computed as 12.99%, and 7.81% respectively. SCBNL seems to have higher mean ratio than that of EBL. Likewise from the perspective of consistency, ratio of SCBNL has higher consistency with 0.07% than 0.16% of EBL.

2.3.4 Risk Ratio

- Through computing liquidity risk ratio, the liquidity of SCBNL and EBL in terms of average is computed as 6.99%, and 15.04% respectively. EBL's

liquidity in terms of average seems to be much higher than that of SCBNL. Likewise from the perspective of consistency, ratio of EBL has higher consistency with 0.22% than 0.30% of EBL.

- The Credit Risk or Non Performing Loan to Total Loan and Advances ratio of SCBNL, and EBL are computed as 1.26%, and 0.68% respectively. The Non Performing Loan with respect to Loan and Advances of SCBNL seems to be higher than that of EBL. Likewise from the perspective of consistency, ratio of SCBNL has higher consistency with 0.58% than 0.60% of EBL.
- The mean Loan Loss Provision to Loan and Advances ratio of SCBNL, and EBL are computed as 2.08%, and 2.69% respectively. EBL loan loss provision with respect to its total loan and advances seems to be higher than that of SCBNL. Likewise from the perspective of consistency, ratio of EBL has higher consistency with 0.17% than 0.37% of SCBNL.

2.3.5 Adequacy of Loan Loss Provisioning

- On average SCBNL, and EBL have been able to maintain the pass loan provision of at least 1% of the total pass loan as according to the NRB directives.
- On average both the banks SCBNL, and EBL have able to maintain the substandard loan loss provisioning at least 25% of the total substandard loan as per the directives of NRB.
- From mean ratio point of view EBL & SCBNL have been able to maintain the provision for doubtful debt of at least 50% of total doubtful debt according to the directives of NRB.
- On average both the banks SCBNL and EBL have been able to meet the standard set by the NRB directives of having provision for bad debt of 100% of the total bad debt.

2.3.6 Co-efficient of Correlation Analysis

- Coefficient of correlation between total deposit and loan and advances of SCBNL and EBL has positive relationship. The relationship between the total deposit and loan and advances is significant in case of both the banks. However, the value of r^2 is different in either case. It indicates that the increase in loan and advances is due to increase in deposit or successful mobilization of deposit in both the banks and other factors have nominal role in increment of loan and advances as compare to deposit.
- There is the positive relationship between Net Income and loan and advances of SCBNL and EBL. The relationship between the Net Income and loan and advances is significant in case of these two banks. However, the value of ' r^2 ' is different in both cases. In case of EBL the value of ' r^2 ' comparatively high than that of SCBNL, but yet it shows good percentage of dependency.
- There is the positive relationship between interest earned and loan and advances of SCBNL and EBL. The relationship between the interest earned and loan and advances is significant in case of these two banks. It shows good percentage of dependency. It indicates that the increase in interest income is due to increase in loan and advances and other factors have nominal role in increment of as compare to loan and advances
- There is the negative relationship between non performing loan and loan and advances of SCBNL and EBL which implies that NPL has been decreasing with the increment in loan and advances due to effective recovery of non-performing loan.

2.3.7 Trend Analysis and Projection for Next Five Years

- The trend value of total deposit of SCBNL, and EBL are in increasing trend. If other thing remains the same, loan and advances of SCBNL in

mid-July 2016 will be Rs 24612.82 million. Similarly, EBL's loan and advances for mid-July 2016 has been forecasted to be Rs 51635.37 million. This analysis, clear's that EBL's utilization of deposit in terms of loan and advances is comparatively higher than that of SCBNL.

- The trend value of Total deposit of SCBNL and EBL are in increasing trend. If other thing remains the same the total deposits of SCBNL and EBL for the mid-July 2016 has been forecasted to be Rs 54060.14 million and 68221.57 million respectively. The analysis also reveals that the deposit position of SCBNL and EBL are increasing in the same proportion. Yet EBL will be the more successful than the SCBNL to deposit huge amount.
- The trend value of Net Profit of SCBNL and EBL are in increasing trend. If other thing remains the same the Net Profit of SCBNL and EBL for mid-July 2016 has been forecasted to be 1687.43 million and 1563.11 million respectively. SCBNL's rate of generating net profit is higher than EBL.
- The trend value of Non-performing loan of SCBNL and EBL has decreasing trend. The average NPL of SCBNL is Rs 66.78 million which is decreasing every year. The average NPL of EBL is Rs 65.75 million which is also decreasing every year. SCBNL decreasing rate in NPL is much higher than that of EBL.

2.3.8 Test of Hypothesis

From the test of significance difference the parameter of the population, has been found that:

- There is significant between mean ratios of loan and advances to total deposit of SCBNL with Everest.
- There is significant between mean ratios of Total Investment to total deposit of SCBNL with Everest.

- There is no significant between mean ratios of Investment on government securities to current assets of SCBNL with Everest.
- There is significant difference between mean ratios of loan and advances to current assets of SCBNL with Everest.
- There is significant different between mean ratios of return on loan and advances of SCBNL with Everest.
- There is no significant difference between mean ratios of total interest earned to total outside assets of SCBNL with Everest.

CHAPTER- III

CONCLUSION AND RECOMMENDATIONS

At last chapter of this study the conclusion and recommendations developed from the comparative analysis of various aspects of the credit of the commercial banks by using some important financial as well as statistical tools. After completing the basic analysis required for the study the final and the most important tasks of the researcher is to summarize the study and recommend for the future importance. I am hopeful that the study that I have conducted would be meaningful to the top management of the concerned banks to initiate action and to achieve the desired results.

3.1 Conclusion

From the analysis made during the study period of the concerned sample banks, certain conclusion has been derived after the financial as well as statistical tools have been measured on behalf of different aspect of the Credit Management of the concerned banks under study.

