INVESTMENT POLICY OF NEPAL SBI BANK LIMITED

Submitted By:

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Tribhuvan Multiple Campus

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A Thesis Submitted to:

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Tansen, Palpa

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This is to certify that ANJU DEVI PANDEY. has prepared the thesis entitled " INVESTMENT POLICY OF NEPAL SBI BANK LIMITED" under my supervision and guidance. I am satisfied with the work in terms of Research methodology, presentation and describes of data.

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This thesis is forwarded for examination. I recommend this thesis for approval and acceptance.

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(Mahesh Bhattarai)

Thesis Supervisor

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<u>APPROVAL SHEET</u>

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VIVA-VOCE SHEET

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And found the thesis to be the original work of the student written according to the prescribed format. We recommend the thesis to be accepted as partial fulfillment of the requirement for the Degree of Master of Business Studies (M.B.S.)

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DECLARATION

I hereby declare that the work reported in this entitled "**INVESTMENT POLICY OF NEPAL SBI BANK LIMITED"** submitted to Tribhuvan Multiple Campus, Palpa, Faculty of Management, Tribhuvan University, is my original work done in the form of partial fulfillment of the requirement for the Master of Business Studies (M. B. S.) under the supervision of **Mr.** Mahesh Bhattarai of Tribhuvan Multiple Campus, Palpa.

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Anju Devi Pandey.

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TABLE OF CONTENTS

LISTS OF TABLES

LIST OF FIGURES

Page No.

LIST OF ABBREVIATION

CD Ratio	=	Credit Deposit Ratio
CRR	=	Cash Reserve Ratio
CV	=	Coefficient of Variation
EPS	=	Earning Per Share
FDR	=	Fixed Deposit Receipt
Forex	=	Foreign Exchange
FY	=	Fiscal Year
GDP	=	Gross Domestic Product
IFIC Bank	=	International Finance Investment & Commercial Bank Limited
JVBs	=	Joint Venture Banks
L/C	=	Letter of Credit
MIS	=	Management Information System
NBL	=	Nepal Bank Limited
NEPSE	=	Nepal Stock Exchange
NIBL	=	Nepal Investment Bank Limited
NIM	=	Net Interest Margin
NPA	=	Non-Performing Assets
NPL	=	Non-Performing Loan
NRB	=	Nepal Rastra Bank
NRs.	=	Nepalese Rupees
NSBL	=	Nepal SBI Bank Limited
OBS	=	Off-Balance Sheet
P.Er.	=	Probable Error
RBB	=	Rastriya Banijya Bank Limited
ROA	=	Return on Assets
ROE	=	Return on Equity
SBI	=	State Bank of India
SCBNL	=	Standard Chartered Bank (Nepal) Limited.
S.D.	=	Standard Deviation

CHAPTER - I

INTRODUCTION

1.1 Background of the Study

It is obvious that economic development is impossible without the development of different sectors like Agriculture, Industry, Trade etc. of the country. So, development of these sectors needs a regular supply of financial resources. In developing countries there is always shortage of the capital for the development activities. It is not possible to handle and develop all the sectors by the Government alone at a time. Private people also can not undertake large business because per capita income of the people is very low while their propensity to consume is very high. Due to low income their saving is very low and capital formation is very low. So their saving is not sufficient for carrying on development works.

"Economic development demands transformation of savings or investible resources into the actual investment. It is the financial institution that transfer funds from surplus spending units to deficit units" (Nepal Rastra Bank, 1996: 43)

Capital formation is one of the important factors in economic development. The capital formation leads to increase in the size of the national output, income, and employment, solving the problem of inflation and balance of payment and making the economy free from the burden of foreign debt. Domestic capital formation helps in making a country self-sustainable. Profit made by business community constituted the major part of the saving of the community and what was saved was assumed to be invested.

Banking sector plays an important role in the economic development of the country. Commercial Banks are one of the vital aspects of this sector, which deals in the process of channeling the available resources in the needed sector. It is the intermediary between the deficit and surplus of financial resources. Financial institutions like banks are a necessity to collect scattered saving and put them into productive channels. In the absence of such institutions it is possible that the saving will not be safely and profitably utilized within the economy. It will be diverted aboard or channeled into unproductive conspicuous consumption including real estate speculation.

"The business of banking is one of collecting funds from the community and extending credit (making loans) to people for useful purposes" (Edmister, 1980: 73). Loaning money has always been a basic function of commercial bank. After providing for its cash need a bank normally seeks to loan as large a portion of its deposit and excess capital as it prudentially can. The remaining portion of its investible fund is placed in suitable securities (American Institute of Banking, 1966: 163).

Loans are an essential aspect of commercial bank. "First, income from loan contributes substantially to the revenues and profit of the bank. Second, lending money to people in the community strengthens the community- bank relationship. Third, lending money spurs business development and supports a growing economy" (Edmister, 1980: 82). Credit being the most important function of commercial banks, affects overall development of the country. So far as pace of economic development is considered, it is directly related to the quality and quantity of the credit, which is derived from various financial institutions, especially commercial banks in Nepal.

Investment operation of commercial banks is very risky one. For this, commercial banks have to pay due consideration while formulating Investment Policy. A healthy development of any commercial bank depends upon its investment policy. A good investment policy attracts both borrowers and lenders, which helps to increase the volume and quality of deposits, loans and investment.

1.2 Statement of the Problem

"The major problem in almost all underdeveloped countries and Nepal is no exception, is that of capital formation and proper utilization. In such countries, the commercial banks have to shoulder more responsibilities and act as development banks, due to the lack of other specialized institutions" (Dali, 1974: 52).

Credit extended by commercial banks is directly related to the National Interest of the country.So the investment policy of the commercial banks should be very sound and farsighted."A policy is a statement or general understanding which provides guidance in decision making to members of an organization in respect to any course of action"(Gautam, 2002:33). Defining the commercial banks investment policy,Diana Mc

Naughton (1994) says that investment policy should incorporate several elements such as regulatory environment, the availability of the funds, the selection of the risk, loan portfolio balance and term structure of the liabilities.

Project appraisal method followed by commercial banks is also not scientific one. So a large volume of credit extended by commercial banks is drifting from basic credit principle and found to have lower productivity. Loan supervision and follow up regarding whether clients are properly utilizing the bank investment is found to be poor in many of the commercial banks. Due to all these reasons, the proportion of non-performing asset on total loan and advances has been increasing significantly. It has become a major problem of two large commercial banks, Nepal Bank Ltd and Rastriya Banijya Bank, and now private sector joint venture banks are also suffering from the NPA problem within the short time span of their operation.

Credit extended by commercial banks to agricultural and industrial sector is not satisfactory. Even if NRB has regulated to invest in priority sector like agriculture, small-scale industries and service, all the commercial banks have not yet financed full 12% of their loans to this sector. Commercial banks, including NSBL, are following conservative loan policy that is based on string security. They do not consider the profit potential of the project. There is not good trade-off between liquidity and profitability of banks.

Similarly, the investment portfolio position of the banks is not satisfactory. They are not following a sound diversification principle. Portfolio theory gives the concept of investment in a very good way that "do not put all eggs in a single basket". Diversity of funds reduces the risk. One-time commercial banks had invested a large proportion of their loan to Garment, Hotel and Carpet industries. But now these sectors became sick and banks are in trouble of their loan repayment.

The directions and guidance provided by Nepal Rastra Bank are the major policy statements for Nepalese commercial banks. A long term and published policy about their operation is not found even in the joint venture banks. Even if some how they have formulated some procedural guidelines they are failing in proper implementation due to poor supervision.

Thus, in this scenario of Nepalese commercial banking sector, this study mainly seeks the answers of the following specific problems related to investment policy of Nepal NSBL Bank Ltd.:

a) What is the proportion of Non-Performing Asset on total loans and advances of the bank?
b) What is the portfolio behavior of the bank?
c) What is the proportion of bank's investment on priority sector?
d) What is the relationship of total deposit on total investment and total investment on total net profit of the bank?

1.3 Objective of the Study

The main objective of the study is to evaluate the investment policy of NSBL Bank Ltd. However, the specific objectives of the study are:

- To find out the Non Performing Assets position of the bank,
- To evaluate the portfolio management of the bank,
- To find out the bank's investment on priority sector,
- To analyze deposit utilization and its relationship with total investment and net profit of the bank, and
- To suggest measures to improve the investment policy of the bank.

1.4 Significance of the Study

This study mainly fills a research gap on the study of investment policy of NSBL. Definitely, the study will provide a useful feedback to the policy makers of the bank and also becomes a useful reference for other commercial banks of Nepal and central bank (NRB) for the formulation of appropriate strategies. This study evaluates the investment policy of NSBL and finds its loopholes and significantly contributes to make the policy sound.

1.5 Focus of the Study

A bank always puts in efforts to maximize its profitability. The profit is excess of income over expenses. To maximize profit, income should be reasonably excess over expenses. The major source of income of a bank is interest income from loans and investments and fee based income. As loan and advances dominate the asset side of the balance sheet of any bank; similarly earnings from such loan and advances occupy a major space in income statement of the bank. However, it is very important to be reminded that most of the bank failures in the world are due to the shrinkage in the value of loans and advances. Hence loan is known as risky asset and investment operation of commercial banks is very risky one. Risk of non-repayment of loan is known as credit risk or default risk. Performing loans have multiple benefits to the society by helping for the growth of economy while non-performing loans erodes even existing capital. Considering the importance of lending to the individual banks and also

to the society it serves, it is imperative that the bank meticulously plans its credit operations. Sound credit policy has the following objectives:

- To have performing assets.
- To contribute to economic development.
- To give guidance to lending officials.
- To establish a standard for control, etc.

Considering these facts, this study mainly focuses on the investment policy of joint venture commercial banks in Nepal with special reference to the NSBL Bank Limited.

1.6 Limitations of the Study

This study has the following limitations:

a) This is a case study of NSBL and findings of the study can not be generalized.
b) The study is limited to five years period.
c) The study is based on secondary data collected from the bank, which may not be far from limitation due to inherent characters.
d) Among many factors affecting investment decision, only certain factors i.e. liquidity, profitability, diversification, growth etc. have been considered.

1.7 Organization of the Study

The whole study has been divided into five chapters as:

Chapter 1. Introduction

This chapter includes the basic aspect of the whole thesis. In this chapter we have discussed about the objective of the study, problem faced while doing the study and also the limitations while preparing the thesis.

Chapter 2. Review of Literature

In this chapter, focus has been made on the review of literature that is relevant to the investment policy of commercial banks.

Chapter 3. Research Methodology

This chapter describes the methods and process applied in the entire subject of the study.

Chapter 4. Presentation and Analysis of Data

In this chapter, the data collected from different sources have been presented and analyzed

Chapter 5. Summary, Conclusion and Recommendations

Lastly, this chapter has made a summary of whole thesis and made some conclusion of the study. Moreover the recommendations relating to the study have also been presented in this section.

CHAPTER – II

REVIEW OF LITERATURE

In this chapter, focus has been made on the review of literature that is relevant to the investment policy of commercial banks. Review of literature is basically a stock taking of available literature in the field of research. Every possible effort has been made to grasp knowledge and information that is available from libraries, document collection centers, other information managing bureaus and concerned commercial bank. This chapter helps to take adequate feed back to broaden the information base and inputs to the study. Conceptual framework given by different authors, research scholars, practitioners etc. are reviewed from books, research papers, annual reports, articles etc., which are arranged into the following order:

(a) Conceptual framework
(b) Review of related studies
- Review of research papers
- Review of articles
- Review of Ph. D. Thesis
- Review of Master's Degree Thesis

(c) Justification of the study/ Research Gap

2.1 Conceptual Framework

A Commercial Bank is business organization that receives and holds deposits of fund from others, makes loans or extends credits and transfers funds by written order of deposits (Grolier Incorporated, 1984).

Commercial Bank Act of Nepal (1974) has defined that "A commercial bank is one which exchanges money, deposits money, accepts deposits, grant loans and performs commercial banking functions and which is not a bank meant for co-operative, agriculture, industries or for such specific purpose."

Commercial bank is a corporation, which accepts demand deposits subject to check and makes short-term loans to business enterprises, regardless of the scope of its other services (American Institute of Banking, 1972: 345).

This Act has laid emphasis on the functions of commercial bank while defining it. Commercial banks provide short-term debts necessary for trade and commerce. They take deposits from the public and grant loans in different forms. They purchase and discount bills for exchange, promissory notes and exchange foreign currency. They discharge various functions on the behalf of their customers provided that they are paid for their services.

Optimal investment decision plays a vital role in each and every organization. But especially for the commercial banks and other financial institutions the sound knowledge of investment is the must because this subject is relevant for all surrounding that mobilize funds in different sectors in view of return.

As it is concerned to the commercial banks and other financial institutions, they must mobilize (i.e., investment on different sectors) their collections (deposits) and other funds towards the profitable, secured and marketable sectors so that they will be in profit. For this purpose these banks and financial institutions should gather the sufficient information about the firm (client) to which supposed to be invested. These information include as financial background, nature of business as well as its ability to repay the loan back. These all information should be gathered from the viewpoint of security.

The income and profit of the bank depend upon the lending procedure applied by the bank. As well as lending policy and investment in different securities also affect the income and profit. In the investment procedures and policies it is always taken in mind that "the greater the credit created by the bank, 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 savings of a developing country like Nepal.

The sound policies help commercial banks maximize quality and quantity of investment and thereby, achieve the own objective of profit maximization and social welfare. Formulation of sound investment policies and coordinated and planned efforts pushes forward the forces of economic growth.

Commercial banks, as financial institutions, perform a number of internal functions. Among them, providing credit is considered as most important one. In the words of H. D Crosse (1963) , " Commercial banks bring into being the most important ingredient of the money supply, demand deposit through the creation of credit in the form of loan and investments. Investment operation of commercial banks is very risky one. For this, commercial banks have to pay due consideration while formulating investment policy regarding loan investment. Investment policy is one facet of the overall spectrum of policies that guide banks investment operations. A healthy development of any bank depends heavily upon its investment policy. A sound and viable investment policy can attract both borrowers and lenders, which helps to increase the volume and quality of deposits, loan and investment. The loan provided by commercial bank is guided by several principles such as length of time, their purpose, profitability, safety, etc. These fundamental principles of commercial bank's investment are fully considered while making investment policy. Emphasizing upon this H.D. Crosse stated, "The investment policy should be carefully analyzed". Commercial bank should be careful while performing the credit creation function. Investment policy should ensure minimum risk and maximum profit from lending.

Diana Mc Naughton (1994) in her research paper 'Banking institution in developing markets' stated that, "Investment policy should incorporate several elements such as regulatory environment, the availability of funds, the selection of risk, loan portfolio balance and term structure of the liabilities".

According to J.H. Clemens (1963), "Commercial bank should consider the national interest followed by borrower's interest and the interest of the bank itself before investing to the borrowers". To further pursue his view, bank lending must be for such purposes of the borrowers that are in keeping with the national policy and bank’s overall investment policy. A bank’s overall investment: -

a) Should be basically of short term characters,
b) Should be well spread,
c) Should be repayable on demand,
d) Must be profitable
e) Must be well in adequate security.

Thus, commercial banks have to consider government and Nepal Rastra Bank’s instructions and national and their own interest as well. Good investment policy ensures maximum amount of investment to all sectors with proper utilization.

2.1.1 Evolution of Financial System in Nepal (Early Era)

In almost all countries the logical historical order of the development of financial structure has gone through different stages. In Nepal, the first stage starts from rudimentary economy in which the commodity money such as gold and silver coins generally accepted as a means of payment. At 12th century silver coinage came into existence in Nepal. But no financial intermediation was possible in this stage.

The second major stage is the development of interest bearing debt such as bonds, mortgages and loans. In the year 879/80 A.D., we came across the term 'Debt' in Nepal. At the end of the 14th century we further came across the term 'Tanka Dhari', meaning money dealer, which is one of the sixty-four casts classified on the basis of occupation. In historical order of development an organized market was missed out in Nepal. The development of the market is seen only in the last stage. Treasury bills were only issued for the first time in 1962. Government bonds were introduced in February 1964 (Nepal Rastra Bank, 1996:27-40).

2.1.2 Evolution of Banking System

In Nepal financial system is still in evolutionary phase. The existence of unorganized money market consisting of Land-lords, Shahukars (Rich Merchants), Shopkeepers and other indigenous individual money lenders has acted as barriers to institutionalized credit.

During the Prime Ministership of Ranoddip Singh around 1877 A.D., a number of economic and financial reforms were introduced. The establishment of the "Tejarath Adda" fully subscribed by the government in the Kathmandu valley was one of them. The "Tejarath Adda" disbursed credit to the people especially on the collateral of gold and silver. Thus the establishment of the "Tejarath Adda" could be regarded as the premier foundation of modern banking in Nepal (Nepal Rastra Bank, 1996:27-40).

Beginning of modern banking was the establishment of Nepal Bank Limited on November 1937. It laid the foundation of modern financial system in Nepal. It was a joint venture between government and the private sector. After then, the Nepal Rastra Bank came into existence as the central bank on April 26, 1956. It had authorized capital of Rs. 10 million fully subscribed by the government. It was empowered by act to have direct control over financial institutions within the country . It started issuing currency in 1959 A.D. The second commercial bank Rastriya Banijya Bank was established in 1966 A.D.

Besides Nepal Bank Limited and Rastriya Banijya Bank, other commercial banks didn't come into existence until 1984 A.D (Nepal Rastra Bank, 1996:27-40). The commercial banking act 1974 was amended in 1984 A.D. to increase the competition between commercial banks. As per the provision made in this act, private sector (including foreign investment) was given freedom in opening commercial bank. Consequently, Nepal Arab Bank Limited was established in 1984 A.D. as a joint venture bank (Joshi, 2000: 217-218). Likewise Nepal Indo-suez Bank Ltd. and Nepal Grindlays Bank Ltd. were established under joint venture in 1986 and 1987 A.D. respectively.

After the initiation of democracy in 1990 A.D., NRB adopted a more liberal policy in establishing the commercial banks. Now the number reached 19, more than three folds.

Following are the lists of commercial Banks operating in the Nepalese financial market:

List of Licensed Commercial Banks

Mid-January 2013

	Commercial Banks	Operation Date (A.D)	Head Office
1	Nepal Bank Limited	1937/11/15	Kathmandu
2	Rastriya Banijya Bank	1966/01/23	Kathmandu
3	Nabil Bank Limited(established as Nepal Arab Bank Limited)	1984/07/16	Kathmandu
4	Nepal Investment Bank Limited (established as Nepal Indo - Suez Bank Ltd.)	1986/02/27	Kathmandu
5	Standard Chartered Bank Limited (established as Nepal Grindlays Bank Ltd.)	1987/01/30	Kathmandu
6	Himalaya Bank Limited	1993/01/18	Kathmandu
7	Nepal Bangladesh Bank Limited	1993/06/05	Kathmandu
8	Nepal NSBL Bank Limited	1993/07/07	Kathmandu
9	Everest Bank Limited	1994/10/18	Kathmandu
10	Bank of Kathmandu Limited	1995/03/12	Kathmandu
11	Nepal Credit & Commerce Bank Limited(established as Bank of Cylon)	1996/10/14	Siddharthanagar
12	Lumbini Bank Limited	1998/07/17	Narayangadh
13	Nepal Industrial & Commercial Bank Ltd.	1998/07/21	Biratnagar
14	Machhapuchhre Bank Limited	2000/10/03	Pokhara

15	Kumari Bank Limited	2001/04/03	Kathmandu
16	Laxmi Bank Limited	2002/04/03	Birgunj
17	Siddhartha Bank Limited	2002/12/24	Kathmandu
18	Agriculture Development Bank Limited	2006/03/16	Kathmandu
19	Global Bank Limited	2007/01/02	Kathmandu
20	Citizens Bank International Limited	2007/06/21	Kathmandu
21	Prime Commercial Bank Limited	2007/09/24	Kathmandu
22	Sun Rises Bank Limited	2007/10/12	Kathmandu
23	Bank of Asian Limited	2007/10/12	Kathmandu
24	Development Credit Bank Limited	2007	Kathmandu
25	NMB Bank Limited	2008/06/02	Kathmandu
26	Kist Bank Limited	2009/03/07	Kathmandu
27	Janata Bank Limited	2010/04/05	Kathmandu
28	Megha Bank Nepal Limited	2010/07/23	Kathmandu
29	Commerce and Trust Bank Nepal Limited	2010/09/20	Kathmandu
30	Civil Bank Limited	2010/11/26	Kathmandu
31	Century Commercial Bank Limited	2011/03/10	Kathmandu

(Sources: Banking and Financial Statistic)

The banks are such types of Institutions, which deal in money and substitute for money. They deal with cash, credit and credit instruments. Good circulation of credit is very much important for the bank. Unsteady and unevenly flow of credit with ad-hoc decisions harms the economy and the bank as well . Thus , to collect fund and utilize it in a good investment, I s a very difficult and important task for such organization. An investment of fund may be the question of life and death for the bank.

"Investing involves making a current commitment of funds in order to obtain an uncertain future return. It is a risky business that demands information. To process information effectively and select the best investments require goals that are clear cut and realistic" (Clark, 1981: 53).

In the words of Gitman and Jochnk (1990), "Investment is any vehicle into which funds can be placed with the expectation that will preserve or increase in value and generate positive returns."

Dr. Preeti Singh (1985) has defined investment as "Investment is the employment of funds with the aim of achieving additional income or growth in value. The essential quality of an investment is that it involves 'waiting' for a reward."

According to V. K. Valla (1983: 2), there are basically three concepts of investment:

a) Economic investment – that is an economist's definition of investment.
b) Investment in a more general or extended sense which is used by 'the man of the street', and
c) The sense in which we are going to be very much interested, namely financial investment.

"For our purpose, in the study of financial institutions the investment problem will revolve around the concept of managing the surplus financial asset in such a way, which will lead to the wealth maximization and providing a significant further source of income. Thus the investment for various purposes will be the management of the surplus resources in such a way as to make it for providing benefits to the suppliers of the funds by letting third party to use such resources. However, the investments need to be a procedural task. It must follow a definite investment process, which definitely begins from the formulation of proper investment policy" (Dowrei and Fuller, 1950)

According to Sharpe, Alexandr and Baily (1999), "Investment can be categorized as Real investments and financial investments. Real investments generally involve some kinds of tangible asset, such as land, machineries or factories. Financial investments involve contracts written on pieces of paper, such as common stocks and bonds."

William F. Sharpe and Alexander J. Gorden (1998) define investment as, "Investment, in its broadest sense, means the sacrifice of certain present value for (possible uncertain) future value"

Frank K. Reilly (1991) defines investment as, "An investment may be defined as the current commitment of funds for a period of time to derive a future flow of funds that will compensate the investing unit for the time the funds are committed, for the expected rate of inflation and also for the uncertainty involved in the future flow of the funds".

Thus investment is the most important function of commercial banks. It is the long-term commitment of bank in the uncertain and risky environment. It is a very challenging task for commercial banks. So a bank has to be very cautious while investing their funds in various sectors. The success of a bank heavily depends upon the proper management of its investible funds.

Investment management of a bank is guided by the investment policy adopted by the bank. The investment policy of the bank helps the investment operation of the bank to be efficient and profitable by minimizing the inherent risk. Various authors have expressed their views regarding investment policies of commercial banks, their formulation and implementation differently.

According to S. P. Singh and S. Singh (1983), "The investment (credit) policies of banks are conditional, to great extent, by the national policy framework, every banker has to apply his own judgment for arriving at a credit decision, keeping, of course, his bank's credit policy also in mind".

They further stated, "The field of investment is more challenging as it offers relatively greater scope to bankers for judgment and discretion in selecting their loan portfolio. But this higher degree of freedom in the field of credit management is also accompanied by greater risk, particularly during recent years, the credit function has become greater complex."

James B. Bexley, (1987) express his views as, "Investment policy fixes responsibilities for the investment disposition of the banks assets in terms of allocating funds for investment and loan, and establishing responsibility for day to day management of those assets."

According to Chandler L. V. (1973), "A banker seeks optimum combination of earning, liquidity and safety while formulating investment policy".

