FUND MOBILIZATION IN COMMERCIAL BANKS OF NEPAL

(With Special Reference to Nabil Bank Limited and Nepal Investment Bank Limited)

Submitted By:
BINITA BAJRACHARYA
Shanker Dev Campus
Campus Roll No.: 1067/063
T.U. Regd. No.: 7-2-31-672-2003
2nd Year Exam Symbol No.: 1762

Submitted To:
Office of the Dean
Faculty of Management
Tribhuvan University

In partial fulfillment of the requirement for the degree of Master of Business Studies (MBS)

Kathmandu, Nepal
June, 2012

RECOMMENDATION

This is to certify that the thesis

Submitted by:

BINITA BAJRACHARYA

Entitled:

FUND MOBILIZATION IN COMMERCIAL BANKS OF NEPAL
(With Special Reference to Nabil Bank Limited and Nepal Investment Bank Limited)

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

……..……..……..……	......…………..……….…..………	……………..………..…..…………
Prof. Snehalata Kafle	**Prof. Bishweshor Man Shrestha**	**Asso. Prof. Prakash Singh Pradhan**
(Thesis Supervisor)	**(Head, Research Department)**	**(Campus Chief)**

VIVA-VOCE SHEET

We have conducted the viva –voce of the thesis presented

by:

BINITA BAJRACHARYA

Entitled:

FUND MOBILIZATION IN COMMERCIAL BANKS OF NEPAL

(With Special Reference to Nabil Bank Limited and Nepal Investment Bank Limited)

And found the thesis to be the original work of the student and 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 (MBS)

Viva-Voce Committee

Head, Research Department ………………………………

Member (Thesis Supervisor) ………………………………

Member (External Expert) ………………………………

DECLARATION

I hereby declare that the work reported in this thesis entitled "**Fund Mobilization in Commercial Banks of Nepal (With Special Reference to Nabil Bank Limited and Nepal Investment Bank Limited) "** submitted to Office of the Dean, Faculty of Management, Tribhuvan University, is my original work done in the form of partial fulfillment of the requirement for the degree of Master of Business Studies (MBS) under the supervision of **Prof. Snehalata Kafle** of Shanker Dev Campus, T.U.

……………………………………..

Binita Bajracharya

Shanker Dev Campus

Campus Roll No.: 1067/063

T.U. Regd. No.: 7-2-31-672-2003

2nd Year Exam Symbol No.: 1762

ACKNOWLEDGEMENT

This thesis entitled "*Fund Mobilization In Commercial Banks of Nepal: With Special Reference to NABIL Bank Limited and Nepal Investment Bank Limited*" has been prepared in partial fulfillment for the degree of Masters of Business Studies (MBS) under the supervision of Prof. Snehalata Kafle of Shanker Dev Campus. It is my privilege of getting helps and co-operation from different persons. It is not possible to enumerate the names of all of them. However, it will be matter of injustice if I forget the names of those personalities whose valuable suggestions and co-operation to complete this thesis report.

First and foremost, I would like to offer special thanks to my friends for their proper suggestions. I would like to thank all the staff of the concerned banks for their full support in providing all the necessary data, which helped me in preparing this thesis report. I could not remain without thanking to my teachers and supervisor who all helped me during my study of MBS and during preparation of this thesis report.

I am thankful to the librarians of Central Library, TU Kritipur and Library of Shanker Dev for providing me with related books and thesis and the entire teacher involved there who made me capable of writing this thesis. I alone am responsible for whatever weaknesses it may still contain.

Binita Bajracharya

Researcher

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABBREVIATIONS

C.V	:	Coefficient of Variation
CA	:	Current Assets
CBB	:	Cash and Bank Balance
CL	:	Current Liabilities
FA	:	Fixed Assets
Inv.	:	Investment
LA	:	Loan and Advances
LTD	:	Long Term Debt
MSCN	:	Money at Short Call and Notice
NABIL	:	Nepal Arab Bank Limited
NIBL	:	Nepal Investment Bank Limited
NPAT	:	Net Profit After Tax
P.E.	:	Probable Error
r	:	Coefficient of Correlation
S.D.	:	Standard Deviation
SE	:	Shareholders′ Equity
TD	:	Total Deposit
TF	:	Total Fund

CHAPTER – I

INTRODUCTION

1.3 Background of the Study

Generally the organization that transacts money is called bank. Bank and banking has always played a significant role for the financial activities in the business. So bank is the major need for various developments. Bank collects fund as a saving from the community and invest them into most desirable and highly yielding sector as a full to a process of economic development.

The main objectives of the bank are collection of amount from public in a form of saving and providing short-term loan (for the development of industry, trade, and business) to the ones in need. The development of country's economy is impossible without expansion of banking function in both rural and urban area of the country. Development of trade and industry is dependent upon the development of banking facilities. So it is said that the bank is backbone of economic development in modern society. Banking institutions are inevitable for mobilizing resources, for finance and social economic development of a country and which is important to all parties i.e. generally public, business, organization, government and other small financial institution. The development of a country is always measured by its economic development through economic indices. That's why every country has given emphasis on boost up its economy. At present, the financial institutions are viewed as catalyst in the process of the economic growth. The mobilization of domestic resources is one of the key factors in the economic development of a country.

Generally, fund mobilizing means to flow the cash in different sectors at profit motive. Investment in its broadest sense means the sacrifice of certain present value for (possibly uncertain) future value. In pure financial sense, the subsequent use of the term investment will be in the prevalent financial sense of the placing of money in the hands of other for their use, in return for a proper instrument entitling the holders to fixed income payment or the participation in expected profits. It can define the terms of investment at manufacturing and trading forms those long term expenditures that aim at increasing plant capacity of efficiency or at building up goodwill, there by producing an increased return over a period. Experts define the terms of investment from economic view point that investment as a productive process by means of which additional are made to capital equipment's. It is finding to clear the terms of investment at different points of view. But it needs to clear the terms of investment in financial point of view as related to this study.

This research focuses on the comparative study of fund mobilization of two commercial banks; Nepal Arab Bank Limited and Nepal Investment Bank Limited. These two banks are compared as per their fund mobilization procedure by taking 5 years data from the year 2006/07 to 2010/2011.

1.1.1 Profile of Banks

a) NABIL Bank Limited

Nabil Bank Limited was incorporated in 1984 as a first foreign joint venture bank by the joint investment of Dubai Bank and Nepalese promoters. Nepalese investors i.e., government organization and general public owing 20% and 30% of total capital respectively and other half portion of capital is owned by Dubai Bank Ltd. Later on, the shares owned by Dubai Bank Ltd. were transferred to Emirates Bank International Ltd. After this National Bank of Bangladesh required 50% of shares and has become the promoter. Nepal Arab Bank Ltd (Nabil) was registered in May 1984 in Department of Commerce, His Majesty's Government of Nepal. Its Nepalese investors are Industrial Development Corporation (NIDC), stock exchange which subscribes the 20% shares and remaining 30% shares are subscribed to general public of Nepalese shareholders. Nabil commenced its banking operation on July 12th 1984.

Today NABIL Bank is a leader in the financial sector in Nepal with a network that has 26 points of representation spread across the nation; complimented by a network of ATMs and now NABIL Net and NABIL Tele the ease of access of accounts and information for our customers has never been more convenient. NABIL is a full service bank providing an entire range of products and services, starting with deposit accounts in local and foreign currency, Visa and MasterCard denominated in rupees and dollars, Visa Electron debit cards, Personal Lending products for Auto, Home and Personal loans, Trade Finance products, Treasury services and Corporate Financing. NABIL aims to be able to meet entire gamut of financial requirements that is why the banks prides itself in being 'Your Bank at Your Service'. The ownership of Nabil is composed as:

The head office of Nabil is situated in Kamaladi, Kathmandu. It has altogether 42 branches at present. They are spread over in nine districts of Nepal including urban and rural areas. The branches of Nabil Bank are in Kantipath, Lalitpur, Maharajginj, NewBaneshwor, Tirpureshwor, New Road, Kaushaltar, Jorpati, Thamel, Chabahil, Balaju, Kuleshwor, Satdobato, Maitidevi, Bhaktapur and Halchowk inside Kathmandu Valley and in Birgunj, Biratnagar, Sunsari, Butwal, Dharan, Bhaiwari, Bhairahawa, Rupendehi, Pokhara, Nepalgunj, Birtamod, Damak, Hetauda, Narayanghat, Baglung, Ghorahi, Tulsipur, Dhangadi, Mahendranagar, Itahari, Shankhuwashabha, Dolakha, Kavre, Gorkha, Jhapa, Lamjung inside Nepal.

Nabil Bank is the first bank to secure Nepal Rastra Bank approval for opening its branch in Calcutta, India. This matter is now under consideration by Reserve Bank of India. (Gorkhapatra and Naya Patrika Daily). The ownership of Nabil is composed as:

Subscription	% Holding
Foreign ownership	50%
Financial Institution (Employees Provident Fund)	20%
Nepalese Public share holder	30%
Total	100%

b) Nepal Investment Bank Limited

Nepal Investment Bank Ltd. (NIBL), previously Nepal Indosuez Bank Ltd., was established in 1986 as a joint venture between Nepalese and French partners. The French partner (holding 50% of the capital of NIBL) was Credit Agricole Indosuez, a subsidiary of one the largest banking group in the world. With the decision of Credit Agricole Indosuez to divest, a group of companies comprising of bankers, professionals, industrialists and businessmen, has acquired on April 2002 the 50% shareholding of Credit Agricole Indosuez in Nepal Indosuez Bank Ltd.

The name of the bank has been changed to Nepal Investment Bank Ltd. Upon approval of bank's Annual General Meeting, Nepal Rastra Bank and Company Registrar's office with the following shareholding structure.

- A group of companies holding 50% of the capital
- Rastriya Banijya Bank holding 15% of the Capital.
- Rastriya Beema Sansthan holding 15% of the Capital.
- The remaining 20% being held by the General Public.

NIB, which is managed by a team of experienced bankers and professionals having proven track record, can offer you what you re looking for. Besides commercial banking services, the bank also offers industrial and merchant banking services. Investment Bank Limited has always been committed to providing a quality service to its valued customers, being truly a Nepali Bank. The Bank already offers unique services such as the pre-paid mobile recharging system through its ATM, SMS Banking and Internet Banking to customers and will be introducing more services like these in the near future.

1.2 Statement of the Problem

Fund mobilizing is the most important factor for the promoters, shareholders and management.

Fund mobilizing is the most important factor for the promoters, shareholders and management. Fund mobilization is one of the primary objectives of commercial banks. The major problem of developing country like Nepal is the problem of economic growth with stability. Due to various Factors, the economic activities have been highly fluctuating. These days many commercial banks, developments bank and financial institutions are operating their work to assist in the process of economic development in the country. Due to the high competition between the financial institutions the collected huge amount from public is comparatively lower than fund mobilization and investment practice of collected funds. Therefore, it raised the problems of investment and proper mobilization of collected funds. Strong fund mobilization activities play a vital role in utilization of collected funds and overall development of the economy of the nation.

If the funds are wrongly invested without thinking any financial risk, business risk and other related facts, the bank cannot obtain profitable return as well as it should sometimes lose its principle. Fund mobilization policy may differ from one joint venture banks to another but there is no optimum utilization of shareholders fund to have greater return in any bank. Nepal Rastra Bank has also played significant role to make commercial bank mobilize their fund in good sector. For this purpose, NRB imposed many rules and regulation so that commercial bank can have sufficient liquidity and security. Though most of the joint-venture banks have been successful to earn profit from fund mobilization, none of them seem to be capable to invest their entire fund in more profitable sectors.

Fund mobilization is the most important factor from the shareholder and banks management point of view. This study is a comparative study on fund mobilization of Nepal Arab Bank Limited and Nepal Investment Bank Limited. The problems related to fund mobilization procedures of the commercial banks of Nepal have been presented briefly as under:

- What is the major source and major use of fund of NABIL & NIBL?
- Between NABIL and NIBL, which commercial banks have more effective mobilizing fund in loan and advances?
- Are they maintaining sufficient liquidity position?
- Do the two commercial banks are successful to utilize their available fund in terms of profit?
- Is there any stability in fund mobilization between NABIL & NIBL?
- What is the relationship between net profit and total fund, and net profit with total deposit and total and loan and advances?

1.3 Objectives of the Study

The main objective of the study is to analyze the fund mobilizing policy adopted by NABIL and NIBL Bank Limited. The specific objectives related to this study are presented below:

- To recognize the main source of fund and main mobilization of collected fund of NABIL and NIBL.
- To predict the total fund and net profit in the forthcoming two fiscal years.
- To analyze the efficiency of NABIL and NIBL in mobilizing fund in terms of profit.
- To compare the relationship between net profit and total fund and net profit with total deposits and loan and advance of NABIL and NIBL.
- To evaluate the liquidity position of the banks.

1.4 Significance of the Study

Fund mobilization activities of commercial banks greatly effects the growth and earning of banks. Effective, stable, appropriate fund mobilizing policy may cause the earning of sufficient return to the banks. Most of the commercial banks have been successful to earn profit from effective fund mobilization. Fund mobilizing policy may differ from one bank to another but there is no optimum utilization of shareholders fund to have sufficient return in any bank. Optimum utilization of fund makes better impact on the economy of the nation. Fund mobilization activities must consider customer, national and government as well as its shareholders interest. Thus, this study will be mainly significant to the management of the sampled banks to review their fund mobilization. Besides them, the study will also be equally important to the investors, depositors and others who are related to the sampled banks. Further the study will be significant for the future researcher.

1.5 Limitations of the Study

Every research is limited with certain constraints. Likewise, this study is being undertaken as the partial fulfillment of the Master's Degree on Business Studies (MBS) level within limited time and sources. The limitation to state as major are:

- The study would be generally based on the information provided by the organization and field observation, primary and secondary data.
- The whole study is based on the data of 5 years period only (i.e. from F.Y. 2006/07 to 2010/2011).
- This study has been only of two commercial banks as sample i.e. NABIL and NIBL
- Non availability of the various references of sources acts as constraints for the study.
- There are many factors that affect fund mobilizing decision and valuation of the firm. However, among various directives issued by NRB for commercial banks, this study will include directive regarding deposit mobilization of commercial banks only.

1.6 Organization of the Study

The entire study carried out to different stages and procedures as it needed. The study organized in the following chapters in order to make the study easy to understand.

Chapter I: Introduction

The first chapter is an introductory chapter which contains background of the study, statement of the problem, objectives of the study, significance of the study and limitations of the study.

Chapter II: Review of Literature

The second chapter is concerned with review of literature. This contains conceptual framework, review of directives, review of related studies, review of thesis, and research gap.

Chapter III: Research Methodology

The third chapter deals with the research methodology, which is applied to collect the data and analyze them in this study. It contains research design, sources of data, population and sample, financial analysis and statistical analysis to be adopted.

Chapter IV: Data Presentation and Analysis

The fourth chapter is analyzing chapter, which deals with presentation and analysis of relevant data through definite courses of research methodology with financial and statistical analysis related to investment and fund mobilization of NABIL and NIBL. Major findings of the study have been presented at the end of this chapter.

Chapter V: Summary, Conclusion and Recommendations

The fifth chapter is the last part of the study, which provides summary and conclusion, suggestions and recommendations for improving the future performance of the sample banks.

CHAPTER - II

REVIEW OF LITERATURE

This chapter is the important aspects of planning of the study. It deals with the relevant to this study. The main prior of the study is how to find out the work, which has to be done in the area of the research problem and what has not been done in the field of research study undertaken. Every possible effort has been made to grasp knowledge and information that is available from libraries, document collection centre, other information managing bureaus and concerned commercial banks. This chapter helps to take adequate feedback to broaden the information to the study. In this part of the study, the conceptual review, review of NRB directives, review of related studies and review of past thesis have been done.

2.1 Conceptual Review

2.1.1 Fund Collection Techniques

Bank collects the fund that is essential for it to operate the business from various sources. The major sources of fund of banks are listed below;

2.1.1.1 Common Stock Financing

"Common equity in a corporation or partnership or proprietorship interests in unincorporated firm constitutes the first source of funds to a new business and the base of support for borrowing by existing firms. The nature of equity ownership depends on the form of the business of organization. The central problem of such ownership revolves around an apportionment of certain rights and responsibilities among those who have provided the funds necessary for the operation of the business" (Ezra, 1996: 51).

"Two important positive constitutions are involved in equity ownership; income and control. The right to income carries the risk of loss. Control also involves responsibility and liability. In an individual proprietorship that uses funds supplied only by the owner, the owner has a 100% right to income and control and loss and responsibility. As soon as the proprietor incurs debt, however, he or she has entered into contracts that limit the freedom to control the firm and to apportion the firms income. In a partnership, these rights are apportioned among the partners in on agreed upon manner. In the absence of a formal agreement, state law makes division" (Ronald, 1951: 27).

2.1.1.2 Debt Financing

"Bonds are not only long duration but also, usually, of substantial size before the rise of large aggregation of saving through insurance companies or pension funds, no single buyer was able to buy an issue of such size. Bonds therefore, were issued in denomination of $1000 each and were sold to a large number of purchasers." (Myers and Majluf, 1984: 43). There are two types of debt in the market, which are as below:

a) Secured Debt

Secured long term debt can be classified according to (1) the priority to claims. (2) the right to issue additional securities and (3) the scope of the lien.

i) Priority to Claims

"A senior mortgage has period claims on assets and earnings. Senior mortgages, implying that they have the first claim on the land and assets of the corporations. A junior mortgages is a subordinate lien, such as a second or third mortgage. It is a lien or claim junior to others" (Singh and Hamid, 1992: 67).

ii) Right to Issue Additional Securities

“Mortgage bonds can also be classified with respect to the right to issue additional obligations pledging already encumbered property. In the case of closed end mortgage, a company cannot sell additional bond (beyond those already issued) secured by property specified in the mortgage. If the bond indenture is silent on this point, it is called on open end mortgage” (Singh and Hamid, 1992: 68).

iii) Scope of the Lien

“Bonds can also classify with respect to the scope the lien. A lien is granted on certain specified property. When a specific lien exists, the security for a first or second mortgage is specifically designated property. On the other hand, a blanket mortgage pledges all real property currently owned by the company. Real property includes only land, thus a blanket mortgage gives more protection to the bondholder than does a specific mortgage because it provides a claim on all real property owned by the company” (Booth, Aivazian, Demirguc and Maksimovic, 2001: 103).

b) Unsecured Debt

Unsecured long term debt can be classified into three types, which are as follows:

i) Debentures

“A debenture is an unsecured bond and as such, providers no lien on specific property as security for the obligation. Debenture holder, therefore, are creditors whose claims is protected by property not otherwise pledged. The advantage of debentures from the issuer's stand point is that the property is left unencumbered for subsequent financing. However, in practice, the use of debenture depends on the nature of the firm's assets and its general credit strength. A firm whose credit position is exceptionally strong can issue debentures; it simply does not need specific security. However, the credit position of company may be so week that it has no alternative to the use of debentures; all its property may already be encumbered. Companies also issue debentures where it is not practical to provide a lien through a mortgage on fixed assets” (Wiwattanakantang, 2001: 23).

ii) Subordinate Debentures

“The term subordinate means below or inferior. Thus, subordinated debt has claims on assets after unsubordinated debt in the event of liquidation. Debentures can be subordinated to designate notes payable usually banks loans or to any or all other debt. In the event of liquidation or reorganization, the debentures cannot be paid until debt as named in the indenture has been paid. Senior debt, typically, does not include trade accounts payable” (Suto, 2003: 49).

In comparison to subordinated debt, preferred stock suffers from the disadvantage that its dividends are not deductible as an expense for tax purpose. “Subordinated debentures have referred to as being like a special kind of preferred stocks dividends of which are deductible as an expense for tax purposes. Subordinated debt has, therefore, become an increasingly important source of corporate capital” (Fazzari, Hubbard and Petersen, 1988: 82).

iii) Income Bonds

“Income bond provide that interest must be paid only if the earnings of the firm are sufficient to meet the interest obligations. The principal however, must be paid which due. Thus, the interest itself is not a fixed charge. Income bonds, historically, have been issued because a firm has been in financial difficulties and its history suggests that it may be unable to meet a substantial level of fixed charges in the future. More generally, however, income bond simply provide flexibility to the firm in the event that earnings do not cover the amount of interest that would otherwise have to be paid. Income bond are like preferred stock in that the firm will not be in default of current payments on the obligations are not made" (Benerjee, 1989: 50).

2.1.1.3 Preferred Stock Financing

"Preferred stock has claims and rights ahead of common stock but behind of all bond and debt. The preference share may be a prior claim on earning, a prior claim on assets in the event of liquidations and/or a preferential position with regard a both earning and assets. The hybrid nature of preferred stock becomes apparent when we try to classify it in relation to bonds and common stock. The priority features and the fixed dividend indicate that preferred stock is similar to bonds. Payments to preferred stockholders are limited in amount, so that common stockholders receive the advantages (or disadvantages) of leverage. However, if the preferred dividends are not earned, the company can forego paying then without danger if bankrupted. In this characteristic, preferred stock is similar to common stock" (Desai, 1987: 31).

2.1.1.4 Deposit Accounts

For a commercial banks deposit is the most important source of the liquidity. For, banks financial strength it is treated as a barometer. In the word of Eugene, "A bank deposits are the amount that it owes to its customers." Deposit is the lifeblood of the commercial bank. Though the constitution the great bulk of bank liabilities, the success of a bank greatly depends upon the extent to which it may attract more and more deposit. The volume of funds that management will use for creating income through loans and investment is determined largely by the bank's policy governing deposits. In other words when the policy is restrictive, the growth of bank is restarted or accelerated with the liberalization in the deposit policy. In banking business, the volume of credit extension much depends upon the deposit base of a bank. The deposit creating powers of commercial banks forces to raise the assets along with the liability side of the balance sheet. In other words, assets give rise to liabilities. Traditionally, the deposit structure of a commercial bank was thought to be determined by the depositors and not by the bank management. There are regular changes on this view in the modern banking industry. Thus banks have evolved from relatively passive acceptors of deposits to active bidders for funds. Deposits are one of the aspects of the bank liabilities that management has been influencing through deliberate action (Baidhya, 1999:68). Bank deposits arise in two ways. The first when the banker receives cash and credits a customer's account, it is known as a primary or a simple deposit. Such primary deposits are made from the initiative of depositors. The second, when banks advance loans, discount bills, provide overdraft facilities; make investments through bonds and securities. This is called derived deposits of derivative deposits. They add to the supply of money. Banks actively create such deposits (The Encyclopedia Britanica, 1981:700).