The liquidity position of SCBNL, and EBL have been satisfactory, the liquidity of each bank have been different though. On average the liquidity position of EBL is slightly higher than that of SCBNL but yet satisfactory.

Likewise, the liquidity position of EBL is comparatively better than that of SCBNL. It has higher average Cash and Bank Balance to Total Deposit Ratio, Cash and Bank Balance to Current Assets ratio and Loan and Advances to Current Assets Ratio. EBL shows that it is in good position to meet the daily cash requirement; however, the liquidity ratio of EBL is also stable and consistent regarding the liquidity in comparison to SCBNL which indicates the stable policy of EBL.

On the basis of Assets management ratio it has been concluded that EBL is in better position than SCBNL. Though, on average EBL has lower total investment to total deposit ratio in comparison to SCBNL has successfully utilized its deposit on loan and advances but has lower investment in other sector but yet occupies a better position since it has higher loan and advances to total deposit ratio and loan and advances to total working fund ratio.

On the basis of the analysis of profitability, SCBNL has higher return on Loan and Advances, return on Total Working Fund, and Total Interest Earned to Total Loan and Advance ratio on average than that of EBL under study.

On the basis of the analysis of risk ratio, conclusively, from the view point of liquidity risk we can say that EBL has maintained higher liquidity which would obviously lower profit than SCBNL. Whereas SCBNL has stable liquidity risk ratio, which means SCBNL has taken higher risk than EBL under study for the higher profit.

Similarly from the view point of Credit risk and provisioning against the credit risk EBL has taken higher credit risk and also has higher provisioning than SCBNL under study. SCBNL seems to be in the safe side with less NPL to total loan and advances ratio as compare to EBL has also less loan loss provisioning to total loan and advances ratio under study.

On the basis of coefficient of correlation, there is positive correlation between Total Deposit and Loan and Advance, Net Income and Loan and Advances, Interest Earned and Loan and Advances of SCBNL, and EBL. However, the correlation between NPL and Loan and Advances of SCBNL, and EBL is negative which implies that NPL has been decreasing with the increment in loan and

advances due to effective recovery of non-performing loan. There is significant relationship between Total Deposit and Loan and Advance, Net Income and Loan and Advances of the both banks is significant. Likewise there is significant relationship between the NPL and loan and advances of SCBNL and EBL.

On the basis of Trend analysis it can be concluded that the trend value of Loan and Advances, Total Deposit and Net Profit of SCBNL, and EBL is in increasing trend. However the trend value of NPL of SCBNL and EBL is decreasing trend.

3.2 Recommendation

Recommendations are the final output of the whole study. It helps to convey positive information and proper way of improvement to concern banks SCBNL, and EBL and as well as other interest researcher in upcoming days. Various analyses have been done until this stage. On the basis of analysis and findings of the study, following suggestion and recommendation can be advanced to overcome weakness, inefficiency and satisfactory improvement policy of SCBNL, and EBL.

- The cash and bank balance to total deposit measures the availability of bank's highly liquid or immediate funds to meet its unanticipated calls on all types of deposits. The cash and bank balance of EBL with respect is better against the readiness to serve its customer's deposit than SCBNL. It implies that better liquidity position of EBL. In contrast, a high ratio of non-earning cash and bank balances may unfit, which indicates the bank's unavailability to invest its fund in income generation areas. Thus EBL is suggested to invest in more productive sectors like short-term marketable securities, treasury bills etc. insuring enough liquidity which will help the bank to improve its profitability,
- To get success in competitive banking environment, depositor's money must be utilized as loan and advances. If it is neglected, then it could results

to liquidity crisis in the bank and one of the main reasons for the bank's failure. It is found that EBL's loan and advances to total deposit ratio is comparatively higher than that of SCBNL. But in case of total investment to total deposit of SCBNL has higher than EBL. So it is recommended that SCBNL should follow liberal policy, invest more and more percentage of total deposit in loan and advances and maintain more stability on the credit policy.

- There is highly positive correlation between the total deposit and loan and advances of SCBNL, and EBL. So it is recommended for the banks under study especially for EBL to increase their total deposit to make more loan and advances since correlation between the total deposit and loan and advances of EBL is higher than SCBNL.
- The loan loss provisioning and high volume of non-performing loans of SCBNL is in increasing trend which is certainly not a sign of efficient credit management. Where as it is decreasing in higher rate than that of EBL. It is recommended to SCBNL to adopt sound credit collection policy and EBL to maintain and implement its credit policy even more efficiently, which would help them to decrease loan loss provision and non performing loan. The policy should ensure rapid identification of delinquent loans, immediate contact with borrowers and continual follow up until a loan recovery. The recovery of loan is the most challenging job for the bank. Therefore the banks must embrace a strengthen credit management.
- The banks are recommended to adopt innovative approach to marketing. In the light of growing competition in the banking sector, the business of the bank should be customer oriented. It should strengthen and activate its marketing function, as it is an effective tool to attract and retain the customers. For the purpose banks should develop and should develop and innovative approach to bank marketing and formulate new strategies of serving customers in a more convenient and satisfactory way by optimally

utilizing the modern technology and offering new facilities to the customer at competitive prices.

- Banks should avoid extending credits merely based on oral information presented at the credit interview. Historical, financial and trade records as well as realistic cash flow projection should be obtained for proper assessment of the proposal.

Timely and effectively implementation of these corrective actions would lead the bank towards the path of its continued success and future progression.

