

CHAPTER 1

INTRODUCTION

1.1 Background of the study

Economy of the country is the backbone of the nation. The well economic condition of the country gives identity to the country itself and to the people of the county. Economy and commerce are interrelated to each other. Sound economy promotes commercial factor and well commerce gives sound economic condition.

Nepal's economy highly depends upon agriculture. Most of the people are dependent upon traditional agriculture. Today, Nepal is stepping into the commercial sector. Nepal's liberalisation endeavour and economic reform process has a political history. People's movement against then Panchayat regime, which resulted in poor economic performance, led to continued deterioration in the country's balance of payments position in the early 1980's. As a result, Nepal earmarked upon a path of economic reforms. The initiation of the reform process was marked by the implementation of the International Monetary Fund sponsored Structural Adjustment Programme in 1984 followed by similar other programmes like Structural Adjustment Facility and Enhanced Structural Adjustment Facility in years to come.

Government with the view of accelerate the pace of economic development under the structural adjustment program undertook a significant step towards financial liberalization in the year 2043/44. The liberalization policy of the government of Nepal has encouraged the private sectors to invest in various fields, which supports the domestic overall economic growth. The government of Nepal introduced financial sector reforms in 1980s, which encouraged the healthy competition in the financial sector as well as allowed the entry of

foreign banks in the Nepalese market in the forms of joint venture banks. The initial emphasis of the economic reform process was on the fiscal side. Fiscal reforms were carried on the revenue, expenditure and borrowing fronts. Later efforts were directed towards the removal of quantitative restrictions on imports, rationalization and lowering of custom duties, foreign exchange reforms, changes in industrial policy and foreign investment & foreign technology transfer policy etc. Most of these reforms were undertaken during the early 1990s. A vital component of the overall economic reforms process was the reforms undertaken in the country's financial sector.

Generally, financial statements reflect particular services each bank chooses to offer and overall size of a banking organization. The information from financial statements can be used as tools to reveal how well banks are performing. Financial statements provide a wealth of information about a firm's past and present operations. Without them, it is virtually impossible to assess the condition and creditworthiness of the enterprise. Two most important types of financial statements are the balance sheet also known as report of condition, and the income statement also known as report of income. In this study, NABIL BANK, NCC BANK AND SBL are studied regarding financial position by collecting five years data from the fiscal year 2006/07 to 2011/12. We can use financial statements, particularly the balance sheet and the income statement to evaluate how well the bank is performing. The 1st step in analysing the bank's financial statements is to find out what objective the bank is pursuing. Financial sector reforms have always been an integral part of the total reform process. Reforms in the conduct of monetary policies too were pursued. Removal of credit ceilings, differential interest rates, margin requirements and deregulation of interest rates are the key reform measures introduced in the realm of monetary policy conduct. Nepal has been emphasizing on indirect monetary policy instruments, such as bank rates, variable cash reserve requirements and open market operations, among others.

(Joshi, 2008)

The first outcome of the reform process in the financial sector back in the 1980s was the birth of the country's first private sector commercial bank. Until 1984, commercial banking transaction was undertaken by then only two state-owned commercial banks, namely Rastriya Banijya Bank (RBB) and Nepal Bank Limited (NBL). Likewise, finance companies as well as development banks too came into the financial field. The sustenance of reforms during the past two decades has resulted in a tremendous growth of the financial sector. Nowadays there is very much competition in banking market but less opportunity to make investment. In this condition, joint venture banks can take initiation in search of new opportunities, so that they can survive in the competitive market and earn profit. But investment is a very risky job. For a purposeful, safe, profitable investment bank most follows sound investment and deposit mobilization policy. Nepal entered in the world of banking with the establishment of Nepal Bank Limited in 1937 A.D. In 1955 A.D. the first central bank named as the "Nepal Rastra Bank" was established with the objective of supervising, protecting and directing the functions of Commercial banks. Just ten years later, in 1966 A.D., another commercial bank fully owned by government named Rastriya Banijya Bank was established under the 'Banijya Bank Act' 1964 A.D. The first break came in the month of Shrawan of that year, when the first company Nepal Housing and Finance Company came. The second came in the Poush of the same year, Nepal Finance and Saving Company. Now there are altogether 79 companies operating in Nepal. (Bhattarai, 2009)

For any sector to function smoothly a well-defined law governing the organization in that sector should be there. But there are many flaws in these laws giving opportunity for manipulation. All banks basically function the same functions without regards their names, like Business Banks, Retail Banks, Clearing Banks, Joint Venture Banks, Merchant Banks etc. Obviously, like other business organisations the sole objective of the banking industries is the profit maximizing as well as wealth maximization.

Altogether, there are 32 commercial banks, 83 development banks, 79 finance companies and 35 microfinance and cooperatives. They all have got their own rules and regulations and own vision but ultimately they are serving the nation to build a huge financial resource and mobilize in the best possible way. The banking sector remained still for a long period of time but as the time passed on many development occurred. In the present scenario, Nepalese banking system is evolving itself as a powerful instrument of planning and economic growth of all the developed and underdeveloped sectors. The scope and scale of banking too have undergone substantial change in response to the saving and credit needs of the people.

Nepal's financial institutions and commercial banks are listed below:-

Table 1.1 Lists of Financial Institutions in Nepal

S.No	List of Financial Institutions	Numbers
1.	Nepal Rastra Bank	1
2.	Commercial Banks	32
3.	Development Banks	83
4.	Finance Companies	79
5.	Micro-Finance Companies	19
6.	Co-operatives (Licence by NRB)	45
7.	Insurance Companies	21
8.	Employee Provident Fund	1
9.	Citizen Investment Trust	1
Total		263

Source: Website of Nepal Rastra Bank (2012)

Till the date, there are 32 commercial banks in Nepal. Civil Bank Limited and Century Commercial Bank have also been listed in 'A' class financial institutions few months ago. The name and the year of establishment of the commercial banks operating in Nepal has been listed below:

Table 1.2**List of Class A Licensed Financial Institutions (Commercial Banks)**

S.No	Names of Commercial Banks	Establishment Date (A.D)	Head Office
1.	Nepal Bank Limited	1937/11/15	Kathmandu
2.	Rastriya Banijya Bank Ltd.	1966/01/23	Kathmandu
3.	NABIL Bank Limited	1984/07/16	Kathmandu
4.	Nepal Investment Bank Limited	1986/02/27	Kathmandu
5.	Standard Chartered Bank Limited	1987/01/30	Kathmandu
6.	Himalayan Bank Limited	1993/01/18	Kathmandu
7.	Nepal SBI Bank Limited	1993/07/07	Kathmandu
8.	Nepal Bangladesh Bank Limited	1993/06/05	Kathmandu
9.	Everest Bank Limited	1994/10/18	Kathmandu
10.	Bank of Kathmandu	1995/03/12	Kathmandu
11.	Nepal Credit & Commerce Bank Limited	1996/10/14	Siddharthanagar, Rupandehi,
12.	Lumbini Bank Limited	1998/07/17	Narayangadh, Chitwan
13.	Nepal Industrial Bank Limited	1998/07/21	Biratnagar, Morang
14.	Machhapuchchhre Bank Limited	2000/10/03	Pokhara, Kaski
15.	Kumari Bank Limited	2001/04/03	Kathmandu
16.	Laxmi Bank Limited	2002/04/03	Birgunj, Parsa
17.	Siddhartha Bank Limited	2002/12/24	Kathmandu
18.	Agricultural Development Bank Limited	2006/03/16	Kathmandu
19.	Global Bank Limited	2007/01/02	Birgunj, Parsa
20.	Citizen Bank Limited	2007/06/21	Kathmandu
21.	Prime Commercial Bank Limited	2007/09/24	Kathmandu
22.	Bank of Asia Limited	2007/10/12	Kathmandu
23.	Sunrise Bank Limited	2007/10/12	Kathmandu
24.	Development Credit Bank Limited (Grand Bank Limited)	2008/05/25	Kamaladi, Kathmandu
25.	NMB Bank Limited	2008/06/05	Babarmahal, Kathmandu
26.	Kist Bank Limited	2009/05/07	Anamnagar, Kathmandu
27.	Janata Bank Limited	2010/04/05	New-Baneshwor, Kathmandu
28.	Mega Bank Limited	2010/07/23	Kantipath, Kathmandu
29.	Commerze and Trust Bank Limited	2010/09/20	Kamaladi, Kathmandu
30.	Civil Bank Limited	2010/11/26	Kamaladi, Kathmandu
31.	Century Bank Limited	2011/03/10	Putalisadak, Kathmandu
32.	Sanima Bank Limited	2012/02/15	Naxal, Kathmandu

Source: Nepal Rastra Bank, Banking and Financial Statistics, 2012

The Present research paper directly focuses on the financial performance of the bank in Nepal. The study on the financial analysis of *Nepal Arab Bank Limited (Nabil)*, *Nepal Credit & commerce Bank Limited (NCCBL)* & *Siddhartha Bank Limited(SBL)*, as commercial banks would be dealt throughout the research process. For this purpose, the study evaluated the position of the banks with respect to liquidity, leverage, capital adequacy, turnover and profitability and tests the relationship between various variables. The study assumes the hypothesis that the performance of sampled banks does not differ significantly.

1.2 Statement of the Problem

The numbers of joint venture banks are being increased in response to the economic liberalization policies of the government besides joint venture commercial banks are also being registered by the promoters of Nepal. These institutions have the tendency to centralize in major cities focusing the activities among the industrialists, traders and entrepreneurs. Most of the business organizations along with banks are facing different problems due to the lack of political stability and unrest. Bank has being facing the considerable pressure to lower the lending rates, which affects the profitability adversely. Financial Analysis is the most important factor for promoters, shareholders and managements. Mushrooming of Joint Venture banks is the present situation of Nepalese financial system. There is high flow of money in the market but less viable and investible projects. The problems of the study refer the comparative study of the Siddhartha Bank Limited, NCC Bank Limited and NABIL Bank Limited. This Master's Degree thesis seeks to demystify these financial sector commitments. The problem of the study will be focused on finding out financial strengths, weaknesses, opportunities and threats of the NABIL Bank, Siddhartha Bank and NCC Bank. In this perspective the study deals with the following issues:

- (1) How far Siddhartha Bank, NCC Bank and NABIL Bank have been able to shift the monetary resources from the savers to users?
- (2) What is the deposit and investment condition of three joint venture banks?
- (3) What are the trends of current ratio over the years?
- (4) What is the capital structure of the sample banks?
- (5) What is the current level of liquidity of Siddhartha Bank, NCC Bank and NABIL Bank?
- (6) Are the banks earning profit or suffering loss over the standard?

1.3 Objectives of the Study

The general objective of this study is to study the financial strength and weaknesses or financial position of Siddhartha Bank, NCC Bank and NABIL Bank. Every research study posses certain objectives; the research study entitled Financial analysis of commercial banks in Nepal highlights to attempt following objectives:

- (1) To study financial position of the three commercial banks.
- (2) To evaluate the investment positions of the banks under study.
- (3) To analyze the gap between deposits and investments and its alternative investment prospective.
- (4) To make a comparative study of profitability position of SBL, NCC and NABIL Bank.

1.4 Significance of the Study

The proper mobilization and utilization of domestic resource become indispensable for suitable economic development and there is no doubt that commercial banks have pivotal role for the collection of dispersed small savings of Nepalese people and transforming them into meaningful investment. The success and prosperity of the banks relies heavily upon the successful

investment of collected resources to the important sectors of economy as well as to generate more profit by investing in the customer's demand. The main aim of the present study is to find out what sorts of tool and techniques have been used to overcome the problem of non-investing and financing arena into sustainable financial and investment arena.

The success of Commercial bank highly depends on the efficient management of deposit as per environment. The economy of country is already in the recession due to slowdown of the global economy and unstable internal environment leading to adverse effect in business and industrial sector. A crisis in bank for deposit collection is the indicator of crisis in the economy. This study is an attempt to get insight on operation and management practiced in the sampled banks. It encompasses credit policy, loan approval, loan administration and loan repayment including the credit risk and its mitigation. Joint venture bank are going a wide popularity through their efficient management and professional service and playing an eminent role in the economy. Considering the economic structure of the country, the banks do not have sufficient opportunity. Rapidly increasing financial institutions are creating threats to the joint venture banks. In this context, the study would analyse strengths, weaknesses, opportunities and threats of the selected commercial banks. The research will be helpful for joint venture banks to formulate strategies to face the increasing competitions. Besides, it also helps to identify the importance of shareholders, policy formulators, professionals and outsiders investors.

This study focuses in the qualitative measurement of the selected banks. Similarly, the finding of the study will equally important to other who is interested in knowing about these banks.

1.5 Limitation of the Study

This study is simply a partial study for the fulfilment of MBS Degree. This is not so far from several limitations, which weakens the study from the viewpoint of reliability and validity.

- a) This study faces serious time and resource constraints.
- b) Only one financial sub-sector has been covered by the study. Institutions that have been providing micro-finance for rural development have not been covered. Likewise, no attempt was made to look into issues relating to finance companies, insurance companies, Employees Provident Fund and Pension Fund.
- c) Where possible, the data of the whole commercial banking system have been used. However in some cases due to time constraint and unavailability of sufficient data, the three commercial banks of Nepal have only been taken as the samples for the study.
- d) Though the nature of analysis is both qualitative and quantitative in nature, relative assessment through literature review has been the focal method by which this study has been carried out.
- e) Since most of the respondents were not able to answer the many technical questions contained in the questionnaire, the presentation of key stakeholders' opinions has been kept only rudimentary to facilitate easy understanding and to broadly reflect the views of the aware respondents.
- f) There are 32 commercial banks operating in Nepal. Since the study deals with only three commercial banks namely Nabil, NCCBL and SBL. The conclusion drawn from the study may not be applicable to other banks.
- g) Many financial & statistical tools are used to study the financial performance. But this study has used limited tools.

1.6 Organization of the Study

The study is organized into five sections, each section deals with the specific aspects of the study, which will be as follows:

The first chapter entitled “Introduction” includes the subject; present the research problem, reason for studying, objective of the study, along with limitation. The second chapter entitled “Review of Literature” review of relevant literature which helps to this study more meaningful. The review of literature consists of different textbooks, different thesis and review of articles, journals and research studies published by various authors. The third chapter discussed the “Research Methodology” used in the study. It comprises research design, nature and source of data, data gathering method and analytical tools used. The fourth chapter deals with the “Presentation & Analysis of data” & scoring the empirical finding out the study through definite course of research methodology. The last chapter i.e. “Summary of the study”, which is followed by the basic conclusion of the study based in the fourth chapter on the basic of these conclusion and recommendation has also been presented for consideration. The bibliography and annexes are placed at the end of the thesis.