"A sound investment policy of a bank is such that its funds are distributed on different type of assets with good profitability on the one hand and provides maximum safety and security to the depositors and banks on the other hand. Moreover, risk in banking sectors tends to be concentrated in the loan portfolio. Therefore the banks investment policy must ensure that it is sound and prudent in order to protect public funds. Bank makes a variety of loans to a wide variety of customers for different purposes. Therefore no uniform rules can be laid down to determine a portfolio of a bank. The environment in which it operates influences the investment policy of the bank. The nature and availability of funds also differ widely from one region to another within the country. For example scope of a bank operating in Jumla will be different from the scope of bank operating in Kathmandu. Therefore the investment policy to be applied in Kathmandu may not be applicable to the bank operating in Jumla" (Baidhya, 1999: 46-47).

Emphasizing the importance of investment policy, H. D. Crosse (1963) puts his view in this way, "Lending is the essence of commercial banking, and consequently the formulation and implementation of sound policies are among the most important responsibilities of bank directors and management. Well conceived lending policies and careful lending practices are essential if a bank is to perform its credit creating function effectively and minimize the risk inherent in any extension of credit".

He further adds, the formulation of sound lending policies for all banks should have adequate and careful consideration over community needs, size of loan portfolio, character of loan, credit worthiness of borrower and asset pledged to security borrowing , interest rate policy, etc.

Investment policy provides the bank several inputs through which they can handle their investment operation efficiently ensuring the maximum return with minimum exposure to risk, which ultimately leads the bank to the path of success.

According to Edward W. Reed, Richard V. Cotter, Edward K. Gill and Richard K. Smith (1980: 1-5),"Commercial banks still remain the heart of our financial system holding the deposits of millions of persons, governments and business units. They make funds available through their lending and investing activities to borrowers, individuals, business firms and governments. Commercial banks are the most important type of financial institutions in the nation in terms of aggregate assets." The primary function of commercial banks is the extension of credit to worthy borrowers. In making credit available, commercial banks are rendering a great social service. Through their actions, production is increased, capital investments are expanded, and a higher standard of living is realized. Although the investment activities of commercial banks are usually considered separately from lending, the economic effects and social results are the same.

Reed et al. (1980: 195) added that "The rate of return on assets is a valuable measure when comparing the profitability of one bank with another or with the commercial banking system. A low rate might be the result of conservative lending and investment policies or excessive operating expenses. Banks could, of course, attempt to offset this by adopting more aggressive lending and investment policies to generate more income"

Investment policies include credit analysis and its principal purpose is to determine the ability and willingness of a borrower to repay a requested loan in accordance with the terms of the loan contract. Factors considered in credit analysis are capacity to borrow, characters (honesty, integrity, industry, morality, ability to create income, ownership of assets, economic conditions, etc. Loans are the most important assets held by banks and bank lending provides the bulk of bank income (Reed et al, 1980: 203, 235).

In broad sense the investment operation of bank includes lending and investing in different types of securities. We can say lending is the primary investment activity and investment in different types of securities is the secondary investment activity of the commercial banks.

Reed et al. (1980: 242) further stressed that “More and more banks have developed formal, written lending policies in recent years. They provide guidance for lending officers and there by establish a greater degree of uniformity in lending practices. Since lending is important both to the bank and to the community it serves, loan policies must be worked out carefully after considering many factors like:

- Capital position.
- Risk and profitability of various types of loans.

- Stability of deposits.
- Economic conditions.

- Influence of monetary and fiscal policy.
- Ability and experience of bank personnel.
- Credit needs of the area served"

"Every commercial bank has an investment policy, whether it is recognized or not. Even though a written statement of investment policy is desirable, few banks have them and few may not have them. The main objectors to a written investment policy are those who feel that the economic environment of banking changes so rapidly that a formal written statement would become dated within a short time. It is true that banking operates in a changing environment, but changes do not occur so rapidly that they cannot be incorporated into a written policy. The basic factors that will determine the objectives of a bank's investment policy are its income and its liquidity needs, and management's willingness to trade liquidity for greater income opportunities and vice-versa, which means accepting greater or lesser degrees of risk. Formulation of an investment policy must give cognizance to the entire risk exposure that bank management is willing to assume as well as the risk carried by the securities that comprise the investment account. One of the acceptable methods of reducing risk in the investment portfolio of a commercial bank is by diversification – a basic and important rule of any investment policy. Risks cannot be completely avoided by diversification, but they can be reduced. A commercial bank is most concerned with quality and maturity diversification so as to minimize the risk. A statement of investment policy should designate the person responsible for handling the investment program. This is fundamental to the efficient operation of an investment portfolio, in that "too many cooks may spoil the stew". Since the board of directors is responsible for the proper investment of the bank's funds, periodic reports regarding the investment

portfolio should be prepared for the board's use in evaluating investment management and establishing investment policy. The investment policy of a bank should be reviewed occasionally and modified as economic conditions change" (Reed et al., 1980: 378)

2.1.3 Features of a Sound Lending and Investment Policy

The income and profit of the bank depends upon its lending procedures, lending policy and investment of its funds in different securities. The greater the credit created by the bank, the higher will be the profitability. A sound lending and investment policy is not only prerequisite for banks profitability, but also crucially significant for the promotion of commercial savings of a backward country like Nepal.

Many authors have given some necessities or some of the main characteristics for sound lending and investment policies, which must be considered by the commercial banks:

(I) Safety and Security

The bank should never invest its funds in those securities, which are too volatile i.e., which are subject to too much depreciation and fluctuations because a little difference may cause a great loss. It must not invest its funds into speculative businessman who may be bankrupt at once and who may earn millions in a minute also. Security means adequate collateral having good value, which can be easily sold off if required at any point of time. The bank should accept that type of securities, which are commercial, durable and marketable having fair market value. For this purpose 'MAST' should be applied while reaching an investment decision, where MAST stands for,

M = Marketability,

A = Ascertain ability,

S = Stability,

T = Transferability.

(II) Profitability

A commercial bank can maximize its volume of wealth through maximization of return on their investments and lending. So, they must invest their funds where they can gain maximum profit. The profit of commercial banks depends on the interest rate, volume of loan, its time period and nature of investment in different securities.

(III) Liquidity

Liquidity is the ability of a firm to satisfy its short-term obligations when they become due for payment. People deposit money at the bank in different account with confidence that the bank will repay their money when they need. To maintain such confidence of the depositors, the bank must keep this point in mind while investing its excess funds in different securities, so that it can meet current or short-term obligations when they become due for payment.

(IV) Purpose of loan

From the viewpoint of security, a banker should always be known that why a customer is in need of loan. If a borrower misuses the loan granted by the bank, it can never repay and bank will possess heavy bad debts. Therefore in order to avoid this situation each and every bank should demand and examine all the essential detailed information about the scheme of the project or activities, before lending.

(V) Diversification

"A bank should not lay all its eggs on the same basket". This saying is very important to the bank and it should always be careful not to grant loan in only one sector. To minimize risk, a bank must diversify its investment on different sectors. Diversification of loan helps to sustain loss according to the law of average because if securities of a company deprived, there may be appreciation in the securities of other companies. In this way the loss can be minimized or recovered.

(VII) Tangibility

Though it may be considered that tangible property does not yield an income apart from direct satisfaction of possession of property, many times, intangible securities have lost their value due to price level inflation. A commercial bank should prefer tangible security to intangible one.

(VIII) Legality

Illegal securities will bring out many problems for the investor. A commercial bank must follow the rules and regulations as well as different directives issued by the central bank

(Nepal Rastra Bank), Ministry of finance, Ministry of law and other relevant authorities, while mobilizing its funds.

(IX) National Interest

In addition to its own profitability the Bank should also consider the national interest. Even though the Bank cannot get maximum return from such investment, it should carry out its obligation towards the society and the country. The Bank is required to invest on such sectors as per the Government and Nepal Rastra Bank's instruction. Investment on government bonds, priority and deprived sector lending are the examples of such investments.

2.2 Review of Related Studies

2.2.1 Review of Research Papers

There are not much articles published related to investment management in Nepal. Shiba Raj Shrestha (1998) has given a short glimpse on the "Portfolio management in commercial banks; theory and practice". Mr. Shrestha has highlighted following issues in the article. The portfolio management becomes very important both for individuals as well as institutional investors. Investors would like to select a best mix of investment assets subject to the following aspect:

- Higher return, which is comparable with alternative opportunities available according to the risk class of investors.
- Good liquidity with adequate safety of investment.
- Maximum tax concession.
- Economic, efficient and effective investment mix.
- Flexible investment.
- Certain capital gains.
- In view of above aspect, following strategies can be adopted:

- Do not hold any single security i.e.; try to have a portfolio of different securities.
- Do not put all the eggs in one basket i.e.; to have a diversified investment.
- Choose such a portfolio of securities, which ensures maximum return with minimum risk or lower return but with added objective of wealth maximization.

However, Mr. Shrestha has also presented following approach to be adopted for designing a good portfolio and its management:

- To find out the investible assets (generally securities) having scope for better returns depending upon individual characteristics like age, health, need, disposition, liquidity, tax liability, etc.
- To find out the risk of the securities depending upon the attitude of investor toward risk.
- To develop alternative investment strategies for selecting a better portfolio that will ensure a trade-off between risk and return, so as to attach the primary objective of wealth maximization at lower risk.
- To identify securities for investment to refuse volatility of return and risk.

Mr. Shrestha has presented two types of investment analysis techniques ie; fundamental analysis and technical analysis to consider any securities such as equity, debentures or bonds and other money and capital market instruments. He has suggested that the banks having international network can also offer access to global financial markets. He has pointed out the requirements of skilled manpower, research and analysis team and proper management information system (MIS) in any commercial bank to get success in portfolio management and customer's confidence.

According to Mr. Shrestha, the portfolio management activities of Nepalese commercial banks at present are in nascent stage. However, on the other hand, most of the banks are not doing such activities so far because of following reasons: -

- Unawareness of the clients about the service available.
- Hesitation of taking risk by the clients to use such facility.
- Lack of proper techniques to run such activities in the best and successful manner.

- Less developed capital market and availability of few financial instruments in the financial market.

Dr. Govind Bahadur Thapa (1994: 29-37) has expressed his view that the commercial banks including foreign joint venture banks seem to be doing pretty well in mobilizing deposits. Likewise, loans and advances of these banks are also increasing. But compared to the high credit needs particularly by the newly emerging industries, the banks still seem to lack adequate funds. The banks are increasing their lending to non-traditional sectors along with the traditional sectors.

Out of the different commercial banks, Nepal Bank Ltd. and Rastriya Banijya Bank are operating with a nominal profit and also turning towards negative from time to time. Because of non-recovery of accrued interest, the margin between interest income and interest expenses is declining. These banks have not been able to increase their income from commission and discount, through traditional off-balance sheet operations. On the contrary, they have got heavy burden of personnel and administrative overheads. Similarly, due to accumulated overdue and defaulting loans, profit position of these banks has been seriously affected.

On the other hand,the foreign venture banks have been functioning in an extremely efficient way.They are making huge profit year after year and have been distributing large amount of loans and dividends to its employees and shareholders. Because of their effective persuasion for loan recovery, overdue and defaulting loans have been limited resulting in high margins between interest income and interest expenses. Similarly, concentration of these banks to modern off-balance sheet activities and efficient personnel management has added to the maximization of their profits.

Dr. Sunity Shrestha (1993) in her research, "Investment planning of commercial banks in Nepal", has made remarkable efforts to examine the investment planning of commercial banks in Nepal. On the basis of the study she concludes that bank portfolio (loans and investment) of commercial banks has been influenced by the variable securities rates. Investment planning of commercial banks in Nepal is directly traced to fiscal policy of government and heavy regulatory procedure of the central bank (Nepal Rastra Bank). So the investments are not made in professional manner. Investment planning and operation of commercial banks in Nepal has not been found satisfactory in terms of profitability, liquidity, safety, productivity and social responsibility. To overcome this problem, she has suggested, "commercial banks should take their investment

function with proper business attitude and should perform lending and investment operation efficiently with proper analysis of the projects".

2.2.2 Review of Articles

In this section, effort has been made to examine and review of some related articles in different economic journals, World Bank discussion papers, magazines, newspapers and other related books and publications.

Krishna D. Bhattarai (2003) has presented an article about the "Non Performing Assets (NPA) Management". According to him, a loan is very easy term for a borrower when he has already taken and for a lender not availed. It is equally difficult for a borrower to avail and for lender to recover. From a banker’s view, it is just like a stone to roll down from the top of the hill while sanctioning, but too difficult to roll back the same stone to the top of the hill while recovering. A loan not recovered within the given time frame either in the form of interest servicing or principal repayment is called non-performing loan (NPL). There are other parameters as well to quantify an NPL. Security not to the extent of loan amount with specified safety margin, value of security not realizable, possession not as per the requirement of bank, conflict of charges are the other reason which causes difficulties while recovering the loan.

According to him NPL for a bank is like a developing cancer in a human body, which will collapse the whole bank if not managed in time. This is an important discipline in banking to prevent whole NPL or avoid situations for a loan to turn into NPL. The loan for a bank is most important to generate revenue for operational expenses as well as to provide return to the shareholder. When a loan advanced from good money turns into a bad loan the chance of shareholders return as well as survival of a bank stands in a stake. Ailing bank can’t portray its better image in the public. And no bank can operate its business without the deposit from the public. When public start loosing their confidence on the bank and don’t keep their deposit in the bank, that bank will start counting its finger for collapse.

A loan disbursed as good loan doesn't turn into bad over the night. It has certain course to turn into bad. An efficient bank management can recover the loan before turning it into bad and can save itself from the un-unwanted debacle.

A general survey reveals following reasons why a good loan turns into bad:

Situational Problem

- Poor analysis of project and its capital requirement leading to a situation of over/under capitalized.
- Faulty evaluation of loan and security.
- Problem in managing the unit.
- Actual modus operandi is totally different than the projection and unit unable to cope with the situation.
- Sudden change in internal and external environment and project not being run according to its plan.
- Mismatch in demand and supply leading over inventory or under inventory.
- Collection of receivables un-necessarily delayed resulting delay in re-order and chances of business penetration by other competitors.

Intentional Problems

- Intention to cheat the bank.
- Intention to flee without settling the loan.
- Malicious act of both the bank-staff and borrower.
- Intention to auction the property, which is in least requirement, borrower.
- To show other creditors to his bankruptcy, which is unmanageable.
- To relieve from other debts.
- To waive interest/ penal interest or avail discount on loan if paid in latter stage when bank offer such facilities.

A borrowing may reflect one or all above signals causing harm to the bank's business. There are few chances of cure to protect bank from an intentional defaulter. But for the defaulter caused by situations we can re-schedule, re-structure their facilities and help them to meet their debt obligation as per the cash flow they are having.

For a genuine loan which was disbursed with all good spirit may turn into bad if it is not monitored properly and corrective measures are not taken in time. The signals of such failure appear to borrower first and then consequences fall upon the shoulder of a bank. When a good loan, with all effort to protect it, turn into bad and borrower ability is not enough to serve from other source, then borrower also tries to hide the information from the bank and wants to be relieved temporarily. Such situations give some signals to the bank and these signals are called danger signals.

He added that a formula Know Your Customer (KYC) is to be always taken into consideration. A bank must be clever and must collect information greater then a borrower require for commencement of business and to be more rigid to give the loan than to give his own money without any security. When a borrowing unit is not able to serve the debt from the source explored, the documentations are merely a decree to enforce legal action against him. But what gets realized when everything is lost. A jail and punishment doesn’t satisfy the interest of bank.

A basic know how of NPL management is to prevent a loan to turn into loss. Therefore every possible measure is to be implemented to keep a loan portfolio intact. Periodic meeting with the borrower and market information is must to check the exposure against a particular business sector.

Similarly, if it is due to changes in the business environment and other factors a rescheduling and restructuring approach to be followed to protect both the bank and borrow. A bank never wants to make a borrower, a squatter. The bank equally tries to protect its interest by any means.

The security given by a borrower may be ample for the exposure. But the borrower from other source of business may not be able to generate substantial earning to service the debt. Bank has all options to auction the property and liquidate the loan. While doing so, realization from the auction of property is always less than the value of an asset. This neither serve the purpose of bank nor the borrower, additionally will cause loss both the bank and borrower. A well doing family may turn to squatter if all the assets so auction at low value.

Prabhakar Ghimire (1999) has published an article in which he has mentioned that most of the commercial banks of Nepal are ready to pay the penalty in spite of investing on rural, priority sector, poverty stricken and deprived areas. In the directives of Nepal Rastra Bank it is clearly mentioned and

directed that all the commercial banks (under NRB) should invest 12 % of its total investments to the priority sectors. However these commercial banks are unable to meet the requirements of NRB.

In the light of above, foreign joint venture banks use to justify that they don't have any network among these priority areas. So, if investment is made to these areas, operation cost will be very high, that exceeds the penalty if investment won't be made. That is why they are interested in paying penalty rather than investing in priority sectors.

Dr. Sunity Shrestha (1998: 23-27) in her article, "Lending operation of commercial banks of Nepal and its impact on GDP", has presented with the objectives to make an analysis of contribution of commercial bank's lending to the gross domestic product (GDP) of Nepal. She has set hypothesis that there has been positive impact of lending of commercial banks to the GDP. In research methodology she has considered GDP as the dependent variable and various sectors of lending viz. agriculture, industrial, commercial, service and general and social sectors as the independent variables. A multiple regression technique has been applied to analyze the contribution. The multiple regression analysis has shown that all the variables except service sector lending have positive impact on GDP. Thus, in conclusion she has accepted the hypothesis i.e.; there has been positive impact on GDP. She has accepted that there has been positive impact by the lending of commercial banks in various sectors of economy, except service sector investment.

Prof. Amrit Man Shrestha (1997) in his article "Nepalma Banijya Bank Haruko Bhumika" has pointed out some important activities and its present scenario. In his words these activities are to be studied and revised as soon as possible, otherwise these may be disaster for the sound and effective banking system. The article is written in Nepali language. Some of the main points of his article are given as:

- Possibility of capital flight: - In Nepalese perspective, capital flight became a major problem . Whatever capitals were constructed in Rana Regime, were already flowed outside the country. Due to the mis-implementation of "Bhumi Sudhar" most of the constructed capital was also flowed away outside the country. Due to the unstable political situation, the possibilities of capital flight seem to be developed in high scale. In this controversial situation joint venture banks become the main source or medium of capital flight. Therefore this problem and situation should be seriously studied and analysed so that corrective action can be taken as soon as possible.

- Minimum Deposit amount: - In these years, it can be seen that most of the commercial banks and other financial institutions have increased the minimum deposit amount (threshold). This policy may harass the lower level depositors. It also affects the banking habits of lower level depositors negatively. That is why this must also be analysed and implemented after doing long homework.
- Debt recovery and its effectiveness: - In these years, it can also be seen that effective debt recovery is also a great problem of banks due to the misinterpretation of use of loan more than this, a gap between banks and debtors (i.e.; effective supervision). Therefore banks should use a team of experts for effective evaluation of collateral and effective use of loan from the debtors side. This must be said a effective and crucial step towards the debt recovery from thegovernment side that "Debt Recovery Act" is announced to be implemented during Ninth five years plan.

Dev Lal Kishi (1996: 27-32) in his article, "The changing face of the banking sector and the HMG/N recent budgetary policy", concluded that following an introduction of the reform in the banking sectors as an integrate part of the liberal economic policy, more banks and finance companies have come up as a welcome measure of competition. Slowly and steadily, the two government controlled banks, Nepal Bank Limited and Rastriya Banijya Bank have also shown an improvement of non-performing loans and are taking steps to adopt improved technology. However, higher economic growth with social justice bringing an significant benefit to the poor are yet to be achieved as envisaged by the HMG/N.

Sekhar Bahadur Pradhan (1996: 9) has presented a short glimpse on investment in different sectors, its problem and prospects, through his article "Deposit mobilization, its problem and prospects". On his article he has expressed that, "Deposit is the life blood of any financial institution, be it commercial bank, finance company, co-operative or non-government organization". He also added, in consideration of 10 commercial banks and nearly three dozens of finance companies, the latest figure does produce a strong feeling that a serious review must be made of problems and prospects of deposit sector. Except few joint venture banks, other organizations rely heavily on the business deposit receiving and credit disbursement.

In the light of this, Mr. Pradhan has pointed out following problems of deposit mobilization in Nepalese perspective:

1) To the lack of education most of Nepalese people do not go for saving in Due to the lesser office hours of banking system people prefers for holding the cash in the personal possession.
2) Unavailability of the institutional services in the rural areas.
3) No more mobilization and improvement of the employment of deposits in the loan sectors.
4) Due institutional manner. However, they are very much used of saving, be it in the form of cash, ornaments or kind. Their reluctance to deal with institutional system are governed by their lower level of understanding about financial organizations, process requirements, office hours withdrawal system, availability of depositing facilities and so on.

Mr. Pradhan mentioned that deposit mobilization carried out effectively is in the interest of depositors, society, financial sector and the nation. Lower level of deposit raising allows squeezed level of loan delivery leaving more room to informal sector. That is why higher priority to deposit mobilization has all the relevance.

Bodhi B. Bajracharya (1990: 93-97) in his article "Monetary policy and deposit mobilization in Nepal", has concluded that mobilization of domestic savings is one of the prime objectives of the monetary policy in Nepal and commercial banks and the more active financial intermediary for generating resources in the form of deposit of private sector and providing credit to the investor in different sectors of the economy.

F. Morris (1990) in his discussion paper, "Latin America's Banking System in the 1980s" has concluded that most of the banks concentrated on compliance with central bank rules on reserve requirements, credit allocation and interest rates. While analyzing loan portfolio, operating efficiency and soundness of bank investment management has largely been overlooked. The huge losses now found in the bank's portfolio in many developing countries are testimony to the poor quality of this oversight investment function.

He further adds that mismanagement in financial institutions has involved inadequate and overoptimistic loan appraisal, lower loan recovery, high risk diversification of lending and investments, high risk concentration, connected and insider lending, loan mismatching, etc. This has led many banks of developing countries to the failure in 1980s.

2.2.3 Review of Ph. D. Thesis

Dr. Sunity Shrestha (1993) has conducted a study on "Investment planning of commercial banks in Nepal" with the objectives of:

- To evaluate the financial performance of commercial banks in Nepal.
- To examine the investment of commercial banks of Nepal with reference to securities, loans & advances.
- To establish the relationship of bank portfolio variables with the national income and interest rates.
- The research was conducted on the basis of primary and secondary data of commercial banks.
- The research findings of the study are summarized as: -
- The general trend of commercial banks asset holding is growing. Deposits have been a major source of funds. The excess reserve level of the banks allows idle money and loss of opportunity. Debt equity ratio is very high, greater than 100%.
- The return ratios are on the average higher for foreign joint venture banks than for the Nepalese bank but return of asset found to be statistically same. Risk taking attitude is higher in foreign joint venture banks. The total management achievement index is higher in case of foreign banks in comparison to the Nepalese banks.
- The hypothesis that the commercial banks have non-professional style of decision making in Investment has been accepted. The investment of commercial banks in shares and securities is normal and not found to have

strategic decision towards investment in shares and securities. Yield from the security has been found to be satisfactory.

- Investment in various economic sectors shows industrial and commercial sector taking higher share of loan till 1990.
- Investment in various sectors has a positive impact on the national income from their respective sectors.
- Lending in priority sector showed cottage and small industry sector sharing higher loans.
- Priority sector lending showed positive impact on the national income.

The secured loan analysis showed commercial loan as being very important followed by social and industrial loans. The loan loss ratio has been found to be increased with low recovery of loan. Demand of bank credit has been found to be affected by the national income and lending and treasury bill rate. The investment of commercial banks on government securities has been observed to be affected by total deposit, cash reserve requirements and treasury bill and lending rates. Interest rates, lending rate, deposit rate were found to constitute a set of significant variables affecting the bank portfolio composition.

2.2.4 Review of Master's Degree Thesis

Before this, several thesis works have been conducted by various students regarding the various aspects of commercial banks such as financial performance, lending policy, investment policy, interest rate structure, resources mobilization, capital structure, etc. Some of them, as supposed to be relevant for the study are presented below.

Pravakar Dhungana (2002) conducted a study on "Investment policy of Nepal Bangladesh Bank Limited & other Joint Venture Banks (Himalayan Bank Limited & Nepal State Bank of India Bank Limited)." with the objective of:

- To study fund mobilisation and investment policy with respect to fee based off-balance sheet transaction and fund based on balance sheet transaction.
- To evaluate the liquidity efficiency of assets management and profitability position.
- To evaluate the trends of deposit utilisation towards total investment and loan & advances and its projection for next five years.