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APPENDICES

Appendix-A

Current Ratio

SCBNL				(Rs. In Millions)
F/Y	Current Assets (Rs)	Current Liabilities (Rs)	Ratio(Times)	
2006/2007	3253.51	24013.21	0.14	
2007/2008	3782.17	26480.34	0.14	
2008/2009	4247.78	30843.24	0.14	
2009/2010	5192.71	37014.10	0.14	
2010/2011	3598.77	36843.61	0.10	

EBL				(Rs. In Millions)
F/Y	Current Assets (Rs)	Current Liabilities (Rs)	Ratio(Times)	
2006/2007	1619.80	21195.60	0.08	
2007/2008	2391.30	20349.60	0.12	
2008/2009	3013.90	25425.30	0.12	
2009/2010	6164.40	34686.10	0.18	
2010/2011	7818.80	38519.10	0.20	

Appendix-B

Cash & Bank Balance to Total Deposit

SCBNL				(Rs. In Millions)
F/Y	Cash & Bank Balance (Rs)	Total Deposits (Rs)	Ratio (%)	
2006/2007	1276.24	23061.03	5.53	
2007/2008	2021.02	24647.02	8.20	
2008/2009	2050.24	29744.00	6.89	

2009/2010	3137.16	35350.82	8.87
2010/2011	1929.30	35182.72	5.48
EBL (Rs. In Millions)			
F/Y	Cash & Bank Balance (Rs)	Total Deposits (Rs)	Ratio (%)
2006/2007	1552.90	13802.40	11.25
2007/2008	2391.30	18186.20	13.15
2008/2009	2667.90	23976.30	11.13
2009/2010	6164.40	33322.90	18.50
2010/2011	7818.80	36932.30	21.17

Appendix-C

Cash & Bank Balance to Current Ratio

SCBNL (Rs. In Millions)			
F/Y	Cash & Bank Balance (Rs)	Current Ratio (Rs)	Ratio (%)
2006/2007	1276.24	3253.51	0.39
2007/2008	2021.02	3782.17	0.53
2008/2009	2050.24	4247.78	0.48
2009/2010	3137.16	5192.71	0.60
2010/2011	1929.30	3598.77	0.54

EBL (Rs. In Millions)			
F/Y	Cash & Bank Balance (Rs)	Current Ratio (Rs)	Ratio (%)
2006/2007	1552.90	1619.80	0.96
2007/2008	2391.30	2391.30	1.00
2008/2009	2667.90	3013.90	0.89

2009/2010	6164.40	6164.40	1.00
2010/2011	7818.80	7818.80	1.00

Appendix-D

Loan and Advances to Current Assets Ratio

SCBNL (Rs. In Millions)			
F/Y	Loan & Advances (Rs)	Current Assets (Rs)	Ratio (%)
2006/2007	8935.42	3253.51	2.75
2007/2008	10502.64	3782.17	2.78
2008/2009	13718.60	4247.78	3.23
2009/2010	13679.76	5192.71	2.63
2010/2011	15956.96	3598.77	4.43

EBL (Rs. In Millions)			
F/Y	Loan & Advances (Rs)	Current Assets (Rs)	Ratio (%)
2006/2007	10136.2	1619.80	6.26
2007/2008	14082.7	2391.30	5.89
2008/2009	18836.4	3013.90	6.25
2009/2010	24469.6	6164.40	3.97
2010/2011	28156.4	7818.80	3.60

Appendix-E

Loan and Advances to Total Deposit Ratio

SCBNL (Rs. In Millions)			
F/Y	Loan & Advances (Rs)	Total Deposit (Rs)	Ratio (%)

2006/2007	8935.42	23061.03	0.39
2007/2008	10502.64	24647.02	0.43
2008/2009	13718.60	29744.00	0.46
2009/2010	13679.76	35350.82	0.38
2010/2011	15956.96	35182.72	0.45

EBL (Rs. In Millions)			
F/Y	Loan & Advances (Rs)	Total Deposit (Rs)	Ratio (%)
2006/2007	10136.20	13802.40	0.73
2007/2008	14082.70	18186.20	0.77
2008/2009	18836.40	23976.30	0.79
2009/2010	24469.60	33322.90	0.73
2010/2011	28156.40	36932.30	0.76

Appendix-F

Total Investment to Total Deposit Ratio

SCBNL (Rs. In Millions)			
F/Y	Total Investment (Rs)	Total Deposit (Rs)	Ratio (%)
2006/2007	12838.55	23061.03	0.56
2007/2008	13553.23	24647.02	0.55
2008/2009	13902.82	29744.00	0.47
2009/2010	20236.12	35350.82	0.57
2010/2011	19847.51	35182.72	0.56

EBL (Rs. In Millions)			
F/Y	Total Investment	Total Deposit(Rs)	Ratio (%)

	(Rs)		
2006/2007	4200.50	13802.40	0.30
2007/2008	4984.30	18186.20	0.27
2008/2009	5059.60	23976.30	0.21
2009/2010	5948.50	33322.90	0.18
2010/2011	5008.30	36932.30	0.14

Appendix-G

Loan and Advances to Total Working Fund Ratio

SCBNL			
(Rs. In Millions)			
F/Y	Loan and Advances	Total Working Fund	Ratio (%)
	(Rs)	(Rs)	
2006/2007	8935.42	25767.35	0.35
2007/2008	10502.64	28596.69	0.37
2008/2009	13718.60	33335.79	0.41
2009/2010	13679.76	40066.57	0.34
2010/2011	15956.96	40213.32	0.39

EBL			
(Rs. In Millions)			
F/Y	Loan and Advances	Total Working Fund	Ratio (%)
	(Rs)	(Rs)	
2006/2007	10136.20	16294.00	0.62
2007/2008	14082.70	21851.10	0.64
2008/2009	18836.40	27646.50	0.68
2009/2010	24469.60	37501.70	0.65
2010/2011	28156.40	41982.80	0.67

Appendix-H

Return on Loan and Advances Ratio

SCBNL (Rs. In Millions)			
F/Y	Net Profit (Rs)	Loan & Advances (Rs)	Ratio (%)
2006/2007	658.76	8935.42	7.37
2007/2008	691.67	10502.64	6.59
2008/2009	818.92	13718.60	5.97
2009/2010	1025.11	13679.76	7.49
2010/2011	1085.87	15956.96	6.80