Besides afore mentioned sources of fund, deposit account is considered the main outside fund of banks. Mainly, the deposits are collected in the form of current accounts, savings accounts and fixed accounts.

A) Current Accounts

"A current account is a running account with amount being paid into and drawn out from the account continuously. These accounts are also called demand deposits or demand liabilities. Since the banker is under an obligation to pay the money in such deposits on demand. The account never becomes time barred, because the limitation does not run until the customer on the bank for the payment of deposit makes a demand. These accounts are generally opened by business houses, public institutions, corporate bodies and other organizations whose banking transactions are numerous and frequent" (Grywinski, 1991: 72).

B) Saving Accounts

“Saving accounts are mainly meant for non trading customers who have some potential for saving and who do not have numerous transactions entering their account. Salaried class of the lower and middle- income group, small traders and farmers mainly open such accounts” (Grywinski, 1991: 73).

C) Fixed Deposit Account

“Fixed deposits constitute a very important resource for banks, as banks need not keep greater reserves of such deposits. Reserve bank is regulating the interest rates by giving directives from time to time. Reserve bank is following a differential interest rate policy having regard to size of deposits held by the banks. Slightly, higher rates of interest are permitted in the case of smaller banks. Even before reserve bank felt the need to regulate, lending banks themselves regulated the interest rates on voluntary basis, familiarly referred to as Inter Bank Agreement on Deposit rates” (Grywinski, 1991: 74).

2.1.2 Mobilization of Funds

Banks mobilize their funds into suitable and profitable sector. Bank cannot get its aim of profit earning without mobilizing its fund in right sectors and different activities. Banker being financial intermediary, we will not able to make any profit unless he has to pay interest on deposits, meet establishment expenses, meet liquidity of cash balance, and yet allow him some balance from out of which he can build reserve and pay dividend to the shareholder.

Commercial banks expect to make a profit. If there is no profit, there will be unfavorable criticism against public sector banking, both in and outside the parliament when these banks are asked to open new branches in areas which do not allow profits for years, or asked to grant loan to the priority sectors such as small industries and agriculture with a high incidence of bad debts, there is need for counter balancing profit from elsewhere. Therefore, these banks will have to show an ascending order of profit in order to ensure growth with stability. For this purpose the bank will have to allocate land able resources to different segments in such a manner these banks can ensure adequate profitability while at the same time responding to the policy laid down in accordance with national purpose. Bank should separate the useful and profitable sector for mobilizing their funds (Adhikari, 2002:54).

Banks should mobilize its funds in suitable and profitable banking activities and right sector. Generally bank has mobilized its funds in the following activities.

1) Liquid Funds

A bank has kept a volume of amount in liquid funds. These funds have so many responsibilities in banking activities. Liquid funds have covered the following transactions (Adhikari, 2002:55)

- Cash in hand
- Balance with Nepal Rastra Bank
- Balance with domestic bank
- Call Money

2) Investment

Bank invests its fund in different banking activities and different fields. Bank invests its funds in following titles:

- Government Securities
- Share Debenture
- NRB Bond
- Joint Venture

3) Loan and Advances

Bank mobilizes its funds by providing different types of loan and advances to customers, by charging fixed interest. Different types of loan and advances are

- To government enterprises
- To private enterprises

4) Fixed Assets

Land and Buildings are essential for the establishment of bank. Bank's funds are used in buying of furniture, vehicles, computer and other concerned instrument, which are related to banking activities. A bank has need of fund to purchase fixed assets for the expansion of the bank.

5) Administrative and Miscellaneous Expenses

Bank should manage a fund for administrative and other miscellaneous expenses. Different types of administrative expenses are as follows (Adhikari, 2002:56):

- Salary of Employees
- Allowances
- Pension
- Provident Fund
- Advertisement
- Stationary
- Rent
- Income Tax
- Donation or Charity
- Insurance
- Commission
- Tour Expenses

Different types of miscellaneous expenses

- To distribute dividend to shareholders
- To bear the losses on sale and purchase of banking assets
- Maintenance expenses
- Reserve fund
- To pay the interest on borrowed amount.

In this way, bank mobilizes its funds in different activities to achieve its goal of earning profit.

2.1.3 Features of Sound Fund Mobilization Policy

Income and profit of the financial institutions like commercial banks and financial institutions depend upon its funding mobilization policy and through investing in different securities. The greater the credit created by the bank the higher will be the profitability. Some required features of sound fund mobilization are explained as under:

a) Safety and Security

Financial institutions should inlets their deposit in profitable and secured sectors. They should not invest their fund in securities of those companies whose securities are too much depreciated and fluctuated because of risk of loss factors. They should accept those securities, which are marketable, durable, profitable and high market price as well as stable. In this case MAST should be applied for the investment.

Where,

M = Marketability

A = Ascertain ability

S = Stability

T = Transferability

b) Legality

Each and every financial institution follow the rules and regulation of the company, government and various directions supplied by Nepal Rastra Bank, Ministry of Finance and on while issuing securities and mobilizing their fund. Illegal securities will bring out any problems to the investors. Lastly, the reputation and goodwill of the firm may be lost.

c) Liquidity

"Liquidity is the position of the firm to meet current or short-term obligations. General public or customers deposit their savings at the banks in different accounts having full confidence of repayment by the banks whenever they require. To show a good current position and maintain the confidence, every firm must keep proper cash balance with them while investing in different securities and granting loan for excess fund.

d) Profitability

To maximize the return on investment and lending position, financial institutions must invest their collected fund in proper sectors. Finally they can maximize their volume of wealth. Their return depends upon the interest rate, volume of loan its time period and nature of investment on different securities and sectors.

e) Tangibility

A commercial bank should prefer tangible security to an intangible one. Though it may be considered that tangible properly doesn't yield an income a part from intangible securities, which have lost their value due to price level inflation.

f) Purpose of Loan

Banks and other financial institutions must examine why loan is required to the customer. If customers do not use their borrowings, they can never repay and the financial institutions will have heavy bad debts. So, they should collect detailed information about the plan and scheme of the borrowing.

g) Diversification

A firm can invest its deposit collection in various securities to minimize the risk. So, all the firms must diversify their fund or make portfolio investment. Diversification helps to earn a good return and minimize the risks and uncertainty. So, the firms are making portfolio investment with different securities of different companies.

2.2 Review of NRB Directives

1.1.1 NRB is the central bank of Nepal. It issues directives under which the financial institutions of Nepal have to perform. The directives that are related to the study are reviewed in this part of the study.

1.1.2

1. NRB Directives Relating to Capital Adequacy

Capital Adequacy Ratio

The sum of core capital and supplementary capital is called total capital fund. Capital adequacy ratio is calculated on the basis of core capital, supplementary capital and risk weighted assets. The provision of minimum capital fund to be maintained by the commercial banks as per directed by NRB since fiscal year 2061/62 is as follows.

Table 2.1

Capital Fund to be Maintained

Fiscal Year	Capital Fund in % on the Basis of Total Risk Weighted Assets	
	Core capital	Total capital fund
2061/62	6.00	12.00
2066/67	6.00	10.00

Source: Unified Directives 2061/62 & 2066/67

1.1.3

2. NRB Directives Relating to Loan Classification and Loan Loss Provision

A) Classifications of Loan and Advances

Effective from FY 2058/59 (2001/02) banks shall classify outstanding principal amount of loan and advances on the basis of aging. As per the directives issued by NRB, all loans and advances shall be classified into the following four categories:

a. **Pass Loan: -** Loans/advances which have not overdue and which are overdue by a period up to 3 months shall be included in this category. These are classified and defined as performing loans.

b. **Sub-Standard Loan: -** Loans/advances which are overdue by a period from 3 months to a maximum period of 6 months shall be included in this category.

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

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

B) Loan Loss Provisioning

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

Classification of Loan	Loan Loss Provision
Pass loan	1%
Sub-standard loan	25%
Doubtful loan	50%
Loss	100%

3. NRB Directives Relating to Cash Reserve Ratio (CRR)

"Till 2002/03 commercial banks were required to maintain compulsory reserve at 7 percent of their current and saving deposits and 4.5 percent balance of their fixed deposits with the NRB as well as vault compulsory ratio at 2 percent of total domestic deposits. In the light of the undergoing management reforms in the RBB and the NBL as well as the increasing efficiency of the commercial banks to manage their financial resources themselves, the provision of maintaining 2 percent balance in commercial banks' vault as a part compulsory reserve has been withdrawn. Effective from FY 2003/04, commercial banks were required to maintain 6 percent of their total domestic deposit liabilities at the NRB as compulsory reserve. A single, uniform compulsory ratio has been introduced so as to bring about uniformity and simplicity in the previously differentiated compulsory rates with respect to the different domestic deposit liabilities." (Monetary Policy, 2003/04: 12).

In contrast, "the CRR had been reduced from 6.0 percent to 5.0 percent for FY 2004/05." (Monetary Policy, 2004/05: 11) Likewise, "the cash reserve ratio (CRR) had been raised to 5.5 percent from the 5 percent of the total domestic deposits effective from October 17, 2008." (Monetary Policy, 2008/09: 4) However, "the cash reserve ratio (CRR) has been kept unchanged at 5.5 percent for the fiscal year 2009/10" (Monetary Policy, 2009/10: 5).

2.3 Review of Related Studies

Prior to this, several thesis works has been attempted by previous students regarding various aspects of commercial banks like financial performance, lending policy, investment policy, resource mobilization, capital structure etc. Among them some research those that were found relevant for this study are presented below:

Shrestha (2003) has analyzed in her article "*Financial Performance of Commercial Banks Using Both Descriptive and Diagnostic Approach"* In her studies she has concluded the following points.

- The structural ratio of commercial bands shows that banks invest on the average 75% of their total deposit on the government securities & the shares.
- The analysis of resources position of commercial banks should quite high % of deposit as cash reserve.
- Return ratio of al the banks show that most of the time foreign banks have higher return as well as higher risk than Nepalese banks.
- The debt –equity ratios of commercial banks are more than 100% in the most of the time period under studies period. It led to conclude than the commercial banks are highly leveraged & highly risk. Joint venture banks had higher capital adequacy ratio but has been dealing everyday.
- In case of the analysis of the management achievement foreign banks have comparatively higher total management achievement index.

Shrestha (2004) has presented a short scenario of investment management from his article "*Portfolio Management in Commercial Bank, Theory and Practice*." He has stressed in the following issues, in case of investors having lower income, portfolio management may be limited to small saving incomes. But, on the other bank, portfolio management means to invest funds in various schemes of mutual funds like deposits, shares and debentures for the investors with surplus income. Therefore, portfolio management becomes very important both for an individual as well as institutional investors. Large investors would like to select a best mix of investment assets and subject to the following aspects:

- Higher return which is comparable with alternative opportunities available according to the risk class of investor.
- Good liquidity with adequate safety on investment.

- Certain capital gains
- Maximum tax concession
- Flexible investment
- Economic and efficient investment

In the view of these aspects, investors are expected to develop the following strategy:

- Do not hold any single security; try to have a portfolio of different securities.
- Do not pull 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 with added objectives wealth maximization.

In order to prepare structure and modus operandi of effective portfolio management, Shrestha has presented the following approaches to be adopted.

- To find out the investing assets (generally securities) having scope for better returns depending upon individual characteristics like age, health, need deposition, liquidity and tax liquidity etc.
- To find out the risk of securities depending upon the attitude of investor towards risks.
- To develop alternative investment strategies for selecting a better portfolio this will ensure a trade-off between risk and return so as to attain the primary objective of wealth maximization at lowest risk.
- To identify variety of securities for investment to refuse volatility of returns and risk

Sharma (2005) has found same results that all the commercial banks are establishing and operating in urban areas, in this study, "*Banking the Future on Competition*." His achievements are:

Commercial banks are establishing and providing their services in urban areas only. They do not have interest to establish in rural areas. Only the branch of Nepal Bank Ltd. and Rastriya Banijya Bank Ltd. are running in those sectors.

- Commercial banks are charging higher interest rate on lending
- They have maximum tax concession
- They do not properly analyze the system

According to him, “Due to the lack of investment avenues, banks are tempted to invest without proper credit appraisal and on personal guarantee, whose negative side effects would show colors only after four or five years.” He has further included that private commercial banks have mushroomed only in urban areas where large volume of banking transaction and activities are possible.

Chalise (2007) writes an article for the Nepali Daily Newspaper, focusing market expansion of banking services and new investment areas as possible. He writes, data from NRB shows that only 20% of the populations have access to banking services leaving the vast majority out of the banking reach. And on the other hand, all the banks though they claim of going to rural areas are urban-centric and promise to provide modern banking services. “There has been no market expansion and the banks are operating on very thin margin”. Says one banker adding that the size of the market should rise and the banks explore new areas of investment.

Lu (2008) in his article, *“What is the Wind Behind this Sail? Can Fund Managers Successfully Time Their Investment Styles?”* stated that over the ten-year period of this study (June 1992 to July 2002), the average mutual fund manager demonstrates little ability to time the market in aggregate. In fact, using empirical factor timing model, only 8.3 percent of my funds had significant positive alphas. There is even some weak evidence that supports the assertion that mutual fund managers attempt to implement market timing strategies at the expense of poor stock selection performance.

Most funds are restricted from taking substantial positions in small-cap stocks and there are relatively higher transaction costs associated with size (big cap/small cap) and momentum (winner/loser) timing strategies when compared to book-to market (value/growth) timing strategies. There may also be a behavioral explanation which is related to the trading behavior and preferences of fund managers. Fund managers prefer big-cap stocks to small-cap stocks as safer investments. Also, they tend to sell winners too soon and to hold on to losers too long.

Cumming, Eddine and Schwienbacher (2009) in their article, *"An Empirical Analysis of Fund Regulation and Scope of Distribution of European Investment Funds"*, have stated that consistent with limitations to the UCITS III regulations that hampered international distributions as implied by the changes proposed in 2009 with UCITS IV, strong evidence that UCITS III promoted international distributions for larger funds was found. Further, the nontrivial costs of international notification under UCITS III imply that smaller countries would have disproportionately more interest in notification internationally.

Promoters that are commercial banks do not seem to set up funds with a broader scope of distribution. However, non-European promoters have funds with greater scope, irrespective of the measure of scope of distribution used. Non-European promoters included in analysis originate by far from the US. Further there has been an increase in the number of fund promoters that distribute UCITS funds outside the European Union, notably in Asia.

2.4 Review of Thesis

Thapa (2004) has conducted a research entitled "*Investment Policy of Commercial banks in Nepal*".

The objectives of the study were:

- To discuss fund mobilization and investment policy of EBL in respect to its fee based off-balance sheet transaction and fund based on balance sheet transaction of NABIL and BOKL.
- To evaluate the liquidity, efficiency, profitability and risk position.
- To evaluate the growth ratios of loans and advances and total investment with other financial variables.

His major findings are enumerated below:

- EBL is comparatively better than NABIL and BOKL in terms of liquidity.
- EBL has been less successful than NABIL and BOKL in its on balance sheet operation as well as off balance sheet activities

Roy (2005) has conducted a research entitled "*An Investment Analysis of RBB in Comparison with NBL*".

The specific objectives of the study were.

- To evaluate liquidity, activity and profitability ratios of RBB in comparison with NBL and industry average.
- To analyze relationship of loan and advance and total investments with total deposit and net profit of RBB and to compare it with that of NBL and industry average.

The major findings of the study were:

- RBB has good deposit collection, enough loan and advance and investment in government securities. It has comparatively better liquidity position than NBL.

- RBB is in comparatively better position regarding issue of loan and advance but it does not have good position regarding investment in shares and debentures of other companies, off balance sheet operation. Loan Loss ratio shows low quality of loan and advance.

Pandit (2006) has conducted a research entitled "*Investment Policy Analysis of Joint Venture Bank (With Special Reference to NSBIL & EBL)"*
The objectives of the study were as follows:

- To evaluate the liquidity management, assets management efficiency, profitability position, risk position and investment practices of NSBIL, BOKL & EBL)
- To find out the relationship between deposit and total investment, deposit and loan and advance, and net profit and outside asset.

His major findings are enumerated below:

- NSBIL has better liquidity position. It is in a good position to meet its daily cash requirement and current obligation. Liquidity position of EBL & BOKL have not been satisfactory.
- NSBIL's loan and advance to total deposit ratio is lower than EBL & BOKL. It does not seem to follow any definite policy regarding the management of its assets.
- The profitability position of all the banks is not satisfactory. The banks have not adopted sound investment policy in utilizing their surplus funds.

Subedi (2008) in his thesis, *"Fund Collection and Mobilization of Joint Venture Banks of Nepal",* has the main objective on reviewing the fund collection and its mobilization in the joint venture banks, especially in NABIL, SCBNL, HBL and EBL. Some of the main objectives of the study are as follows:

- To find out the effectiveness of the selected joint venture banks in fund mobilization.
- To analyze the ability of the selected joint venture banks in mobilizing the total collected funds.
- To identify the factors affecting the fund mobilization.
- To provide suggestions and recommendations on the basis of analysis.

The major findings of the study are;

- Average ratio of cash and bank balance to total deposit reveals that EBL had higher the ratio and NABIL had lower the ratio in comparison to other banks which shows that the liquidity position of EBL is quit well than other banks.
- The average debt to equity ratio shows that HBL has the highest average ratio than other banks that means the financial risk of this bank is also high. All the JVBs have used excessive amount of debt.
- The average ratio of credit and advances to total deposit of EBL is higher than other three joint venture commercial banks and SCBNL has the lower ratio which means EBL has mobilized its collected deposit in credit and advance more than other banks but SCBNL seems weak to mobilize its collected deposit in credit and advances. But EBL seems more stable in providing credit and advances.
- The average ratio of return on assets of NABIL is higher than other banks. That means NABIL is more successful to earn profit on total working fund than other banks. On the other hand, NABIL seems more stable in earning profit.

Devkota (2010) in her thesis, *"Fund Mobilization of Commercial Banks of NCC Bank Limited and NABIL Bank Limited",* has the main objectives of examining, interpreting and analyzing the fund mobilization procedures adopted by commercial banks. The other specific objectives related to this study are presented below:

- To measure the relationship of total deposits with total investment, loan and advances and net profit.
- To evaluate the growth ratio on total investment, loans and advances, total deposits and net profit of NCC and NABIL Bank Limited.
- To evaluate financial efficiency of bank on the basis of Assets management and leverage position.
- To observe the trend of deposit, loan and advance and net profit.
- To provide suggestions on the basis of major findings.

The major findings of the study are,

- The mean ratio of cash and bank balance to total deposits of NABIL is lower than NCC. It means the liquidity position of NABIL is lower than NCC. It shows the lower position regarding the meeting of demand of its customer on their deposit at any time than NCC. The ratio of NCC is more consistent and that of NABIL is less consistent.
- The average study of cash and bank balance to current assets ratio of NCC is higher than NABIL. It shows that NABIL has taken more risk to meet the daily requirement of its customer's deposit than NCC. The ratio of NCC is more consistent and NABIL has less consistent ratio.
- The mean ratio of loan and advances to total deposits of NCC is lower than that of NABIL. The ratio of NCC is more consistent and NABIL has less consistent ratio.
- Due to higher mean ratio of return on working funds of NABIL, it seems more successful in earning profit on total assets than NCC. The variability in the ratio of NABIL is less consistent and NCC is more consistent.

2.6 Research Gap

The review of above relevant literature has contributed to enhance the fundamental understanding and knowledge, which is required to make study meaningful and purposive. There has been lots of article published related to financial performance and fund mobilization of commercial banks. There are various researches conducted on financial performance and fund mobilization of commercial banks, but there is few research available on “fund mobilization” with NABIL Bank Limited and NIBL Bank Limited. So, this study will be fruitful to those interested person, parties, scholars, professor, students, businessman and government for academically as well as policy perspective.

CHAPTER – III
RESEARCH METHODOLOGY

This chapter deals with the research methodology employed in the entire aspect of the study. Research methodology is the process of arriving at solution of the problem through planned and systematic dealing with the collection, analysis and interpretation of facts and figures (Kothari, 1989:8). In other words, research methodology refers to the various methods of practices applied by the researcher in the entire aspect of the study. This chapter includes the research design, population and sample, nature and sources of data and analysis of data.

3.1 Research Design

Research design is the plan, structure and strategy of investigation conceived so as to obtain answer to research questions and to control variance. It is arrangement for collection and analysis of data. 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 analyze the fund mobilization of commercial banks.

3.2 Population and Sample

The method of selecting for study a small portion of the population to draw conclusion about characteristics of the population is known as sampling. Sampling may be defined as the selection of part of the population on the basis of which a judgment or inference about the universe is made. Currently there are 32 commercial banks operating in Nepal. The study of all these banks in this study is almost impossible. Here two commercial banks, namely Nepal Arab Bank Limited and Nepal Investment Bank Limited, have been selected randomly as sample of the study.

3.3 Nature and Sources of Data

The study is based on secondary data. To analyze the fund mobilization of the commercial banks, sources of fund collection, mobilization of fund in various sector, and the efficiency of fund mobilization have been measured. The data have been extracted from the annual reports of NABIL and NIBL. Besides annual reports, the official website of sampled banks, NEPSE, SEBON and NRB have also been reviewed.

3.4 Periods Covered

For the convenience, the study covers only six fiscal years period, i.e. from the fiscal year 2006/07 to 2010/11.