- To evaluate the growth ratios of loan & advances and total investment with respect to growth ratios of total deposit and net profit.
- To study the various risks in investment.

The study was conducted on the basis of secondary data.

The research findings of the study are:

- The liquidity position of NSBL is not better than that of HBL and NSBL.
- NSBL is in better position regarding its on balance sheet activities. The ratios of NSBL are highly variable which reveals NSBL has not followed stable policy.
- NSBL is not better regarding off-balance sheet transactions. The ratios of NSBL are highly variable also. The position of NSBL is moderate in OBS transaction.
- The profitability position of NSBL is comparatively not better than that of HBL but better than that of NNSBL.
- The credit risk ratios and interest rate risk ratios of NSBL is higher than that of HBL and NNSBL.
- NSBL has not maintained adequate capital in relation to the nature and condition of its assets, its deposit liabilities and other corporate liabilities.
- NSBL has maintained high growth rate.
- Deposit collection position, lending position, investment position and net profit position of NSBL is not better in comparison to HBL but better than NNSBL.

Lila Prasad Ojha (2002) conducted a study on "Lending practices: A study on NABIL Bank Ltd., SCB Nepal Ltd. and Himalayan Bank Ltd." with the objective of:

- To determine the liquidity position, the impact of deposit in liquidity and its effect on lending practices.
- To measure the bank's lending strength.
- To analyze the portfolio behavior of lending and measuring the ratio and volume of loans and advances made in agriculture, priority and productive sector.
- To measure the lending performances in quality, efficiency and its contribution in total income.

The study was conducted on the basis of secondary data.

The research findings of the study are:

- 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.
- The measurement of lending strength in relative terms has revealed that the total liability to total assets of SCBNL has the highest ratio. The high ratio is the result of high volume of shareholder equity in the liability mix. Himalayan Bank Ltd. has high volume of saving and fixed deposits as compared to current deposit resulting into low ratio of non-interest bearing deposits to total deposits ratio compared to the combined mean.
- 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 ratio of investment to investment and loan and advances has measured the total portion of investment in total of investment and loans and advances. The mean ratio among the banks does not have deviated significantly.
- 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.
- The absolute measures of lending strength have revealed that the mean volume of net assets and deposits is highest in SCBNL with moderate variation. The volume of net assets of Himalayan Bank Ltd. is the least due to the low share capital, reserves and surplus in its capital mix. But the volume contributed by Himalayan Bank Ltd. in case of loans and advances is highly appreciable as compared to its net assets. The volume of loans and advances contributed by NABIL Bank Ltd. is the greatest in five years of study period. The mean investment of NABIL Bank Ltd. is the highest but the investment on government securities of SCBNL is the highest.
- The portfolio analysis has revealed that the flow of loans and advances in agriculture sector is the lowest priority sector among these commercial banks. The contribution of all the banks in industrial sector is appreciable. The contribution made by Himalayan Bank Ltd. in industrial sector is the greatest and that of SCBNL is the least.

- The lending in commercial purpose is highest in case of NABIL Bank Ltd. and least in case of SCBNL. SCBNL has highest contribution in service sector lending. It has contributed 25.47 % of its total credit in general use and social purpose.
- The measurement of efficiency in lending has revealed that the loan loss provision to loans and advances analysis shows that NABIL Bank Ltd. has the highest mean ratio. According to Nepal Rastra Bank directive, the loan loss provision indicates the provision made against the performing loan (pass loan and sub-standard loan) only. It indicates that the volume of sub-standard loan in the loan mix of NABIL Bank Ltd. is higher and the volume of non-performing loan in the mix of NABIL Bank Ltd. is likely to increase in coming future.
- The mean ratio of interest income to total income has concluded that the contribution of interest income in total income is higher in case of Himalayan Bank Ltd. and lower in case of SCBNL. The interest expenses to total deposits ratio indicate that the cost of fund in Himalayan Bank Ltd. is the highest and that of SCBNL is the least.
- The total income to total assets ratio measures the earning power of each rupee employed by the bank. NABIL's ratio in this case is the best. The ratio of total income to total expenses reflects the earning capacity of a rupee of expenses. The productivity of expenses in SCBNL is the best.
- The performance of SCBNL is significantly better than other two banks in case of profitability. EPS is highest in case of SCBNL.

Samiksha Thapa (2001) conducted a study on "Investment policy of Nepal Bangladesh Bank Ltd. and other Joint Venture Banks (NABIL and Nepal Gridlays Bank Ltd.)" with the objective of:

- To examine the liquidity, asset management efficiency, profitability and risk position of NB Bank in comparison to NABIL and NGBL.
- To analyse the relationship between loan & advances and total investment with other financial variables of NB Bank and compare them with NABIL and NGBL.
- To examine the fund mobilization of investment policy of NB Bank through off-balance sheet activities in comparison to the other two banks.
- To study the various risks in investment of NB Bank in comparison to NABIL and NGBL.

- To analyse the deposit utilization trend and its projection for next five years of the NB Bank & compare it with that of NABIL and NGBL.
- The study was conducted through secondary data.
- The research findings of the study are as follows:
- The liquidity position of NB Bank is comparatively better than that of NABIL and NGBL.
- NB Bank is not in better position regarding its on balance sheet as well as off balance sheet activities in compare to NABIL and NGBL. NB Bank does not seem to follow any definite policy regarding the management of its assets.
- Profitability position of NB Bank is comparatively worse than that of NABIL and NGBL.
- NB Bank has maintained high growth rates in comparison to other banks though it is not successful to make enough investment.
- The position of NB Bank in regard to utilization of the fund to earn profit in not better in compare to NABIL and NGBL.

Shiba Raj Laudari (2001) conducted a study on "A study on investment policy of Nepal Indosuez Bank Ltd. in comparison to Nepal NSBL Bank Ltd." with the objectives of: -

- To examine the liquidity, asset management and profitability position and investment policy of NIBL in comparison to Nepal NSBL bank ltd.
- To study the growth ratios of loans and advances and investment to total deposit and net profit of NIBL in comparison to Nepal NSBL bank ltd.
- To analyse relationships between deposit and investments, deposits and loan & advances, net profit and outside assets of Nepal Indosuez Bank Ltd. in comparison to Nepal NSBL Bank Ltd.

The study was conducted through secondary data.

The research findings of the study are as follows: -

Current ratios for both the Banks is satisfactory.

- Although cash reserve ratio (CRR) is managed by both banks as per Nepal Rastra Bank directives, both banks have not paid sufficient insight toward cash management. Their cash reserves have fluctuated in a high degree

- Nepal NSBL Bank Ltd. has increased investment in government securities where as Nepal Indosuez Bank Ltd. has decreased.
- Nepal Indosuez Bank Ltd. has maintained both current ratio and cash reserve ratio better than Nepal NSBL Bank Ltd. But its cash and bank balance, investment in government securities and loan and advances in comparison to current assets are lower than that of Nepal NSBL Bank Ltd.
- Deposit utilization of Nepal Indosuez Bank Ltd. is less effective than that of Nepal NSBL Bank Ltd. Further Nepal Indosuez Bank Ltd. has invested lesser amount on government securities and shares and debenture than that of Nepal NSBL Bank Ltd.
- Nepal Indosuez Bank Ltd. did a better performance in return on total assets and loan and advances and interest earning, but it paid lower interest amount to working fund.
- The analysis of growth ratios shows that growth ratios of total deposit, loan and advances, total investment and net profit of Nepal Indosuez Bank Ltd. is less than that of Nepal NSBL Bank Ltd.
- The trend value of loan and advances to total deposit ratio is decreasing in case of both the banks. The trend value of total investment to total deposits ratio is also decreasing in case of both the banks.

The research findings of the study are as follows:

- The target of 12% investment of total outstanding liabilities in priority sector and 3% out of which has been invested in deprived sector has been met by RBB.
- Trend analysis for 10 years shows the increasing trend of investment in priority sectors which shows that the commercial banks are giving due consideration to increase investment in priority sector.
- Trend analysis of repayment for 10 years shows that the repayment has also increased in the following years.
- Interest charged on the loan disbursed in this sector is fairly less than the interest charge on loans for other purposes. In addition to this, there is high overhead cost incurred for supervision, administration and others in this program.
- Regression analysis shows positive relation between investment and repayment.
- The Chi square test of effectiveness of program shows that the program is more effective in rural and semi rural areas as compared to the urban areas.

- Investment on agriculture is higher than investment on industry and service sector.
- The study revealed that the procedure of loan disbursing itself is complicated for the borrowers to understand it.
- In fact, if the supervisors make the scheduled supervision and inspection and the frequent contact with the borrowers, the chance of misuse of the loan can be minimized.

  Upendra Tuladhar (2000) conducted a study on "A study on investment policy of Nepal Grindlays Bank Limited in comparison to other Joint venture Banks of Nepal" with the objective of:

- To study the fund mobilization and investment policy with respect to fee-based off-balance sheet transaction and fund based on-balance sheet transactions.
- To study the liquidity, efficiency of assets management and profitability position.
- To evaluate the growth ratios of loan and advances and total investment with respective growth rate of total deposit and net profit.
- To perform an empirical study of the customers' views and ideas regarding the existing services and adopted investment policy of the Joint venture banks.

The study is mainly based on secondary data and in some aspects of the study primary data are also collected through questionnaire survey of 100 respondents.

The research findings of the study are as follows:

From the analysis of primary data concerning in which sector should JVBs invest; 28.37 % respondents emphasized on educational sector to be invested by these JVBs as the potential investment sector. Consequently poverty stricken and deprived sector was given second priority (26.24 %), whereas industrial sector (18.44 %), tourism sector (16 %), agricultural sector (16 %), and construction sector (4.25 %) are given third, fourth, fifth and sixth priority respectively.

From the analysis of secondary data, following conclusions were drawn:

- Nepal Grindlays Bank Ltd. has maintained consistent and successful liquidity than NABIL Bank Ltd. and Himalayan Bank Ltd.
- The mean of total investment to total deposits ratio of Nepal Grindlays Bank Ltd. is higher than the other JVBs. The mean of the loan and advances to total deposits ratio of

Nepal Grindlays Bank Ltd. is less and inconsistent than NABIL Bank Ltd. and Himalayan Bank Ltd.

- Loan and advances to working fund ratio of Nepal Grindlays Bank Ltd. was found less than the mean ratio of other banks. Investment on government securities to working fund ratio of Nepal Grindlays Bank Ltd. had the highest mean ratio than NABIL Bank Ltd. and Himalayan Bank Ltd. during the study period.
- It was found that total Off-balance sheet operation to loan and advances ratio of Nepal Grindlays Bank Ltd. is found to be of highest mean ratio than that of NABIL Bank Ltd. and Himalayan BankLtd. It means Nepal Grindlays Bank Ltd. used to perform highest off-balance sheet operation than the other two JVBs ie; used to give priority to provide letter of credit, guarantee and others(eg:- trade finance) excessively than to others.
- The mean of investment on shares and debentures to total working fund ratio of Nepal Grindlays Bank Ltd. was found less than NABIL Bank Ltd. but higher than Himalayan Bank Ltd.
- The profitability position of Nepal Grindlays Bank Ltd. is higher than NABIL Bank Ltd. and Himalayan Bank Ltd. as well as it use to provide interest to the customers for different activities consistently.
- The volume of growth ratio of loan and advances of Nepal Grindlays Bank Ltd. is found higher than that of NABIL Bank Ltd. but lower than Himalayan Bank Ltd. It indicates that all the JVBs used to provide loan and advances in increasing manner.
- From the analysis of growth ratio of total investment it is found that Nepal Grindlays Bank Ltd. and NABIL Bank Ltd. have negative growth ratio ie; they used to reduce the investment during the study period. But it is increasing in the case of Himalayan Bank Ltd.
- The growth ratio of net profit of Nepal Grindlays Bank Ltd. seemed to be more satisfactory than NABIL Bank Ltd. but in case of Himalayan Bank it seemed to be very high.

Prem Bahadur Shahi (1999) conducted a study on "Investment policy of commercial banks in Nepal" with the main objectives of:

- To evaluate the liquidity, asset management efficiency and the profitability and risk position of Nepal bank limited to the Joint venture banks.

- To discuss fund mobilization and investment policy of Nepal bank limited in respect to its fee based off-balance sheet transaction and fund based on-balance sheet transaction in comparison to the Joint venture banks.
- To find out the empirical relationship between various important variables ie; deposits, loan and advances, investment, net profit, etc. and compare them with the Joint venture banks.
- To analyze the deposit utilization trend and its projection for next five years of the Nepal bank limited and compare it with that of the Joint venture banks.
- To provide a package of workable suggestions and possible guidelines to improve investment policy of Nepal bank limited and the Joint venture banks based on the finding of the analysis, for the improvement of financial performance of Nepal bank limited in future.

The research was conducted mainly on the basis of the secondary data.

The research findings of the study are as follows: -

- The liquidity position of NBL is comparatively better than that of the JVBs. Highly fluctuating liquidity position shows that the bank has not formulated any stable policy. It can also be conducted that NBL has more portions of current assets as loan and advances but less portion as investment on government securities.

  The mean ratio of loan and advances to total deposit of NBL is slightly lower than that of the JVBs. Likewise NBL's ratios seem to be more variable than that of the JVBs. The mean ratio of total investment to total deposit of NBL is lower than that of the JVBs. The mean ratio of investment on government securities to total working fund of NBL is slightly lower than that of the JVBs. The mean ratio of total off-balance sheet operation to loan and advances of NBL is found significantly lower than that of JVBs. So it was concluded that NBL is comparatively less successful in on-balance sheet as well as off-balance sheet operations than that of the JVBs. It hasn't followed any definite policy with regard to the management of its assets.
- Profitability position of NBL is comparatively not better than that of the JVBs. It indicates that NBL must maintain its high profit margin in future.

- There is comparatively higher risk in NBL than that of the JVBs regarding various aspects of the banking function.
- From the analysis of different growth ratios it can be concluded that NBL has not been more successful to increase its sources of funds, ie; deposits and mobilization of it. ie; loan and advances and total investment. Similarly it seems to have failed to maintain high growth rate of profit in comparison to that of other JVBs.
- It has been found that there is significant relationship between deposits and loan and advances. There is negative relationship between deposits and investment in case of NBL and positive in case of the JVBs.
- NBL has higher trend analysis values of loan & advances and deposit,but lower trend values of net profit & total investment in comparison to the JVBs for next 5 years.
- Highly fluctuating ratios of NBL show that it has not formulated any stable policy to maintain its liquidity in a consistent manner.
- High portion of cash and bank balance in NBL shows its negligence and inefficiency in its best utilization. It has not considered the cost of fund and its opportunity costs. Higher percentage of loan loss ratios shows that NBL is weak in credit collection. There is absence of a sound credit collection policy. NBL has not followed innovative approach toward lending. Poor quality of loan due to lack of necessary skills of project appraisal, improper collateral evaluation, irregular supervision, etc. is a severe problem for the bank's success.

Raja Ram Khadka (1998) conducted a study on "A study on the investment policy of NABIL Bank Ltd. in comparison to other Joint venture Banks of Nepal" with the objective of:

- To evaluate the liquidity, asset management efficiency and profitability positions in relation to fund mobilization of NABIL Bank Ltd. in comparison to other Joint venture Banks.
- To discuss fund mobilization and investment policy of NABIL Bank Ltd. in respect to its fee-based off-balance sheet transactions and fee-based on-balance sheet transactions in comparison to other JVBS.
- To evaluate the growth ratios of loan and advances and total investment with respective growth rate of total deposits and net profit of NABIL Bank Ltd. in comparison to other JVBS.

- To find out the relationship between deposits and total investment, deposit and loan and advances, and net profit and outside assets of NABIL Bank Ltd. in comparison to other JVBS.

The study was conducted using secondary data.

The research findings of the study are as follows:

- The liquidity position of NABIL Bank Ltd. is comparatively worse than that of other JVBS. NABIL Bank has more portions of current assets as loans and advances but less portion as investment on government securities.
- NABIL Bank Ltd. is comparatively less successful in on-balance sheet operation as well as off-balance sheet operations than that of other JVBS.
- Profitability position of NABIL Bank Ltd. is comparatively not better than that of other JVBS. The mean ratio of return on loan and advances of NABIL Bank Ltd. has been found slightly lower than that of other JVBS and the return has been found less homogeneous than that of other JVBS. Similarly the mean ratio of total interest earned to total outside assets of NABIL Bank Ltd. has been found slightly lower than that of other JVBS.
- Though NABIL Bank Ltd. seems to be more successful to increase its sources of funds as well as mobilization of it by increasing loan and advances and total investment, it seems to be failure to maintain its high growth rate of profit in comparison to that of other JVBS (ie; Nepal Grindlays Bank Ltd. and Nepal Indosuez Bank Ltd.).
- There is significant relationship between deposit and loan and advances as well as outside assets and net profit but not between deposit and total investment in case of both NABIL Bank Ltd. and other JVBS.

Indira Pokharel (1983) conducted a study on "Investment pattern and policy of Rastriya banijya bank" with the objective of:

- To review the present investment policy of RBB.
- To examine whether the bank has been fully utilizing the deposits mobilized or not.
- To establish the relationship between deposits, loans and advances and the effect on them by the change of interest rate.
- To recommend for the improvements in the investment policy.

- The research was conducted mainly on the basis of secondary data. Interview technique has also been used to collect information on the investment policy of the bank.
- The research findings of the study are concluded as:
- From the study of investment pattern of RBB, it is observed that the investment is mainly towards the security of gold and silver.
- From the study it has been revealed that there has never been any clear and specific investment policy. In fact the bank is running its business without having any definite direction, except to follow the directives issued by NRB from time to time in some specific matters.
- The deposits raised by the bank are not properly utilized. This also reflects the lack of definite policy of the RBB
- The effect of changes in interest rate has neither contributed to raise deposits nor has been favorable in investment extension.
- Time to time checking and supervision by the bank should be faithfully followed.

Udaya Bahadur Silwal (1980) has conducted a study on "Lending policy of commercial banks in Nepal" with the objective of:

- To analyze the role of commercial banks in its historical prospective.
- To show the relationship between deposits and loan & advances.
- To identify major weakness of lending policy of the commercial banks.

The research was conducted mainly on the basis of secondary data.
The research findings of the study are summarized as follows:

- Effectiveness of lending policy is directly based upon a sound banking system. But due to geographical variation, transportation and other regional disparities, it is very difficult to expand branches in different rural areas. So, it can be said that commercial banks in Nepal are not playing an active role to utilize their sources collected from different sectors.
- By paying higher interest rate, the banks are increasing deposits, which in turn increase saving habits of the general people. Then the banks will be able to utilize these idle funds in productive channels. This type of business of

- Commercial bank is really a necessary one in an agricultural country like Nepal, where public investment has limited capacity.

2.3 Justification of the Study / Research Gap

Investment in different sectors is made on the basis of the directives and circulars of Nepal Rastra Bank as well as the investment guidelines and policy of the concerned commercial bank. The directives of NRB change over time. NRB makes necessary amendments in prevailing directives and circulars and communicates to commercial banks. Commercial banks should follow these directives and circulars. Furthermore, their own investment guidelines and policies should be in line with NRB directives and circulars. So, the up to dated study over the change of time frame is major concern for the researcher and concerned organization as well as industry as a whole. This study covers the more recent financial data, NRB circulars and guidelines than that of studies previously conducted.

No research has yet been undertaken regarding the sector-wise loan and advances diversification of NSBL. Portfolio management is the major part of the bank's investment policy. The optimum diversification of loan and advances reduced the default risk of credit. It is the major concern of stakeholders to know the portfolio behavior of the bank. This study puts its effort to find out the proportion of total loan and advances of the bank disbursed to different sectors of economy and analysis the diversification of its investment.

No case study has yet been conducted about the investment policy of NSBL. Some comparative studies are previously done but in-depth study about the bank is not found. Investment function is the major function of the commercial bank. NSBL is one of a leading joint venture commercial bank of the country having huge market share and its investment activities has significant impact on the national economy. Hence, this study fulfills the prevailing research gap about the in depth analysis of the investment policy pursued by the organization, which is the major concern of public shareholders and other stakeholders.

CHAPTER - III

RESEARCH METHODOLOGY

Research methodology refers to the various sequential steps to be adopted by a researcher in studying a problem, with certain objectives in view. In other words, research methodology describes the methods and processes applied in the entire subject of the study. Research Methodology is a way to systematically solve the research problem. It may be understood as a science of studying how research is done significantly. It is necessary for the researcher to know not only the research methods / techniques but also the methodology. Researchers not only need to know how to develop certain indices or tests, how to calculate the mean, the mode, the research techniques, but they also need to know which of these methods or techniques are relevant and which are not, and what would they mean and indicate and why.

The topic of the problem has been selected as "Investment Policy of Nepal NSBL Bank Limited". The sole objective of this study is to evaluate the investment policy of Nepal NSBL Bank Limited. In order to reach and accomplish the objectives of the study, different activities are carried out and different stages are crossed during the study period. For this purpose the chapter aims to present and reflect the methods and techniques those are carried out and followed during the study period. The research methodology adopted for the present study is mentioned in this chapter which deals with research design, sources of data, data collection, processing and tabulating procedure and methodology.

3.1 Research Design

A research design is purely and simply the framework or plan for a study that guides the collection and analysis of data. Research design is the plan, structure and strategy of investigations conceived so as to obtain answers to research questions and to control variances. A true research design is basically concerned with various steps to collect the data for analysis and draw a relevant conclusion. It is the arrangement of conditions for collection and analysis of data that aims to combine relevance to the research purpose with economy in procedure. To achieve the objective of this study, descriptive and analytical research design has been used. Some financial and

statistical tools have been applied to examine facts and descriptive techniques have been adopted to evaluate investment policy of Nepal NSBL Bank Limited.

3.2 Population and Sample

The population refers to the industries of the same nature and its services and product in general. Thus, the total Commercial Banks constitutes the population of the data and the bank under study constitutes the sample for the study. So, from the population of 19 Commercial Banks operating in Nepal, Nepal NSBL Bank Limited has been selected as the sample for the study.

3.3 Sources of Data

Data are collected from two sources. They are Primary sources and Secondary sources. The data presented in this study are of secondary type. The secondary sources of data are those that have been used from published sources or used by someone previously. The annual reports of the concerned Bank are the major sources of data for the study. However, besides the annual reports of the subjected bank, the following sources of data have also been used in the course of the study:

- NRB reports and bulletins.
- Various publications dealing in the subject matter of the study.
- Various articles published in the News Papers.
- Periodic returns submitted by the Bank's Head Office to NRB.
- The NEPSE reports, etc.

Formal and informal talks with the concerned authorities of the bank were also helpful to obtain the additional information of the related problem.

3.4 Data Collection Techniques

This study is mainly based on secondary data obtained from various sources mentioned above. The annual reports of Nepal NSBL Bank Limited for the period of five years from fiscal year 2007/08 to 2011/12 A.D were obtained from the field visit of its shares department at its corporate office located at Hattishar, Kathmandu. NRB

publications such as Quarterly Economic Bulletins, Banking and Financial Statistics, Economic report, etc. have been collected by the personal visit of concerned departments of Nepal Rastra Bank at Baluwatar. The unpublished data of sector wise loans and advances has been collected from reporting department of NSBL. The data on some aspects of the bank has also been obtained from the publications and websites of Nepal Stock Exchange. The reference of NRB directives has been used from Butwal Branch of

NSBL. Some supplementary data and information and literature review have been collected from the Shankar Dev Campus Library, Central Library T.U., NRB Library, different Journals, magazines and other published and unpublished reports documented by the concerned authorities.

3.5 Data Analysis Tools

Presentation and Analysis of the collected data is the core of the research work. The collected raw data are first presented in systematic manner in tabular forms and are then analyzed by applying different financial and statistical tools to achieve the research objectives. Besides these, some graph charts and tables have been presented to analyze and interpret the findings of the study. The tools applied are:

3.5.1 Financial Tools

Financial tools basically help to analyze the financial strength and weakness of a firm. Ratio analysis is one of the important financial tools that have been used in the study. A ratio is simply one number expressed in term of another and such it expresses the quantitative relationship between any two numbers. Ratio can be expressed in terms of percentage, proportion and as coefficient. Logarithmic graph and break-even chart are the graphic forms of expressing a ratio. Financial ratio is the mathematical relationship between two accounting figures. Ratio analysis is a part of the whole process of analysis of financial statements of any business or industrial concern especially to take output and credit decisions. Even though there are many ratios to analyze and interpret the financial statement, only those ratios that are related to the investment operation of the bank are have been covered in this study. Different types of ratios have been used in this study.