EBL (Rs. In Millions)			
F/Y	Net Profit (Rs)	Loan & Advances (Rs)	Ratio (%)
2006/2007	237.20	10136.20	2.34
2007/2008	296.40	14082.70	2.10
2008/2009	451.20	18836.40	2.40
2009/2010	638.70	24469.60	2.61
2010/2011	831.80	28156.40	2.95

Appendix-I

Return on Total Working Fund Ratio

SCBNL (Rs. In Millions)			
F/Y	Net Profit (Rs)	Total Working Fund (Rs)	Ratio (%)
2006/2007	658.76	25767.35	2.56
2007/2008	691.67	28596.69	2.42
2008/2009	818.92	33335.79	2.46

2009/2010	1025.11	40066.57	2.56
2010/2011	1085.87	40213.32	2.70

EBL (Rs. In Millions)			
F/Y	Net Profit (Rs)	Total Working Fund (Rs)	Ratio (%)
2006/2007	237.20	16294.00	1.46
2007/2008	296.40	21851.10	1.35
2008/2009	451.20	27646.50	1.63
2009/2010	638.70	37501.70	1.70
2010/2011	831.80	41982.80	1.98

Appendix-J

Total Interest Earned to Loan and Advances

SCBNL (Rs. In Millions)			
F/Y	Total Interest Earned (Rs)	Loan & Advances (Rs)	Ratio (%)
2006/2007	1189.60	8935.42	13.31
2007/2008	1411.98	10502.64	13.44
2008/2009	1591.20	13718.60	11.60
2009/2010	1887.22	13679.76	13.80
2010/2011	2042.11	15956.96	12.80

EBL (Rs. In Millions)			
F/Y	Total Interest Earned (Rs)	Loan & Advances (Rs)	Ratio (%)

2006/2007	770.35	10136.20	7.60
2007/2008	967.48	14082.70	6.87
2008/2009	1329.85	18836.40	7.06
2009/2010	1852.35	24469.60	7.57
2010/2011	2801.56	28156.40	9.95

Appendix-K

Liquidity Risk Ratio

SCBNL			
(Rs. In Millions)			
F/Y	Cash & Bank Balances	Total Deposit	Ratio (%)
	(Rs)	(Rs)	
2006/2007	1276.24	23061.03	5.53
2007/2008	2021.02	24647.02	8.20
2008/2009	2050.24	29744.00	6.89
2009/2010	3137.16	35350.82	8.87
2010/2011	1929.30	35182.72	5.48

EBL			
(Rs. In Millions)			
F/Y	Cash & Bank Balances	Total Deposit	Ratio (%)
	(Rs)	(Rs)	
2006/2007	1552.90	13802.40	11.25
2007/2008	2391.30	18186.20	13.15
2008/2009	2667.90	23976.30	11.12
2009/2010	6164.40	33322.90	18.50
2010/2011	7818.80	36932.30	21.17

Appendix-L1

Credit Risk Ratio

SCBNL				(Rs. In Millions)			
F/Y	Non Performing Loans		Loan & Advances		Ratio (%)		
	(Rs)		(Rs)				
2006/2007	195.93		8935.42		2.19		
2007/2008	197.02		10502.64		1.88		
2008/2009	128.72		13718.60		0.94		
2009/2010	91.04		13679.76		0.67		
2010/2011	98.14		15956.96		0.62		

EBL				(Rs. In Millions)			
F/Y	Non Performing Loan		Loan & Advances		Ratio (%)		
	(Rs)		(Rs)				
2006/2007	128.73		10136.20		1.27		
2007/2008	112.66		14082.70		0.80		
2008/2009	128.09		18836.40		0.68		
2009/2010	117.45		24469.60		0.48		
2010/2011	45.05		28156.40		0.16		

Appendix-L2

Loan Loss Provision to Total Loan and Advances Ratio

SCBNL				(Rs. In Millions)			
F/Y	Loan Loss Provision		Loan & Advances		Ratio (%)		
	(Rs)		(Rs)				
2006/2007	270.86		8935.42		3.03		
2007/2008	287.51		10502.64		2.74		
2008/2009	245.39		13718.60		1.79		
2009/2010	200.95		13679.76		1.47		
2010/2011	219.63		15956.96		1.38		

EBL				(Rs. In Millions)			
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F/Y	Loan Loss Provision (Rs)	Loan & Advances (Rs)	Ratio (%)
2006/2007	334.95	10136.20	3.30
2007/2008	418.60	14082.70	2.97
2008/2009	497.35	18836.40	2.64
2009/2010	584.88	24469.60	2.39
2010/2011	600.04	28156.40	2.13

Appendix-M

Pass Loan Provision to Total Pass Loan

SCBNL			(Rs. In Millions)
F/Y	Pass Loan Provision (Rs)	Total Pass Loan (Rs)	Ratio (%)
2006/2007	90.10	9010.35	1
2007/2008	105.93	10593.13	1
2008/2009	138.35	13835.26	1
2009/2010	137.90	13789.66	1
2010/2011	160.78	16078.45	1

EBL			(Rs. In Millions)
F/Y	Pass Loan Provision (Rs)	Total Pass Loan (Rs)	Ratio (%)
2006/2007	97.57	9757.20	0.99
2007/2008	137.51	13750.62	1.00
2008/2009	185.55	18555.27	0.99
2009/2010	242.49	24248.6	1.00
2010/2011	288.04	28030.84	1.03