3.5 Data Analysis Tools

The collected data have no meaning if such data are not analyzed. To analyze the data in this research, the researcher has used some statistical and financial tools which are explained here.

3.5.1 Financial Tools

The major financial tools used in this research are as follows:

A) Sources of Fund

Under this section the various sources of fund that the bank uses to collect the fund and their representation in the total fund have been analyzed.

a) Shareholders' Equity to Total fund

Shareholders are the real owners of any business. Shareholders' equity includes the share capital and the other general reserves kept. So determine the contribution of shareholders' in fund collection, this ratio has been determined.

$$\text{Shareholders's Equity to Total fund} = \frac{\text{Total Shareholders's Equity}}{\text{Total Fund}}$$

b) Long-term Debt to Total Fund

This ratio measures the capability of the firm in collecting funds through outside financing. The long-term debt includes long-term borrowing and debenture capital. Higher the ratio indicates, higher risk taker and vice-versa.

$$\text{Long} - \text{term debt to Total Fund} = \frac{\text{Total Long} - \text{term debt}}{\text{Total Fund}}$$

c) Current Liabilities to Total Fund

The current liabilities of the bank include deposit liabilities, bills payable, dividend and income tax payable and others. This ratio measures the collection of fund through short-term financing in relation with long term debt. Higher the ratio requires the bank to be in high liquidity position.

$$\text{Current Liabilities to Total Fund} = \frac{\text{Total Current Liabilities}}{\text{Total Fund}}$$

d) Source of Deposit

Deposit is considered as the major source of fund in banks. To examine the deposit collection from various sources, the deposit collection amount has been analyzed.

Total Deposit = Non Interest Bearing Deposit + Interest Bearing Deposit

B) Mobilization of Fund

After collecting fund from various sources as mentioned above, the bank mobilizes the fund to gain net profit. The various uses of fund and their representation of total fund have been calculated by using the following financial ratios.

a) Cash and Bank Balance to Total Fund

The bank has to keep adequate cash and bank balance to meet its obligation. The cash and bank balance of bank includes cash in hand, cash at NRB and cash in other financial institutions. This ratio measures the mobilization rate of total fund in maintaining cash and bank balance to have sound liquidity.

$$\text{Cash and Bank Balance to Total Fund} = \frac{\text{Total Cash and Bank Balance}}{\text{Total Fund}}$$

b) Money at Short Call and Notice to Total Fund

To increase the interest income, the bank mobilizes certain percentage of its fund in money at short call and notice. The money and short call and notice total fund measures whether the money at short call and notice increases with the increase in total fund

$$\text{MSCN to Total Fund} = \frac{\text{Total MSCN}}{\text{Total Fund}}$$

c) Investment to Total Fund

This ratio explains the relationship between investment and the total fund collected. The investment of bank includes investment in government securities, corporate shares and debentures, mutual fund, SWIFT, local and foreign licensed institutions and others.

$$\text{Investment to Total Fund} = \frac{\text{Total Investment}}{\text{Total Fund}}$$

d) Loan & Advances to Total Fund

To achieve the financial success, effective mobilization of fund is crucial. The bank mobilizes the fund mainly in loan and advances to gain interest income, which is the major source of income in bank.

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

e) Fixed Assets to Total Fund

The bank acquires fixed assets to operate its daily transactions. Thus, the ratio of fixed assets to total fund measures, what percentage of the total fund have been mobilized by bank in purchasing the fixed assets.

$$\text{Fixed Assets to Total Fund} = \frac{\text{Net Fixed Assets}}{\text{Total Fund}}$$

C) Efficiency in Fund Mobilization

After recognizing the major source of fund and the major uses of fund mobilization, the efficiency of the bank in fund mobilization has been measured.

a) Net Profit to Total Fund

The sole objective of the bank is to gain profit. The bank collects and mobilizes fund only to gain net profit. So to what extent the bank efficiently mobilized the collected fund, the net profit to total fund has been determined. Higher the ratio indicates higher efficiency in fund mobilization.

$$\text{Net Profit to Total Fund} = \frac{\text{Net Profit After Tax}}{\text{Total Fund}}$$

3.5.2 Statistical Tools

To achieve the objectives of the study set out in first chapter, the following statistical tools have been efficiently utilized in fourth chapter to analyze the data.

A) Mean

The statistical tool is essential to measure the relationship of two or more variable. It is the mathematical technique used to facilitate the analysis and interpretation of the performances of the organizations. It helps to compare the performance, strengthen, weakness of the organizations. It also helps to present the data, show the relation and deviation or differences of variables of organizations, in this study, the following statistical tools are used. Arithmetic mean or simply a 'Mean' of a set of observation is the sum of all the observation divided by the number of observation (Bajracharya, 1996:177). It is the best value, which represent to the whole group. Mean is the arithmetic average of a variable. Arithmetic mean of a series is given by:

$$\text{Mean } (\overline{X}) = \frac{X^1 + X^2 + \dots\dots\dots\dots\dots\dots\dots\dots\dots. + X^N}{Ns}$$

Where,

X = sum of the variable 'X'

N= No of observation

B) Standard Deviation

The standard deviation is the absolute measures of dispersion in which the drawbacks present in other measures of dispersion are removed. It is said to be the best measure of dispersion as it satisfies most of the requisites of a good measure of dispersion (Bajracharya, 1996:177). Standard deviation is defined as the positive square root of the mean of square of the deviation takes from the arithmetic mean. It indicates the ranges and size of deviation n from the middle or mean. It measures the absolute dispersion. Higher the standard deviation higher will be the variability and vice versa. Dispersion measures the variation of the data from the central value. In other word, it helps to analyze the quality of data regarding its variability. It can be:

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

Here,

N = Number of observations

$\bar{X}$ = Expected return of the historical data

C) Coefficient of Variation

The coefficient of variation represents the ratio of the standard deviation to the mean, and it is a useful statistic for comparing the degree of variation from one data series to another, even if the means are drastically different from each other.

$$\mathrm{C.V.} = \frac{\text{Standard Devitation}}{\text{Mean}} \times 100$$

D) Correlation Coefficient

Two variables are said to have correlation, when they are so related that the change in the value of one variable is accompanies by the change in the value of the other. One of the widely used mathematical methods of calculating the correlation coefficient between two variables is Karl Pearson's correlation coefficient (r), which is defined by;

$$\mathrm{r} = \frac{\sum(X-\bar{X})(Y-\bar{Y})}{\sqrt{(X-\bar{X})^2}\sqrt{(Y-\bar{Y})^2}}$$

E) Probable Error

The probable error denoted by P.E. is used to measure the reliability and test of significance of correlation coefficient. Significance of relationship has been tested by using the probable error (P.E.) and it is denoted by the following model:

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

Where

r = the value of correlation coefficient

n = number of pairs of observations

if r < 6P.E., it is insignificant, i.e. there is no evidence of correlation

if r > 6 P.E., it is significant

F) Regression

Regression refers to any approach to modeling the relationship between one or more variables denoted *Y* and one or more variables denoted *X*, such that the model depends linearly on the unknown parameters to be estimated from the data. The simple regression line of *Y* on *X* is given by;

Y = a + bX … … … …. … … … (i)

Where,

Y = Dependent Variable

a = Constant

b = Regression Coefficient

X = Independent Variable

G) T- Test

T-test, commonly known as Students T-Distribution, is used when sample size is equal to or less than 30, the parent population from which the sample is drawn is normal, the population standard deviation is unknown. In order to test the significance of an observed sample correlation coefficient, the following procedure has been applied: The following formula is used to test an observed sample correlation coefficient:

$$t = \frac{r}{\sqrt{1 - r^2}} \times \sqrt{n - 2}$$

Where,

r = simple correlation coefficient

N = number of observation

H) Trend Analysis

Trend analysis is an analysis of financial ratio over time used to determine the improvement of deterioration of financial situation. Using the least square method, the projection for two years is done. For the estimation of linear trend line, following formula has been used.

$$Y = a + bx$$

Where,

Y = dependent variable

a = y-intercept

b = slope of the trend line

x = independent variable

3.5.3 Classifications and Tabulations of Data

The collected data are classified and tabulated in order to make it easily understandable. The data are classified in chronological order i.e. on the basis of time intervals. After classifications the data are tabulated i.e. arranging the data in column and rows systematically.

3.5.4 Diagrammatic Presentation of Data

Diagram and graphs are visual aids that give a bird eye view of a given set of numerical data .They represent the data in simple and reality comprehensive form. Hence, the various bars, charts and graphs are used to present the data and data analysis in this study.

In this study various diagrams are used to present the data more clearly. The diagrams used in this study are:

- Bar Diagram
- Trend Diagram

CHAPTER – IV

DATA PRESENTATION AND ANALYSIS

Presentation and analysis of data is the most important part in any research or dissertation. So, this chapter is said to be more effective and evaluative in the research process. Therefore analysis parts are presented in detail. Different required financial and statistical analysis which are related to the fund mobilization are studied to evaluate and analyze the performance and condition of financial position of NABIL & NIBL bank. This analysis may help the bank to improve any wrong situation of the bank's financial condition. So the fund mobilization of NABIL & NIBL bank studies the economic good or bad trend of the bank. Data are analyzed according to the figures in the table and mentioning the reasons of increasing and decreasing trend of the data. This chapter recommends suggestions for its improvement through this research study.

4.1 Sources of Fund

Under this part of the study, the detailed sources of fund of NABIL and NIBL and the ratio of each source of fund to the total fund collection have been analyzed.

4.1.1 Total Fund Collection

Bank collects fund from various sources to finance its total assets. The collection of fund by NABIL and NIBL within the five year periods and the percentage increment/decrement within these periods is presented in the Table 4.1.

Table 4.1

Total Fund Collection

(Rs in millions)

Fiscal Year	NABIL		NIBL	
	Amount	**% Change**	**Amount**	**% Change**
2006/07	27253.39	22.05	27590.84	29.35
2007/08	37132.76	36.25	38873.31	40.89
2008/09	43867.39	18.14	53010.80	36.37
2009/10	52150.23	18.18	57305.41	8.10
2010/11	58141.44	11.49	58356.83	1.83
Mean	**43709.04**	**21.36**	**47027.44**	**23.31**
S.D.	**12182.04**	**9.17**	**13360.98**	**17.38**
C.V.%	**27.87**	**42.92**	**28.41**	**74.57**

Sources: Annual Reports of Nabil and Nibl Bank

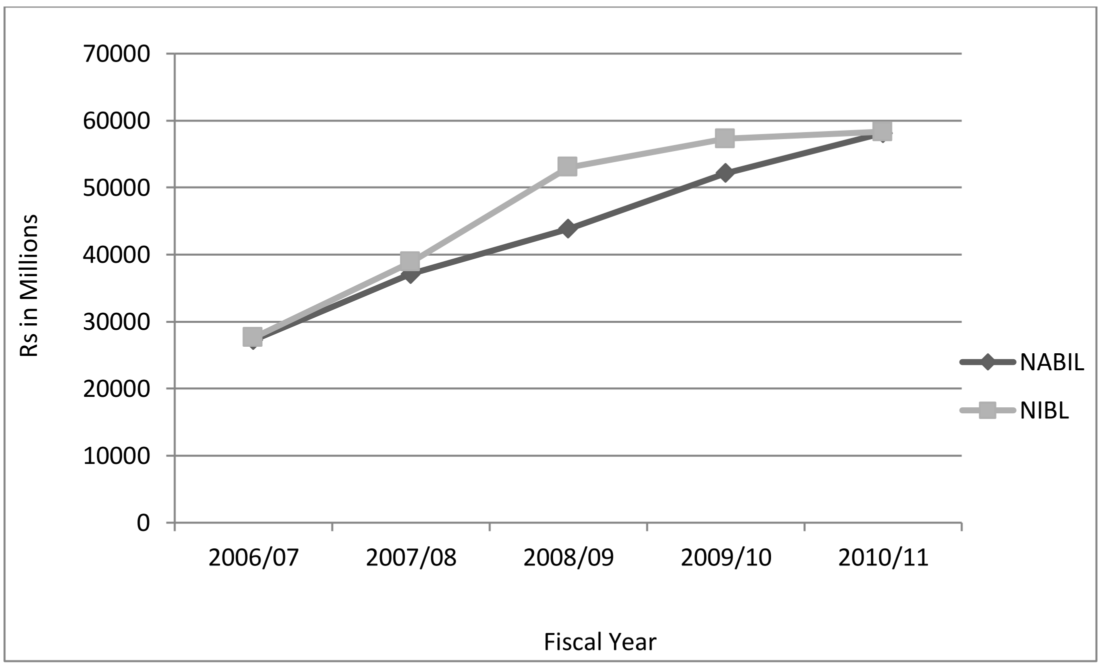
In the table 4.1 it showed the amount of fund collection by NABIL and NIBL and the percentage increase/decrease in fund collection in each fiscal year compared to that in the previous fiscal year. The table showed that the fund collection amount of each bank increased in each year. The fund collected by NABIL in the fiscal year 2006/07, 2007/08, 2008/09, 2009/10 and 2010/11 was Rs. 27253.39 millions, Rs. 37132.76 millions, Rs. 43867.39 millions 52150.23 and Rs 58141.44 respectively. In average, NABIL collected Rs. 43709.04 millions in the five years period. Compared to the previous year, NABIL collected highest amount in the fiscal year 2007/08, since the percentage change in the fund collection was 36.25%, highest, in that year.

Similarly, NIBL collected Rs. 27590.84 millions, Rs. 38873.31 millions, Rs. 53010.80 millions, Rs. 57305.41 and Rs 58356.83 in the fiscal year 2006/07, 2007/08, 2008/09, 2009/10 and 2010/11 respectively. NIBL collected Rs. 47027.44 millions in average. The percentage change in the fund collection compared to that of the previous year was highest, 40.89%, in the fiscal year 2007/08 and lowest, 1.84%, in the fiscal year 2010/11.

Comparing two banks it can be concluded that NIBL collected more funds than NABIL. In average, NIBL was more successful to collect more funds than NABIL and the coefficient of variation the NIBL is higher than NABIL indicating high inconsistency.

Figure 4.1

Total Fund Collection



4.1.2 Shareholders' Equity to Total Fund

The shareholders are the main owners of the bank. Thus, to examine the contribution of shareholders in fund collection, the shareholders equity to total fund have been analyzed.

Table 4.2

Shareholders' Equity to Total Fund

(Rs in millions)

Fiscal Year	NABIL			NIBL		
	SE	**TF**	**Ratio**	**SE**	**TF**	**Ratio**
2006/07	2057.05	27253.39	7.55	1878.12	27590.84	6.81
2007/08	2437.20	37132.76	6.56	2686.79	38873.31	6.91
2008/09	3130.24	43867.39	7.14	3907.84	53010.80	7.37
2009/10	3834.75	52150.23	7.35	4585.39	57305.41	8.00
2010/11	4566.51	58141.44	7.85	5159.75	58356.83	8.84
Mean			**7.29**			**7.59**
S.D.			**0.48**			**0.84**
C.V.%			**6.65**			**11.12**

Sources: Annual Reports of Nabil and Nibl Bank

The above table showed the collection of fund from shareholders equity, i.e. share capital and reserves, and the contribution of shareholders equity in total fund. The table showed that in each fiscal year, the shareholders equity had been raised in NABIL. The shareholders equity ranged from Rs.2057.05 millions in the fiscal year 2006/07 to 4566.51 millions in the fiscal year 2010/11. However, the contribution of shareholders fund did not increase in the same proportion as the total fund increases, as a result the ratio of shareholder's equity to total fund considerably declined in the first two year, i.e. from 7.55% in the fiscal year2006/07 to 6.56% in the fiscal year 2007/08, and slightly increased to 7.14% in the fiscal year 2008/09 to 7.85% in fiscal year 2010/11 respectively. This indicated that the bank remained more dependent in outside funding within the periods taken for study. In average, only 7.29% of the total fund had been collected from internal financing.

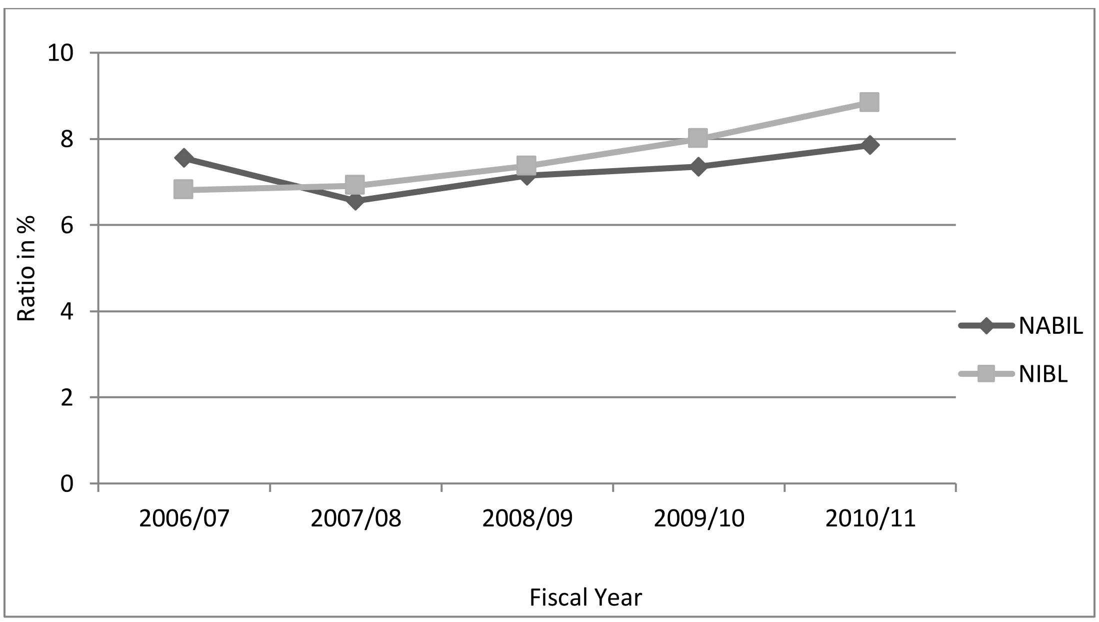
Similarly in NIBL, the collection of fund from shareholders equity had followed increasing trend within the five years period. The shareholders equity was Rs.

1878.12 millions in the fiscal year 2006/07 and reached to Rs. 5159.75 millions, more than triple, in the fiscal year 2010/11. The ratio of shareholders equity to total fund was followed increasing trend in the fiscal years. The ratio increase to 6.81% in fiscal year 2006/07 to 8.84% in fiscal year 2010/11. In average, 7.59% of the total fund came from internal financing, i.e. shareholders equity.

Comparing two banks, it can be concluded that NIBL collected total fund from internal financing more than NABIL did, since the average shareholders equity to total fund of NIBL (7.59%) was higher than that of NABIL (7.29%).

Figure 4.2

Shareholder's Equity to Total Fund



4.1.3 Long Term Debt to Total Fund

The outside financing is the other source of fund of the bank. The long term debt includes long term borrowing and debt capital in bank. Hence, to examine the contribution of long term debt in fund collection, the ratio of long term debt to total debt have been analyzed.

Table 4.3

Long Term Debt to Total Fund

(Rs in millions)

Fiscal Year	NABIL			NIBL		
	LTD	TF	Ratio	LTD	TF	Ratio
2006/07	882.57	27253.39	3.24	800.00	27590.84	2.90
2007/08	1600.00	37132.76	4.31	1050.00	38873.31	2.70
2008/09	1981.31	43867.39	4.52	1088.80	53010.80	2.05
2009/10	374.90	52150.23	0.72	1087.31	57305.41	1.90
2010/11	1950.59	58141.44	3.35	1330.76	58356.83	2.28
Mean			**3.23**			**2.37**
S.D.			**1.51**			**0.42**
C.V.%			**46.84**			**17.95**

Sources: Annual Reports of Nabil and Nibl Bank

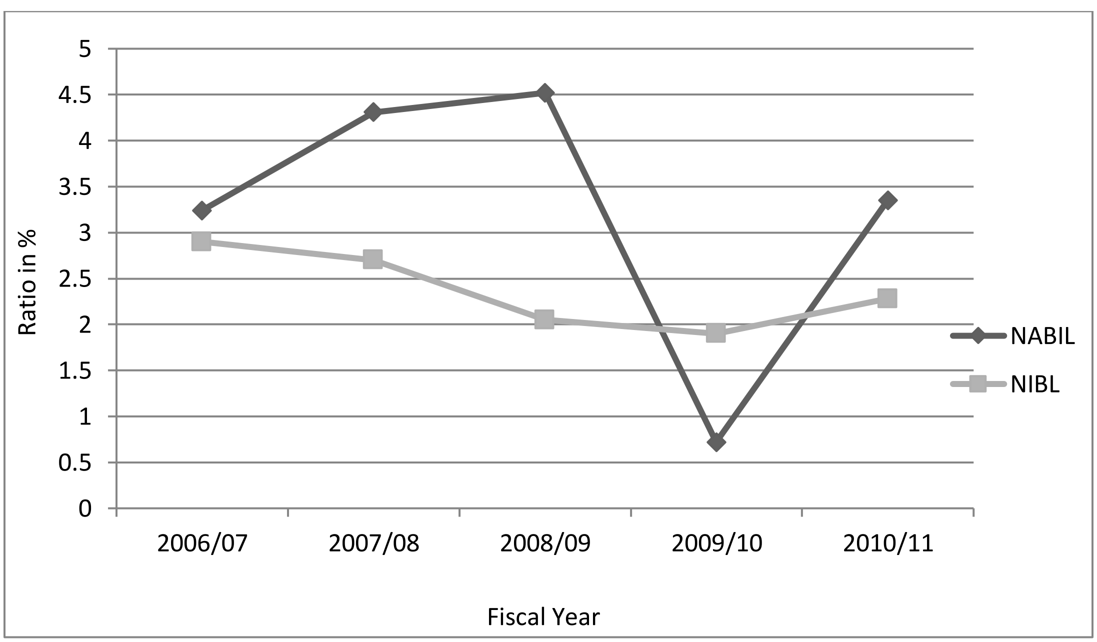
The above table depicted the ratio of collection of fund from long term debt, i.e. debentures and long term borrowing, to total fund. The table showed that the long term debt of NABIL was in increasing trend. The long-term debt, debentures and borrowing, of NABIL in the fiscal year 2006/07 was Rs. 882.57 millions, which increased to Rs. 1950.59 millions in the fiscal year 2010/11. Also, the ratio of long term debt to total fund of NABIL was in fluctuation trend. The ratio was 3.24%, 4.31%, 4.52%, 0.72% and 3.35% in the fiscal year 2006/07, 2007/08, 2008/09, 2009/10 and 2010/11 respectively. NABIL bank started to collect fund from debenture from the fiscal year 2007/08 as a result the amount of long term debt had almost doubled in the fiscal year 2007/08 compared to that in the fiscal year 2006/07. In average, the long term debt to total fund was 3.23% within the five years periods.