3.5.1.1 Liquidity Ratios

This ratio measures the liquidity position of a firm. It measures the firm's ability to meet its short-term obligations or its current liabilities. It measures the speed with which a bank's assets can be converted into cash to meet deposit withdrawal and other current obligations. As a financial analytical tool, following four liquidity ratios has been used to come into the facts and findings of the study.

(i) Current ratio

This ratio shows the banks short-term solvency. It shows the relationship between current assets and current liabilities.

Current assets includes cash (Nrs), cash (foreign currency), balance with other banks, balance held aboard, inter-bank lending, bills purchased/discounted, 40% of loan and advances (assumption), investment on government securities, interest receivable and staff loan and advances. Similarly, current liabilities includes Current Deposits, 60% of Saving Deposits, 40% of Fixed deposits (assumption), Other deposits (margin), Forex Deposits, Expense Payable, Bonus Payable, Income Tax Payable and Proposed Dividend.

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

The widely accepted standard of current ratio is 2:1 but accurate standard depends on the circumstances of the business and the nature of business.

(ii) Cash and bank balance to total deposit ratio

Cash and bank balance are the most liquid current assets. This ratio measures the percentage of most liquid fund with the bank to make immediate payment to the depositor.

This ratio is computed by dividing cash and bank balance by total deposit. This can be presented as,

$$\text{Cash } \& \; bank\ balance\ to\ total\ deposit\ ratio = \frac{\text{Cash \& bank balance}}{\text{Total deposits}}$$

Cash and bank balance includes cash in hand, foreign cash in hand, cheques and other cash items, balance with domestic and foreign banks. The total deposit includes current deposits, saving deposits, fixed deposits, call deposits and other deposits.

(iii) Cash and bank balance to current assets ratio

This ratio measures the proportion of most liquid assets i.e. cash and bank balance among the total current assets of the bank. Higher ratio shows the bank's ability to meet its demand for cash.

The ratio is computed by dividing cash and bank balance by current assets, stated as under,

$$\text{Cash and bank balace to current assets ratio} = \frac{\text{Cash \& bank balance}}{\text{Current Assets}}$$

(iv) Investment on government securities to total current assets ratio

This ratio is calculated to find out the percentage of current assets invested in government securities i.e. treasury bills and development bonds. The ratio is computed as under,

$$\text{Investment on government securities to total current assets ratio} = \frac{\text{Investment on Government Securities}}{\text{Total Current Assets}}$$

3.5.1.2 Asset Management Ratios

Asset management ratio measures the proportion of various assets and liabilities in balance sheet. The proper management of assets and liability ensures its effective utilization. The banking business converts the liability into assets by way of its lending and investing functions. Asset and liability management ratio measures its efficiency by multiplying various liabilities into performing assets. The following are the various ratios relating to asset and liability management, which are used to determine the efficiency of the subjected bank in managing its assets and efficiency in portfolio management

(i) Loan & Advances to total deposit ratio

This ratio is also called credit-deposit ratio (CD ratio). It is calculated to find out how successfully the banks are utilizing their total deposits on loan and advances for profit generating purpose. Greater ratio implies the better utilization of total deposits. This ratio can be obtained by dividing loan and advances by total deposit as under,

$$\text{Loan \& } Advamces\ to\ total\ deposit\ ratio = \frac{\text{Loan and advances}}{\text{Total Deposits}}$$

(ii) Total investments to total deposit ratio

Investment is one of the major forms of credit created to earn income. This implies the utilization of firm's deposit on investment on government securities, shares and debentures of other companies and bank. This ratio can be calculated by dividing total investment by total deposit, stated as under,

$$\text{Total investment to total deposit ratio} = \frac{\text{Total investment}}{\text{Total deposits}}$$

The numerator includes investment on government securities, debenture and bond, shares in subsidiary companies, shares in other companies and other investment.

iii) Loan and advances to working fund ratio

Loan and advances is the major component in the total working fund (total assets), which indicates the ability of bank to channelize its deposits in the form of loan and advances to earn high return.

This ratio is computed by dividing loan and advances by total working fund, that is stated as under,

$$\text{Loan and advances to working fund ratio} = \frac{\text{Loan and advances}}{\text{Total working fund}}$$

Here, the denominator includes all assets of on balance sheet items but excludes off balance sheet items like letter of credit, letter of guarantee etc.

iv) Investment on government securities to total working fund ratio

This ratio shows that bank's investment on government securities in comparison to the total working fund. This ratio is calculated by dividing investment on government securities by total working fund. This is presented as, Investment on government securities

$$\text{Investment on government securities to total working fund ratio}$$
$$= \frac{\text{Investment on government securities}}{\text{Total Working Fund}}$$

v) Investment on shares and debenture to total working fund ratio

This ratio shows the bank's investment in shares and debenture of the subsidiary and other companies. This ratio can be derived by dividing investment on shares and debentures by total working fund mentioned as under,

$$\text{Investment on shares and debenture to toal working fund ratio}$$
$$= \frac{\text{Investment on government securities}}{\text{Total Working Fund}}$$

The numerator includes investment on debentures, bonds and shares of other companies.

(vi) Total outside asset to total deposit ratio

Loan & Advances and investment comprises the total outside assets of a bank. This ratio measures how well the deposits liabilities have been mobilized by the bank in income generation. This ratio is computed by dividing total loan and advances and investment by total deposits.

$$\text{Total outside asset to total deposit ratio} = \frac{\text{Total outside asset}}{\text{Total Deposit}}$$

(vii) Loan & Advances to total outside assets ratio

This ratio measures the contribution made by loans & advances in total amount of loans and advances and investments. The proportion between investment and loans and advances measures the management's attitude towards more risky assets and lower risky assets. Loans & Advances are more risky and also generate more returns in comparison to investments. This ratio is computed by dividing Loan & Advances by total outside assets as under,

$$\text{Loan \& } Advances\ to\ total\ outside\ assets\ ratio = \frac{\text{Loan and advances}}{\text{Total outside asset}}$$

(viii) Investment on government securities to total outside assets ratio

This ratio measures the proportion of the banks investment in risky area and risk free areas. This ratio is computed by dividing investment on government securities by total outside asset as under,

$$\text{Investment on government securities to toal outside assets ratio}$$
$$= \frac{\text{Investment on government securities}}{\text{Total Outside Asset}}$$

(ix) Total outside assets to total assets ratio

Loans & Advances and investments are the outside assets of commercial banks. This ratio is calculated by dividing total outside assets by total assets

$$\text{Total outside assets to total assets ratio} = \frac{\text{Total outside asset}}{\text{Total asset}}$$

These are the proportion of assets employed by the bank for the purpose of income generation. This ratio shows the ability of the bank to utilize its funds into income generating assets.

(x) Total Off-Balance sheet operation to Loan & Advances ratio

The OBS operation shows the bank's efficiency in conducting modern off-balance sheet transaction in comparison to loan and advances i.e. issue of letter of credit, letter of guarantee etc. This ratio shows the proportion of fee-based off-balance sheet activities to fund based loan and advances of the bank. Now a day fee-based off-balance sheet activity play an important role for the better performance of a bank. This ratio is calculated by dividing total OBS operations by loan and advances, which is stated as hereunder,

$$\text{Total off} - \text{balance sheet operation to Loan and Advances ratio} = \frac{\text{Total OBS operation}}{\text{Loan and Advances}}$$

3.5.1.3 Activity of Performing Ratios

Activity ratio measures the performance efficiency of an organization from various angles of its operations. These rations indicate the efficiency of activity of an enterprise to utilize available funds, particularly short-term funds. These ratios are used to determine the efficiency, quality and the contribution of loans and advances in the total profitability. The following activity ratios measure the performance efficiency of the bank to utilize its funds.

(i) Loan loss provision to total loans and advances ratio

The ratio of loan loss provision to total loans and advances describes the quality of assets that a bank is holding. Nepal Rastra Bank has directed the commercial banks to classify its loans & advances into the category of pass, sub-standard, doubtful and loss on the basis of the maturity of principal, to make the provision of 1, 25, 50 & 100 percentage respectively. The provision for loan loss reflects the increasing probability of non-performing loans in the volume of total loans and advances. This ratio is calculated by dividing the loan loss provision by total loans and advances as presented hereunder.

$$\text{Loan Loss Provision to total loans and advances ratio} = \frac{\text{Total loan loss provision}}{\text{Total Loan and Advances}}$$

(ii) Non-performing loans to total loans & advances ratio

This ratio measures the proportion of non-performing loans on the total volume of loans and advances. This reflects the quantity of quality assets that the bank have. Higher ratio reflects the bad performance of the bank in mobilizing loans and advances and

bad recovery rate and vice versa. This ratio is computed by dividing the non-performing loans by total loans and advances as under.

$$\text{Non} - \text{Performing loans to total loans \& } advances\ ratio = \frac{\text{Non} - \text{performing loans}}{\text{Total Loans and Advances}}$$

3.5.1.4 Loans & Advances Portfolio

To analyze the portfolio behavior of loans and advances of the bank for the study period, the ratios of loans & advances granted to various sectors of economy and for various purposes to total volume of loans and advances have been measured. Under this topic the following ratios have been studied.

(i) Priority sector lending to total loans & advances ratio

This ratio measures the contribution of banks lending in priority sector as directed by NRB. Under the priority sector, credit to agriculture and agro based business, cottage and small industries, service sector and other business are included. Credit to the deprived sector is also a part of priority sector lending. The priority sector lending requirement is 12% for the study period. This ratio is calculated by dividing priority sector lending by total loans and advances as under

$$\text{Priority secotr lending to toal loans \& } advances\ ratio = \frac{\text{Priority sector lending}}{\text{Total Loans and Advances}}$$

(ii) Sector wise loan and advances classifications

Here, the total loans and advances diversified to different sectors of the economy are calculated. Total economy has been classified into five sectors as agricultural sector, industrial/ production sector, trading/ commercial sector, service sector and others. These ratios are computed by dividing sector wise loan and advances by total loan and advances

3.5.1.5 Profitability ratios

Profitability ratios are used to indicate and measure the overall efficiency of a firm in terms of profit and financial performance. For better performance, profitability ratios of firms should be higher. Under this topic the following profitability ratios of Nepal NSBL Bank Ltd. have been studied.

(i) Interest income to total income ratio

This ratio measures the volume of interest income in total income of the bank. The high ratio indicates the high contribution made by the lending and investing activities and vice versa. This ratio can be computed by dividing interest income to total income presented as under

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

(ii) Total interest earned to total outside assets ratio

This ratio measures the interest earning capacity of the bank through the efficient utilization of out side assets. Higher ratio implies efficient use of outside assets to earn interest. This ratio is calculated by dividing total interest earned by total outside assets and can be mentioned as,

$$\text{Total interest earned to toal outside assets ratio} = \frac{\text{Total interest earned}}{\text{Total outside assets}}$$

The denominator includes loan and advances, bills purchased and discounted and all types of investments. The numerator comprises total interest income from loans and advances and investments.

(iii) Interest expenses to total expenses ratio

This ratio measures the portion of total interest expenses in the volume of total expenses. The high ratio indicates the low operational expenses and vice versa. This ratio is computed by dividing interest expenses by total expenses, which is presented hereunder,

$$\text{Interest expenses to total expenses ratio} = \frac{\text{Interest Expenses}}{\text{Total Expenses}}$$

(iv) Total interest earned to total working fund ratio

This ratio is calculated to find out the percentage of interest earned to total assets (working fund). Higher ratio implies better performance of the bank in terms of interest earning on its total working fund. This ratio is calculated by dividing total interest earned by total working fund. This is stated as,

$$\text{Total Interst Earned to Total Working Fund Ratio} = \frac{\text{Total interest earned}}{\text{Total Working Fund}}$$

(v) Total interest paid to total working fund ratio

This ratio is calculated to find out the percentage of interest paid on liabilities with respect to total working fund. This ratio can be calculated by dividing total interest paid by total working fund, which can be presented as,

$$\text{Total Interest Paid to Total Working Fund Ratio} = \frac{\text{Total interest paid}}{\text{Total Working Fund}}$$

(vi) Total income to total expenses ratio

The comparison between total expenses and total income measures the productivity of expenses in generating income. The amount of income that a unit of expenses generates is measured by the ratio of total income to total expenses. The high ratio is indicative of higher productivity of expenses and vice versa. This ratio is calculated by dividing total income by total expenses.

$$\text{Total Income to Total Expenses Ratio} = \frac{\text{Total Income}}{\text{Total Expenses}}$$

(vii) Total income to total working fund ratio

This ratio measures how efficiently the asset of a business is utilized to generate income. It also measures the quality of assets in income generation. This ratio is calculated by dividing total income by total assets as stated hereunder,

$$\text{Total Income to total working fund ratio} = \frac{\text{Total Income}}{\text{Total Working Fund}}$$

(viii) Return on loan and advances ratio

This ratio indicates how efficiently the bank has employed its resources in the form of loan and advances. This also measures the earning capacity of its loan and advances. This ratio is computed by dividing net profit (loss) by loan and advances. This can be expressed as,

$$\text{Return on Loan and Advances Ratio} = \frac{\text{Net Profit (Loss)}}{\text{Loan and Advances}}$$

(ix) Return on total working fund ratio (ROA)

This ratio measures the overall profitability of all working funds i.e. total assets. It is also known as return on assets (ROA). This ratio is calculated by dividing net profit (loss) by total working fund. This can be mentioned as,

$$\text{Return on Total Working Fund Ratio} = \frac{\text{Net Profit (Loss)}}{\text{Total Working Fund}}$$

The numerator indicates the portion of income left to the internal equities after deducting all costs, charges and expenses.

(x) Return on equity ratio (ROE)

Net worth refers to the owner's claim of a bank. The excess amount of total assets over total liabilities is known as net worth. This ratio measures how efficiently the banks have used the funds of the owners. This ratio is calculated by dividing net profit by total equity capital (net worth). This can be stated as,

$$\text{Return on Equity Ratio} = \frac{\text{Net Profit (Loss)}}{\text{Total equity capital}}$$

Here, total equity capital includes shareholder's reserve including profit and loss account, general loan loss provision and share capital i.e. ordinary share and preference share capital.

(xi) Earning Per Share (EPS)

EPS refers to net profit divided by total number of shares outstanding. The amount of EPS measures the efficiency of a firm in relative terms. This ratio is computed by dividing total net profit (loss) by total number of shares

$$\text{Earning Per Share} = \frac{\text{Net Profit (Loss)}}{\text{Total Number of Shares}}$$

(xii) Net Interest Margin

Net interest margin in general term is the difference between the interests received from investment on loan and advances and interest paid on deposits collected by the bank. It shows the bank's efficiency to earn high profit to meet various costs. Higher ratio shows the higher profitability and vice versa. This ratio is computed by dividing the difference between interest revenues from earning assets less interest costs on borrowed funds by total earning assets,

$$\text{Net Interest Margin} = \frac{\text{Interest revenues from earning assets} - \text{Interest costs on borrowed funds}}{\text{Total earning assets}}$$

Here, interest revenues from earning assets is the total interest income of the bank and interest costs on borrowed funds is the total interest expenses of the bank. Total loan and advances comprises the total earning assets of the bank.

3.5.1.6 Growth Ratios

To examine and analyze the expansion and growth of the banking business, following growth ratios are calculated in this part of the study.

(i) Growth ratio of total deposits

(ii) Growth ratio of loan and advances

(iii) Growth ratio of total investment

(iv) Growth ratio of net profit

3.5.2 Statistical Tools

Some important statistical tools are used to achieve the objective of this study. In this study statistical tool such as mean, standard deviation, coefficient of variation, coefficient of correlation and trend analysis have been used.

3.5.2.1 Mean

A mean is the average value or the sum of all the observations divided by the number of observations and it is denoted and given by the formula:

$$\bar{x} = \frac{\sum x}{N}$$

Where, $\bar{x}$ = Mean of the values.

N = Number of Pairs of Observations.

During the analysis of data, mean is calculated by using the statistical formula 'AVERAGE' on excel data sheet on computer.

3.5.2.2 Standard Deviation

The standard deviation measures the absolute dispersion. It is said that higher the value of standard deviation the higher the variability and vice versa. Karl Pearson introduced the concept of standard deviation in 1823 and this is denoted by the small Greek letter **σ** (read as sigma).

The formulas to calculate the standard deviation are given below:

$$\sigma = \sqrt{\Sigma \frac{x^2}{N}}$$

Where, x = ($\overline{X} - X$)

During the analysis of data, standard deviation is calculated by using the statistical formula 'STDEV' on excel data sheet on computer.

3.5.2.3 Coefficient of Variation

The standard deviation calculated in the above formulas gives an absolute measure of dispersion. Hence, where the mean value of the variables is not equal, it is not appropriate to compare two pairs of variables based on standard deviation only. The coefficient of variation measures the relative measures of dispersion, hence capable to compare two variables independently in terms of their variability. The coefficient of variation (C.V.) is given by the following formula and this gives the percentage.

$$\text{Coefficient Variation}(\text{C. V}) = \frac{\sigma}{\overline{X}}$$

3.5.2.4 Measures of Correlation

We examine the relation between the various variables . The correlation between the different variables of a bank is compared to measure the performance of these banks.

Correlation refers to the degree of relationship between two variables. If between two variables, increase or decrease in one causes increase or decrease in another, then such variables are correlated variables . The reliability of the value of coefficient of correlation is measured by probable error . The correlation coefficient between two

variables describes the degree of relationship between those two variables. It interprets whether two or more variables are correlated positively or negatively. This tool analyzes the relationship between those variables of the bank which are helpful to make appropriate investment policy regarding deposit collection, fund mobilization and profit maximization. The Karl Pearson coefficient of correlation (r) is given by the following formula:

$$\text{Coefficient of Correlation (r)} = \frac{\sum xy}{N\sigma_x\sigma_y}$$

Where,

x = (X - X[1]),

y = (Y - Y [1]),

σ_x = Standard deviation of series X,

σ_y = Standard deviation of series Y.

N = Number of Pairs of Observations.

During the analysis of data, correlation coefficient is calculated by using the statistical formula 'CORREL' on excel data sheet on computer.

$$\text{Probable Error of r(P.Er)} = 0.6745\frac{1-r^2}{\sqrt{N}}$$

Probable Error of r (P.Er.) = 0.6745 Nr21−

The Karl Pearson coefficient of Correlation r always fall between –1 to +1. The value of correlation in minus signifies the negative correlation and in plus signifies the positive correlation. As the value of correlation coefficient reaches near to the value of zero, it is said that there is no significant relationship between the variables.

The coefficient of correlation has been interpreted based on probable error (P.Er.). If the value of correlation coefficient is greater than 6 times the value of probable error, the correlation coefficient is deemed as significant and reliable. If the value of correlation coefficient is less than probable error, the correlation coefficient is said to be insignificant and there is no evidence of correlation.

In this section of the study, Karl Pearson's coefficient of correlation has been used to find out the relationship between the following variables:

(i) Correlation between Deposits and Loans and Advances

(ii) Correlation between deposits and investments

(iii) Correlation between loan and advances and net profit

(iv) Correlation between investment and net profit

3.5.2.5 Trend Analysis

Among the various methods of determining trend of time series, the most popular and mathematical method is the lease square method. Using this least square method, it has been estimated the future trend values of different variables. For the estimation of linear trend line following formula has been used.

$y = a + bx$

Where,

y= Dependent variable

x= Independent variable

a= y intercept

b= slope of the trend line

By using this method, trend analysis of following variable is conducted

(i) Trend analysis of total deposit
(ii) Trend analysis of loan and advances
(iii) Trend analysis of investment
(iv) Trend analysis of net profit

CHAPTER – IV

PRESENTATION AND ANALYSIS OF DATA

In this chapter, the data collected from various sources have been presented and analyzed to measure the various dimensions of the problems of the study and in major findings of the study are presented systematically.

4.1 Measuring the Liquidity Position of the Bank

A commercial bank must maintain its satisfactory liquidity position to satisfy the credit needs of the community, to meet demands for deposits withdrawal, pay maturity obligation in time and convert non cash assets into cash to satisfy immediate needs without loss to the bank and without consequent impact on long-run profitability of the bank. To measure the liquidity position of the bank, the following measures of liquidity ratio has been calculated and a brief analysis of the same has been done as below.

4.1.1 Current ratio:

This ratio indicates the ability of the bank to meet its current obligation. This is the broad measure of liquidity position of the bank. This ratio shows the banks short-term solvency. It shows the relationship between current assets and current liabilities. Current assets includes cash (NRs), cash (foreign currency), balance with other banks, balance held aboard, inter-bank lending, bills purchased/discounted, 40% of loan and advances (assumption), investment on government securities, interest receivable and staff loan and advances. Similarly, current liabilities includes Current Deposits, 60% of Saving Deposits, 40% of Fixed deposits (assumption), Other deposits (margin), For eg Deposits, Expense Payable, Bonus Payable, Income Tax Payable and Proposed Dividend. It is derived by dividing total current assets by total current liabilities. The current ratios of NSBL are given in the following table

Table 1:

Current ratios (Times)

Bank	FY						S.D	C.V%
	2007/08	2008/09	2009/10	2010/11	2011/12	Mean		
NSBL	1.01	0.59	0.61	0.63	0.62	0.692	0.032	4.5983

(Source: Appendix I)

The above table 1 shows that the current assets of NSBL have exceeded current liabilities in average, in the study period from 2007/08 to 2011/12. The highest ratio is 1.01 in 2007/08 while the lowest ratio is 0.59 in the year 2008/09 with an average ratio of 0.692 during the study period. The ratio shows the fluctuating trend during the period. The coefficient of variation (C.V.) between the ratios for the study period is 4.5983%, which shows that the current ratios during the study period are some what consistent. In general, the bank is able to meet its short-term obligations.

Though the optimal standard of current ratio should be 2:1, the conventional measure of liquidity is not applicable in banking business. Banking business holds big portion of deposits as a core deposit (the minimum level of deposits which the commercial banks hold at all the times) and this deposits remains all the time throughout the years. This core deposit forms the fixed liability of the bank though it is current in nature. So the ratio maintained by the 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 ratio analysis of the bank over the five years period indicates that the bank has satisfactory liquidity position.

4.1.2 Cash and bank balance to total deposit ratio:

Cash and bank balance are the most liquid current assets. This ratio measures the percentage of most liquid fund with the bank to make immediate payment to the depositors. This ratio is computed by dividing cash and bank balance by total deposits. Both higher and lower ratios are not desirable. The reason is that if a 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 fail to make payment for the demands of the depositors. So, sufficient and appropriate cash reserve should be maintained properly.

Table 2

Cash and bank balance to total deposit ratio (%)

Bank	FY						S.D	C.V
	2007/08	2008/09	2009/10	2010/11	2011/12	Mean		
NSBL	9.79	4.21	9.86	4.42	10.33	7.722	9.722	1.259

(Source: Appendix I)

The above table 2 shows that the cash & bank balance to total deposit ratio of NSBL has fluctuating trend. The highest ratio is 10.33% in 2011/12 and the lowest is 4.21 % in 2008/09. The mean of the ratios for the study period is 7.722% and the C.V. between them is 1.259%. On the basis of the C.V. it can be concluded that the ratios are variable and less consistent.

Though the ratios are not consistent, the cash & bank balance position of NSBL with respect to deposits is better to serve its customers deposit withdrawal demands. Commercial banks have to maintain its cash & bank balance in terms of total deposit as directed by NRB time to time. Otherwise they are imposed penalty. A high ratio of non-earning cash & bank balance may be unfit which indicates the banks inability to invest into short-term marketable security, treasury bills, etc ensuring enough liquidity which will help the bank to improve its profitability.

4.1.3 Cash and bank balance to current assets ratio:

This ratio shows the percentage of the banks most liquid fund over current assets of the bank. This ratio is computed by dividing cash and bank balance by current assets.

Table 3

Cash and bank balance to current assets ratio (%)

Bank	FY					Mean	S.D	C.V(%)
	2007/08	2008/09	2009/10	2010/11	2011/12			
NSBL	9.61	7.08	16.14	7.0	16.75	11.52	4.80	42.40

(Source: Appendix I)

The above table 3 shows that the cash & bank balance to current assets ratio of NSBL has fluctuating trend. The highest ratio is 16.75% in 2011/12 and the lowest is 7.0 % in 20010/11. The mean of the ratios for the study period is 11.32 % & the C.V. between them is 42.40%. On the basis of C.V. the ratios are seemed to be variable and less consistent.