Appendix-N

Substandard Loan Loss Provision to Total Substandard

SCBNL			(Rs. In Millions)
F/Y	Substandard Loan Loss Provision (Rs)	Total Substandard Loan (Rs)	Ratio (%)
2006/2007	4.12	16.49	24.98
2007/2008	4.11	16.45	24.98
2008/2009	6.23	24.91	25.01
2009/2010	8.61	34.42	25.01
2010/2011	12.74	50.94	25.00

EBL			(Rs. In Millions)
F/Y	Substandard Loan Loss Provision (Rs)	Total Substandard Loan (Rs)	Ratio (%)
2006/2007	2.67	10.67	25.02
2007/2008	1.05	4.22	24.88
2008/2009	1.58	6.31	25.04
2009/2010	0.34	1.36	25.00
2010/2011	1.37	5.47	25.05

Appendix-O

Provision for Doubtful Debt to Total Doubtful Debt

SCBNL			(Rs. In Millions)
F/Y	Provision for Doubtful Debt (Rs)	Total Doubtful Debt (Rs)	Ratio (%)
2006/2007	62.80	65.61	95.72
2007/2008	63.10	66.19	95.33

2008/2009	45.01	48.01	93.75
2009/2010	9.68	11.85	81.69
2010/2011	1.09	2.18	50.00

EBL				(Rs. In Millions)			
F/Y	Provision for Doubtful Debt (Rs)	Total Doubtful Debt (Rs)	Ratio (%)				
2006/2007	0.34	0.68	50.00				
2007/2008	1.18	2.35	50.21				
2008/2009	0.37	0.75	49.33				
2009/2010	14.26	28.51	50.01				
2010/2011	6.32	12.63	50.04				

Appendix-P

Provision for Bad Debt to Total Bad Debt

SCBNL				(Rs. In Millions)			
F/Y	Provision for Bad Debt (Rs)	Total Bad Debt (Rs)	Ratio (%)				
2006/2007	113.83	113.83	100				
2007/2008	114.37	114.37	100				
2008/2009	55.80	55.80	100				
2009/2010	44.77	44.77	100				
2010/2011	45.02	45.02	100				

EBL				(Rs. In Millions)			
F/Y	Provision for Bad Debt (Rs)	Total Bad Debt (Rs)	Ratio (%)				
2006/2007	117.88	117.88	100				

2007/2008	106.61	106.61	100
2008/2009	120.26	120.26	100
2009/2010	88.11	88.11	100
2010/2011	25.60	25.60	100

APPENDIX-Q (1)

Co-efficient of Correlation between Total Deposit and Loan and Advances

Correlation between Total Deposit and Loan and Advances of SCBNL

F/Y	Total Deposit (X)	Loan & Advances (Y)	$x = x - \bar{x}$	$y = [y - \bar{y}]$	x^2	y^2	xy
2006/2007	23061.03	8935.42	-6536.09	-3623.26	42720446.34	13127984.04	23681920.06
2007/2008	24647.02	10502.64	-4950.10	-2056.04	24503470.21	4227284.03	10177579.69
2008/2009	29744.00	13718.60	146.88	1159.92	21574.32	1345423.69	170371.96
2009/2010	35350.82	13679.76	5753.70	1121.08	33105086.70	1256829.34	6450383.25
2010/2011	35182.72	15956.96	5585.60	3398.28	31198949.70	11548334.14	18981461.91
	X=29597.12	Y=12558.68			131549527.28	31505855.24	59461716.87

Now, we have

$$N=5 \quad \sum x^2 = 131549527.28$$

$$\sum y^2 = 31505855.24$$

$$\sum xy = 59461716.87$$

Correlation of coefficient can be calculated by using the following formula:

$$r = \frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}} = \frac{59461716.87}{\sqrt{131549527.28} \sqrt{31505855.24}} = \frac{59461716.87}{64378415.35}$$

$$r = 0.92 \quad r^2 = 0.85$$

$$P.Er. = 0.6745 \frac{1-r^2}{\sqrt{n}} = 0.6745 \frac{1-0.85}{\sqrt{5}} = 0.05 \quad 6P.Er = 0.30$$

APPENDIX-Q (2)

Correlation between Total Deposit and Loan and Advances of EBL

F/Y	Total Deposit (X)	Loan & Advances (Y)	$x = x - \bar{x}$	$y = [y - \bar{y}]$	x^2	y^2	xy
2006/2007	13802.40	10136.20	-11441.62	-9000.06	130910668.22	81001080.00	102975266.50
2007/2008	18186.20	14082.70	-7057.82	-5053.56	49812823.15	25538468.67	35667116.84
2008/2009	23976.30	18836.40	-1267.72	-299.86	1607114.00	89916.02	380138.52
2009/2010	33322.90	24469.60	8078.88	5333.34	65268302.05	28444515.56	43087413.86
2010/2011	36932.30	28156.40	8775.90	9020.14	77016420.81	81362925.62	79159846.63
	X=25244.02	Y=19136.26			324615328.2	216436905.9	261269782.34

Now, we have

$$N=5 \quad \sum x^2=324615328.2$$

$$\sum y^2 =216436905.9$$

$$\sum xy=261269782.34$$

Correlation of coefficient can be calculated by using the following formula:

$$r = \frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}} = \frac{261269782.34}{\sqrt{324615328.2} \sqrt{216436905.9}} = \frac{261269782.34}{265063648.5}$$

$$r =0.99 \quad r^2=0.98$$

$$P.Er. = 0.6745 \frac{1-r^2}{\sqrt{n}} = 0.6745 \frac{1-0.98}{\sqrt{5}} = 0.006 \quad 6P.Er =0.036$$

APPENDIX-R (1)