CHAPTER 2

REVIEW OF LITERATURE

The first section of this chapter includes theoretical framework whereas second part is confined to review of the previous studies carried out by the various researchers. In this chapter, the overall concept and view of “financial performance” will be streamlined through the review of relevant literature related to this study. This chapter includes the conceptual framework, review of empirical studies, review of Nepalese studies and research gap. Nonetheless, various literatures relating to financial sector reforms have been referred during the course of study. In addition, past researches relating to financial sector reforms have also been reviewed, so has different relevant articles that have appeared in different newspapers, journals, magazines and books, among others. A huge amount of literature available in the internet has been used.

2.1 Conceptual Review

One of the key tasks of the bank management is ensuring adequate liquidity. The bank management cannot ignore liquidity management. The bank should win the confidence of customers in order to earn profit. In order to win people’s confidence adequate liquidity is required in the bank’s assets. Lack of liquidity is one of the first sign that the bank is in serious financial trouble. The financially troubled bank begins to lose its deposits which compel to sell its liquid assets. Even other banks are reluctant to lend money to a troubled bank without additional security or high rate of interest. This reduces the earning capacity of the bank which may lead the bank to failure. It is why the competence and skill of liquidity managers for the properly management of liquidity is regarded as an important barometer of sound management of the bank in achieving its goals.

There is cent percent liquidity if the bank keeps the deposits in the form of cash itself. But the bank cannot make profit if cash is kept idle. Therefore, it is necessary to make some of its assets imperfectly liquid. The investment should be made to yield income and at the same time readily convertible to cash in order to meet the need of depositors. Besides, the assets should be convertible to cash without depreciation. Both of these qualities are compulsory for liquidity. It is difficult to get these qualities in most of the investments. The government securities can be readily converted to cash in the stock exchange. However, cash depends on the current market price of the securities. The bank will have to incur loss if case the bank will have to sale them before fixed period.

A recent study has shown different parties such as owners of the business, debtors, creditors etc are interested in the financial statements of the banks. A business firm should maintain both short-term as well as long term financial strengths. Short term financial position refers to the ability to maintain adequate liquidity position by the banks. In other hand, long term financial position refers to the capital structure ratio throws the light on the long term solvency of the bank as reflected in its ability to assure long term creditors. The calculation of capital structure or leverage ratio is done in order to measure the financial risk and the bank's ability to provide benefit to the shareholders.

2.2 Overview of Nepal's Financial System

Nepal has a reasonably diversified financial sector (as evidenced by the number and variety of institutions that play an active role in the sector) relative to its small and underdeveloped economic base. Unfortunately, the financial system remains unnecessarily segmented, with a negative impact upon financial system competition. The history of modern financial and monetary development in Nepal is not very old. It was established in 1937 that the first

commercial bank (Nepal Bank Ltd.) was established in Nepal with 51% government equity. With increased banking needs of the economy, the second commercial bank, Rastriya Banijya Bank came into existence in 1965 with 100% government ownership in early 1980s to meet the need for healthy competition in the financial system. Nepal allowed the entry of joint venture banks with a maximum of 50% equity participation; Nepal Arab Bank Ltd. was the first bank to be set up under such arrangement in 1984. Commercial banks are considered second types of banks. These banks have been playing a great role for the economic development of the country directly or indirectly. During mid 1980s they adopted the policy of liberalization, which attract the foreign banks to come to Nepal. In 1990, Nepal adopted democratic constitution that was lauded as the best social-legal document in the world. (Bajracharya, 2008)

2.3 Highlights on Performance of Banks

2.3.1 Financial Sector at a Glance

Consequently, by the end of mid – July 2011, altogether 272 banks and non-bank financial institutions licensed by NRB are in operation. Out of them, 32 are “A” class commercial banks, 87 “B” class development banks, 79 “C” class finance companies, 21 “D” class micro-credit development banks, 16 saving and credit co-operatives and 38 NGOs. In mid- July 2011, the commercial banks branches reached to 1245 with the population of twenty one thousand per branch. Present development of financial institutions in Nepal. As of Mid – July 2011, Commercial Bank group occupied 75.3 percent of total assets/liabilities followed by Development Banks 12.0 percent, Finance Companies 10.9 percent and Micro-finance Development Bank 1.8 percent. In Mid – July 2010, the respective shares were 76.7, 10.6, 10.9 and 1.8 percent respectively. The composition of the total liabilities shows as usual, deposit held dominant share of 74.9 percent followed by other liabilities 12.0 percent Capital fund by 9.1 percent and borrowings by 4.0 percent respectively in Mid – July 2011. Likewise in the assets side, loan and advances accounted the

largest share of 61.6 percent followed by investments 14.0 percent, liquid fund 13.0 percent and others 11.4 percent in the same period.

Commercial Banks hold dominant share on the major balance sheet components of financial system. Of the total deposits Rs. 873,489 million in Mid - July 2011, the commercial banks occupied 78.7 percent. Similarly, development banks held 11.1 percent, finance companies 9.8 percent and micro finance development banks 0.4 percent. Likewise, on the loans and advances the share of commercial banks stood at 73.5 percent, development banks 12.4 percent, finance companies 12.1 percent and micro finance development banks 2 percent in Mid - July 2011. In the same year the share of commercial banks in the borrowings, liquid funds and investments constitute 52.8 percent, 64.8 percent and 91.8 percent respectively. The capital fund, one of the components of liabilities, witnessed a significant growth of 36.9 percent and reached to Rs. 105,816 million in mid - July 2011 from Rs.77,264 million in mid July 2010. The borrowings, deposit and other liabilities increased by 23.8 percent, 10.8 percent 14.0 percent respectively compared to mid - July 2010. Similarly loans and advances, the major component of assets increased by 15.8 percent and reached to Rs. 718,674 million in Mid - July 2011 from Rs. 620,837 million in mid July 2010. Likewise investment increased by 10.2 percent while liquid fund decreased by 0.8 percent in mid – July 2011 compared to the previous period.

2.3.2 Commercial Banks

The number of commercial bank branches operating in the country increased to 1245 in Mid July 2011 from 980 in mid July 2010. Among the total bank branches, 50.5 percent bank branches are concentrated in the central region followed by Western 18.0 percent, Eastern 17.3 Mid Western 8.0 percent and Far Western 6.0 percent respectively. Entry of new banks in financial system along with increased in the business, the total assets i.e. sources of fund of

commercial banks increased by 11.6 percent compared to decrement by 3.0 percent in the previous year. By the end of this fiscal year, the total assets of commercial banking sector reached to Rs.878,364 million from Rs 787,301 million in the last period. The share of loans and advances to total assets remained 60.1 percent in Mid - July 2011. Similarly, share of investment and liquid funds to total assets registered 17.0 percent and 11.2 percent respectively. The composition of liabilities of commercial banks shows that, the deposit has occupied the dominant share of 78.3 percent followed by others 12.2 percent capital fund 6.7 percent and Borrowings 2.8 percent. In the Mid - July 2011, the loans and advances increased marginally at lower rate of 12.4 percent compare to 16.8 percent in mid - July 2010. By the end of Mid - July 2011, the total outstanding amount of loans and advances including Bills Purchase and Loan against Collected Bills of commercial banks reached to Rs. 528,023 million. It was Rs. 469,378 million in mid - July 2010. The total investment including share & other investment of commercial banks in Mid - July 2011 increased by 11.6 percent and remained to Rs. 149,557 million from Rs. 134,041 million in Mid – July 2010. Similarly liquid fund decreased by 4.6 percent and amounted to Rs. 98,072 million in Mid – July 2011. In the Mid - July 2011, total deposit of commercial bank increased by 9.0 percent compare to 11.9 percent growth in the Mid - July 2010. As of Mid - July 2011, it reached to Rs. 687,588 million from Rs 630,881 million in the Mid - July 2010. Among the component of deposit, current deposit decreased by 2.0 percent compared to 12.5 percent increment in last year. Similarly, saving deposit decreased by 2.8 percent and fixed deposit increased by 26.8 percent. The fixed deposit comprises the major share in total deposit followed by saving deposit, call deposit and current deposit. As of Mid - July 2011, the proportion of fixed, saving, and call & current deposits are 36.9 percent, 33.6 percent, 17.0 and 11.5 percent respectively. In the Mid - July 2011, the borrowing increased by 25.6 percent compared to 8.0 percent in the previous year. By the end of Mid – July 2011, it reached to Rs. 24,853 million from Rs. 19,784 million in the Mid - July 2010. Capital fund of commercial banks increased by 45.0 percent compared to

previous year and reached to Rs. 59,064 million in Mid - July 2011. It was Rs. 40,720 million in mid - July 2010. Out of the Rs. 528,023 million outstanding sector wise credits in mid - July 2011, the largest proportion of the loans and advances is occupied by manufacturing sector. The share of this sector is 21.7 percent followed by wholesale & retailers 20.8 percent, other sector 12.7 percent, finance, insurance & real estate by 11.3 percent and construction 9.8 percent. Similarly, transportation, communication & public services comprise 4.7 percent, consumable loan by 6.2 percent, other service industries by 4.3 percent and agriculture by 2.4 percent in the same period. The outstanding of deprived sector credit of commercial banks in the Mid - July 2011 by the end of Mid –July reached to Rs. 19,387 million as presented in Table 41. The ratio of deprived sector credit to total outstanding of product wise loans and advances stood at 3.67 percent in the current period. Last year it was 3.56 percent. In Mid - July 2011, the credit to deposit ratio of the commercial banks reached to 76.8 percent compared to 74.0 percent in mid - July 2010. The non-performing loan of commercial banks increased to 3.2 percent in Mid – July 2011 from 2.39 percent in the Mid - July 2010. The total amount of NPA in Mid –July 2011reached to Rs. 16,872 million from Rs. 11,223 million in the Mid - July 2010.

2.4 Profile of Sample Banks

2.4.1 NABIL BANK LIMITED:-

Nabil Bank Limited (NBL), the first foreign joint venture bank of Nepal, started operations in July 1984. Nabil was incorporated with the objective of extending international standard modern banking services to various sectors of the society. Pursuing its objective, Nabil provides a full range of commercial banking services through its 47 points of representation across the kingdom and over 170 reputed correspondent banks across the globe. Nabil, as a pioneer in introducing many innovative products and marketing concepts in the domestic banking sector, represents a milestone in the banking history of Nepal as it

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

Operations of the bank including day-to-day operations and risk management are managed by highly qualified and experienced management team. Bank is fully equipped with modern technology which includes ATMs, credit cards, state-of-art, world-renowned software from Infosys Technologies System, Bangalore, India, Internet banking system and Tele-banking system.

2.4.2 SIDDHARTHA BANK LIMITED:-

Siddhartha Bank Limited (SBL) commenced operations in 2002. The Bank is promoted by a group of highly reputed Nepalese dignitaries having wide commercial experience. The environment of Nepalese banking sector is undergoing a rapid transformation. With liberalization in financial markets and integration of domestic market with external markets, bank operations have become more complex and dynamic. The Vision statement of the Bank describes the core values and purposes that guide the Bank as well as an envisioned future. SBL's vision is to be financially sound, operationally efficient and keep abreast with technological developments.

The Bank firmly believes customer focus is a core value, shareholder prosperity is a prime priority, employee growth is a commitment and economic welfare is a sincere concern. It directs all its efforts to move ahead with increased profits.

2.4.3 NEPAL CREDIT AND COMMERCE BANK LIMITED:-

Nepal Credit and Commerce Bank Limited (NCCBL), bears a unique history of its own. The organization started its journey in the financial sector of the country as an investment company back in 1985. The aim of the company was to mobilize resources from within and invest them in such way so as to develop country's Industrial and Trade Sector and playing a catalyst role in the

formation of capital market as well. Its membership with the browse helped the company to a great extent in this regard. The company operated up to 1992 with 22 branches and thereafter with the permission of the Central Bank converted in to a full fledged private commercial Bank in 1993 with paid up capital of 39.00 crore to serve the nation from a broader platform. The Bank has set up a new standard in financing in the Industrial, Trade and Foreign exchange business. Its various deposit & credit products have also attracted the clients-both corporate and individuals who feel comfort in doing business with the Bank. To mobilize financial resources from within and abroad to contribute to Agriculture's, Industry & Socio-economic development of the country and to play a catalytic role in the formation of capital market. To become the Bank of choice in serving the Nation as a progressive and Socially Responsible financial institution by bringing credit & commerce together for profit and sustainable growth. There are altogether 22 branches with ABBS facility been provided by NCCBL Bank Limited.

2.5 Banking Efficiency

If a bank can provide its service at least cost and achieve its goal of profit maximization it is said to be efficient. Banks always strive to be efficient. One way to see how far the bank is operating is to see its average cost.

Bank's average cost curve shows the relationship between bank size and the cost of production per unit of the bank output. Bank size is measured by total assets or total deposits. The average cost curve of the bank is almost U-shaped in figure, but has a fairly flat middle portion. This indicates that wide range of banks lie close to maximum efficient size. Most recent cost studies of bank pose a different question- is a bank regardless of its size, operating as efficiently as it possibly can? This question raise an issue called x-efficiency by the economists. Efficiency due to the best use of resources is known as x-efficiency. Given the size of the bank, is it operating near to or far away from its lowest possible operating cost? In other words, is the bank is currently

situated along its cost efficient frontier, with little or no waste? Research evidence so far is not conclusive. This suggests that most banks do not operate at their minimum possible cost. Instead, their degree of x-efficient tends to be 20 to 25 percent greater in aggregate production costs than it should be under condition of maximum efficiency. The latter finding indicates that most banks can gain more from lowering their operating costs at their current size than they can from changing scale of output in order to reach a lower cost point on their average cost curve. Thus, x-efficient makes ineffective the economies of scale for most banks.