In conclusion it can be said that NSBL is in good position in terms of its cash & bank balance but it does not mean that it has mobilized its more funds in profitable sectors. It actually means that NSBL can meet its daily requirements to make the payments on customer deposit withdrawals.

4.1.4 Net Profit to Total Assets Ratio:

This ratio examines the portion of a commercial banks total asset, which is measured with net profit. More or less, each commercial bank is interested to earn profit. Though net profit are so liquid as cash and bank balance, they can easily be invest in the market or they can be easily converted into assets in other ways and they are risk free also. So these are additional source of liquidity for the bank to support cash and bank balance to meet unexpected liquidity needs on adverse situations. This ratio is calculated by dividing the amount net profit by current ratio.

Table 4

Net Profit to total assets ratio (%)

Bank	FY						S.D	C.V (%)
	2007/08	2008/09	2009/10	2010/11	2011/12	Mean		
NSBL	1.44	1.05	1.03	1.01	0.83	1.072	22.36	20.86

(Source: Appendix I)

The above table 4 shows that net profit to current assets ratio of NSBL has decreasing trend and from minimum of 0.83% in 2011/12 to the maximum of 1.44% in the year 2007/08. In the year 2011/12, bank has invested its minimum fund in total assets. The mean of the ratios for the study period is 1.072% and the C.V. between them is 20.86%. On the basis of the C.V. it can be concluded that the ratios are more volatile and inconsistent.

In the initial period of the study, NSBL has invested its maximum fund on total assets but later on it hasn't started to invest on total assets and liquidity position of the bank from the point of view of investment on total assets is good.

4.2 Asset Management Ratios:

This ratio measures the efficiency of a commercial bank in its fund mobilization. A commercial bank must be able to manage its assets properly to earn high profit maintaining the appropriate level of liquidity. Asset management ratio measures the efficiency of the bank to manage its assets in profitable way satisfactorily. By the help of following ratios, asset management ability of Nepal NSBL Bank Limited has been analyzed.

4.2.1 Loan and Advance to Total Deposit Ratio:

This ratio measures the extent to which the bank is successful to mobilize its total deposit on loan and advances for the purpose of income generation. A high ratio indicates better mobilization of collected deposits and vice versa. But it should be noted that too high ratio might not be better from liquidity point of view. This ratio is calculated by dividing loans and advances by total deposits.

Table 5

Loan & Advances to Total Deposit Ratio (%)

Bank	FY						S.D	.V (%)
	2007/08	2008/09	2009/10	2010/11	2011/12	Mean		
NSBL	88.32	54.12	50.09	50.37	49.01	58.382	16.85	28.86

(Source: Appendix I)

The above table 5 shows that loan & advances to total deposit ratio of the bank is 88.32% in 2007/08 which is highest of the study period. It is decreased up to 49.01% in 2011/12. This ratio has decreasing trend. The mean of the ratios is 58.382% with 28.86% C.V. between them, which shows that the ratios are satisfactorily consistent over the study period.

This ratio is also called CD ratio i.e. Credit-Deposit ratio and around 70% of CD ratio is taken as standard. From this point of view, the loan & advances to total deposit ratio of the bank isn't in average.

4.2.2 Total Investments to total deposit ratio:

A commercial bank may mobilize its deposit by investing in different securities issued by government and other financial or non-financial organized institutions. This ratio measures the extent to which banks are able to mobilize their deposits on investment in various securities. In the process of portfolio management of bank assets, various factors such as excess availability of fund, liquidity requirement, central banks norms, etc, are to be considered in general.

This ratio indicates the proportion of deposits utilized for the purpose of income generation as well as for maintaining liquidity in appropriate level. A high ratio is the indicator of high success to mobilize deposits in securities and vice versa. This ratio is calculated by dividing total investment by total deposit.

Table 6

Total investment to total deposit ratio (%)

Bank	FY						S.D	C.V (%)
	2007/08	2008/09	2009/10	2010/11	2011/12	Mean		
NSBL	22.52	47.52	46.73	44.59	45.87	41.446	10.64	25.66

(Source: Appendix I)

The above table 6 shows that total investment to total deposit ratios of NSBL are in increasing trend during the study period. The highest ratio is 45.87 % in 2011/12 and lowest is 22.52 % in 2007/08 with mean ratio of 41.446%. The C.V. of 25.66 % between them shows that the ratios are less consistent and more variable.

In the later period of the study, the bank is increasing its mobilization of resources on investment. It may be due to the slack in the different sectors of the economy due to which banks are unable to mobilize its fund in loan and advances. It can be justified by comparing CD ratios and investment to total deposit ratios. When CD ratios are in decreasing trend, investment to total deposit ratios are in increasing trend.

4.2.3 Total Credit to deposit Ratio:

Total Credit of any commercial bank represents the major portion in the volume of the total fund. This ratio measures the volume of Total Credit in the structure of total deposit. The high degree of this ratio doesn’t indicate the good performance of the bank mobilizing its funds by way of landing function. Granting the credit always carries a certain degree of risk. Thus this asset of banking business is regarded as risky assets. This ratio measures the management attitude towards risk assets. The low ratio is indicate of low productivity and high degree of safety in liquidity and vice verse. The interaction between risk and return determines this ratio. This ratio also shows the credit risk taken by the bank towards mobilizing its funds in to different types of assets. This ratio reflects the extent to which the banks are successful in mobilizing their total credit on deposits for purpose of income generations. This ratio is computed by dividing total credit by total deposit.

Table 7

Total credit to deposit ratio (%)

Bank	FY						S.D	C.V (%)
	2007/08	2008/09	2009/10	2010/11	2011/12	Mean		
NSBL	88.32	55.84	51.48	51.20	49.62	59.292	16.39	27.644

(Source: Appendix I)

Table 7 shows that the ratio ranges from the minimum of 49.62% in 2011/12 to the maximum of 88.32% in 2007/08. The mean of the ratio is 59.292% and the C.V. between them is 27.644%, which shows the ratios are consistent over the study period. This shows that loan and advances comprises 59.292% in average of the total asset of the bank.

4.2.4 Investment on government securities to total working fund ratio:

This ratio measures the contribution made by investment on government securities in total working fund of the bank. Besides mobilizing its major portion of funds in the form of loans and advances, banks invests their funds in purchasing different types government securities. They do so mainly to utilize the excess funds for income generation without taking more risk and to maintain the adequate level of liquidity since these securities are more liquid assets than loans and advances. A high ratio indicates better mobilization of fund as investments on government securities and vice versa. This ratio is calculated by dividing investment on government securities by total working fund.

Table 8

Investment on government securities to total working fund ratio (%)

Bank	FY					Mean	S.D	C.V (%)
	2007/08	2008/09	2009/10	2010/11	2011/12			
NSBL	16.07	9.73	9.78	10.16	5.89	10.326	32.9	3.13

(Source: Appendix I)

Table 8 explains that the ratio has ranged from 16.07% in 2007/08 to 5.89 % in 2011/12. The ratio has an decreasing trend in the study period. The mean of the ratio is found to be 10.326% with 3.13% C.V. between them, which indicates that the ratio is highly variable and less consistent over the study period.

4.2.5 Investment on shares & debentures to total working fund ratio:

This ratio measures the contribution made by investment on shares and debentures government securities in total working fund of the bank. Nowadays, commercial banks invest its fund not only on government securities, but also invest on the shares and debenture of other different types of companies. A high ratio indicates better mobilization of fund as investments on shares & debentures and vice versa. This ratio is calculated by dividing investment on shares & debentures by total working fund.

Table 9

Investment on shares & debentures to total working fund ratio (%)

Bank	FY						S.D	C.V (%)
	2007/08	2008/09	2009/10	2010/11	2011/12	Mean		
NSBL	6.252	4.722	5.418	4.996	5.09	5.2956	58.96	11.13

(Source: Appendix I)

Table 9 explains that the ratio has ranged from 6.252% in 2007/08 to 5.09 % in 2011/12. The ratios have a decreasing trend in the study period. The mean of the ratio is found to be 5.2956% with 11.13% C.V. between them, which indicates that the ratio is less variable and somewhat consistent over the study period.

4.3 Activity or Performing Ratios:

In this section, the lending efficiency in terms of quality and turnover is measured. Here different ratios are used to analyze the lending efficiency of the bank. For this purpose the relationship of different variables of balance sheet and profit and loss account have been established. The following ratios are analyzed for this purpose.

4.3.2 Non-Performing Credit to Total Credit Ratio:

This ratio measures the proportion of non-performing credit on the total volume of credi. This reflects the quantity of quality assets that the bank have. Higher ratio reflects the bad performance of the bank in mobilizing loans and advances and bad recovery rate and vice versa. This ratio is computed by dividing the non-performing credit by total credit.

Table 10

Non-performing Credit to Total Credit ratio (%)

Bank	FY						S.D	C.V (%)
	2007/08	2008/09	2009/10	2010/11	2011/12	Mean		
NSBL	3.83	2.02	1.48	1.10	0.54	1.794	12.59	7.28

(Source: Appendix I)

The above table 10 exhibits that the ratios for the study period are fluctuating over the years. The ratio ranges from 3.83 % in 2007/08 to 0.54% in 2011/12 with an average of 1.794%. The data of non-performing credit for the year study period shows that the bank has lower amount of bad loans. So, it can be concluded that the bank has mobilized its fund on good sectors.

The non-performing assets for commercial banks should be in single digit i.e. less than 10% as per international standard. The mean NPA level of NSBL is 1.794 %, which is less than the standard level.

4.4 Loans & Advances Portfolio:

(Analyzing the Portfolio behavior of Loans & Advances)

In this chapter, we examine the portfolio management of loans and advances. Bank advances loan to various sector of economy and to various types of borrowers. Similarly, it invests fund in various types of securities and shares. In this chapter, to analyze the portfolio behavior of loans and advances of the bank for the study period, the ratios of loans & advances granted to various sectors of economy and for various purposes to total volume of loans and advances have been measured.

4.4.1 Priority sector lending to total loans & advances ratio:

This ratio measures the contribution of banks lending in priority sector. Priority sector lending is also called directive credit. Nepal Rastra Bank has regulated the commercial banks to provide credit to the priority sector from their total lending portfolio. In the course of non-compliance, the commercial banks are compelled to pay for penalty. Under the priority sector, credit to agriculture and agro based business, cottage and small industries, service sector and other business are included. Credit to the deprived sector is also a part of priority sector lending. But now NRB has decided to deregulate the priority sector lending on phase wise basis. For the year 2007/08, the priority sector lending requirement is decreased to 7% from 12% and by the year 2007/08 the priority sector lending requirement will be completely deregulated. This ratio is calculated by dividing priority sector lending by total loans and advances.

Table 11

Priority sector loans to total loans & Advances ratio (%)

Bank	FY						S.D	C.V (%)
	2007/08	2008/09	2009/10	2010/11	2011/12	Mean		
NSBL	18.85	17.84	20.09	13.38	9.76	15.98	3.95	24.07

(Source: Appendix I)

The above table 11 shows that the ratios are ranged from 9.76 % in 2010/11 to 20.09% in 2008/09. The mean of the ratios is found to be 15.98 % with 24.07 C.V. between them, which indicates that the ratios are almost variable and not consistent over the study period.

4.4.2 Sector wise loan and advances classifications:

Here, the total loans and advances disbursed to different sectors of the economy is calculated. Commercial banks should have to diversify its loans and advances to different sectors. They cannot pour all of its productive assets into a single sector, which eventually increases the risk factor. Total economy has been classified into five sectors as under.

- Agricultural Sector
- Industrial/ Production Sector
- Trading/ Commercial Sector
- Service Sector
- Others: Include miscellaneous credit to Staffs, Loan against Fixed Deposit Receipt, Loan against the security of shares and debentures, personal loans, consumer loans etc.

This ratio is computed by dividing sector wise loan and advances by total loan and advances.

Table 12

Sector wise loan and advances of Nepal NSBL Bank Limited

{Loans and advances disbursed to different purposes sectors of the economy (**In %**)

Sector	FY						S.D	C.V (%)
	2007/08	2008/09	2009/10	2010/11	2011/12	Mean		
Agriculture	0.02	0.91	0.27	0.39	0.40	0.40	0.3255	81.40
Industry/ Production	50.03	46.28	49.84	54.89	54.31	51.07	3.5566	6.96
Trading/ Commercial	23.69	27.56	18.32	17.25	18.88	21.14	4.3539	20.80
Service	5.83	14.02	13.84	15.67	18.23	13.52	4.6439	34.35
Others	20.43	11.23	17.72	11.80	8.17	13.87	5.0399	36.34
Total	100	100	100	100	100	100	-	-

(Source: Appendix I)

The above table 12 explains NSBL's diversification of lending in different sectors. NSBL has mostly used its funds in production sector. In average, lending in industrial, commercial, others, service and agricultural sector take the first, second, third, fourth and fifth place with mean percentage of 51.07 %, 21.41 %, 13.87%, 13.52 %, and 0.40 % respectively in the lending portfolio of the bank. The lending in the agricultural sector is very nominal comparing to others. The ratios are fluctuating over the study period raging from minimum of 0.02% in 2007/08 to maximum of 0.91% in 2008/09. The mean of the ratios is 0.4% with 81.40% C.V. between them, which suggests that the ratios are highly volatile and less consistent.

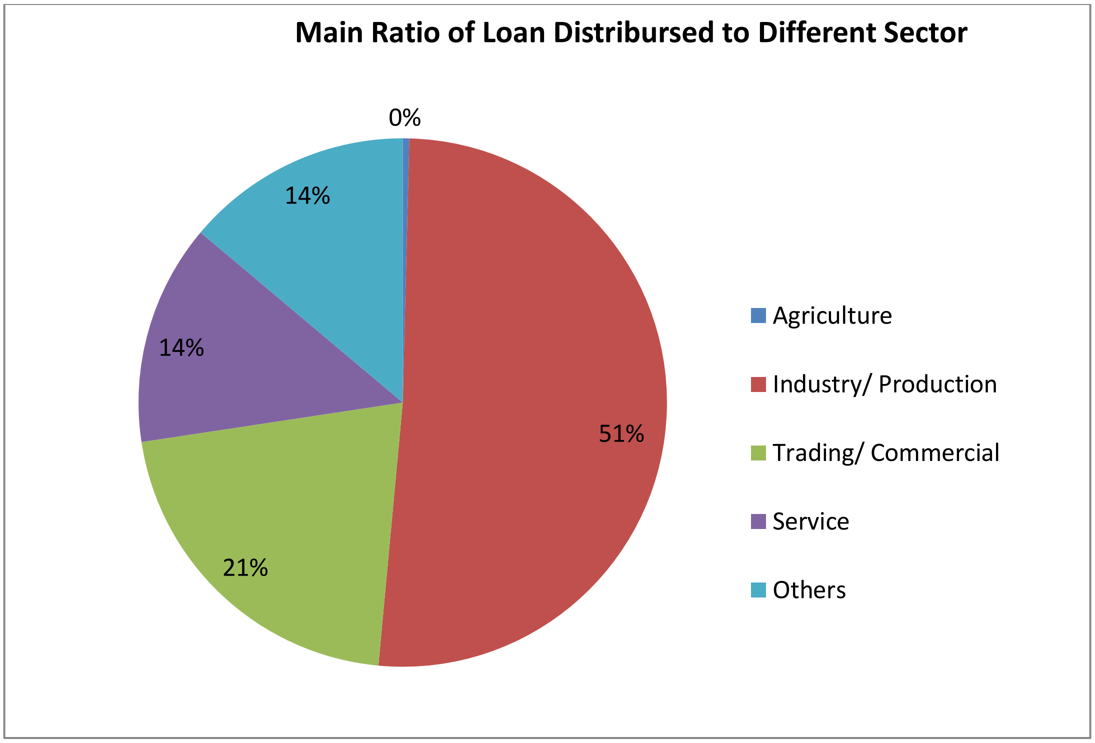


Figure 1: Mean Ratios of Loans disbursed to Different Sectors of NSBL.

The lending in industrial sector is in more consistent than others. Bank has invested half of its fund to production sector. The ratios are in fluctuating trend and ranges from 54.89% in 2009/10 to 46.28% in 2007/08. The average ratio is 51.07% with C.V. 6.96% between the ratios over the study period. It signifies that the ratios are consistent and less variable. The lending in commercial sector shows the overall decreasing trend with the ratios ranging from the minimum 17.25% in 2009/10 to the maximum 27.56% in 2007/08. The mean ratio is 21.14% and the C.V. between the ratios is 20.80%, which shows the ratios are less consistent over the study period. The lending in service sector shows overall increasing trend over the study period. The ratio ranges from the minimum 5.83% in 2007/08 to the maximum of 18.23% in 2010/11 and the C.V. 34.35% shows the ratios are variable and not consistent during the study period. The mean of the ratios is 13.52%. The lending to the other sectors shows the decreasing trend with the fluctuations between them. The ratios range from the minimum of 8.17% in 2010/11 to the maximum of 20.43% in 2007/08. The mean ratio is 13.87%. The C.V. of 36.34% shows the ratios are less consistent and more variable over the study period.

4.5 Profitability ratios:

The main objective of a commercial bank is to earn profit by providing different types of banking services to its customers. No bank can survive without profit. Profit is the indicator of efficient operation of a bank. Profitability ratios are the best indicators of overall efficiency. Higher profitability ratio shows the higher efficiency of a bank and vice versa. Through the following ratios, effort has been made to measure the profit earning capacity of Nepal NSBL Bank Ltd.

4.5.1 Interest income to total income ratio:

This ratio measures the volume of interest income in total income of the bank. This ratio helps to measure the banks performance on how well they are mobilizing their fund for the purpose of income generation. This ratio also helps to measure the banks performance on other fee-based activities, since after investing functions fee based activities are the major source of banks income generation. The high ratio indicates the high contribution made by the lending and investing activities and vice versa. This ratio can be computed by dividing interest income to total income.

Table 13

Interest income to total income ratio (%)

Bank	FY						S.D	C.V (%)
	2007/08	2008/09	2009/10	2010/11	2011/12	Mean		
NSBL	88.8	88.3	89	88.5	88.3	88.58	31.14	0.352

(Source: Appendix I)

The above table 13 shows the ratios are consistent over the study period ranging from the maximum of 88.8% in 2007/08 to the minimum of 88.3 % in 2011/12. The mean of the ratios is 88.58 % and the C.V. between them is 0.352%, which shows the consistency of the ratios over the study period. These ratios suggest that the large proportion of the income is generated from mobilizing the fund to loan and advances and investment activities.

4.5.2 Interest expenses to total expenses ratio:

This ratio measures the portion of total interest expenses in the volume of total expenses. The high ratio indicates the low operational expenses and vice versa. Interpreting in other way the high ratio can be due to the costly sources of funds. This ratio is computed by dividing interest expenses by total expenses.

Table 14

Interest expenses to total expenses ratio (%)

Bank	FY						S.D	C.V (%)
	2007/08	2008/09	2009/10	2010/11	2011/12	Mean		
NSBL	74.9	78.6	8.8	83	85.9	80.64	4.194	5.20

(Source: Appendix I)

Table 14 shows the ratios are in decreasing trend ranging from 74.9% in 2007/08 to 78.6 % in 2008/09. The mean of the ratios is 80.62% with 5.20% C.V., which shows the ratios are satisfactorily consistent over the study period.

4.5.3 Total income to total expenses ratio:

The comparison between total expenses and total income measures the productivity of expenses in generating income. The amount of income that a unit of expenses generates is measured by the ratio of total income to total expenses. The high ratio is indicative of higher productivity of expenses and vice versa. This ratio is calculated by dividing total income by total expenses.

Table 15

Total income to total expenses ratio (Times)

Bank	FY						S.D	C.V (%)
	2007/08	2008/09	2009/10	2010/11	2011/12	Mean		
NSBL	1.80	1.58	1.43	1.39	1.32	1.5	18.97	12.65

(Source: Appendix I)

Table 15 explains that the ratios are consistent during the study period ranging from the minimum 1.32 times in years 2011/12 and 1.80 in year 2007/08. The mean of the ratios is found to be 1.5 times with 12.65% C.V., which shows that the ratios are consistent during the study period.

4.5.4 Total income to total working fund ratio:

This ratio measures how efficiently the asset of a business is utilized to generate income. It also measures the quality of assets in income generation. This ratio is calculated by dividing total income by total assets.

Table 16

Total income to total working fund ratios (%)

Bank	FY						S.D	C.V (%)
	2007/08	2008/09	2009/10	2010/11	2011/12	Mean		
NSBL	6.36	5.48	6.70	7.60	7.35	6.70	0.844	12.597

(Source: Appendix I)

The above table 16 explains that the ratios are in fluctuating trend for the study period ranging from the minimum 5.48 % in 2008/09 to the maximum 7.60 % in 2010/11. The mean of the ratios is found to be 7.01% with 6.72% C.V. between them, which indicates that the ratios over the study period are consistent.

4.5.5 Return on loan and advances ratio:

Return on loan & advances ratio measures the earning capacity of a commercial bank through its mobilized funds in the form of loans and advances. A high ratio indicates greater success to mobilize fund as loans & advances and vice versa. This ratio is calculated by dividing net profit by loan and advances. Table 27 shows the return on loan and advances ratios of NSBL for the study period.

Table 17

Return on loan & advances ratio (%)

Bank	FY						S.D	C.V (%)
	2007/08	2008/09	2009/10	2010/11	2011/12	Mean		
NSBL	2.05	2.09	2.24	2.17	1.84	2.08	0.15	7.3

(Source: Appendix I)

Table 17 explains that the ratios are fluctuating with overall decreasing trend ranging between 2.05% in 2007/08 to 1.84% in 2011/12. The mean of the ratios is found to be 2.08% with 7.3% C.V. between them, which indicates that, the ratios less variable during the period of study.

4.5.6 Return on Equity (ROE):

This ratio measures the amount profit that a rupee of shareholders fund has generated. The high ratio is indicative of high return to shareholders equity and vice versa. This ratio is calculated by dividing net profit by total shareholders fund.

Table 18

Return on equity (%)

Bank	FY						S.D	C.V (%)
	2007/08	2008/09	2009/10	2010/11	2011/12	Mean		
NSBL	17.64	18.58	16.05	16.19	15.02	16.696	1.41	8.445

(Source: Appendix I)

The above table 18 shows that the ratios are fluctuating during the study period with overall decreasing trend. The ratio ranges between 17.64% in 2007/08 to 15.02% in 2011/12 with the mean ratio of 16.696%. C.V. between them is 8.445%, which shows that the ratios are less variable and consistent during the study period.

4.5.7 Earning Per Share (EPS):

EPS refers to net profit divided by total number of shares outstanding. The amount of EPS measures the efficiency of a firm in relative terms. The figure is the indicative of the overall good or bad performance of an organization. How far an organization is able to use its resources to generate profit is determined by the profit it has earned. This ratio is computed by dividing total net profit by total number of shares.

Table 19

Earnings per share (in Rs.)

Bank	FY						S.D	C.V (%)
	2007/08	2008/09	2009/10	2010/11	2011/12	Mean		
NSBL	28.33	36.18	23.69	24.85	22.93	22.996	6.44	3.57

(Source: Appendix I)

Table 19 shows that EPS are fluctuating over the years in decreasing trend. It ranges between Rs. 28.33 in 2007/08 to Rs. 22.93 in 2011/12. The mean EPS during the study period is found to be 22.996 with 3.57% C.V. between them, which shows that the earning is less variable and a bit consistent over the period of study.

4.5.8 Net Interest Margin:

Net interest margin in general term is the difference between the interests received from investment on loan and advances and interest paid on deposits collected by the bank. In other words this is the gross income in percentage from the intermediation cost of any bank. It shows the bank's efficiency to earn high profit to meet various costs i.e. office expenses, staff expenses etc and to provide attractive return to the shareholders. Generally, net interest margin of 4% and above is considered better. This ratio is computed by dividing the difference between interest revenues from earning assets less interest costs on borrowed funds by total earning assets.

Table 20

Net Interest Margin (%)

Bank	FY						S.D	C.V (%)
	2006/07	2007/08	2008/09	2009/10	2010/11	Mean		
NSBL	2.58	3.98	4.62	5.15	4.90	4.24	0.92	21.66

(Source: Appendix I)

Table 20 shows that Net Interest Margin ratios are fluctuating in increasing trend over the years in the study period. It ranges between 2.58% in 2007/08 to 5.15% in 2011/12. The mean NIM during the study period is found to be 4.24% with 21.66% C.V. between them, which shows that the net interest margin is less variable over the period of study.