Co-efficient of Correlation between Net Income and Loan and Advances

Correlation between Net Income and Loan and Advances of SCBNL

F/Y	Net Income (X)	Loan & Advances (Y)	$x = x - \bar{x}$	$y = [y - \bar{y}]$	x^2	y^2	xy
2006/2007	658.76	8935.42	-197.31	-3623.26	38929.66	13127984.04	714890.15
2007/2008	691.67	10502.64	-164.40	-2056.04	27026.04	4227284.03	338004.09
2008/2009	818.92	13718.6	-37.15	1159.92	1379.83	1345423.69	-43086.54
2009/2010	1025.11	13679.76	169.04	1121.08	28575.87	1256829.34	189512.52
2010/2011	1085.87	15956.96	229.80	3398.28	52809.88	11548334.14	780939.26
	X =856.07	Y =12558.68			148721.28	31505855.24	1980259.49

Now, we have

$$N=5 \quad \sum x^2=148721.28$$

$$\sum y^2 =31505855.24$$

$$\sum xy = 1980259.49$$

Correlation of coefficient can be calculated by using the following formula:

$$r = \frac{xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}} = \frac{1980259.49}{\sqrt{148721.28} \sqrt{31505855.24}} = \frac{1980259.49}{2164622.63}$$

$$r = 0.91 \quad r^2 = 0.84$$

$$P.Er. = 0.6745 \frac{1-r^2}{\sqrt{n}} = 0.6745 \frac{1-0.84}{\sqrt{5}} = 0.048 \quad 6P.Er = 0.29$$

APPENDIX-R (2)

Correlation between Net Income and Loan and Advances of EBL

F/Y	Net Income (X)	Loan & Advances (Y)	$x = x - \bar{x}$	$y = [y - \bar{y}]$	x^2	y^2	xy
2006/2007	237.2	10136.20	-253.86	-9000.06	64444.90	81001080.00	2284755.23
2007/2008	296.4	14082.70	-194.66	-5053.56	37892.52	25538468.67	983725.99
2008/2009	451.2	18836.40	-39.86	-299.86	1588.82	89916.02	11952.42
2009/2010	638.7	24469.60	147.64	5333.34	21797.57	28444515.56	787414.32
2010/2011	831.8	28156.40	340.74	9020.14	116103.75	81362925.62	3073522.50
	X = 491.06	Y = 19136.26			241827.55	216436905.9	7141370.46

Now, we have

$$N=5$$

$$\sum x^2 = 241827.55$$

$$\sum y^2 = 216436905.9$$

$$\sum xy = 7141370.46$$

Correlation of coefficient can be calculated by using the following formula:

$$r = \frac{xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}} = \frac{7141370.46}{\sqrt{241827.55} \sqrt{216436905.9}} = \frac{7141370.46}{7234667.01}$$

$$r = 0.99 \quad r^2 = 0.98$$

$$P.Er. = 0.6745 \frac{1-r^2}{\sqrt{n}} = 0.6745 \frac{1-0.98}{\sqrt{5}} = 0.006 \quad 6P.Er = 0.04$$

APPENDIX-S (1)

Co-efficient of Correlation between Interest Earned to Loan and Advances

Correlation between Interest Earned to Loan and Advances of SCBNL

F/Y	Interest Earned (X)	Loan & Advances (Y)	$x = x - \bar{x}$	$y = [y - \bar{y}]$	x^2	y^2	xy
2006/2007	1189.6	8935.42	-434.82	-3623.26	189070.17	13127984.04	1575471.42
2007/2008	1411.98	10502.64	-212.44	-2056.04	45131.60	4227284.03	436788.40
2008/2009	1591.2	13718.6	-33.22	1159.92	1103.70	1345423.69	-38535.00
2009/2010	1887.22	13679.76	262.80	1121.08	69062.79	1256829.34	294618.63
2010/2011	2042.11	15956.96	417.69	3398.28	174463.27	11548334.14	1419422.45
	1624.422	12558.676			478831.53	31505855.24	3687765.91

Now, we have

N=5

$\sum x^2 = 478831.53$

$\sum y^2 = 31505855.2$

$\sum xy = 3687765.91$

Correlation of coefficient can be calculated by using the following formula:

$$r = \frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}} = \frac{3687765.91}{\sqrt{478831.53} \sqrt{31505855.24}} = \frac{3687765.91}{3884069.63}$$

$$r = 0.95 \quad r^2 = 0.902$$

P.Er. = $0.6745 \frac{1-r^2}{\sqrt{n}} = 0.6745 \frac{1-0.90}{\sqrt{5}} = 0.03$ 6P.Er = 0.18

APPENDIX-S (2)

Correlation between Interest Earned to Loan and Advances of EBL

F/Y	Interest Earned (X)	Loan & Advances (Y)	$x = x - \bar{x}$	$y = [y - \bar{y}]$	x^2	y^2	xy
2006/2007	770.35	10136.20	-773.97	-9000.06	599026.47	81001080.00	6965758.44
2007/2008	967.48	14082.70	-576.84	-5053.56	332742.08	25538468.67	2915085.44
2008/2009	1329.85	18836.40	-214.47	-299.86	45996.52	89916.02	64310.37
2009/2010	1852.35	24469.60	308.03	5333.34	94883.71	28444515.56	1642839.39
2010/2011	2801.56	28156.40	1257.24	9020.14	1580657.45	81362925.62	11340498.85
	1544.318	19136.26			2653306.23	216436905.9	22928492.50

Now, we have

$$N=5 \quad \sum x^2=2653306.23$$

$$\sum y^2 =216436905.9$$

$$\sum xy=22928492.50$$

Correlation of coefficient can be calculated by using the following formula:

$$r = \frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}} = \frac{22928492.50}{\sqrt{2653306.23} \sqrt{216436905.9}} = \frac{22928492.50}{23964001.98}$$

$$r =0.96 \quad r^2=0.92$$

$$P.Er. = 0.6745 \frac{1-r^2}{\sqrt{n}} = 0.6745 \frac{1-0.92}{\sqrt{5}} = 0.024 \quad 6P.Er =0.14$$