Similarly, the long term debt collection, as a part of total fund, also followed increasing trend in NIBL. The table showed that the long-term debt of NIBL was Rs. 800 millions in the fiscal year 2006/07 and increased to Rs. 1088.80 millions in the fiscal year 2008/09. Then decrease to Rs. 1087.31 in fiscal year 2009/10 then again increase to Rs. 1330.76 in fiscal year 2010/11. NIBL started to collect fund from debenture capital from the base year 2007/08. Also, the long-term debt to total fund followed decreasing trend for the first four years, i.e. from 2.90% in the fiscal year 2006/07 to 1.90% in the fiscal year 2009/10, and then followed increase to 2.28% in the last year 2010/11. In average, 2.37% of the total fund was collected through long term debt capital.

Comparing two banks on the basis of fund collection from long term debt, it can be concluded that NABIL utilized long term debt capital more than NIBL did in total fund collection and the coefficient of variation of NABIL is higher than NIBL indicating high inconsistency in the ratio was 46.84%. However, in long term debt capital, NABIL focused collection of fund through long term borrowing, while NIBL focused on debenture capital.

Figure 4.3

Long Term Debt to Total Fund



4.1.4 Current Liabilities to Total Fund

Besides shareholder's equity and long term debt, current liabilities, which includes bills payable, deposit, dividend and income tax payable, is the other source of fund in bank. The contribution of current liabilities in collection total fund has been measured in the Table 4.4

Table 4.4

Current Liabilities to Total Fund

(Rs in millions)

Fiscal Year	**NABIL**			**NIBL**		
	CL	**TF**	**Ratio**	**CL**	**TF**	**Ratio**
2006/07	24313.77	27253.39	89.21	24912.72	27590.84	90.29
2007/08	33095.56	37132.76	89.13	35136.52	38873.31	90.39
2008/09	38755.84	43867.39	88.35	48014.16	53010.80	90.57
2009/10	47940.58	52150.23	91.93	51632.70	57305.41	90.10
2010/11	51624.32	58141.44	88.79	51866.30	58356.83	88.88
Mean			**89.48**			**90.05**
S.D.			**1.41**			**0.67**
C.V.%			**1.58**			**0.75**

Sources: Annual Reports of Nabil and Nibl Bank

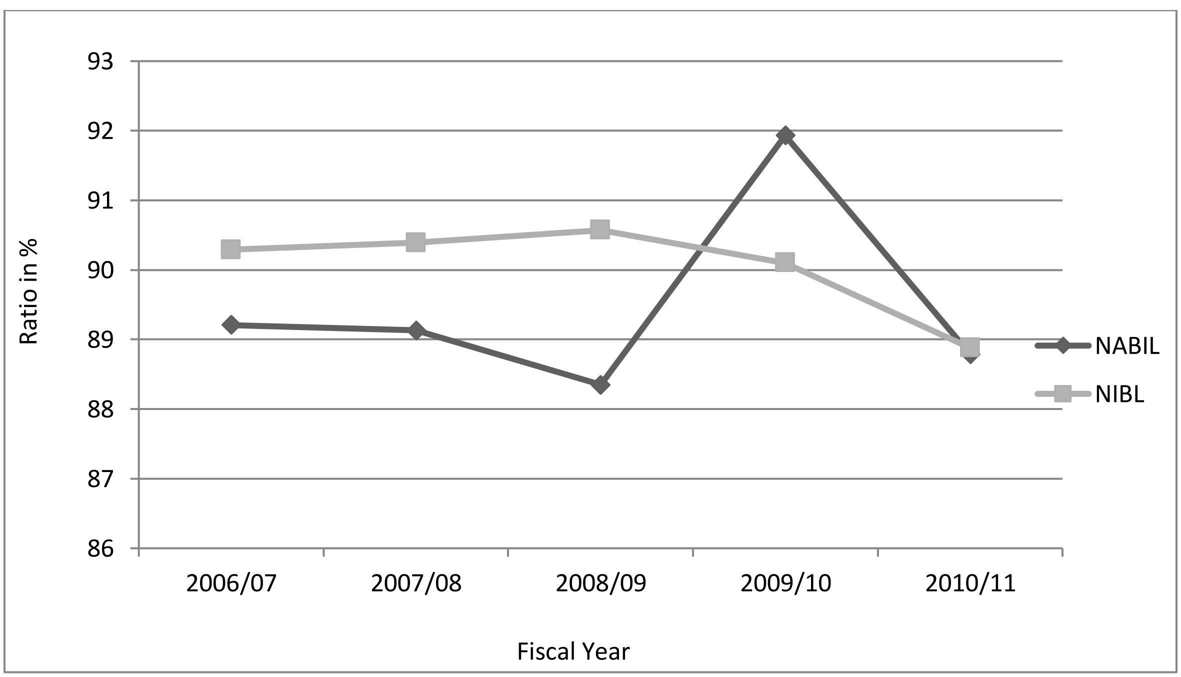
The table showed the proportion of current liabilities to total fund. The table shows that the current liabilities, along with the total fund, of NABIL followed increasing trend. The current liabilities increased from Rs. 24313.77 millions in the fiscal year 2006/07 to Rs. 51624.32 millions in the fiscal year 2010/11. However, the ratio of current liabilities to total fund of NABIL was in fluctuating trend. The ratio was 89.21% in the fiscal year 2006/07, 89.13% in the fiscal year 2007/08 and 88.35% in the fiscal year 2008/09. Then in 2009/10 increase to 91.93% then again decrease to 88.79% in fiscal year 2010/11. In average, 89.48% of the total fund had been collected from current liabilities. This indicated that the main source of fund collection of NABIL banks was current liabilities, mainly the deposit collection.

Similarly, the collection of fund from current liabilities also followed increasing trend in NIBL. The current liabilities ranged from Rs. 24912.72 millions in the fiscal year 2006/07 to Rs. 51866.30 millions in the fiscal year 2010/11. However, the ratio of current liabilities to total fund followed fluctuating trend. The ratio was 90.29%, 90.39%, 90.57%, 90.10% & 88.88% in the fiscal year 2006/07, 2007/08, 2008/09, 2009/10 & 2010/11 respectively. In average, NIBL collected 90.05% of the total fund through current liabilities, especially deposit. And the coefficient of variation in the ratio was 0.75%, which indicated high consistency in the ratio.

On the basis of current liabilities to total fund, it can be collected that the main source of fund of both the sampled banks was current liabilities, especially deposit. This indicated that NIBL used more current liabilities to collect fund than NABIL did. And the coefficient of variation in the ratio of NIBL was 0.75%, which indicated more consistency than NABIL.

Figure 4.4

Current Liabilities to Total Fund



4.5 Collection of Deposit

Deposit is the main source of fund in bank. The bank collects deposit mainly in two categories, via interest bearing deposit and non-interest bearing deposit. The interest bearing deposit includes savings deposit, fixed deposits and call deposits, while non-interest bearing deposits includes current, mutual and other deposit. The collection of deposit from various sources has been presented in the Table 4.5.

Table 4.5

Collection of Deposit

NABIL

(Rs in millions)

Deposit	FY					Mean	
	2006/07	**2007/08**	**2008/09**	**2009/10**	**2010/2011**	**Rs.**	**%**
Current	3395.24	5284.37	5480.53	7904.62	5456.89	27521.65	14.58
Margin	312.06	361.78	463.02	629.86	591.91	2358.63	1.25
Other	50.81	81.4	35.32	86.42	417.91	671.86	0.36
Non-Interest Bearing	**3758.11**	**5727.55**	**5978.87**	**8620.90**	**6466.71**	**30552.14**	**16.19**
Savings	10187.35	12159.97	14620.41	13783.59	14288.52	65039.84	34.46
Fixed	5435.19	8464.09	8310.71	14711.16	16840.83	53761.98	28.49
Call	3961.64	5563.44	8438.26	9295.06	12110.04	39368.44	20.86
Interest Bearing	**19584.18**	**26187.5**	**31369.38**	**37789.80**	**43239.39**	**158170.25**	**83.81**
Total Deposit	**23342.29**	**31915.05**	**37348.25**	**46410.70**	**49706.1**	**188722.39**	**100**

NIBL

Deposit	FY					Mean	
	2006/07	**2007/08**	**2008/09**	**2009/10**	**2010/11**	**Rs.**	**%**
Current	2175.03	3138.67	3756.57	4025.82	4042.69	17138.78	8.32
Margin	371.66	607.06	727.99	779.47	658.80	3144.98	1.53
Other	-------	-------	-------	-------	------	------	
Non- Interest Bearing	**2546.69**	**3745.73**	**4484.56**	**4805.29**	**4684.49**	**20283.76**	**9.85**
Savings	10742.33	13688.77	17066.25	14324.26	13490.31	69311.92	33.67
Fixed	7516.69	7944.24	11633.38	16825.15	18378.30	62297.76	30.26
Call	3683.15	9072.99	13513.91	14140.03	1356.02	53978.37	26.22
Interest Bearing	**21942.17**	**30706.00**	**42213.54**	**45289.43**	**45436.63**	**185588.05**	**90.15**
Total Deposit	**24488.86**	**34451.73**	**46698.10**	**50094.73**	**50138.12**	**205871.81**	**100**

Sources: Annual Reports of Nabil and Nibl Bank

The above table showed the collection of deposit under various account, i.e. interest bearing account, which included savings deposit, fixed deposits and call deposits, and non-interest bearing deposit, which included current deposits, margin deposits and other deposits. The table revealed that both the interest bearing deposit and non-interest bearing deposit of NABIL were in increasing trend. The non-interest bearing deposit ranged from Rs. 3758.11 millions in the fiscal year 2006/07 to Rs. 6466.71 millions in the fiscal year 2010/11. In average, NABIL collected Rs. 30552.14 millions, which represented 16.19% of the total deposit, from non-interest bearing deposit source.

Similarly, the interest-bearing deposit of NABIL ranged from Rs. 19584.18 millions in the fiscal year 2006/07 to Rs. 43239.39 millions in the fiscal year 2010/11. In average, NABIL collected Rs. 158170.25 millions, which represented 83.81% of the total deposit collection, from interest-bearing deposit source. Clearly, the interest bearing deposit dominated the total deposit of NABIL than non-interest bearing deposit. In non -interest bearing deposit, current deposit, which alone represented 14.58% out of 16.19% of the total deposit, was the main source of deposit than margin and other deposits. And in interest bearing deposit, savings deposit, which represented 34.46% out of 83.81% of the total deposit, was the main source of fund than fixed and call deposits. In overall, savings deposit was the main source of deposit fund.

Also in NIBL, both the non-interest bearing deposit and interest bearing deposit were found to be in increasing trend. The non-interest bearing deposit ranged from Rs. 2546.69 millions in the fiscal year 2006/07 to Rs. 4684.49 millions in the fiscal year 2010/11. While the interest bearing deposit ranged from Rs. 21942.17 millions in the fiscal year 2006/07 to Rs. 45436.63 millions in the fiscal year 2010/11. In average, NIBL collected Rs. 20283.76 millions, which represented 9.85% of the total deposit, from non-interest bearing account and Rs. 185588.05 millions, which represented 90.15% of the total deposit, from interest bearing account. Alike NABIL, the non-interest bearing deposit of NIBL was dominated by current deposit, which represented 8.32% out of 9.85% representation of non-interest bearing deposit on total deposit, and the interest bearing deposit was dominated by savings deposit, which represented 33.67% out of 90.15% representation of interest bearing deposit in total deposit. In overall, the deposit of NIBL was dominated by savings deposit, interest bearing deposit.

On the basis of sources of total deposit collection, it can be concluded that the deposit of both the banks was highly dominated from savings account. Also, the deposit was the major source of fund in each bank. However, the average deposit collection of NABIL was Rs. 188722.39 and that of NIBL was Rs. 205871.81 millions, which indicated that NIBL remained more successful to collect high deposit amount than NABIL. It would be worthwhile, if both the banks focus on collecting deposit more from non-interest bearing deposit and enjoy high net profit.

4.1.6 Major Source of Fund

Finally, to recognize the major source of fund in each bank, the average amount of various sources of fund and their contribution to total fund have been calculated, which has been presented in the Table 4.6.

Table 4.6

Major Source of Fund

*(*Rs in Millions)

Source	**NABIL**		**NIBL**	
	Amount	**%**	**Amount**	**%**
Shareholders Equity	3205.15	7.93	3643.58	7.37
Long term Borrowing	1357.87	3.00	1071.37	2.17
Current Liabilities:	40619.39	89.90	44702.32	90.46
a) Deposit	37744.48	83.54	41174.36	83.32
b) Other	2874.91	6.36	3527.96	7.14
Total Fund	**45182.41**	100.00	**49417.27**	100.00

Sources: Annual Reports of Nabil and Nibl Bank

The above table depicted that the both in NABIL and NIBL, the current liabilities, which indicated 89.90% of the average total fund in NABIL and 90.46% of the average total fund in NIBL, was the main source of fund. After current liabilities, shareholders equity was the other source of fund and only then long term borrowing was the other source of fund.

Certainly, it can be concluded that the total deposit, which alone represented 83.54% of the average total fund in NABIL and 83.32% of the average total fund in NIBL, was the main source of fund under current liabilities.

4.2 Fund Mobilization

All the bank of entire world was applied their own fund mobilizing procedure. In practice, straightforward and effective fund mobilization procedure has adopted by the bank. Effective fund mobilization is the indicator of bank prosperity and its growth. It would be worthless to collect fund, if the firm does not mobilize it. So, effective mobilization of fund is crucial.

4.2.1 Current Assets to Total Fund

The bank mobilizes the fund in current assets mainly to earn income and have sound liquidity position. To examine what percentage of the total fund has been mobilized in current assets, the ratio of current assets to total fund has been computed.

Table 4.7

Current Assets to Total Fund

(Rs in Millions)

Fiscal Year	NABIL			NIBL		
	CA	**TF**	**Ratio**	**CA**	**TF**	**Ratio**
2006/07	26966.50	27253.39	98.95	26831.38	27590.84	97.25
2007/08	36534.72	37132.76	98.39	37903.22	38873.31	97.50
2008/09	43206.40	43867.39	98.49	51950.05	53010.80	98.00
2009/10	51370.70	52150.23	98.50	56169.17	57305.41	98.02
2010/11	57206.34	58141.44	98.39	57248.37	58356.83	98.10
Mean			**98.54**			**97.77**
S.D.			**0.23**			**0.38**
C.V.%			**0.24**			**0.39**

Sources: Annual Reports of Nabil and Nibl Banks

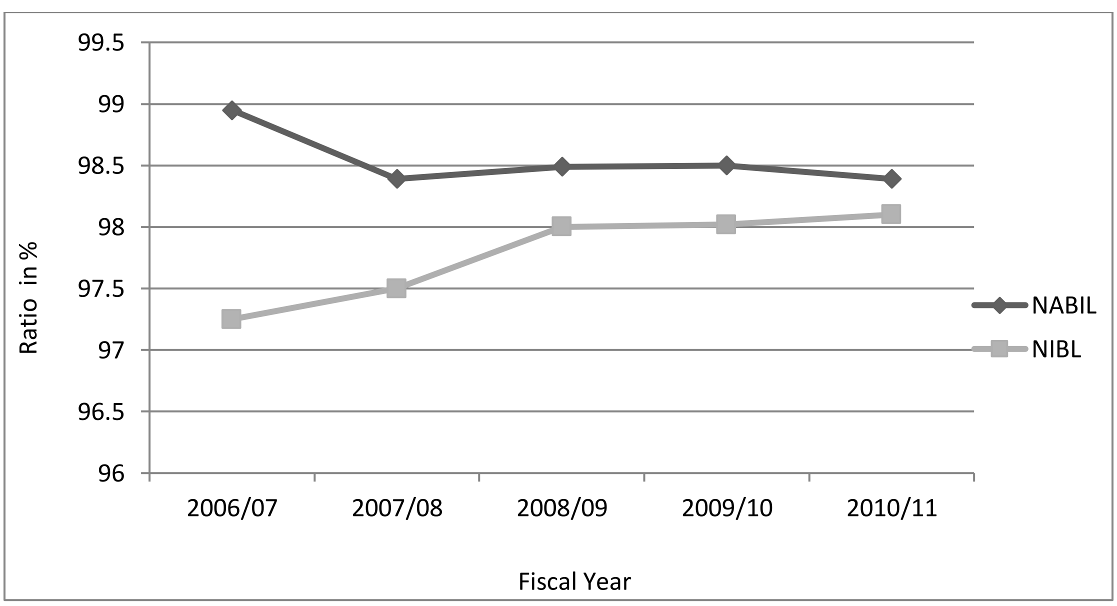
The above table revealed the mobilization of total fund collected in current assets. The table showed that the mobilization of total fund in current assets of NABIL followed increasing trend. The current assets of NABIL ranged from Rs. 26966.50 millions in the fiscal year 2006/07 to Rs. 57206.34 millions in the fiscal year 2010/11. The mobilization of total fund in current assets of NABIL was 98.95%, 98.39%, 98.49%, 98.50% and 98.39% in the fiscal year 2006/07 to 2010/11 respectively. In average, 98.54% of the total fund collected was mobilized in current assets. The coefficient of variation, which was 0.24%, indicated high consistency in the ratio.

Similarly, the mobilization amount of total fund incurrent assets of NIBL was also found to be in increasing trend. NIBL mobilized Rs. 26831.38 millions in current assets in the fiscal year 2006/07 and in the fiscal year 2010/11 the mobilization amount in current assets was Rs. 57248.37 millions. Alike in NABIL, the mobilization rate of total fund in current assets of NIBL was found to be fluctuating trend. The current assets to total fund of NIBL was 97.25%, 97.50%, 98.00%, 98.02% and 98.10% respectively in the fiscal year 2006/07 to 2010/11. In average, NIBL mobilized 97.77% of the total deposit collection in current assets. The coefficient of variation on the ratio was only 0.38%.

On the basis of current assets to total fund, it can be concluded that both of the banks had extremely mobilized their fund in current assets to maximize the net profit. However, as comparing the CV the mobilization rate of NABIL was higher and more consistent than that of NIBL.

Figure 4.5

Current Assets to Total Fund



4.2.2 Fixed Assets to Total Fund

The bank needs fixed assets to operate its daily transactions. So, mobilization of total fund in fixed assets is also essential to earn income. The fixed asset to total fund of NABIL and NIBL is presented in the Table 4.8.

Table 4.8

Fixed Assets to Total Fund

(Rs in Millions)

Fiscal Year	**NABIL**			**NIBL**		
	FA	**TF**	**Ratio**	**FA**	**TF**	**Ratio**
2006/07	286.89	27253.39	1.05	759.46	27590.84	2.75
2007/08	598.04	37132.76	1.61	970.09	38873.31	2.50
2008/09	660.99	43867.39	1.51	1060.75	53010.80	2.00
2009/10	779.54	52150.23	1.49	1136.25	57305.41	1.98
2010/11	935.08	58141.44	1.61	1108.44	58356.83	1.90
Mean			**1.45**			**2.23**
S.D.			**0.23**			**0.38**
C.V.%			**16.10**			**16.89**

Sources: Annual Reports of Nabil and Nibl Bank

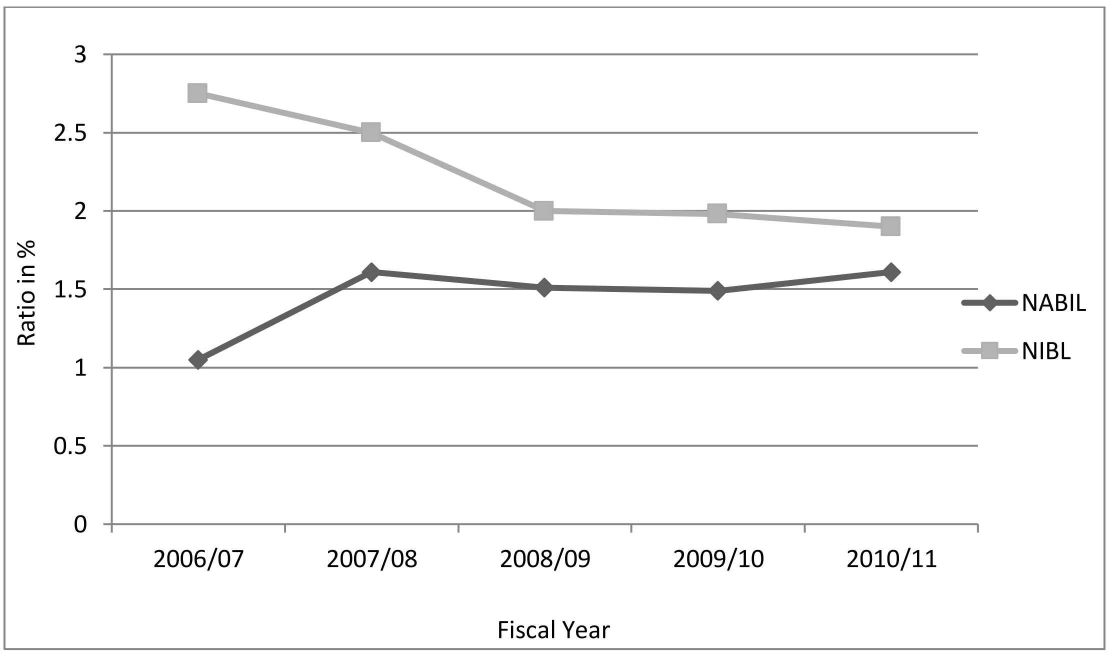
The table showed the mobilization rate of total fund collected in fixed assets. The table revealed that the investment in fixed assets of NABIL remarkably followed increasing trend Rs. 286.89 millions in the fiscal year 2006/07 to Rs. 935.08 in fiscal year 2010/11. Also, the mobilization rate of total fund in fixed assets of NABIL is in fluctuation trend. In average, NABIL mobilized 1.45% of the total fund in fixed assets and the coefficient of variation in the ratio was 16.10%.