4.6 Growth Ratios

To examine and analyze the expansion and growth of the banking business, following growth ratios are calculated in this part of the study. The higher ratios represent the better performance of the bank. Growth ratios are directly related to the fund mobilization and investments decision of the bank. This ratio represents how well the commercial banks are maintaining their economic and financial position. These ratios can be calculated by dividing the difference of last period figure and the first period by the first year figure. Under these topic four types of growth ratios namely growth ratios of total deposits, Loan and advances, total investments, and net profit of Nepal NSBL Bank Ltd. for the study period have been analyzed.

Table 21

Growth ratio of total deposits (Rs. In Millions)

Bank	FY					Growth Ratio(%)
	2007/08	2008/09	2009/10	2010/11	2011/12	
NSBL	137	279	349	424	533	289.05

(Source: Appendix I)

The above table shows that the deposit of the bank is increasing trend with the net growth rate of 289.05% during the study period.

Table 22

Growth ratio of total loan & advances (Rs. In Millions)

Bank	FY					Growth Ratio (%)
	2007/08	2008/09	2009/10	2010/11	2011/12	
NSBL	121	179	156	214	261	115.70

(Source: Appendix I)

The analysis shows that the loan and advances of the bank is in also increasing trend with the net growth rate of 115.70% during the study period.

Table 23

Growth ratio of total investments (Rs. In Millions)

Bank	FY					Growth Ratio (%)
	2007/08	2008/09	2009/10	2010/11	2011/12	
NSBL	309	133	163	189	245	-20.71

(Source: Appendix I)

The analysis shows that the total investment of the bank is in decreasing trend over the years having net growth rate -20.71 during the study period.

Table 24

Growth Ratio of Net Profit (Rs. In Millions)

Bank	FY					Growth Ratio (%)
	2007/08	2008/09	2009/10	2010/11	2011/12	
NSBL	2.5	3.1	3.9	4.6	4.8	92

(Source: Appendix I)

The above table 24 shows that the net profit the bank is also in increasing trend with fluctuations over the year with the net growth rate of 92% during the study period.

4.7 Measuring Correlation Between Different Variables:

4.7.1 Correlation between Deposits and Loans and Advances:

The correlation between total deposits and loans and advances describes the degree of relationship between these two items. How a unit increases in deposits impact in the volume of loans and advances is measured by this correlation. Here, deposit is the independent variable and the loans and advances is the dependent variable.

Table 25

Correlation between deposits and loans & advances

Correlation Coefficient (r)	P.Er	6*P.Er.	Remarks
0.94	0.015	0.094	r>6*P.Er

(Source: Appendix 2)

The above table 25 shows that the correlation coefficient (r) between deposits and loans & advances of the bank is 0.94 and probable error multiplied by six is found to be 0.094. Since r > 6*P.Er., and r is positive and near by 1, it can be inferred that there is very strong positive correlation between deposits and loans & advances during study period.

4.7.2 Correlation between total deposits and total investment:

The correlation between total deposits and total investment describes the degree of relationship between these two items. How a unit increases in deposits impact in the volume of investment is measured by this correlation. Here, deposit is the independent variable and the investment is the dependent variable.

Table 26

Correlation between deposits and investment

Correlation Coefficient (r)	P.Er	6*P.Er.	Remarks
-0.104	0.133	0.80	r>6*P.Er

(Source: Appendix 3)

The above table 26 shows that the correlation coefficient (r) between total deposits and total investment of the bank is -0.104 and probable error multiplied by six is found to be 0.80. Since r > 6*P.Er., it is significant and there is positive correlation between total deposit and total investments during study period in Nepal NSBL Bank Limited.

4.7.3 Correlation between total loan and advances and total net profit:

The correlation between total loan and advances and total net profit measures the degree of relationship between these two variables. The value of (r) explains whether a percentage change in loans and advances contribute to increase the same percentage of net profit. Loans and advances is independent variable and total net profit is dependent variables.

Table 27

Correlation between loans & advances and total net profit

Correlation Coefficient (r)	P.Er	6*P.Er.	Remarks
0.87	0.032	0.196	r>6*P.Er

(Source: Appendix 4)

4.7.4 Correlation between total investment and total net profit:

The correlation between total investment and total net profit measures the degree of relationship between these two variables. The value of (r) explains whether a percentage changes in investment contribute to increase the same percentage of net profit. Investment is independent variable and total net profit is dependent variables.

Table 28

Correlation between total investment and total net profit

Correlation Coefficient (r)	P.Er	6*P.Er.	Remarks
-0.224	0.128	0.768	r>6*P.Er

(Source: Appendix 5)

The above table 28 shows that the correlation coefficient (r) between total investment and total net profit of the bank is -0.224 i.e. negative and probable error multiplied by six is found to be

0.768. Since r < 6*P.Er., the relation is no significant. That is the increase or decrease of total loan & advances affects to the net profit in Nepal NSBL Bank Limited.

4.8 Trend Analysis and Projection for Next Five Years:

The objective of this topic is to analyze trend of deposit collection, its utilization and net profit of Nepal NSBL Bank Limited. Under this topic trend of deposit, total loan and advances and total net profit are forecasted for next five years.

4.8.1 Trend analysis of total deposit:

Table 29

Trend value of total deposit (Rs.)

years	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Trend Value	137	279	349	424	533	626	719	813	907	1000

Source: Appendix 6

Here, an effort has been made to analyze the trend values of total deposit of NSBL from 2008 to 2012 and forecasted for next 5 years till 2017. The following table 29 shows the trend values of NSBL for 10 years from 2008 to 2017.

From the above table 29, it is clear that the total deposit of NSBL is in increasing trend. Other things remaining the same, total deposit of NSBL in 2017 will be Rs. 18242.45 million, which is the highest under the study period.

4.8.2 Trend analysis of total loan and advances:

Here, the trend values of total loan and advances from 2008 to 2012 is calculated and forecasted for next 5 years till 2017. The following table 30 shows the trend values of total loan and advances of NSBL for 10 years from 2008 to 2017.

Table 30

Trend value of loan and advances (Rs.)

years	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Trend Value	121	179	156	214	261	281	312	344	375	407

(Source: Appendix 7)

From the above table 30, it is seen that the total loan and advances of NSBL is in increasing trend. Other things remaining the same, total loan and advances of NSBL in 2017 will be Rs. 407 million, which is the highest under the study period.

4.8.3 Trend analysis of total investment:

Here, an attempt has been made to analyze the trend values of total investment of NSBL for 5 years from 2008 to 2012 and forecasted the same for nest 5 years till 2017. The following table 31 shows the trend values of total investment of NSBL for 10 years from 2008 to 2017.

Table 31

Trend value of total investment (Rs.)

years	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Trend Value	309	133	163	189	245	186	179	172	165	157

(Source: Appendix 8)

From the above table 31, it is clear that the total investment of NSBL is in decrease trend. Other things remaining the same, total investment of the bank in 2017 will be Rs. 157 million, which is the lowest under the study period.

4.8.4 Trend analysis of total net profit:

Here, an attempt has been made to analyze the trend values of total net profit of NSBL for 5 years from 2008 to 2017 and forecasted the same for nest 5 years till 2017. The following table 32 shows the trend values of total net profit of NSBL for 10 years from 2008 to 2017.

Table 32

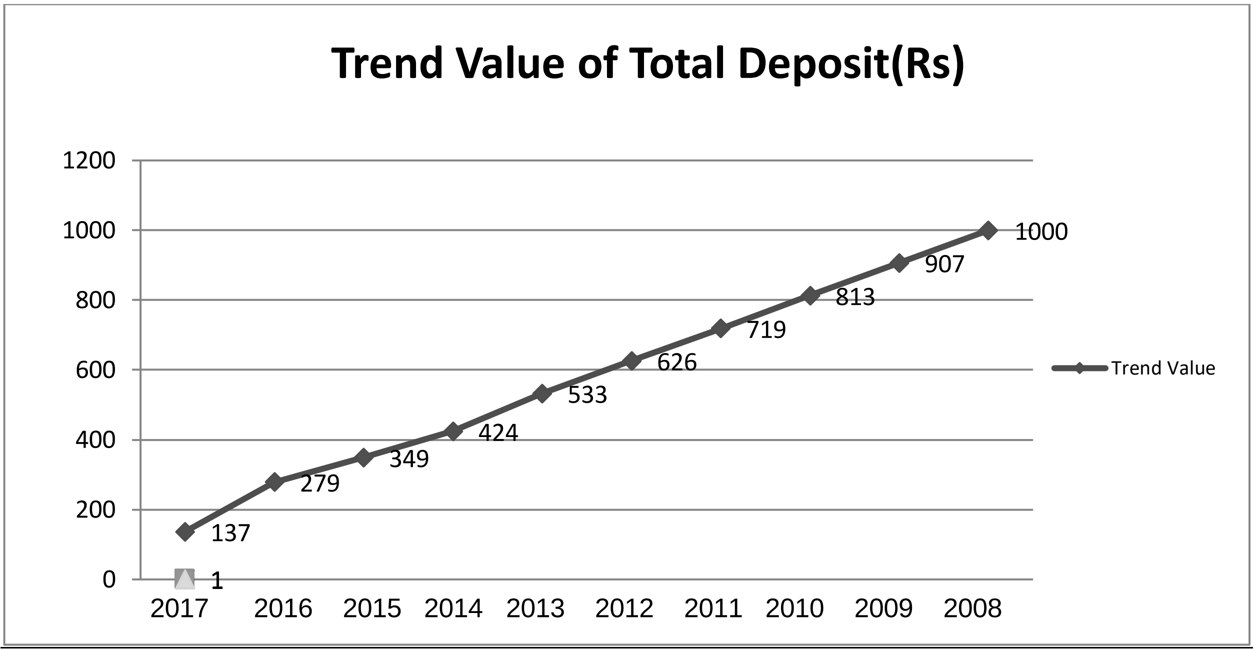
Trend value of total net profit (Rs.)

years	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Trend Value	25	31	39	46	48	56	62	68	74	81

(Source: Appendix 9)

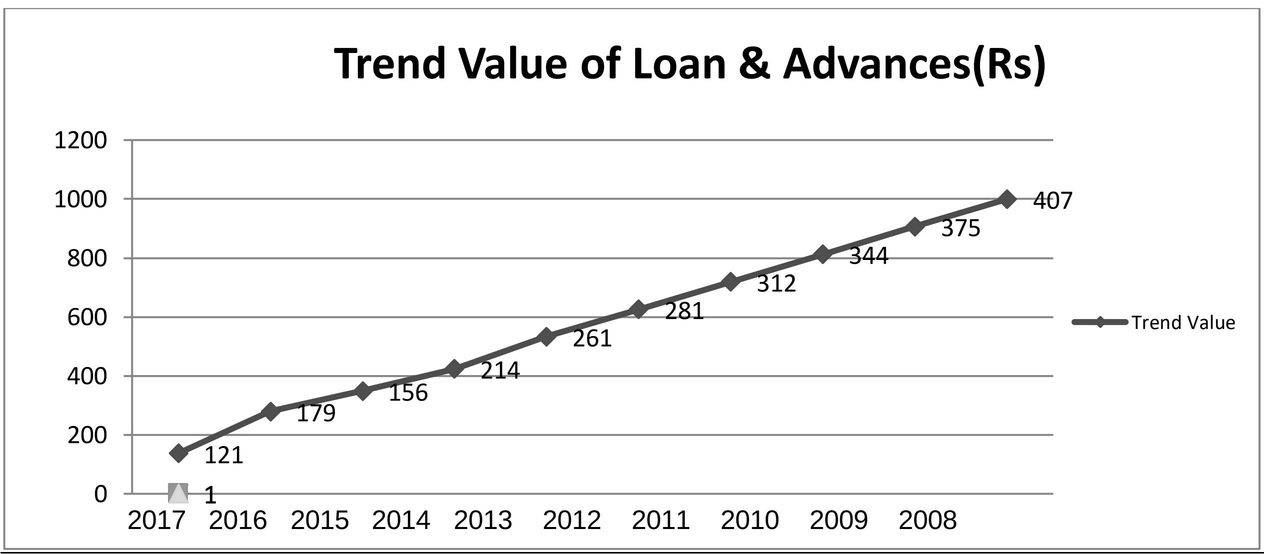
From the above table 32, it is clear that the net profit of NSBL is in increasing trend. Other things remaining the same, net profit of the bank in 2017 will be Rs. 177.66 million, which is the highest under the study period.

Figure 2: Trend Values of Total Deposit of NSBL



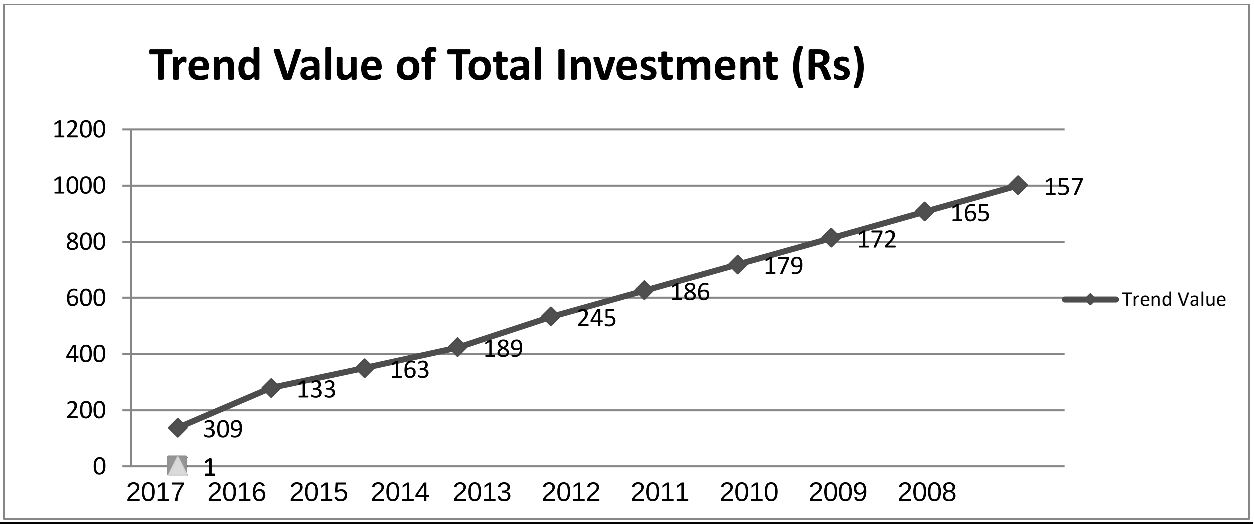
From the above figure, it is clear that the total deposit of NSBL is in increasing trend. Other things remaining the same.

Figure 3: Trend Values of Total Loan and Advances of NSBL



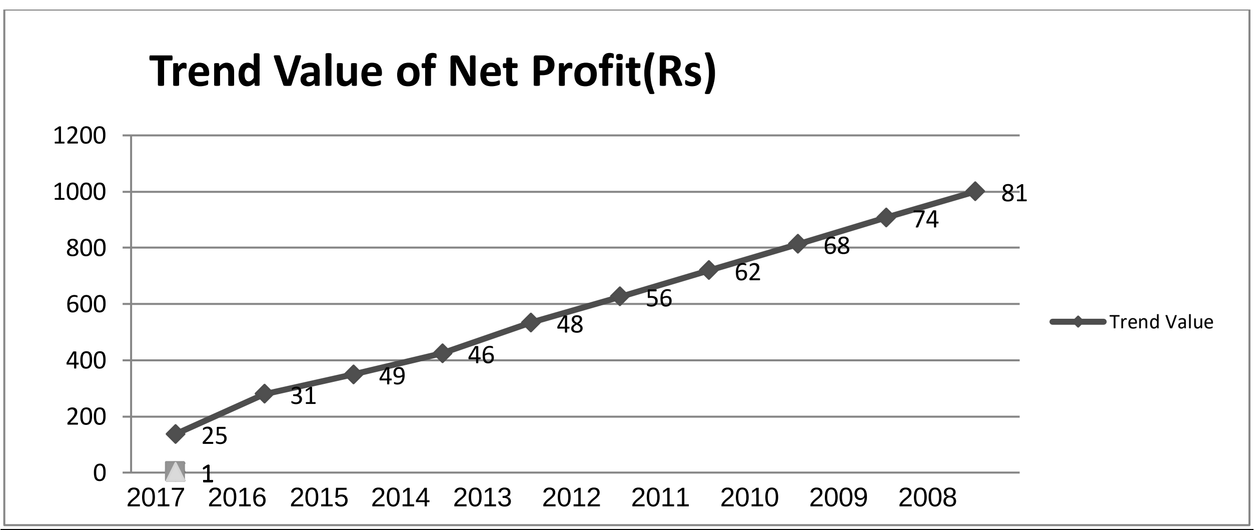
From the above figure, it is seen that the total loan and advances of NSBL is in increasing trend. Other things remaining the same, total loan and advances of NSBL in 2017 will be Rs. 407 million, which is the highest under the study period.

Figure 4: Trend Values of Total Investment of NSBL



From the above figure, it is clear that the total investment of NSBL is in decrease trend. Other things remaining the same, total investment of the bank in 2017 will be Rs. 157 million, which is the lowest under the study period.

Figure 5: Trend Values of Total Net Profit of NSBL



From the above figure, it is clear that the net profit of NSBL is in increasing trend. Other things remaining the same, net profit of the bank in 2017 will be Rs. 177.66 million, which is the highest under the study period.

4.9 Major Findings of the Study

The preceding chapter have discussed and explored the facts and matters required for the various parts of the study. Analytical part, which is the heart of the study, makes an analysis of various aspects of the investment policy of commercial banks by using some important financial as well as statistical tools.

Having completed the basic analysis required for the study, the final and most important task of the researcher is to enlist findings issues and gaps of the study and give suggestions for further improvement. This would be meaningful to the top management of the bank to initiate action and achieve the desired result. The objective of the researcher is not only to point errors and mistakes but also to correct them and give directions for further growth and improvement.

The main findings of the study that are derived on the basis of financial data analysis of Nepal NSBL Bank Limited are presented below.

4.9.1 Findings from the Liquidity Ratios Analysis:

1. From the analysis of the current ratio, current assets of NSBL have exceeded current Liabilities in average of the study period from 2007/08 to 2011/12. The highest ratio ranges from lowest 0.59 in 2008/09 to highest 1.01 in 2007/08 with an average ratio of 0.032. The ratio shows the fluctuating trend during the period. The coefficient of variation (C.V.) between the ratios for the study period is 4.59%, which shows that the current ratios during the study period are consistent. In general, the current ratio analysis of the bank over the five years period indicates that the bank has been able to meet its short-term obligations and has satisfactory liquidity position.
2. The cash & bank balance to total deposit ratio of NSBL has fluctuating trend. The mean ratio is 7.72% for the study period. The C.V. between the ratios is found to be 1.25 %, which shows that the ratios are not consistent. This analysis indicates that the cash & bank balance position of NSBL with respect to deposits is better to serve its customers deposit withdrawal demands. It implies the satisfactory liquidity position of NSBL.
3. The cash & bank balance to current assets ratio of NSBL has fluctuating with decreasing trend. The highest ratio is 16.75% in 2011/12 and the lowest is 7 % in

2010/11.The mean of the ratios for the study period is 11.32% & the C.V. between them is 0.424 %. On the basis of C.V. the ratios are seemed to be variable and less consistent. It indicates that NSBL is in better position in maintaining its cash & bank balance to meet its daily requirements to make the payments on customer deposit withdrawals.

4.9.2 Findings from the Asset Management Ratios Analysis

1. The loan & advances to total deposit ratio of the bank is 88.32% in 2007/08. It is decreased up to 49.01% in 2011/12, which is lowest of the study period. So, it has decreasing trend. The mean of the ratios is 58.38% with 28.86% C.V. between them, which shows that the ratios are satisfactorily consistent over the study period.

   This ratio is also called CD ratio i.e. Credit-Deposit ratio and around 70 % of CD ratio is taken as standard. From this point of view, the loan & advances to total deposit ratio of the bank is slightly high. Loan and advances is the proportion banks investment into most risky assets. High level of risk is not desirable for commercial banks as any default can create the liquidity problem.
2. The investment to total deposit ratios of NSBL are in overall increasing trend during the study period. The highest ratio is 47.52% in 2008/09 and lowest is 22.52% in 2007/08 with mean ratio of 41.44 %. The C.V. of 25.66% between them shows that the ratios are less consistent and more variable.

   The figures suggest that the bank has not mobilized significant amount of fund on the government securities and shares and debentures of other companies. But for the investment on shares and debentures of other companies, the security market of the country is not so developed. There are limited companies listed in the stock exchange.
3. The total credit to total deposit ratio range from the minimum of 49.62% in 2011/12 to the maximum of 88.32% in 2007/08. The mean of the ratio is 59.292% and the C.V. between them is 27.644%, which shows the ratios are consistent over the study period. This shows that total credit to deposit comprises 59.292% in average of the total asset of the bank. The study shows that about two-third of the asset of the bank comprises credit i.e. risky asset. Total credit is the most risky and most productive asset of the bank. High ratio suggests high risk and eventually high return of the bank. So, NSBL has taken optimum risk towards the mobilization of its fund to risky assets.

4. Investment on government securities to total working fund ratio has ranged from 16.78% in 2007/08 to 5.89% in 2011/12. The ratio has an decreasing in the study period. The mean of the ratio is found to be 10.32% with 3.13% C.V. between them, which indicates that the ratio is variable and less consistent over the study period. Investment on government securities is the risk free investment for the commercial banks. This ratio shows the proportion of risk free assets in the total asset of bank. Analysis shows that the bank has mobilized less amount of fund on government securities. This asset is less productive also. So, NSBL has invested less into low productive and risk free sector.
5. Investment on shares and debentures to total working fund ratio has ranged from 6.25% in 2007/08 to 4.72% in 2008/09. The ratios have a decreasing trend in the study period. The mean of the ratio is found to be 5.29% between them, which indicates that the ratio is less variable over the study period. So, NSBL has invested very nominal percentage of total working fund into shares and debentures of other companies.

4.9.3 Findings from the Activity Ratios Analysis

1. The Non-Performing loans to total loans & advances ratios for the study period are fluctuating over the years with overall increasing trend. The ratio ranges from 3.83% in 2007/08 to 20.54% in 2011/12 with an average of 1.794. The C.V. between them is 11.13%, which indicates that the ratios are satisfactorily consistent.

   This is the proportion of non-performing asset of commercial bank and NPA is the major problem now a days. Commercial banks should maintain its NPA within a level. In our context, NPA level should be below 10%, otherwise the bank will be on serious trouble. The mean NPA level of NSBL is 1.794%, which is lower than the standard and within manageable level.

4.9.4 Findings from the Loans & Advances Portfolio Analysis

1. The priority sector loans to total loans & advances the ratios are ranged from 9.76 % in 2011/12 to 20.0910% in 2009/10. The mean of the ratios is found to be 15.98% with 24.07 C.V. between them, which indicates that the ratios are almost consistent and not variable over the study period. For the years of study period the bank has fulfilled it priority sector lending requirement, which the NRB has set.
2. The sector wise total loans & advances into agricultural, industrial, commercial, service and others sectors explains NSBL's diversification of credit to different sectors of economy. The bank has mostly used its funds in industrial sector. In average, lending in industrial, commercial, others, service and agricultural sector take the first, second, third, fourth and fifth place with mean percentage of 51.07 %, 21.41 %, 13.87%, 13.52 %, and 0.40 % respectively in the lending portfolio of the bank.

   The lending in the agricultural sector is very nominal comparing to others. The ratios are fluctuating over the study period raging from minimum of 0.02 in 2007/08 to maximum of 0.91% in 2008/09. The mean of the ratios is 0.4% with 81.40% C.V. between them, which suggests that the ratios are highly volatile and less consistent.

   The lending in industrial sector is in more consistent than others. Bank has invested half of its fund to production sector. The ratios are in fluctuating trend and ranges from 54.89% in 2010/11 to 46.28% in 2008/09. The average ratio is 51.07% with C.V. 6.96% between the ratios over the study period. It signifies that the ratios are consistent and less variable.
3. The lending in commercial sector shows the overall decreasing trend with the ratios ranging from the minimum 17.25% in 2010/11 to the maximum 27.56% in 2008/09. The mean ratio is 21.14% and the C.V. between the ratios is 20.80%, which shows the ratios are less consistent over the study period.