APPENDIX-T (1)

Co-efficient of Correlation between Non performing Loan and Total Loan and Advances

Correlation between Non performing Loan and Total Loan and Advances of SCBNL

F/Y	NPL (X)	Loan & Advances (Y)	$x = x - \bar{x}$	$y = [y - \bar{y}]$	x^2	y^2	xy
2006/2007	195.93	8935.42	53.76	-3623.26	2890.14	13127984.04	-194786.24
2007/2008	197.02	10502.64	54.85	-2056.04	3008.52	4227284.03	-112773.57

2008/2009	128.72	13718.6	-13.45	1159.92	180.90	1345423.69	-15600.98
2009/2010	91.04	13679.76	-51.13	1121.08	2614.28	1256829.34	-57321.02
2010/2011	98.14	15956.96	-44.03	3398.28	1938.64	11548334.14	-149626.44
	142.17	12558.676			10632.48	31505855.24	-530108.26

Now, we have

$$N=5 \quad \sum x^2 = 10632.48$$

$$\sum y^2 = 31505855.24$$

$$\sum xy = -530108.26$$

Correlation of coefficient can be calculated by using the following formula:

$$r = \frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}} = \frac{-530108.26}{\sqrt{10632.48} \sqrt{31505855.24}} = \frac{-530108.26}{578779.21}$$

$$r = -0.92 \quad r^2 = 0.846$$

$$P.Er. = 0.6745 \frac{1-r^2}{\sqrt{n}} = 0.6745 \frac{1-0.85}{\sqrt{5}} = 0.045 \quad 6P.Er. = 0.27$$

APPENDIX-T (2)

Correlation between Non performing Loan and Total Loan and Advances of EBL

F/Y	NPL (X)	Loan & Advance s (Y)	$x = x - \bar{x}$	$y = [y - \bar{y}]$	x^2	y^2	xy
2006/2007	128.73	10136.20	22.33	-9000.06	498.81	81001080.00	-201007.34
2007/2008	112.66	14082.70	6.26	-5053.56	39.24	25538468.67	-31655.50
2008/2009	128.09	18836.40	21.69	-299.86	470.63	89916.02	-6505.16
2009/2010	117.45	24469.60	11.05	5333.34	122.19	28444515.56	58954.74
2010/2011	45.05	28156.40	-61.35	9020.14	3763.33	81362925.62	-553349.51
	106.396	19136.26			4894.19752	216436905.9	-733562.77

Now, we have

$$N=5 \quad \sum x^2 = 4894.19752$$

$$\sum y^2 = 216436905.9$$

$$\sum xy = -733562.77$$

Correlation of coefficient can be calculated by using the following formula:

$$r = \frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}} = \frac{-733562.77}{\sqrt{4894.19752} \sqrt{216436905.9}} = \frac{-733562.77}{1029215.71}$$

$$r = -0.71 \quad r^2 = 0.50$$

$$\text{P.Er.} = 0.6745 \frac{1-r^2}{\sqrt{n}} = 0.6745 \frac{1-0.50}{\sqrt{5}} = 0.151 \quad 6\text{P.Er.} = 0.90$$

Appendix –U (1)

Trend value of Loan and Advances

Trend value of Loan and Advances of SCBNL (2007-2011)

Year (X)	Loan and Advances(Y)	$x = X - 2009$	x^2	xY	$y = a + bx$ $y = 12558.68 + 1722.02x$
2007	8935.42	-2	4	-17870.84	9114.64
2008	10502.64	-1	1	-10502.64	10836.66
2009	13718.60	0	0	0	12558.68
2010	13679.76	1	1	13679.76	14280.70
2011	15956.96	2	4	31913.92	16002.72
	62793.38		10	17220.20	

Now, we have

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

$$b = \frac{\sum xY}{x^2}$$

$$a = \frac{62793.38}{5}$$

$$b = \frac{17220.2}{10}$$

$$a = 12558.68$$

$$b = 1722.02$$

Trend Value of Loan and Advances of SCBNL (2012-2016)

Year(X)	$x = (X - 2009)$	Trend Value $y = a + bx$
2012	3	17724.74
2013	4	19446.76
2014	5	21168.78
2015	6	22890.8
2016	7	24612.82

Appendix –U2

Trend value of Loan and Advances of EBL (2007-2011)

Year (X)	Loan and Advances(Y)	$x = X - 2009$	x^2	xY	$y = a + bx$ $y = 19136.26 + 4642.73x$
2007	10136.20	-2	4	-20272.40	9850.80
2008	14082.70	-1	1	-14082.70	14493.53
2009	18836.40	0	0	0	19136.26
2010	24469.60	1	1	24469.60	23778.99
2011	28156.40	2	4	56312.80	28421.72
	95681.30		10	46427.30	

Now, we have

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

$$b = \frac{\sum xY}{x^2}$$

$$a = \frac{95681.30}{5}$$

$$b = \frac{46427.30}{10}$$

$$a = 19136.26$$

$$b = 4642.73$$

Trend Value of Loan and Advances of EBL (2012-2016)		
Year(X)	$x = (X - 2009)$	Trend Value $y = a + bx$
2012	3	33064.45
2013	4	37707.18
2014	5	42349.91
2015	6	46992.64
2016	7	51635.37

Appendix-V1

Trend Value of Total Deposit

Trend value of Total Deposit of SCBNL (2007-2011)

Year (X)	Total Deposit(Y)	$x = X - 2009$	x^2	xY	$y = a + bx$ $y = 29597.12 + 3494.72x$
2007	23061.03	-2	4	-46122.10	22607.68
2008	24647.02	-1	1	-24647.00	26102.40
2009	29744.00	0	0	0	29597.12
2010	35350.82	1	1	35350.82	33091.84
2011	35182.72	2	4	70365.44	36586.55
	147985.59		10	34947.18	