Features and Consequences of Bank Financial Statements	
Key Features of Bank Financial Statements	Consequences for Bank Managers
<ul style="list-style-type: none"> ▪ Heavy dependence on borrowed funds supplied by others (including deposits and non-deposits borrowings in the money market); thus, banks make heavy use of financial leverage (debt) in an effort to boost their stockholders earnings. 	<ul style="list-style-type: none"> ▪ The bank's earning and its very existence are exposed to significant risk if those borrowings cannot be repaid when due.
<ul style="list-style-type: none"> ▪ Growing use of non-deposits borrowings as a supplement to depositors funds; little owner's capital is invested in most banks. 	<ul style="list-style-type: none"> ▪ The bank must hold a significant proportion of high-quality and readily marketable assets to meet its most pressing debt obligations.
<ul style="list-style-type: none"> ▪ Most revenues stem from interest on loan & securities. The largest expenses item is the interest cost of borrowed funds. 	<ul style="list-style-type: none"> ▪ Bank management must choose loans and investments carefully to avoid a high proportion of earning assets that fail to pay out as planned, damaging expected revenue flows. Because of banks' revenue and expenses are sensitive to changing

	<p>interest rates, management must be competent either at interest-rate forecasting or, more practically, at protecting the bank against losses due to interest rate movements by using interest-rate hedging techniques.</p>
<ul style="list-style-type: none"> ▪ The greatest proportion of a bank's assets is financial assets (principally loans and securities). A relatively small proportion of assets are devoted to plant and equipment (fixed assets); thus, banks make very limited use of operating leverage in most cases. 	<ul style="list-style-type: none"> ▪ With only limited resources devoted to fixed assets and, therefore, few fixed costs stemming from plant & equipment, bank earnings are less sensitive to fluctuation in sales volume (operating revenue) than those of many other businesses, but this also limits a bank's potential earnings (i.e., banking tends to be a moderately profitable industry).

2.6 An overview of on NRB Rules regulation investment of Commercial Banks

NRB established in 2013 BS is the central banks of Nepal. Its determine role in economic plans and implementation in the country is major. The main objective of NRB are to manage the economic and financial transaction over the country. Systematically allocation and management and implementation economic factor over the sate is governed by NRB as a central; bank. All economic plans progress. Policy, strategies, implementation, evaluation made by government are performed under the direction of NRB. So, NRB is the bank of government works for the welfare of nation. Similarly NRB direct the bank and other financial institution too Plans, policies, direction, rules, regulations from NRB as a representative of government. To allocate and mobilized the deposits collected by commercial bank in different sectors' of different policies

etc. In fact NRB controls the over the overall activities made by the commercial bank as well as establishment or operation or dissolution of banks. For so NRB has formulated commercial bank act for the establishment and operation of commercial bank. Here the directions, rules, regulation, directed by NRB in terms of investment made by commercial bank are briefly mentioned below. (NRB, 2009)

1. Establishment of New Commercial Banks:

NRB has enhanced liberal policy for establishment of new commercial bank in Nepal. For such objectives of NRB has regulated the following direction.

- A minimum of Rs. 200 million of paid up capital is required for opening a new bank inside the Kathmandu Valley.
- Similarly, as per directions by NRB Rs. 120 million necessary for starting banking business out of Kathmandu.
- Rs. 50 million paid up capital are necessary for opening central office of bank out of Kathmandu.
- Commonly for establishing the commercial bank in rural areas NRB has directed Rs. 30 million as compulsory paid up capital.
- The investor can invest Ins/her its can be invested maximum up to 70% of total paid up to capital if the bank is promoted by domestic investor and 30% of paid up to capital should be as liquidity margin for repayment for certain deposits.
- For joint venture bank, foreign investor can invest minimum 40% of paid up capital and 50% as maximum. Such bank should manage 30% of paid up capital as floatation for general public.
- Individually, firm or company or groups of company can incest up to 110% of paid up capital.
- Application for the establishment of new banks are to be adopted with in the stipulated times fixed by NRB.

2. Directive for Raising Fund

Commercial banks are directed to raise the capital fund at minimum level of Rs. 500 million. For this, Commercial bank can include paid up capital and deduction made loss for meeting such requirement.

3. Directives for Single Borrower Limit

NRB has beard the single borrower limit as 35% in the case of fund based credit and 50% in the case of non fund based such letter of credit, acceptance latter etc.

4. Regulation for Expansion of Commercial Bank

- For opening of a branch within the area of Kathmandu, Latipur, Pokhara, Birjung, Biratnagar, Narayanghat, Joint venture banks need to open firstly at least two branch in adjoining semi-urban area and secondary at least one branch in rural area not adjoin to any municipalities.
- Banks are not required to open their new branch in semi-urban or rural area it they open new branch outside the seven municipalities.
- For the permission of establishment of new branch commercial banks ha to specify the whole details about the new branch, they must open a branch in a rural or semi-urban area before opening in urban area.

5. Directive for Extension Counters of Joint Venture Banks

- Commercial banks can't open extension in metropolitan area except during trade fairs, festive, ceremonies, celebrations etc. as a directed by NRB such extension must be converted and a branch within two years otherwise must be closed.
- The extension opened can accept deposit and made payment as well as exchange of foreign currencies after the permission for MRB.
- If the extension is open in the area of royal palace, hospitals, foreign diplomatic offices, those extension are not allowed to operate as a branch as mentioned in (II).

6. Credit for Shareholders

The individual or group who holds more than 1% of shares of the commercial banks can't borrow from same bank.

7. Loans Loss Provisioning

The Loans provisioning, on the basis of the outstanding loans and advances and bills purchased as above should be provided as follows:-

Classification of Loan	Loan Provision
Restructure/Reschedule Loan	1%
Sub-Standard Loan	25%
Doubtful Loan	50%
Loss Loan	100%

Classification of Loan	Time	Provision Required
Good	Not overdue	1%
Acceptance	Overdue up to 1 month	1%
Evidence of sub-standard	Overdue 1-6 months	5%
Sub standard	Overdue 6 months to 1 year	25%
Doubtful	Overdue 1 to 5 years	50%
Bad	Overdue more than 5 years	100%

Loan loss provision set aside for performing loans is defined as general loan loss provision and loan loss provision set aside for non-performing loan is defined as specific loan loss provision.

2.7 Review of Previous Studies

2.7.1 Review of Articles

Brigham & Houston define financial management as a firm exists in an economy with a goal to create value to its owners. To pursue its goal the firm performs various activities such as supplying goods and services in the economy. The establishment and operation of a firm requires resources of various types. For examples, if you decide to run it, first, you will have to acquire fixed assets such as land, building, machineries etc. Deciding the procurement of these assets, in the language of finance, is an investment decision

Cross & Hempal, “Commercial banks bring into being the most important ingredient of the money supply demand deposits through the creation of credit in the form of loans & investment. Banks are the custodians of the community's money as well as the suppliers of its liquidity, since the study is concerted with the investment activities of commercial in Nepal, we take in to consideration exclusively the sector that are required for & related to the same.”

Chancy & Eduard A. focuses on the individual investment. They states, it is important that the investor set the appropriate investment objectives & the accompanying investment horizon. In addition, in developing investment strategies to achieve the objectives, the investor must understand the tax conservancies and expected risk & return associated with the various investment alternatives per haves most importantly the investor should recognize that achievement & investment objective involves the creation of a portfolio of assets and not a collection of individual assets. They further states that, individual assets may be very risk. Combining these assets into a portfolio of other assets may actually reduce the risk of the overall risk.

Financial analysis deals with analyzing financial statements of a firm to identify its relative strength and weakness associated to various aspects of financial performance. It also consists of the comparison of financial performance of different firms on the basis of financial information contained in different financial statements, namely income statement and balance sheet. However, a number of difficulties are involved in financial performance of two firms operating in same line or business as well as the financial performance of a single firm over different point of time. Such difficulties arise because of differences in size among the companies and the size of a single company over different point of time. One way to eliminate the problem of size difference is to restate the financial statement of firms using some common standards. Common size statements provide one alternative to express all items in a firm's financial statements in percentage terms over some common items. Common size statement is a standardized financial statement presenting all items in percentage terms. (Ross, 2007)

Shrestha (2009), explains in her book, "Portfolio behavior of commercial banks sector of the economy including agriculture, industry, commercial & social service sectors. The lending policy of commercial is based on the profit maximizing of the institution as well as the economic enhancement of the country."

Sharma & Bhatt (2007), in their article "Priority receiver sector" has present "The commercial banks should take care of board national interest & they should not confine their lending activities only to commercial area providing quick interest if some proportion could be directed to the area conducive to build economic infrastructures of the country it would create atmosphere conducive to their investment in future. In our society where ignorance & illiteracy is in wild scale, it is necessary that the banks search entrepreneurs instead of entrepreneurs searching bank. So, they have opined that the priority sector program is a timely & opportunities there by increasing

production & the general living standard or rural poor. But the success of the largely depends upon the interpreted operation with other program design for rural development. Further they agree that various programmers: Rural development land reform, back to the village national, champion audit literacy etc. couldn't materials their objectives despite their some theoretically philosophy & food objectives.”

Pradhan (2008), in his research paper “Role of saving, investment & capital formation in economic development a case of Nepal” has studied about the strong role & impact of saving, investment & capital formation on economic development of Nepal. This study is based on secondary data only. The necessary data on saving, investment, capital formation and gross domestic product has been collected for the period of 1974/75 to 2000/01. The role & impact of saving, investment and capital formation on economic development were analyzed by using various regression models. The regression equation used in this study have been estimated at current prices as well as in real term with the entire study period divided into different sub-period.

From above definition, it is clear that financial analysis are significant both in vertical and horizontal analysis. In vertical analysis financial analysis with ratio analysis ratio help the analysts to form a judgment whether performance of the firm at a point of good or bad. Likewise, use of financial ratios in horizontal analysis indicates whether the financial condition of the firm is improving or deteriorating and whether the cost, profitability and efficiency is showing an upward or downward trend. In most cases, the financial ratios could be used as a performance evaluation criterion as such that managers compensation could be based on management efficiency in maximizing the size of net profit margin, return on assets, return on equity and so on. It can equally be used to make inter-comparison of financial performance of various division of a firm on the basis of their contribution to the overall profitability of the firm. It is very challenging task for commercial banks. So, a bank has to be very cautions

while investing their funds in various sectors. The success of a bank heavily depends upon the proper management of its investable funds. Investment and capital formation both at current prices and in real terms. The result of the empirical analysis led to three important conclusions: first, saving, investment & capital formation have positive impact on economic development. Second, the current values & past values of saving, investment & capital formation have positive impact on economic development but the current values have the largest impact. Third, there is a strong role played by saving & capital formation on economic development while weak role-played by investment.

2.7.2 Review of Master's Degree Thesis

There are lot of researchers have been performed on financial analysis of commercial banks. The mentioned theses were reviewed as they are relevant to the present research.

K.C (2007) has conducted a thesis on a topic “*Comparative Performance Analysis of Everest Bank Limited and Bank of Kathmandu*”. He has mainly focused his study on comparing and analyzing liquidity, profitability, solvency and activity ratio analysis as well as reviewing the government policies related to banking industry of Nepal. The main objectives of his study are:

- To compare the financial ratios of sampled banks in terms of liquidity, capital adequacy, capital structure, activity and profitability.
- To evaluate the trends of growth of in total deposit, loan and advances and net profit.
- To examine the relationship the relationship between key financial variables such as total deposit and net profit, total deposit and total investment and net worth and net profit of the sampled banks.
- To review the government policies related to banking industry of Nepal.

Time period covered by it was 5 years data from 2001/02 to 2005/06.

Necessary data and other information have been collected from the secondary source of data. In this study, he had pointed out various remarkable finding were:

- The cash reserve ratio of banks was maintained as per the directives of NRB. So, BOK is utilizing its liquid assets better than EBL.
- EBL has maintained liquidity as per financial standard than BOK. So, BOK has poor in the liquidity.
- EBL and BOK appeared highly levered and capital structure of EBL is a little riskier than BOK.
- Earning generating capacity of EBL's assets is far better than BOK. Management of EBL is successful to utilize their resources efficiently and effectively.

The recommendations of this study are:

- EBL has maintained liquidity as per financial standard but BOK is not able to meet the standard. So, EBL can be recommended to utilize the excess amount of current assets on secured and highly liquidity investment and BOK is to increase the liquidity capacity to meet immediate and short term obligations.
- Capital structures of both banks are highly levered so it is recommended to introduce new products with high qualities services, adopt new technology, made adjustment interest rate as per situation.
- To meet their objectives and goals it is recommended to open new branches at new potential urban areas to collect more deposit and to increase investment as well as shareholders' wealth.

Amatya (2008), in her research study entitled, "*A comparative study on financial policy of commercial bank & finance companies of Nepal*" has pointed out the following objectives:

- To find out the relationship between profitability & assets structure of the banks & finance i.e., Standard Chartered Bank Ltd. & BOK Ltd. & finance companies i.e. international leasing & finance company, standard finance company & universal finance company.
- To project the deposit utilization & investment of the banks in companion to finance companies.
- To commend the polices to be adopted by sample banks & finance based by sample banks & finance based on financial analysis for its future development.

Joshi (2009) conducted a study on “*Financial Analysis of commercial banks in Nepal: A comparative study of Everest Bank Limited, Nabil Bank Limited & Bank of Kathmandu*” has presented research finding of the study are:

- The liquidity position of the EBL is comparatively better than NABIL & BOK. EBL has the highest cash & bank balance to total deposit, cash & bank balance to current assets ratio. Nabil has lowest liquidity position than that of other two banks. EBL has good deposit collection & has made enough investment on government securities but it is maintained moderate investment policy on loan & advances.
- From the analysis of assets management ratio or activity ratio, it can be concluded that EBL is comparatively average or in between successful in compared to Nabil & BOK. The total investment of EBL is in between in compared to other two banks.
- In analysis of profitability, total interest earned to total outside assets of EBL is lowest at all. But overall analysis of profitability ratios. EBL is average profitability ratios. EBL is average profitable in comparison to other compared banks i.e. Nabil & BOK. From the view point of risk ratio, EBL has higher capital risk but average of credit risk ratio in compared to Nabil & BOK.

Shrestha (2010) conducted a study on “(A case study of Nepal Investment Bank)”. The main findings of the study are:

- Bank is in good position to meet the daily cash requirement as bank has maintained the average cash & bank balance in respect to total deposit.
- The performance of NIBL regarding deposit collection granting loan & advance & investment is quite satisfactory but doesn't seem to follow definite policy.
- NIBL has not efficiently utilized its equity capital hence return on equity is not satisfactory because of lack of sound investment policy for mobilization of its equity capital.
- Interest earned to total operating income of NIBL is high. However bank failed to maintain net profit on the study.
- From the analysis of coefficient of correlation. There is positive & significant relation between total deposit & loan and advances and current assets and current liabilities and loan and advances but there is negative and no significant relationship between outside assets & her profit.