   The lending in service sector shows overall increasing trend over the study period. The ratio ranges from the minimum 5.83% in 2007/08 to the maximum of 18.23% in 2011/12 and the C.V. 34.35% shows the ratios are variable and not consistent during the study period. The mean of the ratios is 13.52%.

The lending to the other sectors shows the decreasing trend with the fluctuations between them. The ratios range from the minimum of 8.17% in 2011/12 to the maximum of 20.43% in 2007/08. The mean ratio is 13.87%. The C.V. of 36.34% shows the ratios are less consistent and more variable over the study period. The analysis shows that the lending portfolio of NSBL is not well managed and it is not properly diversified. Half of the fund from is poured in a single sector i.e. industrial/ production sector. If the industrial sector will be in slack, the bank will definitely suffer from it.

4.9.5 Findings from the Profitability Ratios Analysis

1) The Interest income to total income ratios are fluctuating over the study period ranging from the minimum of 88.3% in 2008/09 & 2011/12 to the maximum of 89% in 2009/10. The mean of the ratios is 88.58% and the C.V. between them is 35.2%, which shows the consistency of the ratios over the study period. Income generated from loan and advances constitutes the major portion of total income of the bank consistently. So, loan and advances is consistently playing major role for the profitability of the bank.
2) Interest expenses to total expenses ratios are in increasing trend ranging from 74.9% in 2007/08 to 85.9% in 2011/12. The mean of the ratios is 80.64% with 5.20% C.V., which shows the ratios are satisfactorily consistent over the study period. Interest expenses paid to the depositors is the main expenses for the commercial banks. NSBL has more than half portion of interest expenses on total expenses. The decreasing trend of the ratios suggests that the cost of fund of the bank is also increasing.
3) Total income to total expenses ratios are in decreasing trend 1.80% in 2007/08 to 1.32 in 2011/12.The mean of the ratios is found to be 1.5% with 12.65% C.V. between them which indicates that the ratios are satisfactorily consistent over the study period. The ratio indicates that earning power of the total income to total expenses.
4) Total income to total working fund ratios are consistent for the study period ranging from the minimum 5.48% in 2008/09 to the maximum 7.6% in 2010/11. The mean of the ratios is found to be 6.7% with 12.6% C.V. between them, which

indicates that the ratios over the study period are consistent. So, the assets of NSBL are generating 6.7% income in average.

5) Return on loan and advances ratios is fluctuating with overall decreasing trend ranging between 1.84% in 2011/12 to 2.24% in 2009/10. The mean of the ratios is found to be 2.08% with 7.3% C.V. between them, which indicates that the ratios are less variable and a bit consistent during the period of study. The earning capacity of the bank's loan and advances is not satisfactorily consistent. The average ratio of 2.08 suggests that the earning capacity of the bank's loan and advances is satisfactory and the ratios are in decreasing trend in overall.
6) Return on equity (ROE) ratios is fluctuating during the study period with overall decreasing trend. The ratio ranges between 17.64% in 2007/08 to 15.02% in 2011/12 with the mean ratio of 16.69%. C.V. between them is 8.445%, which shows that the ratios are less variable and consistent during the study period. The average ratio of 16.69% suggests that the return on shareholders' fund of NSBL is not very good and the ratios are in increasing trend.
7) Earnings per share of NSBL are fluctuating over the years in decreasing trend. It ranges between Rs.28.33 in 2007/08 to Rs.22.93 in 2011/12. The mean EPS during the study period is found to be Rs.22.996 with 3.57% C.V. between them, which shows that the earning is less variable and satisfactorily consistent over the period of study. The mean EPS of the bank is very good and the ratios are also satisfactorily consistent and less volatile. The earning is also in increasing trend.
8) Net Interest Margin ratios are fluctuating with overall increasing trend over the years in the study period. It ranges between 2.58% in 2007/08 to 5.15% in 2010/11. The mean NIM during the study period is found to be 4.24% with 21.66% C.V. between them, which shows that the net interest margin is inconsistent over the period of study. The mean NIM of the bank is greater than the international standard (i.e. 4%). This shows that the bank is doing better to recover the costs and to earn higher profit. The inconsistency of the ratios shows that bank has not specific policy to get the consistent net interest margin over the period.

4.9.6 Findings from the growth ratios analysis

1) The analysis of the growth ratios of total deposits, total loan & advances, total investments, and net profit of Nepal NSBL Bank Limited during the study period shows that total deposits of the bank is in increasing trend with the net growth rate of 289.8805%. Similarly loan and advances of the bank is in also increasing trend with the net growth rate of 115.070% during the study period. The analysis shows that the total investments of the bank is also in decreasing trend with over the years having net growth rate of -20.71% during the study period. The net profit of the bank is also in increasing trend over the years with the net growth rate of -92% during the study period.
2) The major source of fund of the bank is deposit from its customers and it is in increasing trend with reasonable growth rate. Similarly the bank's utilization of its funds in the form of loan and advances is increasing trend with satisfactory growth rate. The net profit of the bank, which actually shows the performance of the bank in its overall operation, has the positive growth rate with increasing trend.

4.9.7 Findings from the correlation analysis

1. The correlation analysis between total deposit and total loan and advances shows that the correlation coefficient (r) between deposits and loans & advances of the bank is 0.94 and probable error multiplied by six is found to be 0.094. Since r > 6*P.Er., and r is positive and nearby 1.

So, it is inferred that there is very strong positive correlation between deposits and loans & advances during study period. The increase and decrease of total deposit of the bank strongly affects the volume of loan and advances.

2. The correlation analysis between total investment and total deposit shows that the correlation coefficient (r) between total deposits and total investment of the bank is -0.104 and probable error multiplied by six is found to be 0.80. Since r > 6*P.Er., it is significant and there is correlation between total deposit and total investments during study period in Nepal NSBL Bank Limited.

So, NSBBL invests its fund to government securities and shares and debentures of the other companies respective of the total deposit. The increase or decrease of total deposit doesn't affect to the banks investment.

3. The correlation analysis between total loan and advances and net profit shows that the correlation coefficient (r) between loans & advances and total net profit of the bank is 0.87 i.e. positive and probable error multiplied by six is found to be 0.196. Since r > 6*P.Er., the relation is significant. That is the increase or decrease of total loan and advances does affect to total net profit in Nepal NSBL Bank Limited.

   Loan and advances is the main earning asset of the bank and here the increase or decrease of loan and advances is significant to the net profit of NSBL.
4. The correlation analysis between total investment and total net profit shows that the correlation coefficient (r) between total investment and total net profit of the bank is -0.224 i.e. negative and probable error multiplied by six is found to be 0.768. Since r >6*P.Er., it is significant and there is correlation between total investment and total net profit in Nepal NSBL Bank Limited. Total net profit of the bank is respective of the total investment for the study period.

4.9.8 Findings from the trend analysis:

Trend analysis of total deposit, total loan and advances, total investment and total net profit from 2008 to 2012 and projection for next 5 years till 2017 is conducted in this chapter of study and the findings are presented as under;

1. The trend analysis of total deposit of NSBL shows that the total deposit of the bank is in increasing trend. From the trend analysis it is forecasted that the total deposit of NSBL in 2017 will be Rs. 1000 million.
2. From the trend analysis of total loan and advances, it is seen that the total loan and advances of NSBL is in increasing trend. Other things remaining the same, total loan and advances of NSBL in 2017 will be Rs. 407 million.
3. The total investment of NSBL is also in decreasing trend the total investment of the bank by the year 2017 is projected to be Rs. 157 million, which is the second lowest (1st in 2009-133) under the study period.
4. The trend analysis of the net profit of NSBL suggests that is in increasing trend. Other things remaining the same, net profit of the bank in 2017 is projected to be Rs. 81 million, which is the highest under the study period.

Since the earning assets of the bank, loan and advances and the earning of the bank is also in increasing trend and investment is in decreasing trend. This suggests that the quantity of the productive assets is increasing, in the same time the quality of the assets is also in increasing trend. Bank management not only should effort towards the increment of its total assets but also it should give due attention towards the increment of the quality of the assets for the better productivity.

CHAPTER - V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter includes two aspects of the study. First aspect of the study focuses on summarizing the fact-findings of the study and making concluding remarks upon them. While the second aspect of the study focuses on making some useful suggestions and recommendations based on findings of the study to improve the investment policy of Nepal NSBL Bank Limited.

5.1 Summary

The development of any country largely depends upon its economic development. Economic development demands transformation of savings or investable resources into the actual investment. Capital formation is the prerequisite in setting the overall pace of the economic development of a country. It is the financial institution that transfers funds from surplus spending units to deficit units.

Banking sector plays an important role in the economic development of the country. Commercial Banks are one of the vital aspects of this sector, which deals in the process of channeling the available resources in the needed sector. It is the intermediary between the deficit and surplus of financial resources. Financial institutions like banks are a necessity to collect scattered saving and put them into productive channels. In the absence of such institutions it is possible that the saving will not be safely and profitably utilized within the economy. It will be diverted aboard or channeled into unproductive conspicuous consumption including real estate speculation.

Investment operation of commercial banks is very risky one. It is the most important factor from the view point of shareholders and bank management. For this, commercial banks have to pay due consideration while formulating Investment Policy. A healthy development of any commercial bank depends upon its investment policy. A good investment policy attracts both borrowers and lenders, which helps to increase the volume and quality of deposits, loans and investment.

The major source of income of a bank is interest income from loans and investments and fee based income. As loan and advances dominate the asset side of the balance sheet of any bank; similarly earnings from such loan and advances occupy a major space in income statement of the bank. However, it is very important to be reminded that most of the bank failures in the world are due to the shrinkage in the value of loans and advances. Hence loan is known as risky asset and investment operation of commercial banks is very risky one. Risk of non-repayment of loan is known as credit risk or default risk. Performing loans have multiple benefits to the society by helping for the growth of economy while non-performing loans erodes even existing capital. Considering the importance of lending to the individual banks and also to the society it serves, it is imperative that the bank meticulously plans its credit operations.

Though several commercial banks have been established in our country within short period of time, stable, strong and appropriate investment policy has not been followed by the commercial banks to earn sufficient return. They have not been able to utilize their funds more efficiently and productively. Thus proper utilization of the resources has become relevant and current issue for the banks. The directions and guidance provided by Nepal Rastra Bank are the major policy statements for Nepalese commercial banks. However, a long term and published policy about their operation is not found even in the joint venture banks.

The main objective of the study is to evaluate the investment policy of Nepal NSBL Bank Ltd and to suggest measures to improve the investment policy of the bank. The study has been constrained by various common limitations.

The study is based on secondary data from F/Y 2007/08 to 2011/12. The data have been basically obtained from annual reports and financial statements, official records, periodicals, journals and bulletins, various published reports and relevant unpublished master's thesis. Besides this, personal contacts with the bank personnel have also been made.

Financial as well as statistical tools have been deployed in order to analyze and interpret the data and information. Under financial analysis, various financial ratios related to the investment function of commercial banks i.e. liquidity ratio, asset management ratio, activity ratio, loan and advances portfolio, profitability ratio and growth ratio have been analyzed and interpreted. Under statistical analysis, some relevant statistical tools i.e. co-efficient of correlation and trend analysis have been used. This analysis gives clear picture of the performance of the bank with regard to its investment operation.

5.2 Conclusion

Liquidity

The current ratio of the bank over the five years is 1.082 times on an average. Although the current ratio of 2:1 is considered as standard, acceptability of the value depends on the industry. For the banks a current ratio of 1:1 or above would be considered acceptable. Therefore the liquidity position of NSBL is normal from the viewpoint of current ratio. The cash and bank balance to total deposit ratio is also sufficient to meet the short-term obligation of the bank. The mean cash and bank balance to total deposits ratio of 7.722% shows that the bank has enough liquidity. But the ratios are less consistent over the study period.

Similarly 11.32% of mean cash and bank balance to current assets ratio shows that one-fifth of the current asset is very liquid. 42.4% C.V. shows that the ratios are not consistent.

Hence, the above results show that the liquidity position of NSBL is good enough to meet the short-term obligations. The maintenance of the liquidity also depends on the past withdrawal trend of the bank. The inconsistency of the ratios shows the lack of specific corporate policy about the maintenance of liquidity. The proportion of cash and bank balance to current assets is little bit high, which shows that the bank is maintaining more idle cash that can be invested to government securities to get return.

Asset Management

The mean CD ratio of the bank is 58.382%, which is slightly high. It shows that the bank is aggressive in lending. The ratios are satisfactorily consistent over the study period.

The mean Investment to total deposits ratio is 41.44% and the ratios are more volatile. The increasing trend of the ratio suggests that the bank is increasing its investment on government securities and shares and debentures of other companies.

The loan and advances to working fund ratio is 58.382% in average and the ratios are highly consistent also. This shows that NSBL has satisfactorily utilized its total assets for the purpose of income generation. Almost two-third of the total asset in average is mobilized in productive area.

NSBL has invested 10.64% of fund from total asset on government securities in average. The ratios are inconsistent also. So the bank has less investment on risk-free area, which has less return also. The inconsistency of the ratios shows that the bank has not specific policy for the investment on government securities.

Hence, the above results show the asset management efficiency of the bank, which is directly related to the investment policy of the bank. The bank has utilized about 58% of its deposits liability into income generating assets and most of them in the form of loans and advances.

Activity

The analysis shows that Non-Performing loans to total loans & advances ratio of NSBL is 1.794% on an average during the study period. The ratio has been fluctuating over the years and although the highest ratio was found in 2007/08 which is 3.83%. The bank has decreased the ratio next year. This shows bank is aware of Non-performing loans problem. But it is still above the international standard.

Loans & Advances Portfolio

Priority sector loans to total loans & advances ratio is found 15.98% on an average during the study period and the ratios are almost inconsistent. The average ratio required is 12%, except for the year 2007/08. So, the bank is fulfilling the directive credit requirement every year.

Sector wise portfolio analysis of the loans and advances shows that the bank has given priority to industrial or production sector for lending. On an average during the study period the bank has advanced 51.07% on average of loans and advances to industrial sector and the ratio is consistent also. The bank has invested very nominal fund in the agricultural sector i.e. 0.4% on average. Lending in commercial sector is 21.14% on average and less consistent. Service sector lending on an average is found about 13.52% and the ratios are in increasing trend.

Hence, the analysis shows that the lending portfolio of NSBL is not well managed. Although the bank is fulfilling the NRB requirement for priority sector lending, the sector wise lending portfolio it is not properly diversified. Half of the fund is poured in a single sector i.e. industrial/production sector. The industrial sector lending is considered as more risky than commercial and service sector lending. The investment in a single sector increases the portfolio risk.

Profitability

Interest income to total income ratio of the bank is 88.58% on an average during the study period and the ratios are consistent. The average interest income to total outside asset is 88.58% during the study period and the ratios are consistent.

Interest expenses to total expenses ratio is 18.64% on average and the ratios are in increasing trend. This shows that the bank is increasing its cost of fund over the year. This also shows that bank has high proportion of operating and overhead expenses.

There is 5.76% of interest income on total asset on average. The ratios are satisfactorily consistent also. So, the interest earning capacity of total asset is consistent. .

Total income to total expenses ratio is found to be 1.5 times on an average during the study period and the ratios are highly consistent over the years. So the total income is consistently over the total expenses.

Total income to total assets ratio is found to be 6.70% on an average during the study period and the ratios are consistent. This shows that the earning power of the assets is consistent and it is generating income at the consistent rate.

Return on loan & advances ratio is 2.08% on an average during the study period and the ratios are fluctuating with increasing trend. This shows that the bank has not been able to formulate and adopt the appropriate policy to increase the profitability although loan and advances has been increasing continuously.

Return on equity ratio is 16.696% on an average during the study period and the ratios are in increasing trend with fluctuations over the years and the ratios are satisfactorily consistent and less variable. This shows that the mean ratio of ROE is satisfactory and it is increasing during the recent years.

Net Interest Margin is 4.24% on average during the study period and the ratios are little bit inconsistent. This shows that the bank has satisfactory net interest margin and is doing better to recover the costs and to earn higher profit. The inconsistency of the ratios shows that bank has not specific policy to get the consistent net interest margin over the period.

Hence, the above result shows that the bank does have specific policy to increase the profitability of the bank. The interest earning capacity of total loan and advances, total outside asset and total working fund are consistent. Net interest margin of the bank is also satisfactory. The profitability ratios like return on loan and advances, return on assets, return on equity, earning per share etc are also in satisfactory level over the year. This shows that the non-operating expenses of the bank like provision for loan loss is decreasing, which is increasing the profitability of the bank. Interest income has high contribution to the total income of the bank. This shows that the bank has less proportion of income from fee based transactions. Interest expenses contribute about 50% of the total expenses of the bank, which shows that the bank has high proportion overhead expenses. In overall, investment policy adopted by the bank is satisfactory appropriate from the profitability point of view.

Growth

The growth ratio of total deposits during the study period is 289.05% and the amount of deposits is in increasing trend every year. The growth ratio of total loan and advances during the study period is found to be 115.07% and is in increasing trend every year. So, the total deposit and loan and advances are increasing with almost equal proportion. The growth ratio of investments during the study period is 20.71% with increasing trend. The net profit of the bank is also in increasing trend with net growth rate of 92%.

Hence, the above result shows that the bank has been collecting the deposits funds in increasing trend and it has been increasing its loans and advances and investments with the almost same rate. So, both the sources and uses of fund is in increasing trend. At the same time net profit of the bank has also positive growth and it is increasing over the year. It shows that the bank has been successful to adopt the appropriate investment policy to increase the profitability of the bank with positive growth rate of deposit and loans and advances.

Correlation

The correlation analysis shows that the correlation coefficient r between deposits and loans & advances of the bank is 0.94 and is more than six times the probable error, which infers that there is very strong positive correlation between deposits and loans & advances during study period. The analysis shows that there is significant correlation between total deposit and total investment. Similarly, there is positive correlation between total loan & advances and total net profit and it is greater than six times the probable error. So, the total loan and advances and total net profit are also correlated during the study period. The same is for total investment and total net profit and they are also correlated during the study period. This analysis shows that the increase of deposit, loan and advances and investment is contributing to increase the net profit of the bank. The net profit of the bank may decrease if total loan and advances and investment of the bank are decreased.

Trend analysis

From the trend analysis of total deposit, loan and advances, investment and net profit shows that total deposit, loan and advances and investment are in increasing trend. Total value projected for total deposit, loan and advances and investment are Rs.1000 million, 406.07 million and 157.4 million respectively. The net profit is in increasing trend and total net profit projected till 2017 is Rs. 80.05 million.

Hence the NSBL is able to increase the profitability of the bank due to its fund collection and its utilization is increasing. Bank is adopting the proper policy to increase the profit of the organization. If the net profit moves in this trend, bank will be surely in good position after some years. So the investment policy of the bank in terms of optimum utilization of its resources to generate optimum return is well managed.

Hence from the overall analysis of investment policy of NSBL with the help of financial, mathematical and statistical tools the problems set for the study is answered as under, which is the main objective of this study.

1. The proportion of non-performing assets on total loan and advances of the bank is more than the satisfactory level. It should be less than 5% to be graded as internationally A grade commercial bank. For the Nepalese context also, NPA should be in single digit to be considered as satisfactory. The NPA level of the bank is a bit higher than these standards. So, the management of the bank should give its due attention in time to manage the NPA level within the satisfactory level.

2. The loan and advances portfolio of the bank is not satisfactory. The lending is not properly diversified. Half of the loan from total portfolio is given to industrial sectors. Bank is unable to explore the new and profitable sectors for the lending purpose. So, the bank has very risky portfolio of loan and advances. If industrial sector will not function properly, its impact to the bank will be huge.

3. Bank is fulfilling its priority sector investment requirement every year, during the study period. In the course of failure to fulfill the directive credit requirement, bank is subject to penalty, which affects the profitability of the bank. The average priority sector lending of the bank is more than required 12% landmark.

4. The relation of total deposit is positive to total investment i.e. if total deposit increases, bank's loan and advances, investment on government securities, shares

and debentures of other companies also increases. The bank's investment, in the form of loan and advances and other investments, has t positive relation to total net profit of the bank. Bank's total profit is respective to its total investment.

5.3 Recommendations

On the basis of analysis and findings of the study, following recommendations can be made as suggestions to overcome the weakness and less effectiveness in the existing investment policy of Nepal NSBL Bank Limited.

1) Before mobilizing fund well, NSBL is recommended to increase its deposit to lower the credit/deposit ratio in certain extent. The bank has to collect a large variety of deposit schemes. The bank should explore the new deposit products to attract the deposit considerably. For this bank should lunch the new schemes like prize scheme, gift schemes, child deposit schemes, recurring deposit schemes etc. As the competition on the banking sector is increasing, bank should follow the innovative approach to bank marketing.
2) As the amount of investments made by the bank is found very little and also inconsistent during the period, the bank is recommended to increase the investment which helps to utilize the idle funds into income generation as well as minimizes risk and also helps to maintain optimal level of liquidity. Increasing the amount of investment in government securities also helps the bank to maintain an equilibrium level of risk free and risky assets.
3) Interest income from loan and advances and investment has dominance to the total income of the bank. Income from other fee-based transactions has low proportion. The portion of OBS transactions is found decreasing in comparison to loans and advances. Now a day most of the commercial banks are getting more benefits and increasing their earnings through the enhancement of the fee-based OBS transactions. So the bank is recommended to give more priority to increase the fee-based OBS transactions to generate more income.
4) The non-performing loan of the bank is increasing and it is above the satisfactory level. So, the bank management is recommended to give due consideration towards the NPA management in time. The bank has to give its effort towards the recovery of the loan. For this bank has to form the loan monitoring and recovery committee

in its central level which keeps the updated database of total loan and advances and its repayment trend. Bank is recommended to adopt the aggressive loan recovery and follow-up policy. Similarly, the improper project appraisal also increases the chances of default of the loan and advances. So, the bank is recommended to follow-up the scientific project appraisal approach and train the employee in the loan section accordingly.

5) The bank is advised to examine carefully from time to time the portfolio management strategies to maintain equilibrium in the portfolio of loans and investment and make continuous efforts to explore new, competitive and high yielding investment opportunities to optimize the return. The bank has been lending more than 50% of its credit to industrial only during the study period, but at present this sectors is not doing well. So the bank is recommended not to expand its business in this sector so heavily, instead it is advised to give more focus to increase its volume of credit to other sectors specially to retail financing. Bank must develop new lending products. Banking sector is going in consumer credit all over the world by financing the consumer goods. So, NSBL is recommended to focus the fixed income generating people and lunch new credit products like housing loan, education loan, car loan etc. The bank has to concentrate on customer oriented lending policy to sustain in the competitive banking business.

6) Similarly, the bank is fulfilling its lending requirement towards the priority sector. It is the efficiency of the bank's management. It may affect highly towards the profitability of the bank but it may degrade the image of the bank towards the regulatory authority. Bank has to duly follow the legislative provisions of the central bank. Bank also has to give its attention towards the national interest of the country. But due to the lack of reliable lending opportunities and fear of losing the principle in rural sector, all commercial banks including NSBL has been less oriented toward the priority sector and deprived sector lending function. Hence it is recommended that the government and Nepal Rastra Bank should take appropriate action to initiate the commercial banks to attract to flow credit in rural economy so that we can expect the increase in the priority and deprived sector lending by the banks. Posing the compulsions by directives does not create long term healthy

lending practices unless the commercial banks are not self motivated to flow credit in this sector.

7) The bank should be careful in increasing net profit in a real sense to maintain the confidence of shareholders, depositors, its customers and the general public. The overall profitability of the bank has been increasing during the period resulting the sharp increase in the return to the shareholders. The return on loan and advances, return on total assets, return on equity, earning per share all is increasing. The sources of fund and its utilization have been increasing and also the total income of the bank has been increasing due to which the bank has been able to increase the profitability. One of the reasons for this is more increase in the operating income of the bank. Therefore the bank is recommended to decrease the expenses of the bank by controlling the operating expenses as well as by collecting the interest free deposits. It is also recommended to increase the income by enhancing the fee-based OBS transactions as well as utilizing the excess liquid funds in the form of investments.
8) The bank is 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, the bank should develop an 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 customers at competitive prices. The bank is also required to explore the new market areas. For these purpose, the bank is recommended to form a strong marketing department in its central level, which deals with the banking products, places, price and promotion.