However, the investment in fixed assets of NIBL continuously fluctuates in the periods taken for study. The fixed assets amount ranged from Rs. 759.46 millions in the fiscal year 2006/07 to Rs. 1108.44 millions in the fiscal year 2010/11. However, the mobilization rate of total fund in fixed assets followed fluctuating trend, which indicated that the investment in fixed assets did not increase with the same speed that the increment in total fund followed. In average, the mobilization rate of total fund in fixed assets was 2.23% and the coefficient of variation was 16.89%.

On the basis of fixed assets to total fund, it can be concluded that both the banks mobilized very low portion of the total fund collected in fixed assets than ratio mobilized in current assets. However, NIBL mobilized high portion of total fund in fixed assets than NABIL did.

Figure 4.6

Fixed Assets to Total Fund



4.2.3 Cash and Bank Balance to Total Deposit

It is very necessary for the bank to have sound liquidity position so the bank needs sufficient cash and bank balance. The cash and bank balance includes cash in hand, cash at NRB and cash at other financial institutions. Thus, the effective mobilization of total fund in cash and bank balance is crucial, since keeping both high cash balance and low cash balance jeopardizes the bank's sustainability.

Table 4.9

Cash and Bank Balance to Total Deposit

(Rs in Millions)

Fiscal Year	NABIL			NIBL		
	CBB	TF	Ratio	CBB	TF	Ratio
2006/07	1399.83	7253.39	5.14	2441.51	27590.84	8.85
2007/08	2675.14	7132.76	7.19	3754.94	38873.31	9.66
2008/09	3372.51	3867.39	7.69	7918.00	53010.80	14.94
2009/10	1400.40	52150.23	2.68	6815.89	57305.41	11.89
2010/11	2436.54	58141.44	4.19	8140.37	58356.83	13.85
Mean			**5.38**			**11.86**
S.D.			**1.89**			**2.63**
C.V.%			**35.21**			**22.21**

Sources: Annual Reports of Nabil and Nibl Bank

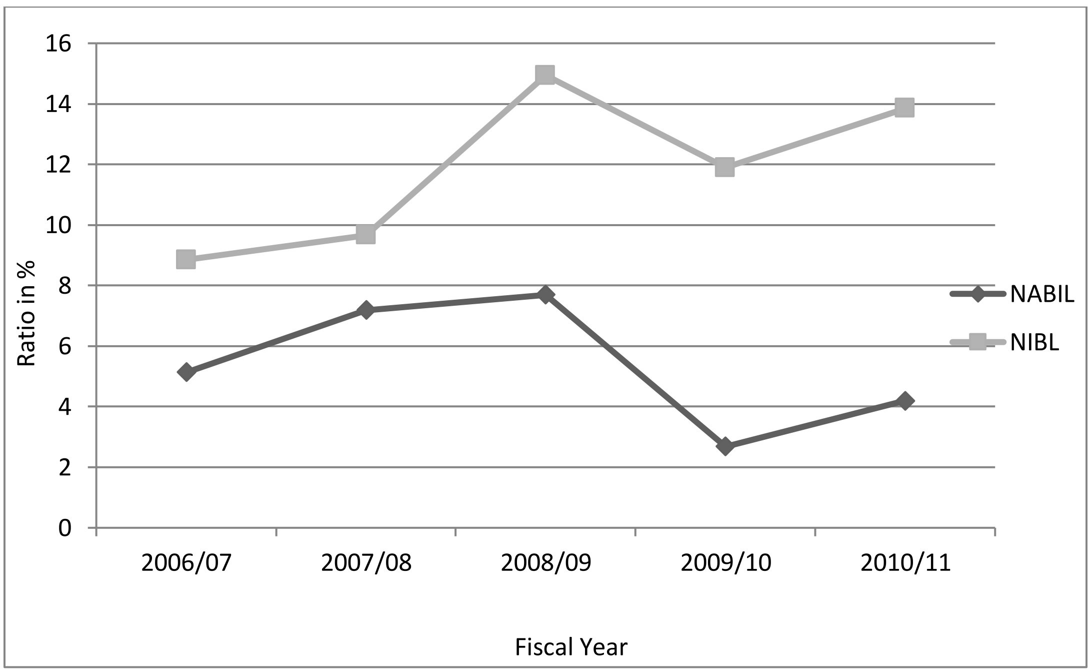
The table evaluated the mobilization of total fund in the most liquid assets, i.e. in cash and bank balance. The table showed that the cash reserve of NABIL considerably followed fluctuation trend in the five consecutive fiscal years. The cash and bank balance ranged from Rs. 1399.23 millions in the fiscal year 2006/07 to Rs. 2436.54 millions in the fiscal year 2010/11. However, the mobilization rate of total fund in cash and bank balance has also been in fluctuation trend. In average, NABIL mobilized 5.38% of the average total fund in cash and bank balance to have adequate liquidity position. While the coefficient of variation, 35.21%, and indicated high inconsistency in the ratio.

Similarly, the mobilization amount of total fund in cash and bank balance of NIBL also followed increasing trend. The cash and bank balance amounted to Rs. 2441.51 millions in the fiscal year 2006/07 and increased to Rs. 8140.37 millions in the fiscal year 2010/11. However, the ratio of cash and bank balance to total fund fluctuating trend. In average, NIBL mobilized 11.86% of the total fund in maintaining cash and bank balance to have sound liquidity position. And the coefficient of variation in the ratio was 22.21%.

Comparing two banks on the basis of mobilization rate of total fund in cash and bank balance, it can be concluded that the liquidity position of NIBL was better than that of NABIL; since the average cash and bank balance to total fund of NIBL (11.86%) was higher than that of NABIL (5.38%).

Figure 4.7

Cash and Bank Balance



4.2.4 Money at Short Call and Notice to Total Fund

The bank mobilizes the fund in money at short call to gain interest income. Higher the money at short call, higher will be the interest amount. The mobilization rate of total fund in money at short call and notice of NABIL and NIBL are presented in the table below.

Table 4.10

Money at Short Call and Notice to Total Fund

(Rs in Millions)

Fiscal Year	NABIL			NIBL		
	MSCN	TF	Ratio	MSCN	TF	Ratio
2006/07	563.53	27253.39	2.07	362.97	27590.84	1.32
2007/08	1952.36	37132.76	5.26	0.00	38873.31	0.00
2008/09	552.89	43867.39	1.26	0.00	53010.80	0.00
2009/10	3118.14	52150.23	5.98	0.00	57305.41	0.00
2010/11	2452.51	58141.44	4.22	150	58356.83	0.26
Mean			**3.76**			**0.32**
S.D.			**2.03**			**0.57**
C.V.%			**54.02**			**181.15**

Sources: Annual Reports of Nabil and Nibl Bank

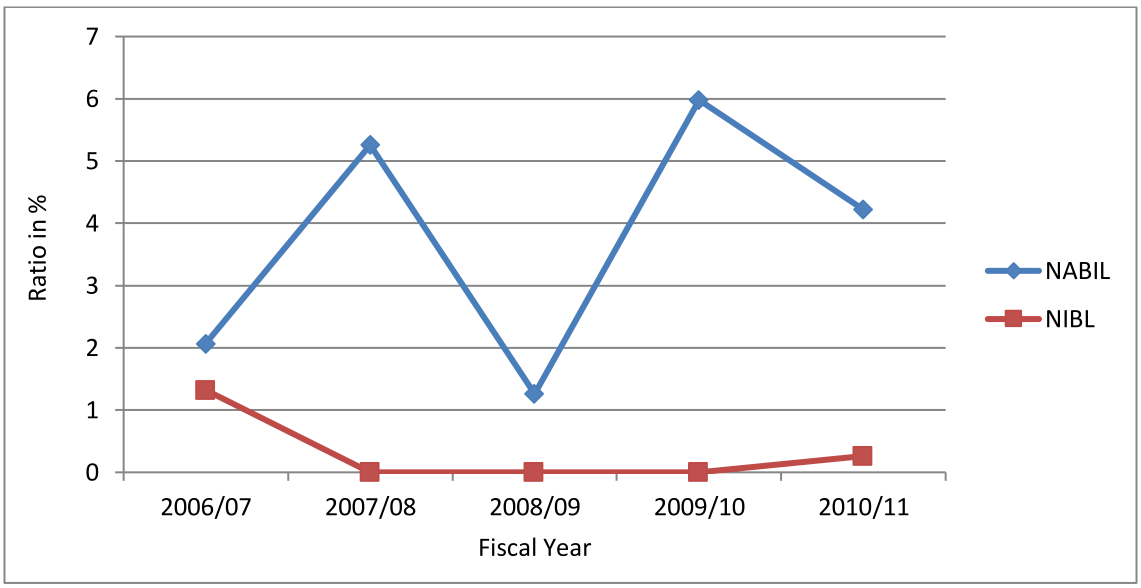
The table showed that the mobilization amount in money at short call and notice of NABIL fluctuated during the periods taken for study, and thus was highest Rs. 3118.14 millions in the fiscal year 2007/08 and lowest (Rs. 552.89 millions) in the fiscal year 2008/09. Also, the mobilization rate of total fund in money at short call and notice fluctuated during the periods. The ratio was 2.07% in the fiscal year 2006/07, again increased to 5.26% in the fiscal year 2007/08 and finally decreased to 1.26% in the fiscal year 2008/09 and increase to 5.98% in fiscal year 2009/10 then decrease to 4.22% in fiscal year 2010/2011. This seemed that NABIL has no fixed policy to mobilize the total fund in money at short call and notice, which was also verified by the high coefficient of variation (54.02%). In average, 3.76% of the total fund had been mobilized in money at short call and notice.

Also, the money at short call and notice in NIBL ranged from Rs. 0 in the fiscal year 2007/08 to 2009/10. Rs. 362.97 millions in the fiscal year 2006/07 and Rs 150 in the fiscal year 2010/2011. The mobilization rate of total fund in money at short call and notice was 1.32% in the fiscal year 2006/07. In average, NIBL mobilized only 0.32% of the total fund in money at short call and notice. The coefficient of variation in the ratio was 181.15%, which indicated inconsistency in the ratio.

On the basis of the mobilization rate of total fund in money at short call and notice, it can be concluded that the money at short call got low priority while mobilizing fund in both the banks. Only small part was invested in such assets. However, NABIL mobilization rate was higher than that of NIBL.

Figure 4.8

Money at Short Call and Notice to Total Fund



4.2.5 Loan and Advances to Total Fund

Granting loan and advances falls on the major function of the bank. The bank grants loan and advances to get interest income, which is the major source of bank's income. The mobilization amount of loan and advances and the mobilization rate of total fund in the loan and advances are presented in the table below.

Table 4.11

Loan and Advances to Total Fund

(Rs in Millions)

Fiscal Year	NABIL			NIBL		
	LA	**TF**	**Ratio**	**LA**	**TF**	**Ratio**
2006/07	15545.78	27253.39	57.04	17286.43	27590.84	62.65
2007/08	21365.05	37132.76	57.54	26996.65	38873.31	69.45
2008/09	27589.93	43867.39	62.89	36241.21	53010.80	68.37
2009/10	32268.87	52150.23	61.88	40318.31	57305.41	70.36
2010/11	38034.09	58141.44	65.42	41095.51	58356.83	70.42
Mean			**60.95**			**68.25**
S.D.			**3.59**			**3.24**
C.V.%			**5.89**			**4.75**

Sources: Annual Reports of Nabil and Nibl Bank

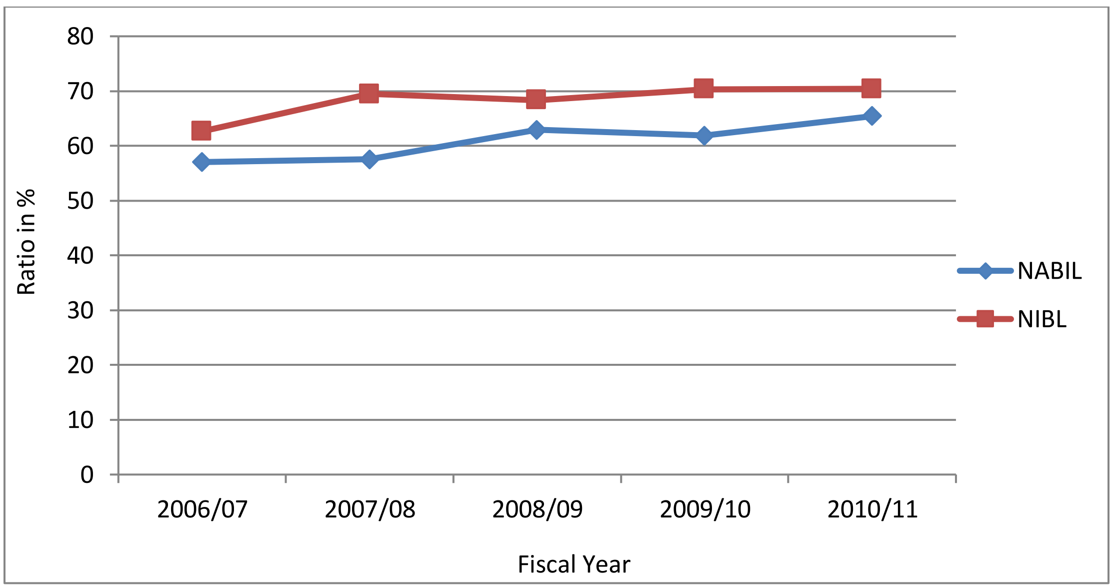
The table showed that the mobilization amount of total fund in loan and advances was in increasing trend over the past five years. With the hope of increasing interest income, the loan and advances amount was raised from Rs. 15545.78 millions in the fiscal year 2006/07 to Rs. 38034.09 millions in the fiscal year 2010/11. However, the mobilization rate of total fund in loan and advances increase over the first three fiscal years, i.e. from 57.04% in the fiscal year 2006/07 to 62.89% in the fiscal year 2008/09, and then decrease to 61.88% in 2009/10 and in increase to 65.42% in fiscal year 2010/11. In average, 60.95% of the total fund available was mobilized in granting loan and advances. The coefficient of variation on such mobilization rate was only 5.89%, indicating high uniformity in the ratio.

Alike in NABIL, the loan and advances in NIBL increased in each fiscal year compared to that in previous year. The loan and advances was Rs. 17286.43 millions in the fiscal year 2006/07 to Rs.41095.51 millions, in the fiscal year 2010/11. However, the mobilization rate of total fund in loan and advances was fluctuated during the periods. In average, NIBL mobilized 68.25% of the total fund in loan and advances, and the coefficient of variation in the ratio was 4.75%.

Comparing two banks, it can be concluded that the mobilization rate of total fund in loan and advances was higher in NIBL than in NABIL in each year and certainly in average. Since 2006/07, both the mobilization amount and rate in loan and advances of NIBL was higher than those in NABIL.

Figure 4.9

Loan and Advances Total Fund



4.2.6 Investment to Total Fund

Investment is the other source of income of bank. The bank earns interest income from government securities, bond and other investment, and dividend & capital gain from corporate shares. The mobilization rate of total fund in short term investment of NABIL and NIBL has been presented in the table below.

Table 4.12

Investment to Total Fund

(Rs in Millions)

Fiscal Year	NABIL			NIBL		
	Inv.	**TF**	**Ratio**	**Inv.**	**TF**	**Ratio**
2006/07	8945.31	27253.39	32.82	6505.68	27590.84	23.58
2007/08	9939.77	37132.76	26.77	6874.03	38873.31	17.68
2008/09	10826.38	43867.39	24.68	7399.81	53010.80	13.96
2009/10	13670.92	52150.23	26.21	8635.53	57305.41	15.07
2010/11	13081.21	58141.44	22.50	7423.11	58356.83	12.72
Mean			**26.60**			**16.60**
S.D.			**3.85**			**4.31**
C.V.%			**14.48**			**25.96**

Sources: Annual Reports of Nabil &Nibl Bank

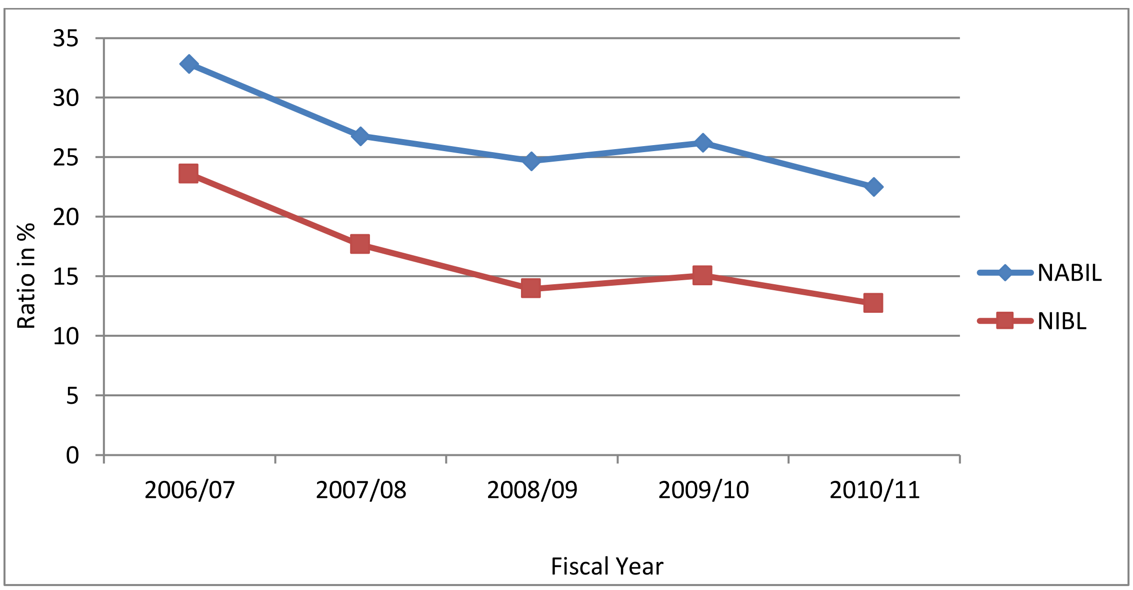
The table showed that the mobilization of total fund in investment assets of NABIL bank increased in each year. The investment amount ranged from Rs. 8945.31 millions in the fiscal year 2006/07 to Rs. 13081.21 millions in the fiscal year 2010/11. However, the mobilization rate of total fund in investment decreased for the first three years ie 32.82%, 26.77% & 24.68%, and then increase to 26.21% in fiscal year 2009/10 then again decrease to 22.50% in fiscal year 2010/11. In average, NABIL mobilized 26.60% of the total fund in investment to gain interest income, dividend and capital gain. The coefficient of variation in the ratio was 14.48%.

Similarly, the mobilization amount in investment of NIBL also followed increasing trend in the five consecutive years. The investment amount was Rs. 6505.68 millions in the fiscal year 2006/07 and Rs. 7423.11 millions in the fiscal year 2010/11. However, the ratio of investment to total fund decreased only in the first three years and then followed increase trend from the fiscal year 2009/10. Then decrease to 12.72% in fiscal year 2010/11. The ratio was highest (23.58%) in the fiscal year 2006/07 and lowest (12.72%) in the fiscal year 2010/11. The significant declining trend indicated that NIBL diverted more fund in other assets, especially in loan and advances. In average, NIBL mobilized 16.60% of the total fund in investment and the coefficient of variation in the mobilization rate was 25.96%.

Comparing two banks, it can be concluded that the mobilization rate of total fund collected in investment was higher in NABIL than in NIBL in each fiscal year, in average, i.e. NABIL has ratio 26.06% greater than ratio of NIBL i.e 16.60% and NABIL is uniformity as comparing Coefficient of Variation.

Figure 4.10

Investment to Total Fund



4.2.7 Major Use of Fund

To recognize the major assets in which the bank mobilizes the collected fund most, the average amount of each asset has been compare.

Table 4.13

Major Use of Fund

(Rs in Millions)

Mobilization	NABIL		NIBL	
	Amount	**%**	**Amount**	**%**
Cash and Bank Balance	2256.76	5.16	5814.14	12.36
Money at Short Call Notice	1727.89	3.95	102.594	0.22
Investment	11292.72	25.84	7367.63	15.67
Loan and Advances	26960.74	61.68	32387.62	68.87
Fixed Assets	652.11	1.49	1006.99	2.14
Other Assets	819.56	1.88	347.99	0.74
Total Fund	**43709.78**	**100**	**47026.97**	**100**

Sources: Annual Reports of Nabil and Nibl Bank

The above table depicted that in both the NABIL and NIBL, the loan and advances which represented 61.68% of the total fund in NABIL and 68.87% of the total fund in NIBL, was the main uses of fund. After loan and advances, the short term investment, which occupied 25.84% of total fund in NABIL and 15.67% of total fund in NIBL, was the other main uses of collected fund. Besides them, the maintenance of cash and bank balance was the third uses of fund in both the banks, and then money at short call and notice was the fourth uses of fund in NABIL but gets last priority in NIBL. Also, the other assets got second last priority in NABIL & NIBL, while mobilizing fund within the fifth year periods.