Lamichhane (2011) conducted a study on “Investment policy of Commercial Bank in Nepal. A comparative study of Everest Bank Limited with NABIL Bank and Bank of Kathmandu” with the objective of:

- To discuss fund mobilization and investment policy of EBL, NABIL & BOK Limited.
- To evaluate the liquidity, efficiency and profitability and risk position.

The research finding of the EBL is comparatively better than NABIL and BOK. EBL has the highest cash and bank balance to total deposit, cash and bank balance to current assets ratio. NABIL has the lowest liquidity position than that of other two other banks. EBL has good deposit collection and has made enough investment on government securities but it has maintained moderate investment policy on loans and advances. From the analysis of assets

management ratio or activity ratio, it can be concluded that EBL is comparatively average or in between successful in compared to NABIL and BOK. The total investment of EBL is in between in compared to other two banks. In the study, loans and advances to total deposit is higher in BOK but total investment to total deposit is higher in NABIL. Investment on share and debentures to total working fund ratio is higher in BOK. But the coefficient of variation is higher in EBL. In analysis of profitability, total interest earned to total outside assets of EBL is lower at all.

2.8 Research Gap

The purpose of the research work is quite different from the studies made by the above persons (related to commercial bank). This study focuses in effectiveness in financial position of commercial banks in Nepal. Financial analysis of NABIL, NCCBL and Siddhartha Bank Ltd. is comprehensive manner considering the major items. Different financial & statistical tools have been used in this study. Among them, ratio analysis, regression analysis are the strong financial tools. This study is a little bit different than previous studies. It may be one of the research study of financial analysis in few research work with reference to NABIL, NCCBL and Siddhartha Bank Ltd. This study tries to indicate the effectiveness of financial policy of concerned banks. So, it is trying to evaluate the effectiveness of monitoring and collective policies of the sample banks. They have assessed their strengths, weaknesses and opportunities and attempted to find out reasons of changes on profitability and liquidity trends of the both. So, this study will be fruitful to those interested person, scholars, professors, students, businessman and government for academically as well as policy perspective.

CHAPTER 3

RESEARCH METHODOLOGY

Research methodology is the way to solve the research problem systematically. It is composed of two words, research and methodology which means the process of investigating in values a series of well thought and activates in gathering, recording, analysing and interpreting the data with the purpose of finding answers to the problem. The entire process by which we attempt to solve the problem is called research while methodology is the method used to list the hypothesis. “Research methodology is the process to solve the research problems systematically.” (Kothari, 2008)

3.1 Research Design

Research design understands for definite sets of procedures, processes, and techniques that guides the research process and propounds the ways for research’s viability. The basic objective of the study is to determine the financial arena of the commercial banks of Nepal under study, evaluating its respective performance and to offer suggestion package for better financial strengths and weaknesses. The data have been analyzed with the use of various tables. The research design of the study is descriptive as well as analytical. Descriptive research design has been adopted in fulfilling the objective of the study. Since, the study is mainly focused on finding out the appropriate path for improving the performance of the banks under study named NABIL, NCCBL & Siddhartha Bank Limited and its financial position. The study follows the historical, descriptive and analytical research design. The research is historical as it has used the past data. The views of key stakeholders have also been described and analyzed in detail.

3.2 Population and Sample

A small portion chosen from the population for studying its properties is called a sample and its number of units in the sample is known as sample size. The population of the commercial banking sector in Nepal would represent all the 32 commercial banks. Where possible, the data of the whole commercial banking system have been used. However, in some cases due to time constraint and unavailability of sufficient data, the following three commercial banks of Nepal have been taken as the samples for the study: the three joint venture commercial banks NABIL, NCCBL & SBL.

3.3 Nature and Source of Data

The study is mainly based on secondary sources of information, which provides insights into financial performance of banks under the study NABIL, NCCBL & SBL. The supplementary data and information have been collected from unpublished official annual reports of the respective bank, information from Nepal Rastriya Bank and other reports, magazines and dissertations/thesis and bulletins of the concerned organisation. The research is based on secondary source of data. For research purpose, published financial statements (i.e. Annual reports) of concerned banks were collected. Similarly, financial statements of selected banks and various markets related information were collected and tabulated in spreadsheet. Such secondary information was gathered from the share department of the concerned banks and Security Board of Nepal. In addition, an answer on certain queries made to staff of concerned organization personal enquiries and discussions were also being conducted for clarification and verification of collected data and for recommendation. Likewise, information and data have also been collected and assimilated from relevant past reports, research works and different relevant articles published in the newspapers and journals.

3.4 Data collection Procedure

The problem of the study lies on the issues related to the strengths and weaknesses of the banks. As a consequence of liberal policy adopted by the government, financial institutions have been emerging in the country. The sample banks have been facing threats from such institutions. Therefore, the study is also intended to find the weaknesses and strengths so that appropriate suggestion can be provided to enhance the performance of the banks in coming days. For this purpose, various data are required with the view of obtaining the data, researcher made several visits of the sample bank. In first visit, researcher consulted the concerned authority of the bank and explained about the above stated problems and objectives of the study. Researchers also explained why s/he is interested in these banks and what s/he wishes to analyse. After keeping in view of researcher, the authorities got convinced and appraised the efforts. They assured that they would help as far as possible. Regarding the information needed they said that they would make them available up to the extent that doesn't affect the privacy and secrecy of the bank. Researchers got pleased with the response shown by them and started the work. In the another visit, researcher approached to the share department and asked profit and loss account and balance sheet of the bank of last five years. After explaining the need of such information, the related staff provided the necessary statements. Likewise, the researcher visits the accounting experts in the bank for the clarification of the components items of the statements so as so avoid the ambiguity and confusion. In this way the researcher got the available data for his study.

3.5 Data Processing Method

Data obtained from the various sources cannot be directly used in their original form. According to the nature of data, they have been inserted in meaningful tables, which have been shown in annexes. Data, information, figures and facts

so obtained need to be checked, rechecked, edited and tabulated for computation. Using financial and statistical tools, data have been analysed and interpreted.

3.6 Analytical Tools

After data have been collected from a representative sample of the population, the next step is to analyse the data so that the research hypothesis can be tested. The most popular and widely used method of data analysis and interpretation is frequency distribution as a basic method of reporting and summarizing data. A simple statistical tool i.e., tables and accounting tool namely, ratio analysis have been used during the course of study. However, relative assessment through literature review has been the focal method by which this study has been carried out. To meet the objectives of the study, the sources of secondary data of commercial banks are analysed by using financial tools such as ratio analysis. Simple descriptive analysis tools such as frequency, mean, standard deviation are used. Financial statement can provide various useful information for parties directly or indirectly involved in the business. Selection of suitable tools and proper analysis makes data effective. The researchers have used two sorts of tools. They are as follows:

- i) Financial Tools
- ii) Statistical Tools

3.6.1 Financial Tools

Financial tools are those which are used for the analysis and interpretation of financial data. These tools can be used to get the precise knowledge of a business, which in turn, are fruitful in exploring the strengths and weaknesses of the financial policies and strategies. In order to meet the purpose of the study, following tools have been used.

3.6.1.1. Ratio Analysis

Ratio analysis is one of the best tools available in financial analysis. It is the process of determining and interpreting numerical relationship between the figures or items of financial statements i.e. Balance Sheet, Income Statement etc. The ratios, which are calculated on the basis of accounting information, are called accounting ratios. It helps to present the financial statements in simple, concise and intelligible form, which makes financial evaluation of the performance of an organization.

The following are the three bases of creating accounting ratios.

- i) Income Statement or Trading and Profit & Loss Account
- ii) Balance Sheet and
- iii) Inter-Statement (Income Statement and Balance Sheet both)

A Single ratio itself does not indicate favourable or unfavourable condition. It should be compared with some standard. The standards of comparison of calculated ratios may be made with the ratios calculated in the past years or with competitor's ratios or industry ratios or projected ratios (Limbu, 2068).

Ratio can be classified in a variety of ways as follows:-

- A. Liquidity Ratios
- B. Activity Ratios
- C. Profitability Ratios
- D. Leverage Ratios
- E. Other Ratios

A.Liquidity Ratios:

Liquidity refers the ability of firm to pay its current liabilities. To test on the solvency position for the payment of short-term liabilities is the purpose of this ratio. It measures a firm's ability to satisfy its short-term commitments out of current or liquid assets. These ratios focus in current assets and liabilities and

are used to ascertain the short term solvency position of the firm. Liquidity ratio may be further sub grouped into two major heads. In the context of burning competition in banking sector, insufficient liquidity will leave the concerned bank behind. On the other hand, high liquidity is also bad as it results in lower profitability because of underutilized assets. Therefore, it is necessary to strike a proper balance between liquidity and lack of liquidity. (Pandey, 2007)

1. Current ratio

This ratio is also called working capital ratio. It shows a relationship between current assets and current liabilities. Here, current assets are those, which can normally be converted into cash within one year. These include cash and bank balance, money at short notice, investment in government securities, prepaid expenses and marketable securities, account receivable, inventories and so on. On the other hand, current liabilities refer to those obligations, which must be paid within an accounting cycle. These include deposits, accruals, bills payable, account payable, note payable, tax provision, staff bonus, and dividend payable and other liabilities.

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

The current ratio, thus calculated, measures the ability of the firm to meet the obligations due within one year. This assumes a regular cash flow and that both accounts receivable and inventories can be readily converted into cash. As a conventional rule, the ratio 2:1 is employed as a standard of comparison. Current ratio less than 2:1 is typically considered low and indicates financial difficulties. However, current ratio is the quantitative test of a bank's liquidity. It does not consider the quality of current assets. Therefore, the ratio equal to or greater than 2:1 may not be doing good due to slow-collection of accounts receivable or slow movement of inventories & vice versa.

2. Cash and bank balance to current and saving deposits ratio

Cash and bank balance are the liquid current assets. This ratio is calculated to find out the percentage of the liquid fund with the bank to make immediate payment.

$$\text{Cash \& bank balance to current \& saving deposit ratio} = \frac{\text{Cash and bank balance}}{\text{Current and saving deposit}}$$

Cash and bank balance includes cash in hand, foreign cash in hand, cheque and cash items, balance with domestic bank and balance held in Central Bank as well as foreign banks. Current and saving deposits consist of all types of deposits excluding fixed deposits. The ratio measures the ability of bank to meet its immediate obligations. High ratio indicates sound liquidity position of the bank.

3. Cash and bank to total deposits ratio

This ratio is calculated to find out the percentage of bank's idle money with total fund collected, which is not used to create money.

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

Total deposits consist of current deposit, saving deposit, fixed deposit, and money at call, short notice and other deposits. The ratio shows the proportion of total deposits held as most liquid assets. High ratio shows the strong liquidity position of the bank.

4. Fixed deposit to total deposit ratio

Fixed deposit is the highest interest bearing long-term liabilities. This ratio is calculated to find out the percentage of fixed deposit with highest interest bearing. Higher the ratio of fixed deposit to total deposit ratio gives the higher

liquidity ratio because higher portion of the long-term liabilities means lower the current liabilities, which gives the higher liquidity ratio.

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

High ratio indicates better opportunities available on the bank to invest in sufficient profit generating long-term loans. Low ratio means the bank should invest the fund of low cost in short-term loans.

5. Saving deposit to total deposit ratio

Saving deposit is the short-term liabilities with fixed interest charges. This ratio is calculated to find out the proportion of saving deposit with respect to total deposit.

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

Higher the ratio of saving deposit with respect to total deposit causes lower liquidity position.

6. Loan and advance to current assets ratio

Loan and advance is the current assets, which generates the income. Loans and advances include bills purchased and discounted, cash credit, overdrafts and other short-term loans etc.

$$\text{Loan and advance to current assets ratio} = \frac{\text{loan and advances}}{\text{Current assets}}$$

High ratio indicates better opportunity available on the bank to invest in sufficient profit generating long-term loans.

Low ratio means the bank should invest the fund of low cost in short-term loans

B. Activity/Turnover/Efficiency/Performance Ratios:

An activity ratio is also called as 'Turnover Ratio' or 'Performance Ratio'. This ratio measures the effectiveness with which a bank uses its available resources. The fund of creditors and owners are invested in various assets to generate income and profit. Activity ratio reflect how efficient the banks haven been in managing resources. High ratio depicts the managerial efficiency in utilizing the resources. However, low ratio is the result of insufficient utilization of resources. Even, too high ratio is also not good enough as it may be due to the insufficient liquidity.

1. Loans and advances to saving deposit ratio

Saving deposit is that liabilities, which bears short-term interest loans and advances are the major sources of income that can be re-invested for generating income by the bank. Loan and advances to saving deposit ratio are calculated in order to measure how many times loans and advances have been made in comparison with saving deposits.

$$\text{Loan and advance to saving assets ratio} = \frac{\text{Loans and advances}}{\text{Saving deposits}}$$

High ratio indicates greater consumption of the saving deposits in advancing loans.

2. Loan and advances to fixed deposit ratio

Fixed deposit bears long-term interest associated with long-term obligations. Loans and advances is the major source of income that can be invested to generate further income by the banks. Loan and advances to fixed deposits ratio measures the extent to which the fixed deposits are utilized for generating income.

$$\text{Loan and advance to fixed assets ratio} = \frac{\text{Loans and advances}}{\text{Fixed deposits}}$$

Since, the fixed deposits carry high rate of interest, fund so collected need to be invested in such sectors, which yield at least sufficient return to meet the obligation.

3. Loans and advances to total deposit ratio

This ratio is calculated to find out whether the banks are able to utilize their total deposits for profit generating purpose on loans and advances made by them. Generally, a high loans and advances to total deposit ratio reflects higher efficiency to utilize its total deposit & vice versa.

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

Loan and advances consists of loan, advances, cash credit, overdrafts and foreign bills purchased and discounted bills. Total deposit includes all the deposits. High ratio means the greater use of deposit for investing in loans and advances. On a contrary, too low ratio may be the cause of idle cash or use of fund in less productive sectors.

4. Investment to total deposit ratio

Investment is one of the major forms of credit created to earn return. Investment to total deposit ratio measures the mobilization percent of total deposit on investment. Investment includes both short-term and long-term investment i.e. investment on government securities and investment on shares, debentures, government treasury bills, development bonds etc.

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

Higher ratio indicates managerial efficiency regarding the utilization of deposits. Low ratio is the result of less efficiency in use of funds.