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http://www.nsbl.com.np

http://www.nepalstock.com

http://www.nrb.org

Appendices

Appendix I

Table No. 1

Current Ratio (Times)

		FY				Mean
	2007/08	2008/09	2009/10	2010/11	2011/12	
Current Assets	139783.37	166266.77	213238.01	267602.08	328803.34	
Current Liabilities	137905.1	280201.68	349687.92	424961.28	534158.81	
NSBL Ratio	1.01	0.59	0.61	0.63	0.62	0.693

Calculation of Standard deviation and C.V of Current Ratios

Year	Ratio Value(X)	$\mathrm{X}-\bar{\mathrm{x}}$	$(\mathrm{X}-\bar{\mathrm{x}})^2$
07/08	1.01	0.318	0.101124
08/09	0.59	-0.102	0.010404
09/10	0.61	-0.082	0.006724
10/11	0.63	-0.062	0.003844
11/12	0.62	-0.072	0.005184
Total	3.46	0	0.12728

Mean Ratio of Total Income, $\bar{X} = \frac{\sum x}{n} = 0.692$

$$\text{S.D } (\sigma) = \sqrt{\frac{(\mathrm{X}-\bar{\mathrm{x}})^2}{n-1}}$$

$$= 0.03182$$

$$\text{C.V.} = \frac{\sigma x}{\bar{x}}$$

$$= 0.045983$$

$$= 4.5983$$

Table No. 2
Cash and bank balance to total deposit ratio (%)

		FY				Mean
	2007/08	2008/09	2009/10	2010/11	2011/12	
Current Assets	13429.59	11764.39	34412.6	18729.37	55083.81	
Current Liabilities	137153.95	279572.21	348964.24	424154.43	533372.64	
NSBL Ratio	9.79	4.21	9.86	4.42	10.33	7.722

Calculation of Standard deviation and C.V.

Year	Ratio Value(X)	$X - \bar{x}$	$(X - \bar{x})^2$
07/08	9.79	2.068	4.276
08/09	4.21	-3.512	12.32
09/10	9.86	2.138	4.57
10/11	4.42	-3.302	10.903
11/12	10.33	2.608	6.802
Total	38.61	0	38.88668

Mean Ratio of Total Income, $\overline{X} = \frac{\sum x}{n}$

$= 7.722\%$

$= 0.07722\text{times}$

S.D $(\sigma) = \sqrt{\frac{(X - \bar{x})^2}{n-1}}$

$= 9.722$

C.V. $= \frac{\sigma x}{\bar{x}}$

$= 1.259$

Table No. 3
Cash and bank balance to current ratio (%)

		FY				Mean
	2007/08	2008/09	2009/10	2010/11	2011/12	
Cash & Bank Balance	13429.59	11764.39	34412.6	18729.37	55083.81	
Current Assets	139783.37	166266.77	213238.01	267602.08	328803.34	
NSBL Ratio	9.61	7.08	16.14	7.0	16.75	11.32

Calculation of Standard deviation and C.V.

Year	Ratio Value(X)	$\mathrm{X} - \bar{\mathrm{x}}$	$(\mathrm{X} - \bar{\mathrm{x}})^2$
07/08	9.61	-1.70	2.89
08/09	7.08	-4.23	17.8923
09/10	16.14	4.82	23.2324
10/11	7.0	-4.32	18.6624
11/12	16.75	5.43	29.4849
Total	56.58	0	92.1626

Mean Ratio of Total Income, $\overline{X} = \frac{\sum x}{n}$

$$= 11.32$$

$$\text{S.D } (\sigma) = \sqrt{\frac{(\mathrm{X}-\bar{\mathrm{x}})^2}{n-1}}$$

$$= 4.80$$

$$\text{C.V.} = \frac{\sigma x}{\bar{x}}$$

$$= 0.424$$

Table No. 4
Net Profit to total assets ratio (%)

Bank		FY				Mean	S.D	C.V (%)
	2007/08	2008/09	2009/10	2010/11	2011/12			
NSBL	1.44	1.05	1.03	1.01	0.83	1.072		

It Is taken from the Five Years Indicators

Calculation of Standard deviation and C.V.

Year	Ratio Value(X)	$\mathrm{X} - \overline{\mathrm{x}}$	$(\mathrm{X} - \overline{\mathrm{x}})^2$
07/08	1.44	0.368	0.124354
08/09	1.05	-0.022	0.000484
09/10	1.03	-0.042	0.001764
10/11	1.01	-0.062	0.003844
11/12	0.83	-0.242	0.058564
Total	5.36	0	0.20008

Mean Ratio of Total Income, $\overline{X} = \frac{\sum x}{n}$

$$= 1.072$$

S.D $(\sigma) = \sqrt{\frac{(\mathrm{X}-\overline{\mathrm{x}})^2}{n-1}}$

$$= 0.2236$$

$$= 22.36\%$$

C.V. $= \frac{\sigma x}{\overline{x}}$

$$= 0.2086$$

$$= 20.86\%$$

Table No. 5
Loan & Advances to total deposit ratio (%)

		FY				Mean
	2007/08	2008/09	2009/10	2010/11	2011/12	
Loan & Advances	121136.98	151317.48	174805.45	213657.71	261420.94	
Total deposit	137153.95	279572.21	348964.24	424154.43	533372.64	
NSBL Ratio	88.32	54.12	50.09	50.37	49.01	58.382

Calculation of Standard deviation and C.V.

Year	Ratio Value(X)	$\mathrm{X}-\bar{\mathrm{x}}$	$(\mathrm{X}-\bar{\mathrm{x}})^2$
07/08	88.32	29.938	896.28
08/09	54.12	-4.262	18.165
09/10	50.09	-8.292	68.757
10/11	50.37	-8.012	64.192
11/12	49.01	-9.372	87.834
Total	291.91	0	1135.23228

Mean Ratio of Total Income, $\overline{X} = \frac{\sum x}{n}$

$= 58.382$

S.D $(\sigma) = \sqrt{\frac{(\mathrm{X}-\bar{\mathrm{x}})^2}{n-1}}$

$= 16.85$

C.V. $= \frac{\sigma x}{\bar{x}}$

$= 0.2886$

$= 28.86\%$

Table No. 6
Total investment to total deposit ratio (%)

		FY				Mean
	2007/08	2008/09	2009/10	2010/11	2011/12	
Total investment	30888.87	132861.82	163056.33	189110.22	244634.52	
Total deposit	137153.95	279572.21	348964.24	424154.43	533372.64	
NSBL Ratio	22.52	47.52	46.73	44.59	45.87	41.446

Calculation of Standard deviation and C.V.

Year	Ratio Value(X)	$\mathrm{X}-\bar{\mathrm{x}}$	$(\mathrm{X}-\bar{\mathrm{x}})^2$
07/08	22.52	-18.926	358.193476
08/09	47.52	6.074	36.893476
09/10	46.73	5.284	27.920656
10/11	44.59	3.144	9.884736
11/12	45.87	4.424	19.571776
Total	207.23	0	452.46412

Mean Ratio of Total Income, $\overline{X} = \frac{\sum x}{n}$

$$= 41.446$$

$$\text{S.D}\ (\sigma) = \sqrt{\frac{(\mathrm{X}-\bar{\mathrm{x}})^2}{n-1}}$$

$$= 10.64$$

$$\text{C.V.} = \frac{\sigma x}{\bar{x}}$$

$$= 0.2566$$

$$= 25.66$$

Table No. 7
Total credit to deposit ratio (%)

		FY				Mean
	2007/08	2008/09	2009/10	2010/11	2011/12	
NSBL Ratio	88.32	55.84	51.48	51.20	49.62	59.292

It Is taken from the Five Years Indicators

Calculation of Standard deviation and C.V.

Year	Ratio Value(X)	$X-\bar{x}$	$(X-\bar{x})^2$
07/08	88.32	29.028	842.624784
08/09	55.84	-3.452	11.916304
09/10	51.48	-7.812	61.027344
10/11	51.20	-8.092	65.480464
11/12	49.62	-9.672	93.547584
Total	296.46	0	1074.59648

Mean Ratio of Total Income, $\overline{X} = \frac{\sum x}{n} = 59.292$

$$\text{S.D}\ (\sigma) = \sqrt{\frac{(X-\bar{x})^2}{n-1}}$$

$$= 16.39$$

$$\text{C.V.} = \frac{\sigma x}{\bar{x}}$$

$$= 0.27644$$

$$= 27.644\%$$

Table No. 8

Investment on government securities to total working fund ratio (%)

		FY				Mean
	2007/08	2008/09	2009/10	2010/11	2011/12	
Government securities	27628.6	29338.5	37205.9	46821.2	34179.8	
Working fund	171874.6	301664.40	380476.79	460882.33	580597	
NSBL Ratio	16.07	9.73	9.78	10.16	5.89	5.326

Mean Ratio of Total Income, $\overline{X} = \frac{\sum x}{n} = 10.326$

Table No. 9

Investment on shares & debentures to total working fund ratio (%)

		FY				Mean
	2007/08	2008/09	2009/10	2010/11	2011/12	
Investment on shares & debenture	10745.28	14243.39	20613.24	23039.66	29557.39	
Working fund	171874.6	301664.40	380476.79	460882.33	580597	
NSBL Ratio	6.252	4.722	5.418	4.996	5.09	5.2956

Mean Ratio of Total Income, $\overline{X} = \frac{\sum x}{n} = 5.296$

Table No. 10

Non-performing Credit to total credit ratio (%)

		FY				Mean
	2007/08	2008/09	2009/10	2010/11	2011/12	
NSBL	3.83	2.02	1.48	1.10	0.54	1.794

It Is taken from the Five Years Indicators

Mean Ratio of Total Income, $\overline{X} = \frac{\sum x}{n}$

$$= 1.794$$

Table No. 11

Priority sector loans to total loans & Advances ratio (%)

		FY					S.D	C.V(%)
	2007/08	2008/09	2009/10	2010/11	2011/12	Mean		
NSBL	18.85	17.84	20.09	13.38	9.76	15.98	3.95	24.07

It Is taken from the Five Years Indicators

Mean Ratio of Total Income, $\overline{X} = \frac{\sum x}{n}$

$$= 15.98$$

$$\text{S.D } (\sigma) = \sqrt{\frac{(\mathrm{X}-\bar{\mathrm{x}})^2}{n-1}}$$

$$= 3.95$$

$$\text{C.V.} = \frac{\sigma x}{\bar{x}}$$

$$= 24.07\%$$

Table No. 12

Sector wise loan and advances of Nepal NSBL Bank Limited

Sector		FY					S.D	C.V(%)
	2007/08	2008/09	2009/10	2010/11	2011/12	Mean		
Agriculture	0.02	0.91	0.27	0.39	0.40	0.40	0.3255	81.40
Industry/ Production	50.03	46.28	49.84	54.89	54.31	51.07	3.5566	6.96
Trading/ Commercial	23.69	27.56	18.32	17.25	18.88	21.14	4.3539	20.80
Service	5.83	14.02	13.84	15.67	18.23	13.52	4.6439	34.35
Others	20.43	11.23	17.72	11.80	8.17	13.87	5.0399	39.34
Total	100	100	100	100	100	100	-	-

It Is taken from the Financial highlights

Mean Ratio of Total Income, $\overline{X} = \frac{\sum x}{n} = 0.14, 51.07, 21.14, 13.52, 13.87$

$$\text{S.D } (\sigma) = \sqrt{\frac{(\text{X}-\bar{\text{x}})^2}{n-1}}$$

$$= 0.3255, 3.5566, 4.3539, 4.6439, 5.0399$$

$$\text{C.V.} = \frac{\sigma x}{\bar{x}}$$

$$= 81.40, 6.96, 20.80, 34.35, 36.34$$

Table No. 13

Interest income total income ratio (%)

		FY				Mean
	2007/08	2008/09	2009/10	2010/11	2011/12	
Int. income	9705.13	14604.46	22697.04	30999.08	37694.83	
Total income	10929.77	16533.67	25505.21	35017.21	42677.45	
NSBL	88.8	88.3	89	88.5	88.3	88.58

Calculation of Standard deviation and C.V.

Year	Ratio Value(X)	$\mathrm{X} - \bar{\mathrm{x}}$	$(\mathrm{X} - \bar{\mathrm{x}})^2$
07/08	88.8	0.22	0.0484
08/09	88.3	-0.28	0.0784
09/10	89	0.42	0.1764
10/11	88.5	-0.08	0.0064
11/12	88.3	-0.28	0.0784
Total	442.9	0	0.388

Mean Ratio of Total Income, $\overline{X} = \frac{\sum x}{n}$

$$= 88.58$$

$$\text{S.D } (\sigma) = \sqrt{\frac{(\mathrm{X}-\bar{\mathrm{x}})^2}{n-1}}$$

$$= 0.3114$$

$$\text{C.V.} = \frac{\sigma x}{\bar{x}}$$

$$= 0.352$$

Table No. 14

Interest income total income ratio (%)

		FY				Mean
	2007/08	2008/09	2009/10	2010/11	2011/12	
Int. expenses	4549.18	8247	14436.94	20960.38	27707.99	
Total expenses	6072.98	10486.66	17875.44	25257.81	32269.25	
NSBL	74.9	78.6	80.8	83	85.9	80.64

Calculation of Standard deviation and C.V.

Year	Ratio Value(X)	$\mathrm{X}-\overline{\mathrm{x}}$	$(\mathrm{X}-\overline{\mathrm{x}})^2$
07/08	74.9	-5.74	32.9476
08/09	78.6	-2.04	4.1616
09/10	80.8	0.16	0.0256
10/11	83	2.36	5.569
11/12	85.9	5.26	27.6676
Total	403.2	0	70.372

Mean Ratio of Total Income, $\overline{X} = \frac{\sum x}{n}$

$$= 80.64$$

S.D $(\sigma) = \sqrt{\frac{(\mathrm{X}-\overline{\mathrm{x}})^2}{n-1}}$

$$= 4.194$$

$$= 419.4\%$$

C.V. $= \frac{\sigma x}{\overline{x}}$

$$= 5.20$$

Table No. 15

Interest income total expenses ratio (%)

		FY				Mean
	2007/08	2008/09	2009/10	2010/11	2011/12	
Int. expenses	10929.77	16533.67	25505.21	35017.73	42677.45	
Total expenses	6072.98	10486.66	17875.44	25257.81	32269.25	
NSBL	1.80	1.58	1.43	1.37	1.32	1.5

Calculation of Standard deviation and C.V.

Year	Ratio Value(X)	$X - \bar{x}$	$(X - \bar{x})^2$
07/08	1.80	0.30	0.09
08/09	1.58	0.08	0.0064
09/10	1.43	-0.07	0.0049
10/11	1.37	-0.13	0.0169
11/12	1.32	-0.18	0.0324
Total	7.5	0	0.1442

Mean Ratio of Total Income, $\overline{X} = \frac{\sum x}{n}$

$= 1.5$

S.D $(\sigma) = \sqrt{\frac{(X-\bar{x})^2}{n-1}}$

$= 0.1897$

$= 18.97\%$

C.V. $= \frac{\sigma x}{\bar{x}}$

$= 0.1265$

Table No. 16

Total income to total working fund ratios (%)

		FY				Mean
	2007/08	2008/09	2009/10	2010/11	2011/12	
Total income	10929.77	16533.67	25505.21	35017.73	42677.45	
working fund	171874.46	301664.40	380476.49	460882.33	580597.07	
NSBL Ratio	6.36	5.48	6.70	7.60	7.35	6.70

Calculation of Standard deviation and C.V.

Year	Ratio Value(X)	$X - \bar{x}$	$(X - \bar{x})^2$
07/08	6.36	-0.34	0.1156
08/09	5.48	-1.22	1.4884
09/10	6.70	0	0
10/11	7.60	0.9	0.81
11/12	7.35	0.66	0.4356
Total	33.49	0	2.8496

Mean Ratio of Total Income, $\overline{X} = \frac{\sum x}{n}$

$= 6.70$

S.D $(\sigma) = \sqrt{\frac{(X-\bar{x})^2}{n-1}}$

$= 0.844$

C.V. $= \frac{\sigma x}{\bar{x}}$

$= 0.12597$

$= 12.597\%$

Table No. 17

Return on Loan and Advances (%)

		FY				Mean
	2007/08	2008/09	2009/10	2010/11	2011/12	
Total income	2477.71	3163.73	3917.42	4645.65	4801.05	
working fund	121136.98	151317.48	174805.45	213657.71	261420.94	
NSBL Ratio	2.05	2.09	2.24	2.17	1.84	2.08

Calculation of Standard deviation and C.V.

Year	Ratio Value(X)	$\mathrm{X}-\overline{\mathrm{x}}$	$(\mathrm{X}-\overline{\mathrm{x}})^2$
07/08	2.05	-0.028	0.000784
08/09	2.09	0.012	0.000144
09/10	2.24	0.162	0.026244
10/11	2.17	0.092	0.008464
11/12	1.84	-0.238	0.056644
Total	10.39	0	0.09228

Mean Ratio of Total Income, $\overline{X} = \frac{\sum x}{n}$

$$= 2.078\%$$

$$\text{S.D } (\sigma) = \sqrt{\frac{(\mathrm{X}-\overline{\mathrm{x}})^2}{n-1}}$$

$$= 0.1518$$

$$= 15.18\%$$

$$\text{C.V.} = \frac{\sigma x}{\overline{x}}$$

$$= 0.073$$

$$= 7.3\%$$

Table No. 18

Return on equity (%)

		FY					Mean	S.D	C.V%
	2007/08	2008/09	2009/10	2010/11	2011/12				
NSBL	17.64	18.58	16.05	16.19	15.02	16.696	1.26	13.25

It is taken from the financial highlights

Calculation of Standard deviation and C.V.

Year	Ratio Value(X)	$\mathrm{X}-\overline{\mathrm{x}}$	$(\mathrm{X}-\overline{\mathrm{x}})^2$
07/08	17.64	0.944	0.891136
08/09	18.58	1.884	3.549456
09/10	16.05	-0.636	0.404496
10/11	16.19	-0.507	0.256036
11/12	15.02	-1.676	2.808976
Total	83.48	0	7.911113

Mean Ratio of Total Income, $\overline{X} = \frac{\sum x}{n}$

$$= 16.696\%$$

$$\text{S.D } (\sigma) = \sqrt{\frac{(\mathrm{X}-\overline{\mathrm{x}})^2}{n-1}}$$

$$= 01.41$$

$$\text{C.V.} = \frac{\sigma x}{\overline{x}}$$

$$= 0.08445$$

$$= 8.445\%$$

Table No. 19

Earnings per share (in Rs.)

		FY					Mean	S.D	C.V%
	2007/08	2008/09	2009/10	2010/11	2011/12				
NSBL	28.33	36.18	23.69	24.85	22.93	22.996	6.44	3.57

It is taken from the financial highlights

Mean Ratio of Total Income, $\overline{X} = \frac{\sum x}{n}$

$= 22.996\%$

S.D $(\sigma) = \sqrt{\frac{(\mathrm{X}-\bar{\mathrm{x}})^2}{n-1}}$

$= 6.44$

C.V. $= \frac{\sigma x}{\bar{x}}$

$= 3.57$

Table No. 20

Net Interest Margin (%)

		FY					Mean	S.D	C.V%
	2007/08	2008/09	2009/10	2010/11	2011/12				
NSBL	2.58	3.98	4.62	5.15	4.90	4.24	0.92	21.66

It is taken from the financial highlights

Mean Ratio of Total Income, $\overline{X} = \frac{\sum x}{n}$

$= 4.24\%$

S.D $(\sigma) = \sqrt{\frac{(\mathrm{X}-\bar{\mathrm{x}})^2}{n-1}}$

$= 0.92$

C.V. $= \frac{\sigma x}{\bar{x}}$

$= 21.66$

Table No. 21

Ratio of Total Deposits (Rs. In Millions)

		FY				Growth Ratios%
	2007/08	2008/09	2009/10	2010/11	2011/12	
NSBL	137	279	349	424	533	289.05

We have,

Growth Ratios from 2007/08 to 2011/12

Growth Ratios (07/08-011/12) $= \frac{\text{value of 2012} - \text{value of 2008}}{\text{value of 2008}}$

$$= \frac{533 - 137}{137}$$

$$= 289.05\%$$

Table No. 22

Growth Ratio of Total Loan & Advances (Rs. In Millions)

		FY				Mean	S.D	C.V%
	2007/08	2008/09	2009/10	2010/11	2011/12			
NSBL	2.58	3.98	4.62	5.15	4.90	4.24	0.92	21.66

We have,

Growth Ratios from 2007/08 to 2011/12

Growth Ratios (07/08-011/12) $= \frac{\text{value of 2012} - \text{value of 2008}}{\text{value of 2008}}$

$$= \frac{261 - 121}{121}$$

$$= 115.70\%$$

Table No. 23

Growth Ratio of Total Investment (Rs. In Millions)

		FY				Growth Ratios%
	2007/08	2008/09	2009/10	2010/11	2011/12	
NSBL	309	133	163	189	245	-20.71

We have,

Growth Ratios from 2007/08 to 2011/12

Growth Ratios (07/08-011/12) $= \frac{\text{value of 2012} - \text{value of 2008}}{\text{value of 2008}}$

$$= \frac{245-309}{309}$$

$$= -20.71\%$$

Table No. 24

Growth Ratio of Net profit (Rs. In Millions)

		FY				Mean	S.D	C.V%
	2007/08	2008/09	2009/10	2010/11	2011/12			
NSBL	2.58	3.98	4.62	5.15	4.90	4.24	0.92	21.66

We have,

Growth Ratios from 2007/08 to 2011/12

Growth Ratios (07/08-011/12) $= \frac{\text{value of 2012} - \text{value of 2008}}{\text{value of 2008}}$

$$= \frac{4.8-2.5}{2.5}$$

$$= 92\%$$

Appendix 12

Table 33

Profit and Loss Account

Particular	07/08	08/09	09/10	10/11	11/12
Interest Income	970,512,681	1,460,445,686	2,269,704,291	3,099,907,735	3,769,483,069
Interest Expenses	454,917,713	824,700,275	1,443,693,573	2,096,038,379	2,770,789,689
Net Interest Income	515,594,968	635,745,411	826,010,718	1,003,869,356	998,684,380
Commission & Discount	50,917,830	78,836,624	131,692,149	236,159,350	255,351,737
Other operating incomes	19,557,259	52,790,137	78,796,662	95,172,658	141,761,704
Exchange Fluctuation income	51,989,275	61,294,299	70,328,247	70,532,720	101,138,325
Total Operating Income	638,059,332	828,666,471	1,106,827,776	1,405,734,084	1,496,936,146
Staff Expenses	74,890,269	121,989,160	130,336,536	255,430,258	289,153,228
Other Operating Expenses	152,379,842	223,965,592	343,850,226	429,743,236	456,126,353
Exchange Fluctuation Loss	_	_	_	_	_
Operating Profit Before Provision for possible loss	410,789,211	482,711,719	632,640,974	720,560,563	751,656,565
Provision for possible losses	57,463,909	40,345,336	62,350,544	46,308,152	78,011,798
Operating Profit	353,325,312	442,366,383	570,290,430	674,252,411	673,644,767
Non Operating income/loss	(271,006)	2,516,407	2,552,892	3,113,765	2,182,640
Provision for possible Loss Written Back	29,782,580	198,672,788	56,621,276	179,122,158	91,695,108
Profit from regular operations	382,836,886	643,555,578	629,464,598	856,488,334	767,522,515
Profit/Loss from extra- ordinary Activities	_	(156,220,828)	(37,226,000)	(137,672,628)	(12,203,577)
Net Profit after considering all activities	382,836,886	643,555,578	629,464,598	856,488,334	767,522,515
Provision for staff Bonus	34,803,353	44,303,159	53,836,236	65,346,882	68,665,358
Provision for income tax	100,262,775	126,958,096	146,620,243	188,903,825	206,548,087
Current year's	105,745,947	133,123,502	183,015,350	206,531,475	229,051,564
Previous Year's	870,463	2,582,900	(28,395,565)	(4,928,484)	729,573
Deferred Tax	(6,353,635)	(9,048,306)	(7,999,542)	(12,699,166)	(23,233,050)
Net Profit/Loss	247,770,758	316,373,495	391,742,119	464,564,999	480,105,493