4.2.8 Loan and Advances Portfolio

Loan and Advances portfolio is the combination of loan advances into different areas sanctioned by bank. By analyzing the loan diversified into different areas and the current status of that sector bank can make decision whether to lend more or stop for that particular sector. The percentage calculated below is the average of the five years data from 2006/07 to 2010/11.

Table 4.14

Loan and Advances Portfolio of NABIL and NIBL

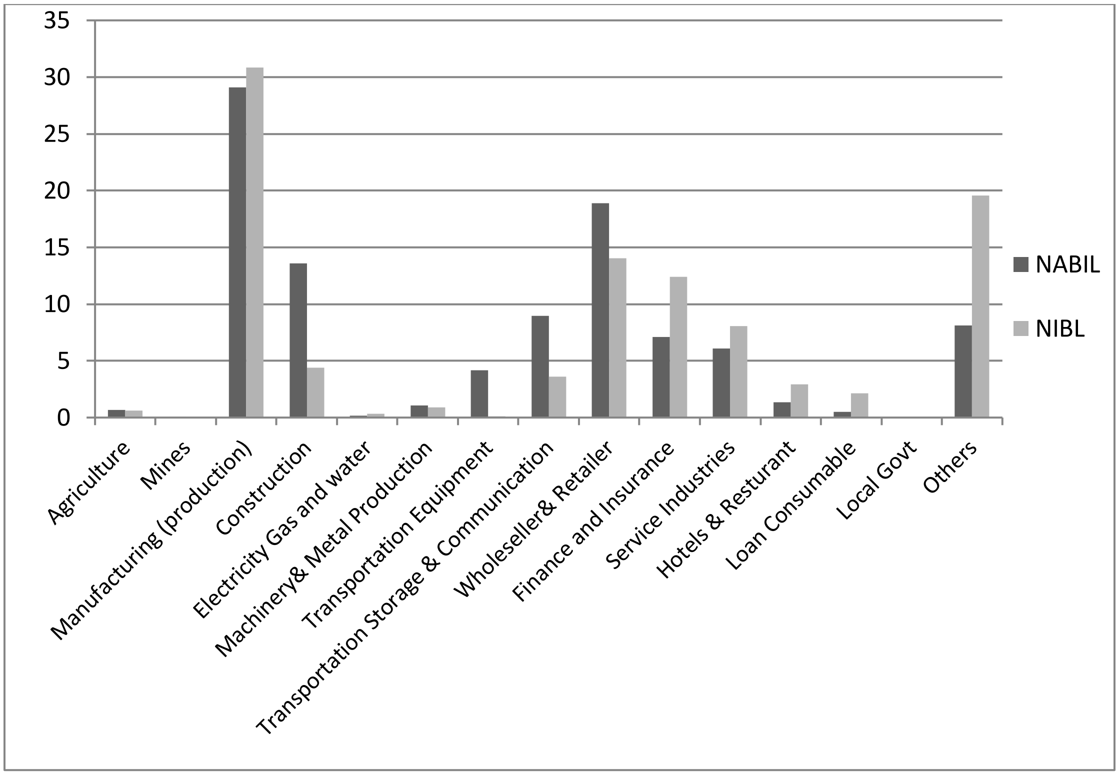
	Sector	**NABIL**	**NIBL**
1	Agriculture	0.67	0.63
2	Mines	0.053	0.02
3	Manufacturing	29.11	30.85
4	Construction	13.61	4.38
5	Electricity Gas and water	0.18	0.34
6	Metal Production, Machinery	1.06	0.89
7	Transportation Equipment Production	4.18	0.10
8	Transportation Storage & Communication	8.98	3.59
9	Wholesaler& Retailer	18.91	14.06
10	Finance and Insurance	7.11	12.42
11	Service Industries	6.10	8.06
12	Hotels & Restaurant	1.352	2.93
13	Consumable Loan	0.483	2.14
14	Local Government	0.00	0.00
15	Others	8.10	19.59
	Total	100	100

Source: NRB Report

Table 4.14 shows the average sector wise lending of the NABIL and NIBL of years 2006 to 2011. The Bank has lend mostly in the production sector with 29.11% in NABIL and 30.85% in NIBL followed by Wholesale & Retailer. NABIL bank has granted small percentage of loan in agriculture and metal production sector. The loan and advances in service industries are 6.10% in NABIL and 8.06% in NIBL. There is no lending in the local government sector.

Figure 4.11

Sector wise Lending of NABIL and NIBL Banks



In the figure 4.11, the average production of loan and advances in different sectors of NABIL and NIBL of years 2006 to 2011. NABIL and NIBL bank has highest portions of loan in the production sector and very minimum part in agriculture and mine industries. There is no lending in local government.

Comparing two banks, it can be conclude that the average sector wise lending of the sampled bank. All the banks have highest proportion of their loan and advances in the production sector followed by the wholesaler and retailer. NABIL has the highest lending in the other sector in relation with that of NIBL bank. NABIL have invested around 6.10% in services sectors but NIBL has invested 8.06% in the same. NABIL and NIBL have invested very low in agriculture and mines sectors and there is no lending in local government.

4.3 Efficiency in Fund Mobilization

The bank collects and mobilizes fund to gain net profit. Thus, to measure the efficiency of the bank in fund mobilization, the net profit to total fund has been analyzed.

4.3.1 Net Profit to Total Fund

The net profit to total fund measures the efficiency of the bank in effectively mobilizing the fund available to get net profit. The net profit to total fund also measures the sustainability of the bank in the long run. The net profit to total fund of NABIL and NIBL are presented in the Table 4.15.

Table 4.15

Net Profit to Total Fund

(Rs in Millions)

Fiscal Year	NABIL			NIBL		
	NPAT	**TF**	**Ratio**	**NPAT**	**TF**	**Ratio**
2006/07	637.96	27253.39	2.47	501.40	27590.84	1.82
2007/08	746.47	37132.76	2.01	696.73	38873.31	1.79
2008/09	1031.05	43867.39	2.35	900.62	53010.80	1.70
2009/10	1139.09	52150.23	2.18	1265.95	57305.41	2.21
2010/11	1337.75	58141.44	2.30	1176.64	58356.83	2.02
Mean			**2.26**			**1.91**
S.D.			**0.18**			**0.21**
C.V.%			**7.74**			**10.76**

Sources: Annual Reports of Nabil and Nibl Bank

The above table depicted that the net profit of NABIL was in increasing trend. The net profit of NABIL was Rs. 673.96 millions in the base year 2006/07, which was dramatically increased within the five years period and reached to Rs. 1337.75 millions in the fiscal year 2010/11. The net profit to total fund was 2.47%, 2.01%, 2.35%, 2.18% and 2.30% in the fiscal year 2006/07 to 2010/11 respectively. In average, the ratio of net profit to total fund was 2.26%, which indicated that

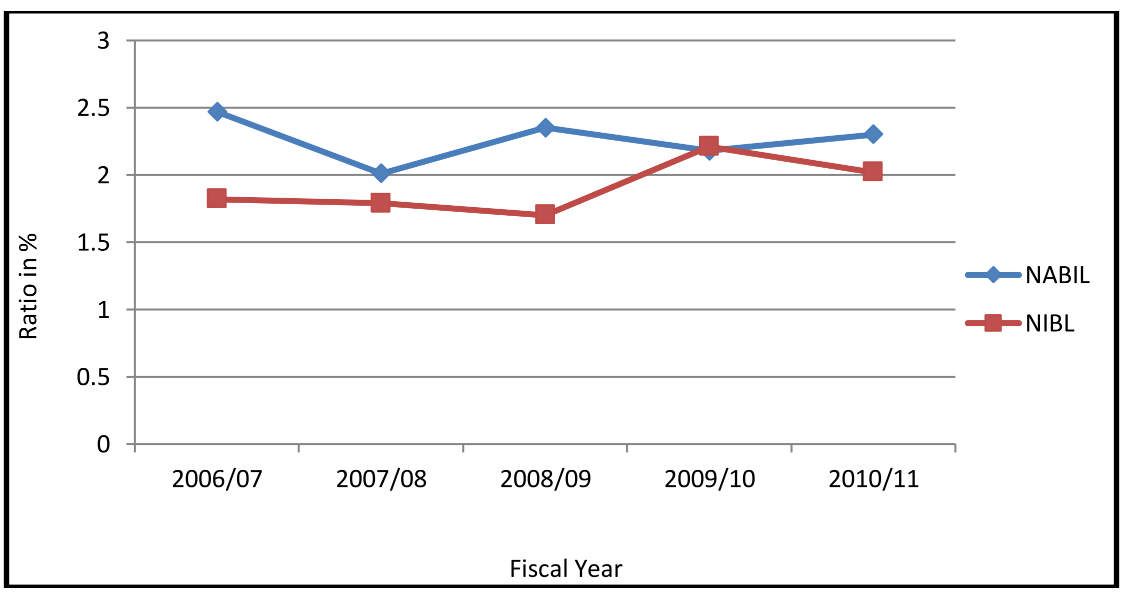
NABIL generated. Rs 2.26 net profit from mobilization of fund. The coefficient of variation in the ratio was 7.74%.

Similarly, the net profit amount of NIBL was also in increasing trend and thus ranged from Rs. 501.40 millions in the fiscal year 2006//07 to Rs. 1176.64 millions in the fiscal year 2010/11. Further, the net profit to total fund was found to be in decreasing trend for the first three years, i.e. from 1.82% in the fiscal year 2006/07 to 1.70% in the fiscal year 2008/09, and then increase to 2.21% in 2009/10 then again decrease. In average, the net profit to total fund of NIBL was 1.91%, which indicated that NIBL generated Rs. 1.91 net profit from mobilization of fund. And the coefficient of variation in the ratio was 10.76%.

Comparing two banks, it can be concluded that NABIL was more success in fund mobilization than NIBL, since the average net profit to total fund of NABIL (2.26%) was higher than that of NIBL (1.91%). However, the ratio was more consistent in NABIL than in NIBL, since the coefficient of variation in the ratio was lower in NABIL (7.74%) than in NIBL (10.76%).

Figure 4.12

Net Profit to Total Fund



4.4 Statistical Analysis

In this section, the relationship between net profit and total fund, net profit, total deposit and loan and advances has been measured using correlation coefficient and regression analysis. Further the trend value of total fund and net profit has also been estimated.

4.4.1 Simple Correlation and Regression Analysis

To find the relationship of net profit with total fund, the Karl Pearson's correlation coefficient and simple regression lines have been analyzed.

4.4.1.1 Correlation between Net Profit and Total Fund

The correlation coefficient between net profit after tax (NPAT) and total fund (TF) as calculated in Appendix I is summarized below.

Table 4.16

Correlation Coefficient between Net Profit and Total Fund

Banks	R	Relationship	r2	P.E.	6 P.E.	Remarks
NABIL	0.9743	+ve	0.9493	0.0153	0.0918	Significant
NIBL	0.9523	+ve	0.9069	0.0281	0.1686	Significant

Source: Appendix I

The table helps to depict the relationship between net profit after tax (NPAT) and total fund (TF) of NABIL and NIBL. The correlation coefficient (r) between NPAT and total fund of NABIL was 0.9743 which indicated the perfect positive relationship between NPAT and total fund. Likewise, the relationship between NPAT and total fund of NIBL was also perfectly positive, 0.9523, and the degree of correlation coefficient is high. The value of r^2 of NABIL was 0.9493, which indicated that 94.93% of variation was explained in the dependent variable NPAT due to the change in the value of independent variable total fund.

Similarly, in case of NIBL, the coefficient of determination between NPAT and total fund was 0.9069, which indicated that 90.69% variations in the NPAT was explained due to change in the value of total fund.

Likewise, the probable error indicated that the relationship between NPAT and total fund of NABIL was statistically significant (r > 6 x P.E.) and also the relationship between NPAT and total fund of NIBL was statistically significant (r > 6 x P.E.).

4.4.1.2 Regression Analysis: Net Profit after Tax on Total Fund

The simple regression equation of NPAT on total fund (TF) calculated in the Appendix II is:

$$Y = a + b X$$

$$NPATNABIL = 111.48 + 0.02 \times TFNABIL$$

$$NPATNIBL = -32.28 + 0.02 \times TFNIBL$$

The regression variable and t-value obtained is summarized in the following table 4.17.

Table 4.17

Regression Analysis of NPAT on Total Fund

Banks	no. of Observation (n)	Constant (a)	Regression Coefficient (b)	T value
NABIL	5	111.48	0.02	7.49
NIBL	5	-32.28	0.02	5.40

Source: Appendix II

The table depicted the output of simple regression analysis of NPAT on total fund of the two banks viz. NABIL and NIBL. In case of NABIL, beta coefficient was 0.02, which indicated that one rupee increase in total fund leads to an average Rs. 0.02 increase in dependent variable NPAT, holding the variable, 111.48, constant.

Also, the calculated value of t (7.49) was higher than the tabulated value of t (3.182) at 5% level of significance and 4 Degree of freedom, which indicated that the result was statistically significant.

In the case of NIBL, the beta coefficient was also 0.02, which indicated one-rupee increase in total fund leads to an average Rs. 0.02 increase in NPAT, if the constant (a), -32.28, remains constant. Since, calculated t-value (5.40) of NIBL was higher than the tabulated value of t (3.182) at 5% level of significance, the result was statistically significant.

Thus, it can be concluded that the NPAT had direct relationship with the total fund in both the banks. Also, there was same rupee increment/decrement in the net profit after tax while increasing/decreasing per rupee in total fund in both the banks.

4.4.2 Multiple Correlation and Regression Analysis

To find out the relationship of net profit with the total deposit (major source of fund) and loan and advances (major uses of fund), the multiple correlation coefficient and regression analysis have been evaluated.

4.4.2.1 Multiple Correlation Among Net Profit (NPAT), Total Deposit (TD) and Loan & Advances (LA)

Let correlation between NPAT and TD be denoted by r_{12}, TD and LA be denoted by r_{23} and NPAT and LA be denoted by r_{13}. Then the multiple correlation coefficient of NPAT on TD and LA is given by; (Appendix III)

$$R_{1.23} = \sqrt{\frac{r_{12}^2 + r_{13}^2 - 2\, r_{12}\, r_{23}\, r_{13}}{1 - r_{23}^2}}$$

$R_{(NABIL)} = 0.9927$

$R_{(NIBL)} = 0.9631$

Table 4.18

Multiple Correlations between NPAT, TD and LA

Banks	R	Relationship	R^2	P.E.	6P.E.	Remarks
NABIL	0.9927	+ve	0.9854	0.0044	0.0264	significant
NIBL	0.9631	+ve	0.9276	0.0218	0.1308	significant

Source: Appendix III

The above table showed the multiple correlations among net profit after tax (NPAT) and total deposit (TD) and loan and advances (LA) of two concerned banks during the year covered for study. The multiple correlation coefficients (R) between NPAT, TD and LA of NABIL and NIBL were 0.9927 and 0.9631 respectively, which showed the positive relationship in positive correlation in both banks among these variables.

The coefficient of multiple determinations (R^2) of NABIL was 0.9854, which was slightly higher than that of NIBL was 0.9276. It showed that, in case of NABIL, 98.54% of variation in dependent variable (NPAT) was explained by the variation in independent variables (TD and LA). Similarly, 92.76% variation in dependent variable (NPAT) of NIBL was explained by the variation in independent variables (TD and LA).

To measure the significance of the relationship among NPAT, TD and LA of the two concerned banks, it would be more preferable to calculate the probable error of correlation coefficient. The same table depicted that R (0.9927) of NABIL was higher than 6 P.E (0.0264) of the corresponding bank, also R (0.9631) of NIBL was higher than 6 P.E (0.1308). So, it can be concluded that the relationship among net profit after tax, total deposit and loan and advances was statistically significant in both the banks.

4.4.2.2 Multiple Regression Equation: NPAT on TD and LA

Let NPAT, TD and LA be denoted by X_1, X_2 and X_3 respectively. Then the multiple regression equation of NPAT on TD and LA is given by;

$X_1 = a + b1\ X_2 + b_2\ X_3$

$NPAT_{NABIL} = 392.52 – 0.02\ TD_{NABIL} + 0.05\ LA_{NABIL}$

$NPAT_{NIBL} = 131.31- 0.04\ TD_{NIBL} + 0.07\ LA_{NIBL}$

Table 4.19

Multiple Regression Line of NPAT on TD and LA

Banks	No. of year	Constant (a)	Regression Coefficient (b)	
			b1	b2
NABIL	5	392.52	-0.02	0.05
NIBL	5	131.31	-0.04	0.07

Source: Appendix IV

The above table represented the linear relationship between NPAT, TD and LA of two concerned banks. The constant (a) was 392.52 in NABIL and 131.31 in NIBL. In case of NABIL, the beta coefficient of total deposit and loan and advances were -0.02 and 0.05 respectively. It indicated that one-rupee increase in total deposit leads to Rs. 0.02 decrease in NPAT and one rupee increase in loan and advances leads to an average about Rs. 0.05 increase in NPAT.

On the other hand, in case of NIBL, the regression coefficients of total deposit and loan and advances were -0.04 and 0.07 respectively, which indicated that one rupee increase in total deposit caused Rs. 0.04 decrease in NPAT and one rupee increase in loan and advances leads to an average about Rs. 0.07 increase in NPAT.

4.4.3 Trend Analysis

In this trend analysis, the fiscal year has been taken, to estimate the value of total fund collection and net profit after tax in the forthcoming years, i.e. in the fiscal year 2006/2007 and so on.

4.4.3.1 Trend Analysis of Total Fund

Let the total fund collection be the dependent variable on the time period, then the estimated value of total fund on year calculated in Appendix V.

Table 4.20

Trend Analysis of Total Fund

Fiscal Year	NABIL	NIBL
2006/07	28350.282	42705.97
2007/08	36029.66	44866.71
2008/09	43709.042	47027.44
2009/10	51388.42	49188.175
2010/11	59067.80	51348.91
2011/12	66747.182	53509.64
2012/13	74426.56	55670.38
2013/14	82105.94	57831.12
2014/15	89785.32	59991.85

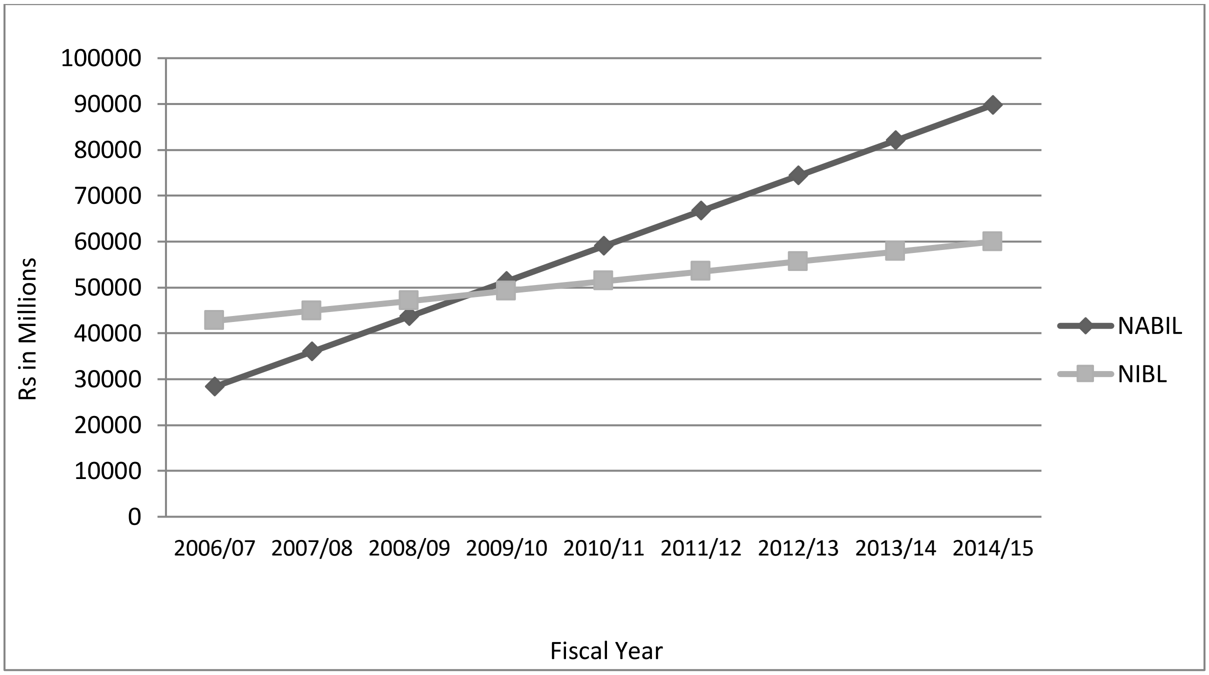
Source: Appendix V

From the above comparative table it is clear that the trend value of both the banks are increasing trend. Other things remaining the same the trend value of both the banks are in increasing trend. The trend value of NABIL will be highest in F/Y 2014/15 i.e. Rs. 89785.32 million. In case of NIBL net profit will be Rs 59991.85 million in F/Y 2014/15, which is the highest under the review period.

Comparing two banks, it can be concluded that in the forthcoming years as well, NABIL would be more successful to collect fund than NIBL, and also the pace of growth of fund in NABIL would be greater than that in NIBL.

Figure 4.13

Trend Value of Total Fund



4.4.3.2 Trend Analysis of Net Profit

The estimated value of net profit of NABIL and NIBL in the fiscal year 2006/07 to 2013/14 net profit on time have been presented in the table below.