C. Profitability Ratios:

Profitability is the end results of a number of corporate policies and decisions. It measures how effectively the bank is being operated and managed. Besides owners and managers, creditors are also interested to know the financial soundness of the bank. Owners are eager to know their returns whereas the managers are interested in their operating efficiency. Therefore, they calculated profitability ratios because expectations of both owner and manager are evaluated in terms of profit earned by the bank. Profitability shows the overall efficiency of the bank. Profitability ratio calculates the relationship between return of the firm with the shares, equity, and assets. Bank profitability implies the net after tax income or net earnings of a bank, usually divided by a measure of bank size. (Joshi, 2005)

1. Interest earned to total assets ratio

Interest earned to total assets ratio is calculated to find out the percentage of interest earned in comparison to total assets. Higher interest earned to total assets ratio indicates the efficiency of using the assets. Interest earned represents the total interest income shown in the income side of the profit and loss account. Similarly, total assets include all the assets shown on the right side of the balance sheet.

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

High ratio indicates the proper utilization of bank's assets for income generating purpose. Low ratio represents unsatisfactory performance.

2. Interest paid to total assets ratio

Interest paid to total assets ratio is calculated in order to find out the percentage of interest paid on liabilities with respect to total assets.

Here, interest paid represents the total interest expenses side of profit and loss account.

$$\text{Interest paid to total assets ratio} = \frac{\text{Total interest paid}}{\text{Total assets}}$$

3. Return on assets

The return on assets (ROA), which is often called the bank's return on total assets, measures the overall effectiveness of management in generating profit with its available assets. The higher the firm's return on assets the better it is doing in operation and vice versa. This ratio establishes the relationship between net profit and total assets. It measures the productivity of total assets.

$$\text{Return on assets} = \frac{\text{Net profit after tax (NPAT)}}{\text{Total assets}}$$

Higher ratio is better which shows the better utilization of total assets and lower ratio means insufficient operation of the bank.

4. Return on total deposit ratio

Deposit is the main financial source of the bank. The deposits are mobilized for loans and advances, investments etc. with the objective of making financial gain. Return in total deposit ratio shows the relationship between net profit and loss after tax and total deposit with the explanation of the ability of management in effective utilization of the deposit. This ratio is also called as a mirror of banks financial performance because it shows bank ability to generate profit. Higher ratio is the index of strong profitability position.

$$\text{Return on total deposit} = \frac{\text{Net profit after tax}}{\text{Total deposit}}$$

5. Total interest expenses to total interest income ratio

The ratio is calculated by dividing total interest expenses by total interest income.

Total interest expenses consist of interest expenses incurred for deposits, borrowing and loans taken by the bank or financial institutions. Total interest income includes interest income received from loans, advances, cash credit, overdrafts and government securities, interbank and other investments.

$$\text{Total interest expenses to total interest income ratio} = \frac{\text{Total interest expenses}}{\text{Total interest income}}$$

The ratio shows the percentage of interest expenses incurred in relation to the interest income realized. Lower ratio is favorable from the profitability point of view.

6. Staff expenses to total income ratio

The ratio is obtained by dividing the staff expenses by the total income.

$$\text{Staff expenses to total income ratio} = \frac{\text{Staff expense}}{\text{Total income}}$$

Staff expenses include the salary and allowances, contribution to the provident fund & gratuity fund, staff training expenses and other allowances and expenses made for staff.

The ratio measure the proportion of income spent for the staff, whose contribution is of great significance in the success of the bank. High ratio indicates that the major portion of income is used for staff. From the firm's point of view, low ratio is advantages. However, the staffs prefer high ratio, as it is the result of higher level of facilities and benefits provided to them.

D. Leverage /Capital Structure/Solvency Ratios

Capital structure refers to the combination of long-term sources of funds, such as, long-term debt, preference stock and common equity including reserves and surpluses (i.e. related earnings). Capital structure represents the relationship among different kinds of long-term source of capital and their amount. The share capital is often supplemented by debt securities and other long term borrowed capital. In a going concern, retained earnings or surpluses too form a part of capital structure. Except for the common shares, different kinds of external financing i.e. preference shares as well as the borrowed capital carry fixed return to the investors. The calculation of this ratio is done in order to measures the financial risk and the firm's ability to provide benefit to the shareholders.

1. Total debt to total assets ratio

The debt-assets ratio (DA), simply known as debt ratio, shows the proportion of total debts used in financing total assets of a firm. Debt to assets ratio reflects the financial contribution of outsiders and owners on total assets of the bank. This ratio also measures the financial security of outsiders. Creditors prefer low debt ratio but owners prefers high debt ratio but owners prefer high debt ratio. It is because creditor prefers this ratio to be lower because it makes them secured in order to extent credit. However from the firm's management point of view, owners prefer this ratio to be higher because they can magnify their earnings as well as it helps them to maintain better control to the firm. Debts includes all the deposits of the bank, Debentures and Bonds, short term debts(loans), long term debts(loans) and all kinds of borrowings.

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

2. Total debt to total equity ratio

Debt to total equity ratio is the most widely used leverage ratio to evaluate the long-term solvency of a bank. This ratio expresses the relationship between debt capital and equity capital, and reflects the relative claim of them on the assets of bank. This ratio is also known as External –Internal equity ratio. Total debt includes all deposits, bills payable, borrowing from other banks, and other liabilities. Total equity or shareholders' equity includes paid up capital, reserve and surplus, undistributed profit minus accumulated loss (if any).

$$\text{Total debt to total equity ratio} = \frac{\text{Total debt}}{\text{Total shareholder's equity}}$$

Debt equity ratio is used as a tool for analyzing financial risk both by creditors as well as by a firm. High debt equity indicates greater contribution at a firm's financing by debt holder than those of equity holders. From the creditor's viewpoint, high debt equity ratio of a firm is riskier to them as the firm may be unable to satisfy creditors' claim whereas low debt equity ratio provides a cushion of protection to the creditors against losses. Again, with low level of capital investment by equity holders in comparison to debt holders, they may involve in speculation and may not behave responsibly towards a firm so that it threatens the creditors' position.

3. Long-term debt to total assets ratio

Long-term debt to total assets ratio represents the relationship between long-term debts to total assets of a firm. It is, besides former two ratios, another way to express the use of long-term debt capital in comparison to total assets of the firm. When the bank uses less long-term debt and more of short-term debt, it means the bank has adopted aggressive financing policy. Aggressive financing

policy makes bank's position more risky. Here, long-term debt includes fixed deposits and borrowings from other banks and institutions.

$$\text{Long term debt to total assets ratio} = \frac{\text{Long term debt}}{\text{Total assets}}$$

4. Interest coverage ratio

The interest coverage ratio is also referred to as times-interest earned (TIE) ratio, measures the extent to which interest on debt capital is covered by EBIT. It is calculated by dividing EBIT by the interest charges. Interest ratio is calculated in order to determine bank's ability to meet interest obligations. It provides an assurance for the creditors about the interest paying capacities. Higher interest coverage ratio indicates the high capacity of the firm to meet fixed charges on its liabilities & vice-versa.

$$\text{Interest coverage ratio} = \frac{\text{Net profit before interest \& tax (EBIT)}}{\text{Interest expenses}}$$

The ratio measures to what extent a firm's EBIT can decline before the firm is unable to pay its interest. It is a measure of debt serving capacity of a firm.

5. Long term debt to capital employed ratio

This ratio reflects the proportionate relationship between the long-term debt and permanent capital. Higher this ratio indicates higher risk to creditor, while lower this ratio assures security to creditors in extending credit in extending credit. Here, this ratio indicates higher risk to creditor, while lower this ratio assures security to creditors in extending credit. The long-term debt indicates the total of fixed deposits and borrowing from other banks. Similarly, capital employed includes the total of net worth and long-term debt.

$$\text{Long term debt to capital employed ratio} = \frac{\text{Long term debt}}{\text{Capital employed}}$$

6. Debt to total capital ratio

This ratio is obtained by dividing total debt to total capital of the bank.

$$\text{Debt to total capital ratio} = \frac{\text{Total debt}}{\text{Total capital}}$$

Total capital refers to the sum of interest-bearing debt and net worth/ shareholder's equity. It shows the proportion of debt in total capital employed by the bank. High ratio indicates greater claim of creditors. Contrary to it, low ratio is the indication of lesser claim of outsiders. For the sound solvency position, the ratio should not be too high or too low.

E. Other Ratios/ Indicators

Above stated ratios throw light on various aspects of bank. Management, investors and creditors can get information regarding their interest. Some indicators are dealt here which provide more knowledge about the performance of bank. They are listed below.

1. Earning per share(EPS)

Earning per share refers to the income available to the common shareholders on per share basis. It enables us to compare whether the earning based on per share basis has changed over past period or not. The investors favor high EPS. It reflects the sound profitability position of the bank. It is obtained by dividing earning available to common shareholders by number of equity share outstanding.

$$\text{Earning per share} = \frac{\text{Earning available to common shareholders}}{\text{No. of equity share outstanding}}$$

Earning available to common shareholders is the amount of that profit which can be found after deducting the amount of interest to the outsiders' fund,

dividend to the preferred shareholders and income tax to the government. For this purpose, it is net profit after tax.

2. Price earning ratio (P/E ratio)

P/E ratio is widely used to evaluate the bank's performance as expected by investors. It represents the investors' judgment or expectation about the growth in the bank's earning. In other word, it measures how the market is responding towards the earning performance of the concerned institution.

$$\text{Price earning ratio} = \frac{\text{Market value per share (MVPS)}}{\text{Earning per share (EPS)}}$$

High ratio indicates greater expectation of the market towards the achievement of bank.

3. Market value per share to book value per share (MVPS/BVPS)

The ratio measures the value that the financial market attaches to the management and organization of the bank as a growing concern. High ratio is the indication of strong management and organization. It is the ratio of market value per share to book value per share.

$$\text{Market value per share to book value per share} = \frac{\text{Market value per share (MPS)}}{\text{Book value per share (BVPS)}}$$

BVPS is net worth divided by the number of share outstanding.

3.6.2 Statistical Tools:

Statistical tools are indispensable tool in the hand of researchers. These tools are used in research in order to draw the reliable conclusion through the analysis of financial data. Statistics is a method of decision making in the fact of uncertainty based on numerical data and calculated risk. It involves variety

of methods and techniques to arrive at the conclusion by analyzing data collected for the purpose.

3.6.2.1 Spread

For the purpose of the study, the spread understands for the difference of interest income and the interest expenses.

3.6.2.2 Incomes and expenses analysis

Besides the above ratios income and expenses, analysis is one of the main tools for the making financial performance analysis of the bank. The profit and loss account of the bank is used to determine operating income, operating expenses and a profit percentage.

3.6.2.3 Correlation Analysis

Correlation is a statistical device designed to measure degree of association between two or more variables. In order word, the measures of relations between two or more variables are termed correlation. Sir Francis Galton (1822-1911) opened some major ideas while he was thinking about the degree to which children research their patents. Karl Pearson (1587-1936) was much fascinated by work of Francis Galton and was able to suggest a method measuring the association between two variables. To measures the degree of association between the variables, one more summary statistics is needed and is known correlation coefficient. It is generally denoted by 'r'. It could range between -1 to +1. When $r=0$, there is perfect correlation between variables, when r is closer to +1 then high degree of positive correlation between variables, when it is closer to -1, there is high degree of negative correlation between variables. This method measures the intensity or the magnitudes of

linear relationship between two variables series. The formula used for computation of Karl Pearson's Correlation Coefficient(r) is as follows:

$$r_{xy} = \frac{n \sum XY - \sum X \sum Y}{[\sqrt{n \sum X^2 - \sum (X)^2}] [\sqrt{n \sum Y^2 - \sum (Y)^2}]}$$

Where,

N = number of observation in series X and Y .

$\sum X$ = sum of observations in series X .

$\sum Y$ = sum of observations in series Y .

$\sum X^2$ = sum of squared observations in series X .

$\sum Y^2$ = sum of squared observations in series Y .

$\sum XY$ = sum of the product of observations in series X and Y .

On the basis of the variables, correlation can be categorized as positive, linear, non-linear, partial and multiple.

3.6.2.4 Probable error

Probable error of correlation is an old measure for testing the reliability of an observed correlation. P.E. (r) shortly denotes the probable error of correlation coefficient calculated. The probable error of a correlation coefficient also enables to find the limits within which the sample correlation coefficient can be expected to vary in the population. The probable error of the coefficient of correlation is calculated by using the following formulas:-

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

Where,

$$\frac{1 - r^2}{\sqrt{N}} = \text{Standard error.}$$

If $r < P.E. (r)$; there is no evidence of correlation i.e. correlation is not significant.

If $r > 6 P.E. (r)$; there is no evidence of correlation i.e. correlation is significant.

For other situations except these two cases, nothing can be stated.

3.6.2.5 Arithmetic Mean

Arithmetic mean or simply a ‘mean’ of a set of observations is the sum of all the observations divided by the number of observations. Arithmetic mean is also known as the arithmetic averages. Out of various measures of the central tendency, arithmetic means is one of the useful tools applicable used for the calculation procedures. It is easy to calculate and understand and based on overall observations.

Arithmetic mean of a given set of observations is their sum divided by the number of observations. In general, if $X_1, X_2, X_3, \dots, X_n$ are the given observations, then arithmetic mean usually denoted by \bar{X} is given by; (Gupta, 2008)

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

Where, n = number of observations

3.6.2.6 Coefficient of Variation

It is defined as the standard deviation divided by the mean of the expected return. It is used to standardize the risk per unit of the return i.e. measure the risk per rupee. The coefficient of variation should be used to compare investments when both the standard deviations and the expected value differ.

Coefficient of variation, denoted by C.V. is given by;

$$C.V = \frac{\sigma}{\bar{X}} \times 100$$

Where, σ = Standard Deviation

$$\text{i.e. } \sigma = \sqrt{\frac{\sum X^2}{n} - \left(\frac{\sum X}{n}\right)^2} \text{ or } \sigma = \sqrt{\frac{\sum (X - \bar{X})^2}{n}}$$

For comparing the variability of two distributions, we compute the coefficient of variation for each distribution. A distribution with similar CV is said to be more homogeneous or uniform or less variable than other. Conversely, a series with greater CV is said to be more variable or heterogeneous than the other.

3.6.2.7 Regression Analysis

It is the most frequently used method of demand estimation. This method combines economic theory and statistical techniques of demand estimations. According to Edwin Mansfield-“Regression analysis describes the way in which one variable is related to another.” Regression analysis derives one equation, which on the basis of known value of one variable can be used to estimate the unknown value of another variable. This enables the firm to consider the time dimension i.e. whether the financial position of a firm is improving or deteriorating over the years. It also helps to determine the movement of firm is favorable or unfavorable.