Now, we have

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

$$b = \frac{\sum xY}{x^2}$$

$$a = \frac{147985.59}{5}$$

$$b = \frac{34947.18}{10}$$

$$a = 29597.12$$

$$b = 3494.72$$

Trend Value of Total Deposit of SCBNL (2012-2016)		
Year(X)	$x = (X - 2009)$	Trend Value $y = a + bx$
2012	3	40081.27
2013	4	43575.99
2014	5	47070.71
2015	6	50565.43
2016	7	54060.14

Appendix-V2

Trend value of Total Deposit of EBL (2007-2011)

Year (X)	Total Deposit (Y)	$x = X - 2009$	x^2	xY	$y = a + bx$ $y = 25244.02 + 6139.65x$
2007	13802.40	-2	4	-27604.80	12964.72
2008	18186.20	-1	1	-18186.20	19104.37
2009	23976.30	0	0	0.00	25244.02
2010	33322.90	1	1	33322.90	31383.67
2011	36932.30	2	4	73864.60	37523.32
	126220.10		10	61396.50	

Now, we have

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

$$b = \frac{\sum xY}{x^2}$$

$$a = \frac{126220.10}{5}$$

$$b = \frac{61396.50}{10}$$

$$a = 25244.02$$

$$b = 6139.65$$

Trend Value of Total Deposit of EBL (2012-2016)		
Year(X)	$x = (X - 2009)$	Trend Value $y = a + bx$
2012	3	43662.97
2013	4	49802.62
2014	5	62081.92
2015	6	62081.92
2016	7	68221.57

Appendix-W1

Trend Value of Net Profit

Trend value of Net Profit of SCBNL (2007-2011)

Year (X)	Net Profit (Y)	$x = X - 2009$	x^2	xY	$y = a + bx$ $y = 856.07 + 118.77x$
2007	658.76	-2	4	-1317.52	618.53
2008	691.67	-1	1	-691.67	737.30
2009	818.92	0	0	0	856.07
2010	1025.11	1	1	1025.11	974.83
2011	1085.87	2	4	2171.74	1093.60
	4280.33		10	1187.66	

Now, we have

$$a = \frac{\sum Y}{N} \qquad b = \frac{\sum xY}{x^2}$$

$$a = \frac{4280.33}{5} \qquad b = \frac{1187.66}{10}$$

$$a = 856.07 \qquad b = 118.77$$

Trend Value of Net Profit of SCBNL (2012-2016)		
Year(X)	$x = (X - 2009)$	Trend Value $y = a + bx$
2012	3	1212.36
2013	4	1331.13

2014	5	1449.90
2015	6	1568.66
2016	7	1687.43

Appendix- W2

Trend value of Net Profit of EBL (2007-2011)

Year (X)	Net Profit (Y)	$x = X - 2009$	x^2	xY	$y = a + bx$ $y = 491.06 + 153.15x$
2007	237.20	-2	4	-474.40	184.76
2008	296.40	-1	1	-296.40	337.91
2009	451.20	0	0	0.00	491.06
2010	638.70	1	1	638.70	644.21
2011	831.80	2	4	1663.60	797.36
	2455.30		10	1531.50	

Now, we have

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

$$b = \frac{\sum xY}{x^2}$$

$$a = \frac{2455.30}{5}$$

$$b = \frac{1531.50}{10}$$

$$a = 491.06$$

$$b = 153.15$$

Trend Value of Net Profit of EBL (2012-2016)

Year(X)	$x = (X - 2009)$	Trend Value $y = a + bx$
2012	3	950.51
2013	4	1103.66
2014	5	1256.81
2015	6	1409.96
2016	7	1563.11

Appendix-X1

Trend Value of Non performing Loan

Trend value of Nonperforming Loan of SCBNL (2007-2011)

Year (X)	NPL (Y)	$x = X - 2009$	x^2	xY	$y = a + bx$ $y = 142.17 + (-30.16)x$
2007	195.93	-2	4	-391.86	202.48

2008	197.02	-1	1	-197.02	172.33
2009	128.72	0	0	0	142.17
2010	91.04	1	1	91.04	112.01
2011	98.14	2	4	196.28	81.86
	710.85		10	-301.56	

Now, we have

$$a = \frac{\sum Y}{N} \qquad b = \frac{\sum xY}{x^2}$$

$$a = \frac{710.85}{5} \qquad b = \frac{-301.56}{10}$$

$$a = 142.17 \qquad b = -30.16$$

Trend Value of Nonperforming Loan of SCBNL (2012-2016)		
Year(X)	$x = (X - 2009)$	Trend Value $y = a + bx$
2012	3	51.70
2013	4	21.55
2014	5	-8.61
2015	6	-38.77
2016	7	-68.92

Appendix-X2

Trend value of Nonperforming Loan of EBL (2007-2011)

Year (X)	NPL (Y)	$x = X - 2009$	x^2	xY	Trend Value $y = a + bx$ $y = 106.40 + (-16.26)x$
2007	128.73	-2	4	-257.46	138.91
2008	112.66	-1	1	-112.66	122.65
2009	128.09	0	0	0	106.40
2010	117.45	1	1	117.45	90.14
2011	45.05	2	4	90.1	73.88
	531.98		10	-162.57	

Now, have

$$a = \frac{\sum Y}{N} \qquad b = \frac{\sum xY}{x^2}$$

$$a = \frac{531.98}{5} \qquad b = \frac{-162.57}{10}$$

$$a = 106.40 \qquad b = -16.26$$

Trend Value of Nonperforming Loan of EBL (2012-2016)		
Year(X)	$x = (X - 2009)$	Trend Value $y = a + bx$
2012	3	57.63

2013	4	41.37
2014	5	25.11
2015	6	8.85
2016	7	-7.40