Table 4.21

Trend Analysis of Net Profit

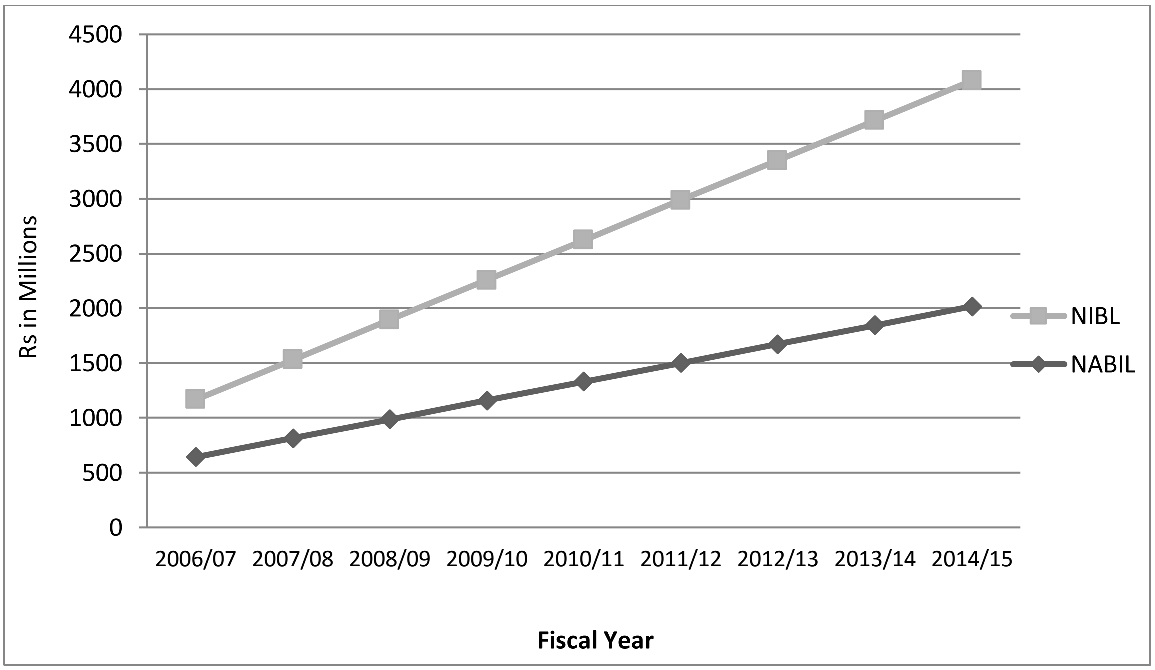
FY	NABIL	NIBL
2006/07	641.62	524.33
2007/08	813.64	716.3
2008/09	985.66	908.27
2009/10	1157.68	1100.24
2010/11	1329.7	1292.21
2011/12	1501.72	1484.18
2012/13	1673.74	1676.15
2013/14	1845.76	1868.12
2014/15	2017.78	2060.09

Source: Appendix VI

From the above comparative table it is clear that the trend value of both the banks are in increasing trend. Other things remaining the same the trend value of both the banks are in increasing trend. The trend value of NABIL will be highest in F/Y 2014/15 i.e. Rs. 2017.78 million. In case of NIBL net profit will be Rs 2060.09 million in F/Y 2014/15, which is the highest under the review period.

Figure 4.14

Trend Value of Net Profit after Tax



4.5 Major Findings

In this research analysis the fund mobilization of NABIL & NIBL Bank for the 5 year period i.e. 2006/07 to 2010/11 has been taken in to consideration. Secondary data have been used for analysis. Generally financial and statistical tools have been used to reveal the entire position of fund of the bank. These are the major findings, which are derived from the analysis of NABIL & NIBL.

4.5.1 Major Findings of the Study

- From the analysis it reveals that, NABIL collected Rs. 43709.04 millions as total fund in average, whereas NIBL collected Rs. 47027.44 millions as total fund in average. Hence, NIBL was more successful in collecting higher fund than NABIL.

- NABIL collected in average, 7.29% of the total fund from shareholder's equity; while in NIBL 7.59% of the total fund was collected from shareholder's equity. The average collection of total fund through shareholder's equity was higher in NIBL than in NABIL.
- NABIL collected 3.23% of the total fund through long term debt, while NIBL collected 2.37% of the total fund through long term debt. The long term debt of NABIL was dominated by long-term borrowing, while that of NIBL was dominated by debenture.
- The current liabilities covered 89.48% of the total fund in NABIL, while that covered 90.05% of the total fund in NIBL. In current liabilities, main source of fund of both the banks was current liabilities, especially deposit & NIBL has used more current liabilities to collect fund than NABIL.
- In deposit, both the bank interest-bearing deposit was comparatively very higher than non-interest-bearing deposit. The major source of deposit was savings account in both the banks, which covered 34.46% in NABIL and 33.67% in NIBL. Current deposit was the main source of fund in non-interest bearing deposit in both the bank.
- Among all the sources of fund, deposit was the major source of the average total fund in both the banks. The deposit represented 83.54% and 83.32% of the total fund in NABIL and NIBL respectively.
- The Current Assets covered 98.54% of the total fund in NABIL, while that covered 97.77% of the total fund in NIBL. Both the banks extremely mobilized their collected fund in current assets. As a result, the average fixed assets to total fund were 1.45% in NABIL and 2.23% in NIBL. However, NIBL mobilized high portion of total fund in fixed assets than NABIL did.

- NABIL collected 5.38% of the total fund and NIBL collected 11.86% of the total fund in cash and bank balance to have sufficient liquidity position. The liquidity position of NIBL was better than that of NABIL, since the average cash and bank balance to total fund of NIBL higher than that of NABIL.
- Similarly, money at short call represented 3.76% in NABIL and 0.32% in NIBL of the total fund.
- The total fund of both the banks had been mainly mobilized in granting loan and advances. The average mobilization rate of total fund in loan and advances was 60.95% in NABIL and 68.25% in NIBL.
- The mobilization rate of total fund collected in investment was higher in NABIL than in NIBL in average, i.e. the average investment to total fund of NABIL was 26.60% and that of NIBL was 16.60%.
- Among all the assets, both the banks mobilized the total fund collected mainly in loan and advances and then in investment. Fixed assets get lowest priority in NABIL its ratio is 1.49% and the Money at Short Call notice got lowest priority in NIBL its ratio is 0.22% while mobilizing fund.
- NABIL was more success in fund mobilization than NIBL, since the average net profit to total fund of NABIL (2.26%) which was higher than that of NIBL (1.91%).

Correlation Coefficient

- The correlation between these two variables was 0.9743 in NABIL and 0.9523 in NIBL. There existed significant relationship between net profit and total fund. As r>6P.E ie. 0.9743>0.0918 in NABIL & 0.9523>0.1686 in NIBL.
- The coefficient of multiple determinations (R^2) of NABIL was 0.9854, which was slightly higher than that of NIBL (0.9276). It showed that, in case of NABIL, 98.54% of variation in dependent variable (NAPT) was explained by

the variation in independent variables (TD and LA). Similarly, 92.76% variation in dependent variable (NPAT) of NIBL was explained by the variation in independent variables (TD and LA).

- There existed significant relationship between net profit and total fund. As R>6P.E i.e. 0.9927>0.0264 in NABIL & 0.9631>0.1308 in NIBL it shows significant relation these variable these variables**.**

Trend Analysis and Projection for the Next Year

- The trend value of total fund has found in increasing trend. The total fund of NABIL will be Rs. 89785.32millions & the total fund of NIBL will be Rs 59991.85millions in 2014/15, if variable remain constant. Comparing two banks, it can be concluded that in the forthcoming years as well, NABIL would be more successful to collect fund than NIBL.
- Similarly the trend value of net profit in NABIL is in increasing trend. The net profit of NABIL will be Rs. 2017.78 millions & that of NIBL will be Rs 2060.09 millions in 2014/15, if variable remain constant. Comparing two banks, NIBL will make more profit than NABIL.

CHAPTER – V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

This research focuses on the comparative study of fund mobilization of two joint venture banks namely NABIL Bank Limited is compared with the NIBL Bank Limited on their future fund mobilizing activities by collecting five years data from the year 2006/07 to 2010/11. Both banks have strong position in the market with new banking system and their activities.

The purpose of the study is to know the efficient fund mobilizing policy adopted by NABIL and NIBL Bank Limited. The specific objectives of the study are: a) To measure the relationship of net profit with total deposits and loan and advances of both the bank b) To measure efficiency in mobilizing fund has been shown by using profitability, liquidity position of NABIL and NIBL. c) To examine the deposit collection from various sources and d) To recognize the main source of fund and mobilization of collected fund of both the banks.

To achieve the objectives of the study firstly collection of the data from the different sources has been done then, it is analyzed by using financial tools and statistical tools. The data obtained through secondary sources were represented in suitable table and graphs, analyzed through using financing as well as stabilized tools, interpreted and finally deduced to conclusions.

The data relating to the investment, deposit, loan and advances, assets, liabilities and profit are directly obtained from the balance sheet and Profit and Loss A/C of the concerned bank's annual reports. Supplementary data and information are collected from number of institution and authoritative sources like Nepal Rastra

Bank, Security Exchange Board, Nepal Stock Exchange Ltd., Ministry of Finance, and economic survey, etc.

Findings are drawn by applying various financial tools namely shareholder's equity to total fund ratio, long term debt to total fund ratio, current liabilities to total fund ratio and also, included sources and uses of funds too.

In the same way, statistical tools have been used namely mean, standard deviation, coefficient of variation, correlation regression; trend analysis and hypothesis testing have been used to standardize the measurement, analysis & comparison of data.

5.2 Conclusion

From the analysis of sources of fund of NABIL and NIBL, it can be concluded that in average NIBL was more successful to collect fund than NABIL, however in the initial period, NABIL was more successful to collect greater amount of fund. In average, NIBL made more progress in fund collection than NABIL.

Analysis, the mobilization rate NABIL utilized long term debt more than NIBL in total fund collection. However, NABIL focused collection of fund through long term borrowing, while NIBL focused on and debenture capital. However, the mobilization rate of internal financing, shareholder's fund, in fund collection was greater in NIBL than in NABIL. NABIL had more stable policy than NIBL in collecting funds through shareholder's equity and long term debt capital. Analyzing the sources of funds, it can be concluded that the current liabilities, especially deposit, was the main source of fund in both the banks but NIBL has used more current liabilities then NABIL did. Also within deposits, it can be concluded that savings deposit was the main source of fund in both the banks.

However, NIBL remained more successful to collect high deposit amount than NABIL.

Similarly, the mobilization of fund conclude that both the banks mobilized very low portion of the total fund collected in fixed assets and thus high percentage of the total fund invested in current assets. Comparing two banks, NIBL has higher and stable ratio than in NABIL.

Further, to maintain the liquidity position cash and bank balance has been major. NIBL liquidity position is higher than that of NABIL, since higher ratio of collected fund was utilized by NABIL to maintain cash and bank balance requirement. However, the mobilization rate of total fund in money at short call and notice to earn interest income was higher in NABIL than in NIBL. But to get dividend and interest income in investment was higher in NABIL than in NIBL.

Obviously, loan and advances was the main uses of fund in both the banks but to gain interest income from loan and advances was higher in NIBL than in NABIL. Eventually, NABIL was more efficiency in fund mobilization & sustainable to get net profit in long run, than NIBL, despite collecting lower return on total fund, i.e. net profit to total fund, was higher in NABIL than in NIBL.

The Loan and advances granted by the commercial banks in the different sectors plays a vital role in the development if the particular sectors and the situation of the economy. The maximum amount of loan has been sanctioned to the production sector and the second priority was wholesale and retailers while no lending in the local government sector.

Eventually, the statistical analysis aids to conclude that the net profit had significant relationship with the fund collection, and thus the net profit increases/decreases with the increase/decrease in fund. Also the increment amount in net profit was same in both the banks, with the same rupee increment in total fund. However, the multiple correlations indicated that there was no significant joint effect of total deposit and total assets on the net profit of both the banks. Finally with the aid of trend analysis, it can be concluded that NIBL will continue to collect more fund than NABIL in the future as well and the net profit of NIBL will be more than that of NABIL only from the fiscal year 2014/2015, since the pace of growth on net profit and total fund was greater in NIBL than in NABIL. Eventually, on the overall analysis it can be concluded that till present NABIL was more efficient than NIBL in fund mobilization, however in the future it can be predicted that NIBL will succeed NABIL in terms of both gaining higher profit and higher fund collection.

5.3 Recommendations

On the basis of the major findings drawn in the previous chapter and the conclusion derived, the following recommendations have been presented for the enhancement of the fund mobilization and collection in the commercial banks in Nepal, especially in NABIL and NIBL;

- Both the banks, NABIL and NIBL, had followed the conservative policy of fund collection, which meant that the internal financing was comparatively very lower than debt financing, so it would be better if both the banks adopt moderate policy.
- In long term debt, NABIL collected fund through debenture capital mostly and NIBL collected fund through long term borrowing mostly. It would be better if both the banks implement portfolio while collecting fund through long term debt.
- The deposit collection of NABIL and NIBL was mainly concentrated on savings deposit only. Thus, it would be better if both the banks promote non-interest bearing deposit and thus increase profit.

- Both the banks should be careful in increasing profit of the banks to maintain the confidence of shareholders, depositors and others. NIBL had lower ratio of net profit to total fund than NABIL had, thus to compete in the market, NIBL should optimize its uses of fund.
- Major portion of fund had been mobilized in loan and advances in both the banks. It would be better if the banks grants loan and advances only after careful evaluation of the loan proposal and the measurement of credit risk.
- There is no credit rating agency in Nepal. Banks have to rely heavily on information given by central bank for analyzing credit worthiness. So in order to separate good loans from bad loans and to ultimately reduce the level of non performing assets, NABIL and NIBL should take some initiative by themselves to use some kind of internal credit scoring system that would evaluate the loan applications.
- In investment, the investment in foreign banks and local licensed institutions was dominant. Thus, the bank should have sound portfolio in investment and investment more money in corporate shares and debentures and in government securities as well. Also, the bank should quest for new sector of investment.
- Sector wise lending of two banks is highly concentrated in some area. Their higher proportion in the production sector has yet positively affected the economy. Their loan proportion in service industries is very low and negligible in agriculture industries. So banks should diversify their loan and advances in new and profitable sectors. They should focus on lending to the productive sectors rather than focusing in the retail market. They should focus in productive lending and long term projects like hydro-power, infrastructure building, construction and mining services which also contribute in the economic growth.

- Growth of the commercial banks helps to develop the economic growth of the country. So the service of the commercial banks should be expanded in the country through collection of idle saving from each nook and should be utilized for income generation purpose. Government should encourage the commercial banks to expand banking service in rural areas and communities without making unfavorable impact in their profit.

BIBLIOGRAPHY

Books

Benerjee, S.K. (1989). *Financial Management.* New Delhi: Sultan Chand & Company Ltd.

Bhalla, V.K. (1997). *Investment Management.* New Delhi: Sultan Chand & Company Ltd.

Booth, L., Aivazian, V., Demirguc, K.A. & Maksimovic, V. (2001). *Capital Structures in Developing Countries.* Singapore: Asiapac Books Pvt. Ltd.

Charles, J.P. (1999). *Investment Analysis and Management.* Bombay: Himalaya Publishing House.

Crosse, H.K. (1993). *Management Policies for Commercial Banks*. New Jersey: Prentice Hall Inc.

Desai, V.R. & Mutalik, S. (1987). *Banking Development in India*. Bombay: Pc Mansktol and Sons Pvt. Ltd.

Ezra, S. (1996). *The Theory of Financial Management.* New Delhi: CBS Publishers and Distributors.

Fazzari, S.M., Hubbard, R.G. and Petersen, B.C. (1988). *Financing Constraints and Corporate Investment.* Sacramento: Blackwell Publishers.

Ferson, W.E. & Warther, V.A. (1996). *Evaluating Fund Performance in a Dynamic Market.* New York: Harper and Row Publishers.

Grywinski, K. (1991). *The New Fashioned Banking.* New York: The Dryden Press.

Ling, D. & Naranjo, A. (2003). *Capital Flows and Returns*. Boston: Houghton Miffin Company.

Myers, S.C. & Majluf, N.S. (1984). *Corporate Financing and Investment.* New York: Simmons Boardman Publishing Co.

Ronald, R.I. (1951). *The Management of Bank Fund*. New York: McGraw-Hill.

Singh, A. & Hamid, J. (1992). *Corporate Financial Structures in Developing Countries.* Washington DC: Mage Publishers Incorporated.

Suto, M. (2003). *Capital Structure and Investment Behavior.* Selangor: BHS Book Printing Sdn. Bhd.

Wiwattanakantang, Y. (2001). *Controlling Shareholders and Corporate Value.* Bangkok: Amarin Printing and Publishing Public Co. Ltd.

Reports, Journals and Articles

Chalise, K. (2007). *The Himalayan Times*, Vol No. 325.

Cumming, D., Eddine, G.I. & Schwienbacher, A. (2009). *An Empirical Analysis of Fund Regulation and Scope of Distribution of European Investment Funds*. London: AAPPL Journal of Financial Review Artists and Photographers Press Ltd. XV (10): 42.

Lu, J.J. (2008). *What is the Wind Behind this Sail? Can Fund Managers Successfully Time Their Investment Styles*? Journal of Financial Research. Journal of Financial Services Research. Boston: Kluwer Academic Publishers. XI (2): 341.

NABIL (F.Y. 2004/05 – 2008/09). *Annual Reports.* Kathmandu: Nepal Arab Bank Ltd.

NIBL (F.Y. 2004/05 – 2008/09). *Annual Reports.* Kathmandu: Nepal Investment Bank Limited.

Sharma, B. (Oct.2005). *Banking the Future on Competition*. Business Age. p. 13.

Shrestha R .L (2003). *A Study on Deposit and Credit of Commercial Banks in Nepal.* Nepal Rastra Bank Samachar.

Shrestha, S.R. (2004). *Portfolio Management in Commercial Bank, Theory and Practice.* Nepal Rastra Bank Samachar. Kathmandu: Nepal Rastra Bank.

Thesis

Devkota, S. (2010). *Fund Mobilization of Commercial Banks.* Kathmandu: Central Department of T.U.

Pandit, D. (2006). *Investment Policy Analysis of Commercial Bank in Nepal* Kathmandu: Central Department of T.U.

Roy, D. (2005). *An Investment Analysis of RBB in Comparison with NBL*. Kathmandu: Nepal Bank Patrika, Baisakh Masanta.

Subedi, S. (2008). *Fund Collection and Mobilization of Joint Venture Banks of Nepal.* Kathmandu: Central Department of T.U.

Thapa, J. (2004). *Investment Policy of Commercial Bank in Nepal.* Kathmandu: Central Department of T.U.

Websites

http://www.bfr.nrb.org.np/bfrdirectives.php?vw=15

http://www.nabilbank.com/annualrep.php

http://www.nibl.com.np/images/AnnualReport/22Annual_report.pdf

http://www.nrb.org.np/ofg/policy.php?tp=monetary_policy&&vw=15

APPENDICES

Appendix-I

Coefficient of Correlation Analysis

NABIL BANK

a) Coefficient of Correlation between NPAT(X) &Total Fund(Y)

Fiscal Year	NPAT(X)	Total Fund (Y)	$\boldsymbol{X} = (\boldsymbol{X}-\bar{\boldsymbol{X}})$	$\boldsymbol{Y} = (\boldsymbol{Y}-\bar{\boldsymbol{Y}})$	$(\boldsymbol{X}-\bar{\boldsymbol{X}})(\boldsymbol{Y}-\bar{\boldsymbol{Y}})$
2006/07	673.96	27253.39	-311.7	-16455.65	5129226.10
2007/08	746.47	37132.76	-239.2	-6576.28	1573046.18
2008/09	1031.05	43867.39	45.39	158.35	7187.51
2009/10	1139.09	52150.23	153.43	8441.19	1295131.78
2010/11	1337.75	58141.44	352.09	14432.40	5081503.72
	$\sum X$=4928.32	$\sum Y$= 218545.21			$\sum XY$= 13086095.29

$\bar{X} = \frac{\sum X}{N} = \frac{4928.32}{5} = 985.66$ σx = $\sqrt{\frac{\sum(X-\bar{X})^2}{5-1}}$ =275.65

$\bar{Y} = \frac{\sum X}{N} = \frac{218545.21}{5} = 43709.042$ σx = $\sqrt{\frac{\sum(X-\bar{X})^2}{5-1}}$ =12182.04

Here,

r = $\frac{\sum(X-\bar{X})(Y-\bar{Y})}{\sqrt{(X-\bar{X})^2}\sqrt{(Y-\bar{Y})^2}} = \frac{3271523.82}{2275.65\times12182.04} = 0.9743$

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

$= \frac{0.6745\times(1-0.9523^2)}{\sqrt{5}} = 0.02809$

NIBL BANK

b) Coefficient of correlation between NPAT(X) & Total Fund(Y)

Fiscal Year	NPAT(X)	Total Fund(Y)	$X = (X - \bar{X})$	$Y = (Y - \bar{Y})$	$(X - \bar{X})(Y - \bar{Y})$
2006/07	501.40	27590.84	- 406.87	-19436.6	7908169.442
2007/08	696.73	38873.31	221.54	-8154.13	1806465.96
2008/09	900.62	53010.80	-7.65	5983.36	- 45772.704
2009/10	1265.95	57305.41	357.68	10277.97	3676224.31
2010/11	1176.64	58356.83	268.37	11329.39	3040468.39
	$\sum X$= 4541.34	$\sum Y$= 235137.19			$\sum XY$= 16385555.41

$\bar{X} = \frac{\sum X}{N} = \frac{4541.34}{5} = 908.27$

σx = $\sqrt{\frac{\sum(X-\bar{X})^2}{5-1}}$ =321.96

$\bar{Y} = \frac{\sum X}{N} = \frac{235137.19}{5} = 47027.44$

σx = $\sqrt{\frac{\sum(X-\bar{X})^2}{5-1}}$ =13360.98

Here,

r = $\frac{\sum(X-\bar{X})(Y-\bar{Y})}{\sqrt{(X-\bar{X})^2}\sqrt{(Y-\bar{Y})^2}} = \frac{4096388.852}{321.96 \times 13360.98} = 0.9523$