CHAPTER 4

PRESENTATION AND ANALYSIS OF DATA

In this chapter, efforts have been made to present and analysis the collected data. Data collected from various sources such as primary and secondary sources were collected and tabulated as per the requirement of study and in accordance to the nature of data. Different arithmetical and statistical tools are used to analyze the data collected under the study. To make easier and make clearer to the understanding of the study, data are presented in Tables and figures also.

This chapter contains the data and information regarding the overall financial analysis of Siddhartha Bank Limited (SBL), Nepal Credit & Commerce Bank Ltd (NCCBL) and Nepal Arab Bank Limited (NABIL). This analysis tries to highlights on various aspects of the sample banks on their position, performance as well as financial stability based on deposit trend, investment, loan and advances, liquidity, leverages, efficiency and earning power. This chapter deals with the research techniques and methodologies.

Here in the study, data of five years starting from FY 2006/07 to FY2011/12 have been presented to study and analyze the financial strength and weakness of the sample banks. Data are also presented to examine or analyze the effects of deposits and other financial activities of the banks under study.

4.1 Analysis of financial position

4.1.1 Ratio analysis

Ratio analysis is one of the best tools available in financial analysis. It is the process of determining and interpreting numerical relationship between the figures or items of financial statements i.e. Balance Sheet, Income Statement etc. The ratios, which are calculated based on accounting information, are called accounting ratios. It helps to present the financial statements, in simple, concise and intelligible form, which makes financial evaluation of the performance of an organization.

4.1.1.1 Liquidity Ratios:

Liquidity refers the ability of a bank to pay its current liabilities. In another words, liquidity ratios measures a bank's ability to satisfy its short-term commitments out of current or liquid assets. These ratios focus on current assets and liabilities and are used to ascertain the short-term solvency position of the bank. A high degree of liquidity shows bank's inability to utilize the available funds and low liquidity shows poor credit worthiness, which results in loss of creditor's confidence or even in legal tendencies resulting the closure of the bank. To test on the solvency position for the payment of short-term liabilities is the purpose of this ratio.

1. Current ratio:

Current ratio (CR) is the quantitative relationship between current assets and current liabilities. The current ratio, thus calculated, measures the ability of a bank to meet obligations within one year. This assumes a regular cash flow and that both account receivable and inventories can be readily converted into cash. However, current ratio is the quantitative test of a bank's liquidity. This Table shows the position of current ratio of NABIL Bank, NCCBL and Siddhartha Bank and its ability to meet the obligations dues. This ratio shows the relationship between current assets and current liabilities.

Standard ratio 2:1 (Current assets should be twice the amount of current liabilities)

[Current ratio is calculated dividing current assets by current liabilities.]

Table 4.1
Current ratio of banks (Times)

(Rs. In Million)

Fiscal Year	Bank Name	Current Assets	Current Liabilities	Ratios (Times)	Average	S.D.	C.V
2007/08	NABIL Bank	1963.36	2431.38	0.81	1.04	0.25	23.57
2008/09		4623.50	3073.16	1.50			
2009/10		3925.40	3875.59	1.01			
2010/11		4815.24	4797.06	1.00			
2011/12		4489.06	5154.80	0.87			
2007/08	NCC Bank	833.81	654.70	1.27	1.72	0.35	20.27
2008/09		1632.22	755.62	2.16			
2009/10		1373.39	949.19	1.45			
2010/11		2296.29	1103.15	2.08			
2011/12		1816.16	1114.58	1.63			
2007/08	Siddhartha Bank	746.67	397.26	1.88	1.38	0.30	21.76
2008/09		1022.16	1039.49	0.98			
2009/10		2032.53	1604.76	1.27			
2010/11		3105.65	2062.35	1.51			
2011/12		2788.47	2214.47	1.26			

Source: Annual Reports of the concern banks of fiscal year 2007/08 to 2011/12.

Table 4.1 shows that Nabil Bank has maintained average 1.04 times as current assets out of its current liabilities. It has fluctuating trend of liquidity position. It has maintained highest ratio of 1.5 in the 2008/09 and lowest ratio of 0.81 in the FY 2007/08 where the current ratio decline to 0.87 at the FY 2011/12 which is not a good symptoms. The S.D of Nabil Bank is 0.25 and C.V is 23.57%.

The figure of NCCBL Limited shows that current ratios are not in better position in recent fiscal years. The current ratio was higher at 2.16% at FY 2008/09. There was fluctuation of current ratio thereafter. It was 1.27% in FY 2007/08 whereas it was increasing trend at the FY 2010/11 which shows that the banks has more liquid cash balance in FY 2010/11 than in FY 2010/11.

Siddhartha Bank Limited, it can be said that the ratio between current assets and current liabilities is found to be unsatisfactory during the year under the study except in the FY 2005/06. It is found to be at 1.88% in the fiscal year

2007/08, which is found to be decreasing to 0.98% in FY 2008/09. The ratio was 1.27% in the FY 2009/10 and was rapidly increased to 1.51% in the preceding year and later; it again declined into 1.26% in the FY 2011/12.

Comparing the current ratio of investment on priority sector of current assets and current liabilities, NCCBL has mobilized higher ratio of current assets and current liabilities than that of Nabil Bank and Siddhartha Bank. NCCBL has mean ratio of 1.72, that of Nabil has 1.04, and Siddhartha has 1.38. C.V of NCC bank is 20.27%, which is less than that of Nabil i.e. 23.57% & Siddhartha Bank i.e. 21.76%. The lower percentage of C.V of NCCBL has less relative variability or lower risk per unit of expected return.

Figure 4.1- Current ratio

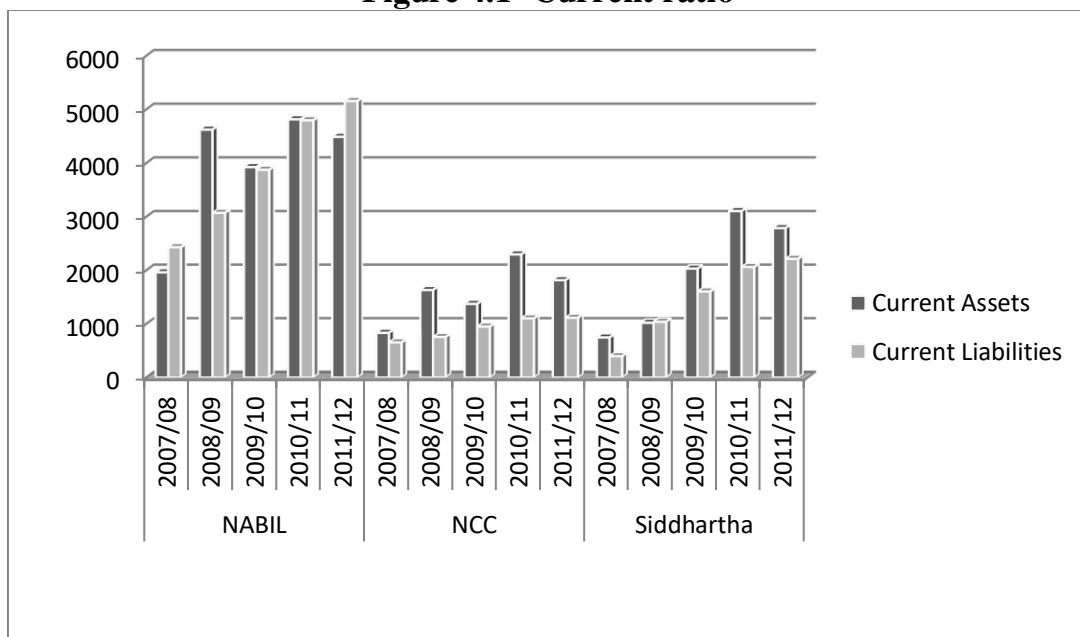


Figure 4.1 show that the bank may face the problem of working capital if they need to pay the current liabilities at demand. The current ratio is not satisfactory in level. They may have problem in winning the confidence of current depositors and short-term lenders. Therefore, it is better to maintain the level of current ratio as it is not good too low liquidity as well as too much liquidity.

2. Cash and bank balance to current assets ratio:

This ratio depicts the relationship between the cash and bank balance in comparison with the total current assets of the bank. Cash and bank balances are regarded as the liquid current assets in general practice.

(Cash and bank balance to current assets ratio is calculated by dividing cash and bank balance by current assets.)

Table 4.2
Cash and bank balance to current assets ratio (%)

(Rs. In Million)

Fiscal Year	Bank Name	Cash & Bank Balance	Current Assets	Ratios (%)	Average	S.D.	C.V
2007/08	NABIL Bank	1399.83	1963.36	71.30	59.67	18.93	31.73
2008/09		2671.14	4623.50	57.77			
2009/10		3372.51	3925.40	85.92			
2010/11		1400.10	4815.24	29.08			
2011/12		2436.55	4489.06	54.28			
2007/08	NCC Bank	758.15	833.81	90.93	91.82	3.47	3.78
2008/09		1477.82	1632.22	90.54			
2009/10		1187.00	1373.39	86.43			
2010/11		2196.35	2296.29	95.65			
2011/12		1735.87	1816.16	95.58			
2007/08	Siddhartha Bank	517.23	746.67	69.27	66.81	12.54	18.77
2008/09		437.43	1022.16	42.79			
2009/10		1547.68	2032.53	76.15			
2010/11		2406.61	3105.65	77.49			
2011/12		1905.68	2788.47	68.34			

Source: Annual Reports of the concern banks of fiscal year 2007/08 to 2011/12.

Table 4.2 shows that the cash and bank balance to current assets of three sample banks. Nabil bank has maintained highest ratio 85.92% in FY 2009/10 and the lowest ratio 2010/11 in FY 2010/11. The ratio increases up to 54.28% at the FY 2011/12, which shows that it is in good trend. The average, standard deviation and coefficient of variation are 59.67%, 18.93% and 31.73% respectively.

The NCCBL has ranged between 90.93% in FY 2007/08 to 95.58% in FY 2011/12. The cash and bank balance to current assets of the bank showed fluctuating trend. The average, standard deviation and coefficient of variation of the bank are 91.82%, 18.93% and 31.73% respectively.

Likewise, Siddhartha Bank has fluctuation in its ratio. It was 69.27 in FY 2007/08 which drastically came down to 42.79% and again increases to 76.15% and 77.49% in FY 2009/10 and 2010/11 but then again decreases to 66.34% of total cash and bank balance to total current assets. The average, standard deviation and coefficient of variation of the bank are 66.81%, 12.54% and 18.77% respectively.

Comparing the cash and bank balance to current assets, NCCBL has mobilized higher ratio of cash and bank balance to current assets than that of Nabil Bank and Siddhartha Bank. NCCBL has mean ratio of 91.82%, that of Nabil has 59.67%, and Siddhartha has 66.81. C.V of NCC bank is 3.78%, which is less than that of Nabil i.e. 31.73% & Siddhartha Bank i.e. 18.77%.

Figure 4.2- Cash and bank balance to current assets ratio

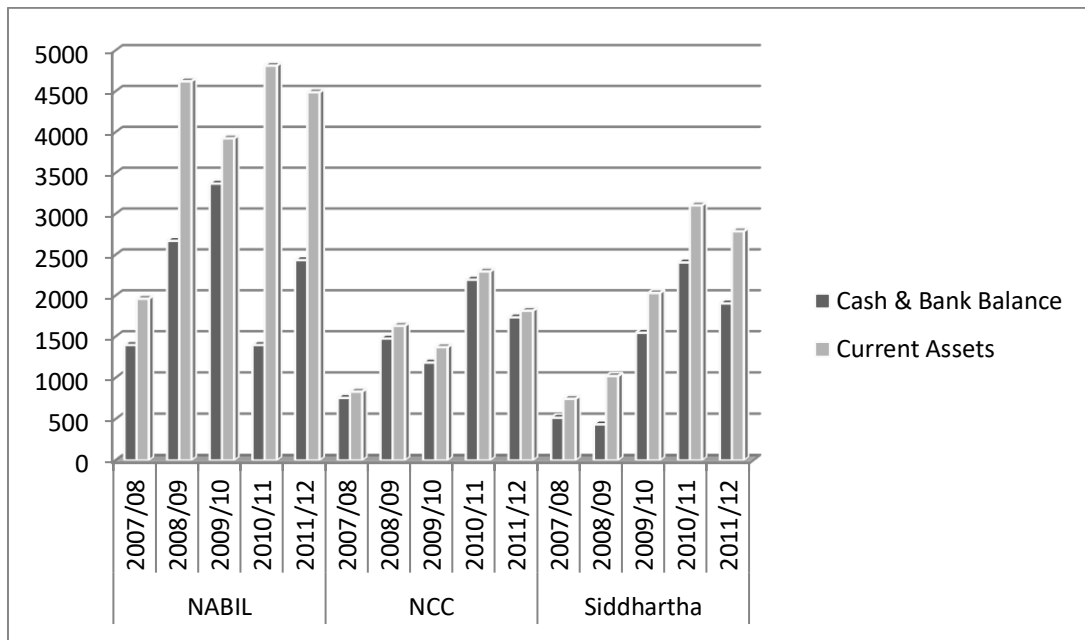


Figure 4.2 shows that the cash and bank balance to current assets ratio is not satisfactory level in Siddhartha Bank and NABIL Bank than that of NCC Bank Limited. High ratio is the indicator of sound liquidity position of the bank. Therefore, the Siddhartha Bank and Nabil Bank should maintain adequate cash and bank balance to meet the unexpected as well as heavy withdrawal of the deposits.

3. Cash and bank balance to total deposit ratio:

This ratio understands for idle money kept in order to meet the daily requirements of the bank. This is the portion of the idle money with the bank collected from different sources on different accounts, which are not used to generate credit.

[Cash and bank balance to total deposit ratio is calculated by dividing cash and bank balance by total deposit.]

Table 4.3**Cash and bank balance to total deposit ratio (%)***(Rs. In Million)*

Fiscal Year	Bank Name	Cash & Bank Balance	Total Deposit	Ratios (%)	Average	S.D.	C.V
2007/08	NABIL Bank	1399.83	23342.29	6.00	6.26	2.22	35.38
2008/09		2671.14	31915.05	8.37			
2009/10		3372.51	37348.26	9.03			
2010/11		1400.10	46410.70	3.02			
2011/12		2436.55	49696.11	4.90			
2007/08	NCC Bank	758.15	6500.30	11.66	15.09	2.94	19.50
2008/09		1477.82	7302.23	20.24			
2009/10		1186.99	9127.74	13.00			
2010/11		1356.10	9216.50	14.71			
2011/12		1735.87	10951.43	15.85			
2007/08	Siddhartha Bank	517.23	6625.08	7.81	8.52	2.51	29.50
2008/09		437.43	10191.44	4.29			
2009/10		1547.68	15854.80	9.76			
2010/11		2406.61	20197.03	11.92			
2011/12		1905.68	21575.65	8.83			

Source: Annual Reports of the concern banks of fiscal year 2007/08 to 2011/12.

Table 4.3 shows the amount of cash and bank balance to total deposit ratio of Nabil bank ranged between 6% (FY 2007/08) to 9.03% (FY 2009/10), the ratio has shown the increasing trend. The analysis shows that the trend of cash and bank balance to total deposit ratio starts to decline from FY 2010/11 i.e. 3.02% and 4.09% in FY 2011/12, which is not good symptoms as compared to previous data. The mean is 6.25% whereas the standard deviation and coefficient of variation are 2.22% and 33.38% respectively.

Likewise, Nabil Bank is in increasing trend from FY 2007/08 to FY2008/09 but it has decreased during FY 2009/10. The mean ratio of NCCBL is 15.09%. The S.D is 2.94% and C.V is 24.50%. It has the highest ratio of cash and bank

balance in FY 2008/09 of 20.24%. In the recent FY 2011/12, it has been shifted to 15.85% slightly lower comparing to the previous year.

Similarly, Siddhartha Bank has more or less showed fluctuating trend throughout the period. On the basis of above analysis, it can be concluded that the cash and bank balance to total deposit ratio on FY 2007/08, 2008/09 and 2009/10 are not so good than that of in FY 2010/11. It means that from the liquidity point of view, Siddhartha Bank has maintained the ratio by 11.92% in FY 2010/11, which finally decline to 8.83% in FY 2011/12.

It is clear from Table 4.3 that NCCBL has maintained more cash and bank balance to total deposit than that of Nabil Bank & Siddhartha Bank. It shows that C.V of Nabil Bank is 35.38% and Siddhartha Bank is 29.50%, which is higher than NCCBL i.e. 19.50%. Since NCCBL has lower ratio of C.V it indicates more consistency in this regard. NCCBL seems stronger than Nabil Bank & Siddhartha Bank to maintain the liquidity position.

Figure 4.3- Cash and bank balance to total deposit ratio

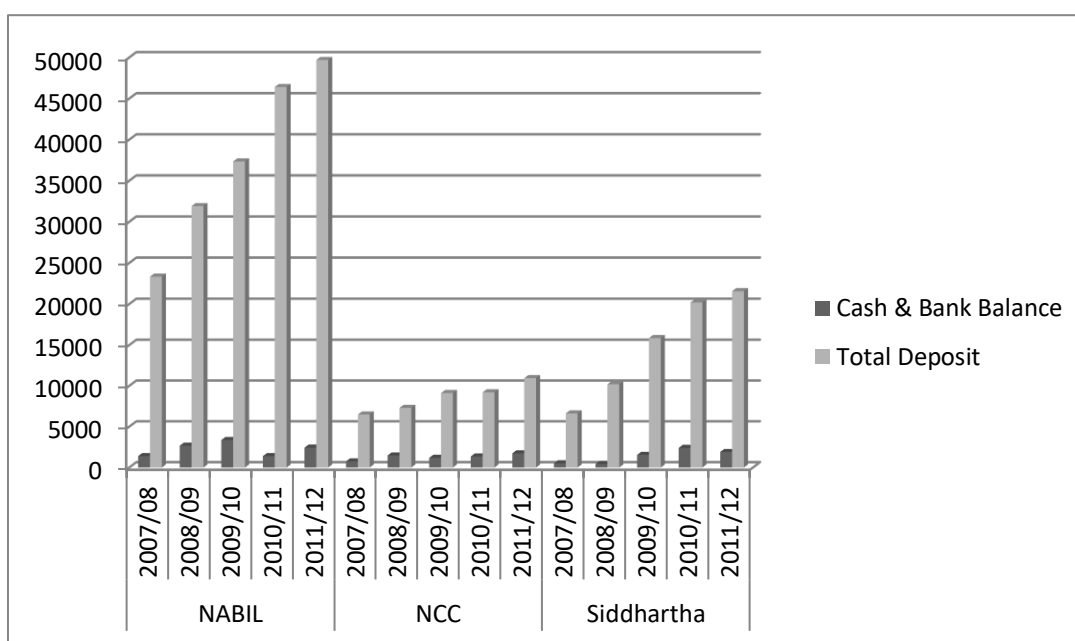


Figure 4.3 shows that the cash and bank balance to current assets ratio is not satisfactory level in Siddhartha Bank and NABIL Bank than that of NCC Bank Limited. However, from the credit point of view, the find remains idle as cash and bank balance showed the lesser efficiency of NCCBL in utilizing money

for investment purposes. Therefore, too much or too less cash and bank balance is not favorable for the bank to survive.

4. Fixed deposit to total deposit ratio:

The amount deposited for a fixed period is called fixed or time deposit. As the name implies, the amount deposited cannot be withdrawn before the fixed period. Fixed deposit accounts are one of the major sources of long-term financial investment. However, the interest rate is higher than offered by the bank. Since, the bank can utilize the money for a fixed period high interest is offered in this account.

[Fixed deposit to total deposit ratio is calculated by fixed deposit by total deposit.]

Table 4.4
Fixed deposit to total deposit ratio (%)

(Rs. In Million)

Fiscal Year	Bank Name	Fixed Deposit	Total Deposit	Ratios (%)	Average	S.D.	C.V
2007/08	NABIL Bank	5435.20	23342.29	23.28	27.53	4.58	16.62
2008/09		8464.09	31915.05	26.52			
2009/10		8310.71	37348.26	22.25			
2010/11		14711.16	46410.70	31.70			
2011/12		16840.83	49696.11	33.89			
2007/08	NCC Bank	1736.58	6500.30	26.72	19.10	8.27	43.28
2008/09		508.48	7302.23	6.96			
2009/10		1145.54	9127.74	12.55			
2010/11		1902.26	9216.50	20.64			
2011/12		3137.78	10951.43	28.65			
2007/08	Siddhartha Bank	3022.56	6625.08	45.62	47.83	3.36	7.02
2008/09		4562.72	10191.44	44.77			
2009/10		7158.20	15854.80	45.15			
2010/11		10195.73	20197.03	50.48			
2011/12		11458.27	21575.65	53.11			

Source: Annual Reports of the concern banks of fiscal year 2007/08 to 2011/12.

Table 4.4 shows the amount of fixed deposits out of total deposit. This table is analyzed the short term obligation capacity of three banks. NRB has directed all the commercial banks to maintain certain percentage of fixed deposit out of total deposits balance. Due to the changes in directives from time to time it seems fluctuating to maintain the liquidity position of the selected banks. From the above table it has found that Nabil Bank has maintained average 16.62% as fixed deposits balance out of its total deposit. It has fluctuating trend of liquidity position. It has maintained highest ratio of 33.89% in the FY 2011/12 and lowest ratio of 22.25% in the FY 2009/10. The S.D of Nabil Bank is 4.58% and C.V is 16.62%.

The fixed deposits to total deposits ratio of NCCBL has ranged between 6.96% (FY 2008/09) to 28.65% (FY 2011/12). The average ratio has more or less

showed fluctuating trend through the periods. The higher ratio is maintained in the recent FY 2011/12 in comparison to other ratios. The average ratio, standard deviation and C.V of the ratio of fixed deposit to total deposits are 19.10, 8.27% and 43.28% respectively.

Siddhartha Bank has maintained an average ratio of 47.83% as fixed deposits balance out of its total deposits balance. It also has fluctuating trend of liquidity position. It has maintained highest ratio of 53.11% in the FY 2011/12 and lowest ratio of 44.77% in the FY 2008/09. The S.D of SBL is 3.36 and C.V is 7.02%.

The relationship between these ratios can be shown in the diagram as presented in the figure 4.4.

Figure 4.4- Fixed deposit to total deposit ratio

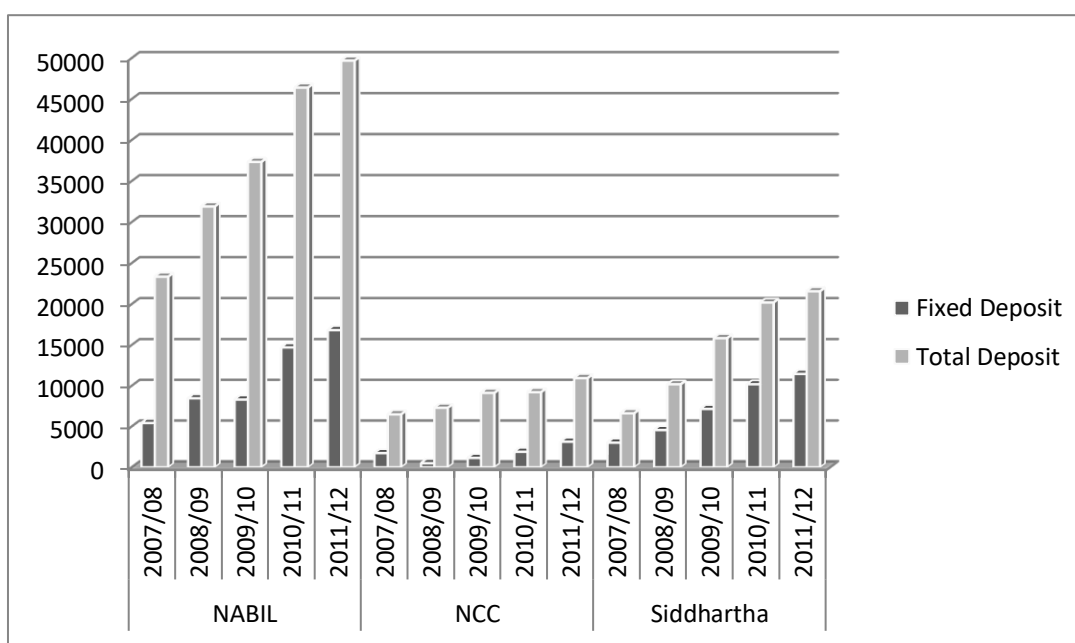


Figure 4.4 shows that fixed deposits to total deposits ratio in FY 2010/11 and FY 2011/12 are mostly greater comparing to FY 2007/08 to FY 2009/10 in Siddhartha Bank and NABIL Bank than that of NCC Bank Limited. It seems that the bank is maintaining more funds than required.

5. Saving deposit to total deposit ratio:

Saving deposit is one of many source of short-term financial requirement of the bank on which fixed rate of interest is charged.

[Saving deposit to total deposit ratio is calculated by dividing saving deposit by total deposit.]

Table 4.5
Saving deposit to total deposit ratio (%)

(Rs. In Million)

Fiscal Year	Bank Name	Saving Deposit	Total Deposit	Ratios (%)	Average	S.D.	C.V
2007/08	NABIL Bank	10187.35	23342.29	43.64	35.87	5.74	16.01
2008/09		12159.97	31915.05	38.10			
2009/10		14620.41	37348.26	39.15			
2010/11		13783.59	46410.70	29.70			
2011/12		14288.52	49696.11	28.75			
2007/08	NCC Bank	3317.31	6500.30	51.03	52.73	7.17	13.59
2008/09		4557.29	7302.23	62.41			
2009/10		5448.55	9127.75	59.69			
2010/11		4932.28	10824.69	45.57			
2011/12		4923.80	10951.43	44.96			
2007/08	Siddhartha Bank	1881.66	6625.08	28.40	21.04	5.62	26.68
2008/09		2622.24	10191.44	25.73			
2009/10		3445.69	15854.80	21.73			
2010/11		2961.26	20197.03	14.66			
2011/12		3169.66	21575.65	14.69			

Source: Annual Reports of the concern banks of fiscal year 2007/08 to 2011/12.

Table 4.5 shows the amount of saving deposits out of total deposit. NRB has directed all the commercial banks to maintain certain percentage of saving deposit out of total deposits balance. Due to the changes in directives from time to time, it seems fluctuating to maintain the liquidity position of the selected banks. From the above table it has found that Nabil Bank has maintained average 16.01% as fixed deposits balance out of its total deposit. It has fluctuating trend of liquidity position. It has maintained highest ratio of

39.15% in the FY 2009/10 and lowest ratio of 28.75% in the FY 2011/12. The S.D of Nabil Bank is 5.74% and C.V is 16.01%.

The fixed deposits to total deposits ratio of NCCBL has ranged between 44.96% (FY 2011/12) to 62.41% (FY 2008/09). The average ratio has more or less showed fluctuating trend through the periods. The lowest ratio is maintained in the recent FY 2011/12 in comparison to other ratios. The average ratio, standard deviation and C.V of the ratio of fixed deposit to total deposits are 52.73%, 7.17% and 13.59% respectively.

Siddhartha Bank has maintained an average ratio of 21.04% as saving deposits balance out of its total balance. It also has fluctuating trend of liquidity position. It has maintained highest ratio of 28.40% in the FY 2007/08 and lowest ratio of 16.66% in the FY 2010/11. The S.D of SBL is 5.62 and C.V is 26.68%.

It is clear from the above table that the selected banks have followed the NRB requirement. The mean ratio of NCC Bank is higher than that of Nabil Bank & Siddhartha. It indicates that NCC Bank has maintained more liquidity in NRB balance than that of Nabil Bank and Siddhartha Bank. NCC Bank has more consistency and uniformity to maintain liquidity position as it has lower ratio of C.V. i.e. 13.59%.