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

$= \frac{0.6745 \times (1 - 0.9743^2)}{\sqrt{5}} = 0.0153$

Appendix-II

NABIL

a) Regression Analysis of NPAT on Total Fund of NABIL BANK

Fiscal Year	Total Fund(X)	NPAT (Y)	(XY)
2006/07	27253.39	673.96	18367694.72
2007/08	37132.76	746.47	27718491.36
2008/09	43867.39	1031.05	45229472.46
2009/10	52150.23	1139.09	59403805.49
2010/11	5814.44	1337.75	77778711.36
	$\sum X_1$ =218545.21	$\sum X_2$ =4928.32	$\sum XY$= 228498175.39

Where, Total Fund=(X), NPAT=Y

$Y = a + bx$

$\sum y = na + b\sum x$

$\sum xy = a\sum x + b\sum x^2$

Now,

4928.32 = 5a+218545.21b…………………………………..i

228498175.39= 218545.21a+10146010571b………………………..ii

Here,

Multiplying eq^n (i) by 43709.042 and subtracting eq^n (ii) from eq^n (i) we get,

215412145.9 = 218545.21a + $9552401763b$

_228498175.39= _218545.21a+_10146010571b

-13086029.43 = - 593608807b

b=0.02

Putting value of b in eq^n i we get,

4928.32 = 5a+218545.21b

4928.32 = 5a+218545.21×0.02

$a = 111.48$

b) Regression Analysis of NPAT on Total Fund OF NIBL BANK

Fiscal Year	NPAT(Y)	Total Fund(X)	(XY)
2006/07	501.40	27590.84	13834047.18
2007/08	696.73	38873.31	27084201.28
2008/09	900.62	53010.80	47742586.7
2009/10	1265.95	57305.41	72545783.79
2010/11	1176.64	58356.83	68664980.45
	$\sum X$= 235137.19	$\sum Y$=4541.34	$\sum XY$= 229871599.4

Where, Total Fund=(X), NPAT=Y

$Y = a + bx$

$\sum y = na + b\sum x$

$\sum xy = a\sum x + b\sum x^2$

Now,

4541.34= 5a+235137.19b…………………………………..i

229871599.4= 235137.19a +11771963222b…………………………..…..ii

Here,

Multiplying eq^n (i) by 43027.438 and subtracting eq^n (i) from eq^n (ii) we get,

213567585.29 = 235137.19a + 11057899624.2b

_229871599.4= _235137.19a +_11771963222b

-16304014.114 = - 714063597.8b

b= 0.02

Putting value of b in eq^n i we get,

4541.34= 5a + 4702.7438b

4541.34= 5a+215137.19 ×0.02

$a = -32.28$

Appendix-III

Calculation of Multiple Correlation of NABIL Bank

a) Multiple Correlation between NPAT, Total Deposit and Loan and Advances

Fiscal Year	NPAT (X_1)	Total Deposit (X_2)	Loan & Advance (X3)	X_1X_2	X_2X_3	X_1X_3
2006/07	673.96	23342.29	15545.78	15731769.77	362874105	10477233.89
2007/08	746.47	31915.05	21365.05	23823627.37	681866639	15948368.87
2008/09	1031.05	37348.25	27589.93	38507913.16	1030435603	28446597.33
2009/10	1139.09	46410.70	32268.87	52865964.26	1497620845	36757147.13
2010/11	1337.75	49696.11	38034.09	66480971.15	1890146320	50880103.9
	$\sum X_1$= 4928.32	$\sum X_2$= 188712.4	$\sum X_3$= 134803.72	$\sum X_1X_2$= 197410246	$\sum X_2X_3$= 5462943512	$\sum X_1X_2$= 142509451.1

$\sum X_1^2$= 5161604.736, $\sum X_2^2$= 7581981121, $\sum X_3^2$=3947212848

$$r_{12} = \frac{n\sum X_1X_2-\sum X_1\sum X_2}{\sqrt{n\sum X_1^2-(\sum X_1)^2}\sqrt{n\sum X_2^2-(\sum X_2)^2}}$$

$$= \frac{5\times197410246-4928.32\times188712.4}{\sqrt{5\times5161604.736-(4928.32)^2}\sqrt{5\times 7581981121-(188712.4)^2}} = 0.9649$$

$$r_{23} = \frac{n\sum X_2X_3-\sum X_2\sum X_3}{\sqrt{n\sum X_2^2-(\sum X_2)^2}\sqrt{n\sum X_3^2-(\sum X_3)^2}}$$

$$= \frac{5\times5462943512-188712.4\times134803.72}{\sqrt{5\times 7581981121-(188712.4)^2}\sqrt{5\times3947212848-(134803.72)^2}} = 0.9894$$

$$r_{13} = \frac{n\sum X_1X_3-\sum X_1\sum X_3}{\sqrt{n\sum X_1^2-(\sum X_1)^2}\sqrt{n\sum X_3^2-(\sum X_3)^2}}$$

$$= \frac{6\times142509451.1-4928.32\times134803.72}{\sqrt{5\times5161604.736-(4928.32)^2}\sqrt{5\times3947212848-(134803.72)^2}} = 0.9885$$

Now,

$$R_{1.23} = \sqrt{\frac{r_{12}^2 + r_{13}^2 - 2\, r_{12}\, r_{23}\, r_{13}}{1 - r_{23}^2}}$$

$$= \sqrt{\frac{0.9649^2 + 0.9885^2 - 2 \times 0.9649 \times 0.9894 \times 0.9885}{1 - 0.9894^2}}$$

= 0.9926

NIBL

b) Multiple Correlation between NPAT, Total Deposit and Loan and Advances

Fiscal Year	NPAT (X_1)	Total Deposit (X_2)	Loan & Advance (X3)	X_1X_2	X_2X_3	X_1X_3
2006/07	501.40	24488.86	17286.43	12278714.4	423324964.2	8667416.002
2007/08	696.73	34451.73	26996.65	24003553.84	930081296.7	18809375.95
2008/09	900.62	46698.10	36241.21	42057242.82	1692395649	32639558.55
2009/10	1265.95	50094.73	40318.31	63417423.44	2019734854	51040964.54
2010/11	1176.64	50138.12	41095.51	58994517.52	2060451611	48354620.89
	$\sum X_1$= 4541.34	$\sum X_2$= 205871.54	$\sum X_3$= 161938.11	$\sum X_1X_2$= 200751452.02	$\sum X_2X_3$= 7125988376	$\sum X_1X_2$= 159511935.93

$\sum X_1^2$= 4535062.129, $\sum X_2^2$= 8990651559, $\sum X_3^2$= 5655472139

$$r_{12} = \frac{n\sum X_1X_2 - \sum X_1 \sum X_2}{\sqrt{n\sum X_1^2 - (\sum X_1)^2}\sqrt{n\sum X_2^2 - (\sum X_2)^2}}$$

$$= \frac{5 \times 200751452.02 - 4541.34 \times 205871.54}{\sqrt{5 \times 4535062.129 - (4541.34)^2}\sqrt{5 \times 8990651559 - (205871.54)^2}} = 0.9478$$

$$r_{23} = \frac{n\sum X_2X_3 - \sum X_2 \sum X_3}{\sqrt{n\sum X_2^2 - (\sum X_2)^2}\sqrt{n\sum X_3^2 - (\sum X_3)^2}}$$

$$= \frac{5 \times 7125988376 - 205871.54 \times 161938.11}{\sqrt{5 \times 8990651559 - (205871.54)^2}\sqrt{5 \times 5655472139 - (161938.11)^2}} = 0.9975$$

$$r_{13} = \frac{n\sum X_1X_3 - \sum X_1 \sum X_3}{\sqrt{n\sum X_1^2 - (\sum X_1)^2}\sqrt{n\sum X_3^2 - (\sum X_3)^2}}$$

$$= \frac{5\times159511935.93 - 4541.34\times161938.11}{\sqrt{5\times 4535062.129 - (4541.34)^2}\sqrt{5\times 5655472139 - (161938.11)^2}} = 0.9575$$

Now,

$$R_{1.23} = \sqrt{\frac{r_{12}^2 + r_{13}^2 - 2\, r_{12}\, r_{23}\, r_{13}}{1 - r_{23}^2}}$$

$$= \sqrt{\frac{0.9478^2 + 0.9575^2 - 2\times0.9478\times0.9975\times0.9575}{1 - 0.9975^2}} = 0.9631$$

Appendix-IV

a) Calculation of Multiple Regression Equation of NABIL Bank

Multiple Regression Equation: NPAT on TD and LA

Where, NPAT=(X_1), Total Deposit=(X_2), Loan & Advance=(X3)

$\sum X_1$=4745.94, $\sum X_2$=172950.3, $\sum X_3$=120278.34,

$\sum X_1X_2$=15806545.6.2, $\sum X_2X_3$=3977231076, $\sum X_1X_3$= 105344492.9

$\sum X_1^2$= 4046099.353, $\sum X_2^2$= 5699368850, $\sum X_3^2$= 2779679881

$\sum X_1 = na + b_1 \sum X_2 + b_2 \sum X_3$…………………..i

$\sum X_1X_2 = a \sum X_2 + b_1 \sum X_2^2 + b_2 \sum X_2 X_3$…………………..ii

$\sum X_1X_3 = a \sum X_3 + b_1 \sum X_2 X_3 + b_2 \sum X_3^2$…………………..iii

Now,

4745.94 = 6a+172950.3b_1+172950.3 b_2…………………………………..iv

150806545.6 = 172950.3a+5699368850

b_1+3977231076b_2………………………..v

105344492.9 = 120278.34a+3977231076

b_1+2779679881b_2……………………..vi

Here,

Multiplying eq^n (iv) by 28825.05 and subtracting eq^n (iv) from eq^n (v) we get,

136801957.8 = 172950.3a+ $4985301045b_1 + 3467029164b_2$

_150806545.6 =_172950.3a +_ $5699368850b_1 + 3977231076b_2$

-14004587.8 = -714067805b_1 - $510201912b_2$

14004587.8 =

714067805b_1 + $510201912b_2$……………………vii

Again,

Multiplying eq^n (vi) by 1.437917251 and subtracting eq^n (v) from eq^n (vi)

We get,

_150806545.6 =_172950.3a +_ $5699368850b_1 + 3977231076b_2$

_151476663.6 =_172950.3a +_ $5718929175b_1 \pm 3996949653b_2$

-670118 = $-19560325.39b_1 - 19718577b_2$

670118 = 19560325.39 $+$

$19718577b_2$……………………….viii

Now,

Multiplying eq^n (viii) by 25.874175 and subtracting eq^n (vii) from eq^n (viii)

We get,

14004587.8 = $714067805b_1 + 510201912b_2$

_17338750.4 = _ $506107282.2b_1 \pm 510201912b_2$

-3334162.6 = $207960522.8\ b_1$

$b_1 = -0.01603267079$

Putting value of b_1 in eq^n vii we get,

14004587.8 = $714067805b_1 + 510201912b_2$

14004587.8 = 714067805×(-0.01603267079)+ $510201912b_2$

b_2=0.04988809575

Again,

Putting value of b_1 & b_2 in eq^n v we get,

150806545.6 = 172950.3a+5699368850

b_1+3977231076b_2………………………..v

150806545.6=172950.3a-91376104.48+1988416484.7

a=253.0563135

b) Calculation of Multiple Regression Equation of of NIBL Bank

Multiple Regression Equation: NPAT on TD and LA

Where, NPAT=(X_1), Total Deposit=(X_2), Loan & Advance=(X3)

$\sum X_1$=3947.39, $\sum X_2$=188915.3, $\sum X_3$=143744.87,

$\sum X_2X_3$=5451698682, $\sum X_1X_3$=117986652.5, $\sum X_1X_2$=151700912.2

$\sum X_1^2$= 3327352.354, $\sum X_2^2$= 7038256311, $\sum X_3^2$= 4232399830

$\sum X_1 = na + b_1 \sum X_2 + b_2 \sum X_3$…………………..i

$\sum X_1X_2 = a \sum X_2 + b_1 \sum X_2^2 + b_2 \sum X_2 X_3$…………………..ii

$\sum X_1X_3 = a \sum X_3 + b_1 \sum X_2 X_3 + b_2 \sum X_3^2$…………………..iii

Now,

3947.39 = 6a+188915.3b_1+143744.87 b_2………………………………..iv

151700912.2= 188915.3a+7038256311

b_1+5451698682b_2………………………..v

117986652.5= 143744.87a+5451698682

b_1+4232399830b_2……………………..vi

Here,

Multiplying eq^n (iv) by 31485.88333 and subtracting eq^n (iv) from eq^n (v)

We get,

124287061 = 188915.3a + 5948165095b_1 + 4525934206b_2

_151700912.2= _188915.3a+_7038256311 b_1+_5451698682b_2

-27413851.2 = -1090091216b_1 - 925764476b_2

27413851.2 =

1090091216b_1 + 925764476b_2……………………vii

Again,

Multiplying eq^n (vi) by 1.314240293 and subtracting eq^n (v) from eq^n (vi)

We get,

151700912.2= 188915.3a+7038256311 b_1+5451698682b_2

_155062812.8 =_188915.3a +_ 716484207.3b_1 $\pm$ 5562390393b_2

-3361900.552 = -126585762b_1 $-$ 110691711b_2

3361900.552 = 126585762b_1 $+$

110691711b_2……………………….viii

Now,

Multiplying eq^n (vii) by 0.1161240088 and subtracting eq^n (vii) from eq^n (viii)

We get,

3183406.298 = 126585762b_1 + 107503482.2b_2

_3361900.552 = _ 126585762b_1 $\pm$ 110691711b_2

-178494.254 = - 3188228.8 b_1

b_2 $= 0.05598539666$

Putting value of b_1 in eq^n vii we get,

3361900.552 = 126585762b_1 $+$ 110691711b_2

or, 3361900.552 = 126585762b_1 $+$ 6197119.347

b_1= -0.0223976121

Again,

Putting value of b_1 & b_2 in eq^n v we get,

151700912.2 = 188915.3a+7038256311

b_1+5451698682b_2………………………..v

151700912.2= 188915.3a-157640134.7+35215513.2

4125533.7=188915.3a

a =21.8

Appendix-V

1. a) Trend values of Total Fund of NABIL Bank

(Rs in Millions)

Fiscal Year	Total Fund(Y)	X =X-2008	X^2	XY	Y=a=bx
2006/07	27253.39	-2	4	-54506.78	28350.282
2007/08	37132.76	-1	1	-37132.76	36029.662
2008/09	43867.39	0	0	0	43709.042
2009/10	52150.23	1	1	52150.23	51388.42
2010/11	58141.44	2	4	116282.88	59067.80
N=5	∑Y=218545.21		$\sum X^2$ = 10	∑XY= 76793.57	

N=5, ∑Y=218545.21, $\sum X^2$= 10, ∑XY= 76793.57

Here,

$a = \frac{\sum Y}{n} = \frac{218545.21}{5} = 43709.042$ $\qquad b = \frac{\sum XY}{n} = \frac{76793.57}{10} = 7679.38$

Y= a+bx =43709.042+7679.38X

Trend values of Total Fund of NABIL

Fiscal Year	X	Yc = a+bx
2011/12	3	66747.182
2012/13	4	74426.56
2013/14	5	82105.942
2014/15	6	89785.32

b) Trend Values of Total Fund of NIBL Bank

(Rs in Millions)

Fiscal Year	**Total Fund(Y)**	**X =X-2008**	**X^2**	**XY**	**Y=a=bx**
2006/07	27590.84	-2	4	-55181.58	42705.97
2007/08	38873.31	-1	1	-38873.31	44866.705
2008/09	53010.80	0	0	0	47027.44
2009/10	57305.41	1	1	57305.41	49188.175
2010/11	58356.83	2	4	58356.83	51348.91
N=5	$\sum$Y= 235137.19		$\sum X^2$ = 10	$\sum$XY= 21607.35	

N=5, $\sum Y = 235137.19$, $\sum X^2$= 10, $\sum XY = 21607.35$

Here,

$a = \frac{\sum Y}{n} = \frac{235137.19}{5} = 47027.44$ $b = \frac{\sum XY}{n} = \frac{21607.35}{10} = 2160.735$

Y= a+bx =35695.67+2588.41x

Trend Values of Total Fund of NABIL

Year	**X**	**Yc = a+bx**
2011/12	3	53509.645
2012/13	4	55670.38
2013/14	5	57831.12
2014/15	6	59991.85

Appendix-VI

2. a)Trend values of Net Profit of NABIL Bank

(Rs in Millions)

Fiscal Year	**Total Fund(Y)**	**X =X-2008**	**X^2**	**XY**	**Y=a=bx**
2006/07	673.96	2	4	-1347.92	641.62
2007/08	746.47	-1	1	-746.47	813.64
2008/09	1031.05	0	0	0	985.66
2009/10	1139.09	1	1	1139.09	1157.68
2010/11	1337.75	2	4	2675.5	1329.7
N=5	$\sum Y$=4928.32		$\sum X^2$ = 10	$\sum XY$=1720.2	

N=5, $\sum Y = 4928.32$, $\sum X^2$= 10, $\sum XY = 1720.2$

Here,

$a = \frac{\sum Y}{n} = \frac{4928.32}{5} = 985.66$ $\qquad$ $b = \frac{\sum XY}{n} = \frac{1720.2}{10} = 172.02$

Y= a+bx =985.66+172.02x

Trend values of Net Profit of NABIL

Fiscal Year	**X**	**Yc = a+bx**
2011/12	3	1501.72
2012/13	4	1673.74
2013/14	5	1845.76
2014/15	6	2017.78

b) Trend Values of Net Profit of NIBL Bank

(Rs in Millions)

Fiscal Year	Net Profit (Y)	X =X-2008	X^2	XY	Y=a=bx
2006/07	501.40	-2	4	-1002.8	524.33
2007/08	696.73	-1	1	-696.73	716.3
2008/09	900.62	0	0	0	908.27
2009/10	1265.95	1	1	1265.95	1100.24
2010/11	1176.64	2	4	2353.28	1292.21
N=5	$\sum$Y=4541.34		$\sum X^2$ = 10	$\sum$XY=1919.7	

N=5, $\sum Y = 4541.34$, $\sum X^2$= 10, $\sum XY = 1917.7$

Here,

$a = \frac{\sum Y}{n} = \frac{4541.34}{5} = 908.27$ $b = \frac{\sum XY}{n} = \frac{1919.7}{10} = 191.97$

Y= a+bx = 908.27+191.97x

Trend values of Net Profit of NABIL

Fiscal Year	X	Yc = a+bx
2011/12	-2	1484.18
2012/13	-1	1676.15
2013/14	0	1868.12
2014/15	1	2060.09

Appendix-VII

Sector wise Lending of NABIL Bank

Sector	2006/07	2007/08	2008/09	2009/10	2010/11	Total of yrs	Average
Agriculture	54.50	115.90	192.9	262.9	298.9	925.1	185.02
Mines	13.90	18.50	15.4	9	15.9	72.7	14.54
Manufacturing	5701.50	6640.70	7829.5	8687.9	11205.8	48065.4	8013.08
Construction	1923.30	2985.00	4014.5	4780.6	5022.4	18725.8	13745.16
Electricity Gas and water	0.00	0.00	0.00	129.4	118.9	248.3	49.66
Machinery& Metal Production	163.20	234.90	292.1	294.6	473.3	1457.1	291.42
Transportation Equipment	1467.90	1791.00	2498.4	0.00	0.00	5757.3	1151.46
Transportation storage & Communication	917.70	1785.30	1313.2	4197.3	4147.7	12361.25	2472.24
Wholeseller& Retailer	2458.50	3586.50	5094.6	6283.3	8594.4	26017.3	5203.46
Finance and Insurance	821.10	1255.60	1964.0	2711.4	3030.3	9782.4	1956.48
Service Industries	1260.70	1553.50	1979.4	1853.1	1883.5	8530.2	1706.04
Hotels & Resturant	0.00	0.00	0.00	871.3	989.3	1860.6	372.12
Loan Consumable	84.60	116.80	116.2	139.2	207.7	664.5	132.9
Local Govt							
Others	1036.10	1686.10	2688.0	2810.9	2934.6	11155.7	2231.14
Total	15903.00	21769.80	27997.1	33030.9	38922.7		27524.72

Sector wise Lending of NIBL Bank

Sector	2006/07	2007/08	2008/09	2009/10	2010/11	Total of 5 yrs	Average
Agriculture	156.90	142.70	176.1	253.6	308.5	1037.8	1207.56
Mining	6.40	0.00	0.00	0.00	24.2	33.6	6.72
Manufacturing	5858.40	8353.7	10753.7	12046.3	13871.0	50883.1	10176.62
Construction	771.80	1335.4	1889.9	1699.3	1522.5	7218.9	1443.78
Electricity Gas & water	0.00	0.00	0.00	347.7	213.9	560.8	112.16
Machinery & Metal Production	144.4	325.4	297.7	486.7	221.6	1475.8	295.16
Transportation Equipment	11.4	51.2	110.9	0.00	0.00	173.5	34.7
Transportation, Storage & Communication	861.0	1191.6	1701.9	1200.6	978.9	5934	1186.8
Wholeseller & Retailer	3264.4	4077.7	4572.6	5272.9	5998.5	23186.1	4637.22
Finance & Insurance	961.7	2799.9	4479.3	6219.4	6029.9	20490.2	4098.04
Service Industries	2125.5	3123.3	3294.1	2220.8	2531.2	13294.9	2658.98
Hotel & Restuarants	0.00	0.00	0.00	2522.7	2309.1	4831.8	966.36
Loan Consumable	221.2	269.2	455.7	1327.8	1254.8	3528.7	705.74
Local Govt	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Others	3387.0	5859.2	9095.5	7347.5	6624.5	32313.7	6462.74
Total	17769.1	27529.3	36827.1	40948.4	41887.7	164962.9	32992.58