Figure 4.5- Saving deposit to total deposit ratio

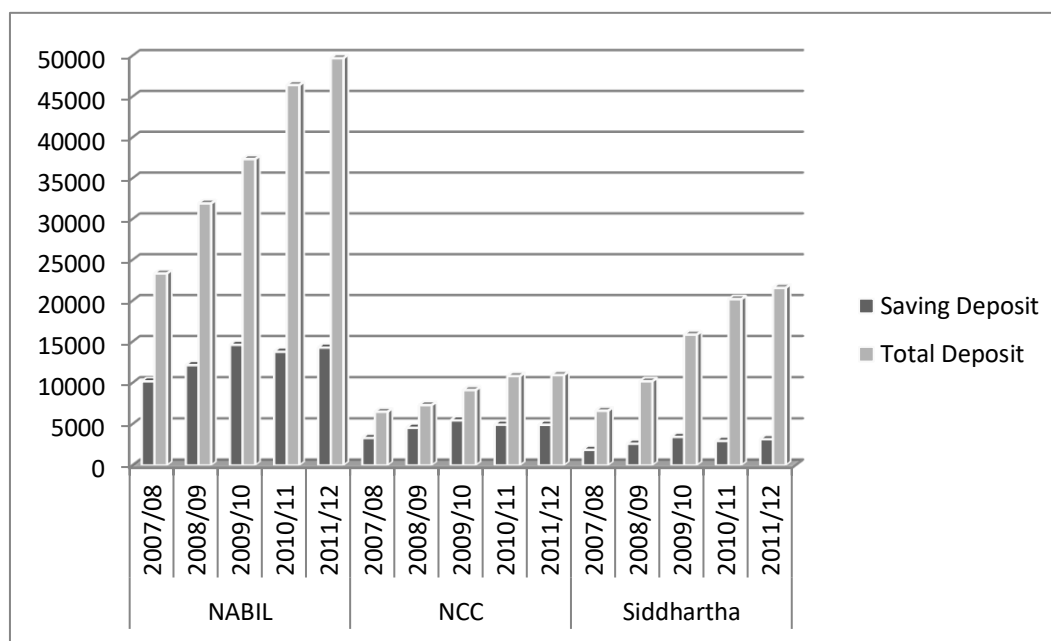


Figure 4.5 shows that saving deposits to total deposits ratio in FY 2010/11 and FY 2011/12 are mostly fluctuating when compared in FY 2007/08, FY 2008/09 and FY 2009/10 in Siddhartha Bank and NABIL Bank than that of NCC Bank Limited. It seems that higher the ratio of saving deposit with respect to total deposit causes lower liquidity position.

6. Loan and advances to current assets ratio:

The bank provides the loans and advances to individuals and institutions for various purposes. The bank charges interest on full amount of the loan. The loan can be provided against the export bills are called advances. This ratio is the relationship between loan and advances with current assets.

[Loan and advances to current assets ratio is calculated by dividing loan and advances by current assets.]

Table 4.6**Loan and advances to current assets ratio (times)***(Rs. In Million)*

Fiscal Year	Bank Name	Loan and Advances	Current Assets	Ratios (Times)	Average	S.D.	C.V
2007/08	NABIL Bank	15545.78	1963.36	7.92	6.95	1.32	19.04
2008/09		21365.05	4623.50	4.62			
2009/10		27589.93	3925.40	7.03			
2010/11		32268.87	4815.24	6.70			
2011/12		38034.10	4489.06	8.47			
2007/08	NCC Bank	4417.85	833.81	5.30	4.78	0.87	18.22
2008/09		5083.90	1632.22	3.11			
2009/10		6858.19	1373.39	4.99			
2010/11		7994.72	1424.40	5.61			
2011/12		8835.19	1816.16	4.86			
2007/08	Siddhartha Bank	6222.59	746.67	8.33	7.00	1.64	23.44
2008/09		9335.60	1022.16	9.13			
2009/10		13328.62	2032.53	6.56			
2010/11		13653.85	3105.65	4.40			
2011/12		18384.03	2788.47	6.59			

Source: Annual Reports of the concern banks of fiscal year 2007/08 to 2011/12.

Table 4.6 shows the amount of loan and advances to current assets and respective ratios of the banks. Nabil Bank has maintained average 6.95 times as loan and advances to current assets. It has fluctuating trend of liquidity position. It has maintained highest ratio of 8.47 times in the FY 2011/12 and lowest ratio of 4.62 times in the FY 2008/09. The S.D of Nabil Bank is 1.32 times and C.V is 19.04%.

The loan and advances to current assets ratio of NCCBL has ranged between 3.11 times (FY 2008/09) to 5.62 times (FY 2010/11), the ratio has more or less increasing trend through the study periods. The average ratio, standard ratio and C.V ratio of the loan and advances to current assets are 4.78 times, 0.87 times and 18.22% respectively.

Siddhartha Bank has maintained an average ratio of 7 times as loan and advances out of current assets. It also has fluctuating trend of liquidity position. It has maintained highest ratio of 9.13 times in the FY 2008/09 and lowest ratio of 4.40 times in the FY 2010/11. The S.D of SBL is 1.64 times and C.V is 23.44%.

Figure 4.6- Loan and advances to current assets ratio

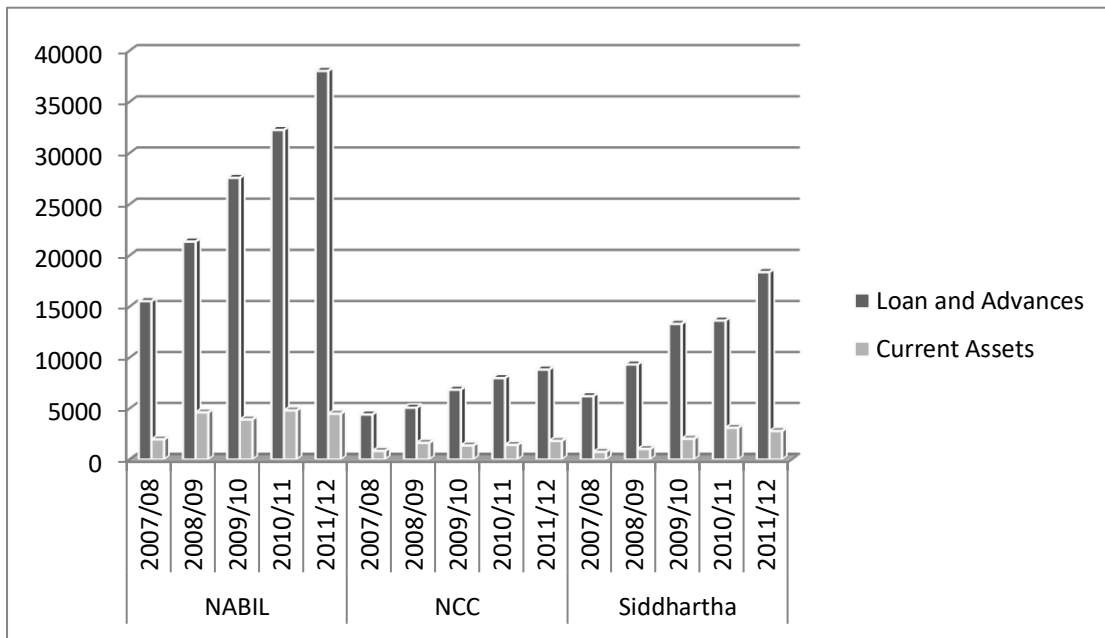


Figure 4.6 shows that loan and advances to current assets ratio are mostly fluctuating throughout the entire sample periods i.e. FY 2007/08 to FY 2011/12 in Siddhartha Bank and NABIL Bank than that of NCC Bank Limited. It seems that higher the ratio of loan and advances with respect to current assets generates the income for the banks.

4.1.1.2 Activity Ratios

Activity ratios are used in order to evaluate the efficiency of the bank in maintaining and utilizing its assets. Activity ratios are also known as turnover ratios or assets utilization ratios. This ratio establishes a relationship between quick assets and current liabilities. The ratio is computed to test the ability of the bank for immediate payment of current liabilities. The greater rate of turnover or conversion denotes better efficiency in utilization of available assets. The efficiency of the bank depends on how the assets are managed and utilized greater the turnover, higher the efficient management of the company and vice-versa.

1. Loan and advance to saving deposit ratio:

Loan and advances to saving deposit ratio is calculated in order to know how many times loans and advances have been made from saving deposit.

[Loan and advances to saving deposit ratio is calculated by dividing loans and advances with saving deposit of sample banks.]

Table 4.7**Loan and advance to saving deposit ratio (Times)***(Rs. In Million)*

Fiscal Year	Bank Name	Loan and Advances	Saving Deposit	Ratios (Times)	Average	S.D.	C.V
2007/08	NABIL Bank	15545.78	10187.35	1.53	2.03	0.41	20.20
2008/09		21365.05	12159.97	1.76			
2009/10		27589.93	14620.41	1.89			
2010/11		32268.87	13783.59	2.34			
2011/12		38034.10	14288.52	2.66			
2007/08	NCC Bank	4417.85	3317.31	1.33	1.41	0.23	16.29
2008/09		5083.90	4557.29	1.12			
2009/10		6858.19	5448.55	1.26			
2010/11		7994.72	4933.28	1.62			
2011/12		8535.19	4923.84	1.73			
2007/08	Siddhartha Bank	6222.59	1881.66	3.31	4.23	0.90	21.24
2008/09		9335.60	2622.24	3.56			
2009/10		13328.62	3445.69	3.87			
2010/11		13653.85	2961.26	4.61			
2011/12		18384.03	3169.66	5.80			

Source: Annual Reports of the concern banks of fiscal year 2007/08 to 2011/12.

Table 4.7 shows that Nabil Bank has an average mean ratio of 2.03 times. During 5 years of period the highest investment of Nabil Bank in loan and advances is 2.66 times in FY 2011/12 and lowest ratio is 1.53 times in the FY 2007/08. S.D of this bank is 0.41 and C.V is 20.20%.

NCCBL has an average mean ratio of 1.41 times. It has highest ratio of Loan and advances is in the FY 2011/12 i.e. 1.73 times and lowest ratio of 1.12 times in the FY 2008/09. S.D of the concern bank is 0.23 and C.V is 16.29%.

Siddhartha Bank has an average mean ratio of 4.23 times. It has highest ratio of Loan and advances is in the FY 2011/12 i.e. 5.80 times and lowest ratio of 3.31 times in the FY 2008/09. S.D of the concern bank is 0.90 times and C.V is 21.24%. Higher growth rate of loans and advances compared to deposit mobilization contribution to increase in this ratio.

Figure 4.7- Loan and advance to saving deposit ratio

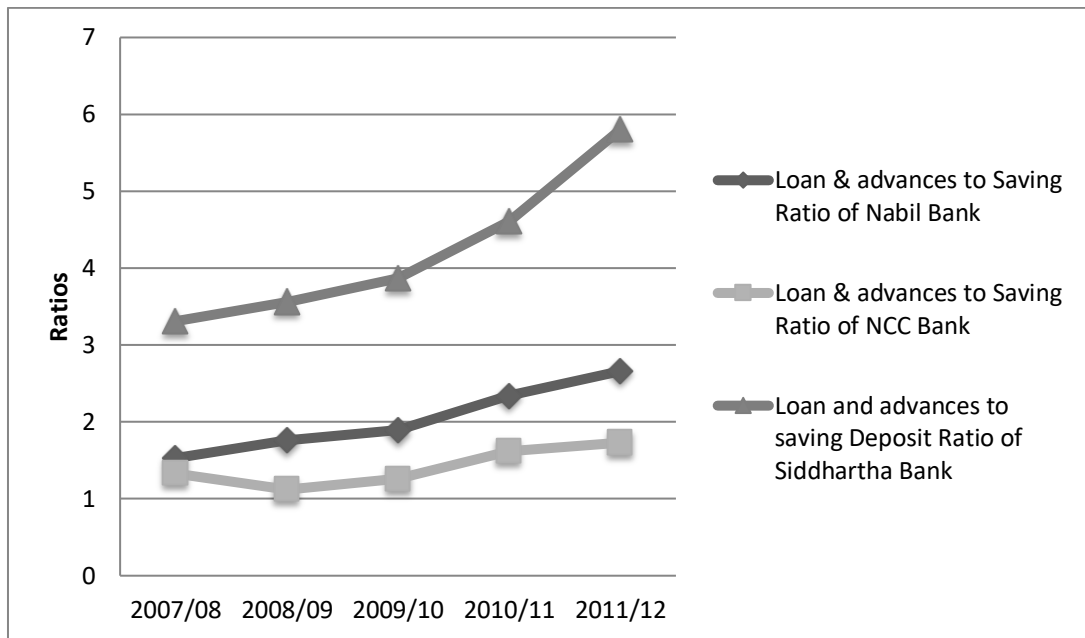


Figure 4.7 shows that Nabil Bank has invested more deposits in loan and advances than that of NCC Bank & Siddhartha Bank. It shows that C.V of Nabil Bank is 20.20% & Siddhartha Bank is 21.24% than that of NIBL is 16.29%. Since NIBL has lower ratio of C.V it indicates more consistency in this regard. NIBL seems stronger than Nabil Bank as well as Siddhartha Bank to advance loan to the market. From this, we can conclude that NIBL has accepted higher risk to survive in the market.

2. Loan and advances to fixed deposit ratio:

Loans and advances to fixed deposit ratio measure the extent to which the fixed deposits are utilized for the income generating purposes. It is the ratio, which indicates the relationship between the investments of bank earning interest at a certain rate. It can be said as the ratio of fixed returns generating investment and fixed cost bearing liabilities.

[Loan and advances to fixed deposit ratio is calculated by dividing loans and advances with fixed deposit.]

Table 4.8**Loan and advances to fixed deposit ratio (Times)***(Rs. In Million)*

Fiscal Year	Bank Name	Loan and Advances	Fixed Deposit	Ratios (Times)	Average	S.D.	C.V
2007/08	NABIL Bank	15545.78	5435.20	2.86	2.63	0.42	15.84
2008/09		21365.05	8464.09	2.52			
2009/10		27589.93	8310.71	3.32			
2010/11		32268.87	14711.16	2.19			
2011/12		38034.10	16840.83	2.26			
2007/08	NCC Bank	4417.85	1736.58	2.54	5.09	2.75	54.00
2008/09		5083.90	508.48	10.00			
2009/10		6858.19	1145.54	5.99			
2010/11		7994.72	1902.26	4.20			
2011/12		8535.19	3137.78	2.72			
2007/08	Siddhartha Bank	6222.59	3022.56	2.06	1.78	0.28	15.48
2008/09		9335.60	4562.72	2.05			
2009/10		13328.62	7158.20	1.86			
2010/11		13653.85	10195.73	1.34			
2011/12		18384.03	11458.27	1.60			

Source: Annual Reports of the concern banks of fiscal year 2007/08 to 2011/12.

Table 4.8 shows the amount of loan and advances to fixed deposit and respective loan and advances to fixed deposit ratio of the sample banks. The average loan and advances to fixed deposit ratio of Nabil Bank is 2.63 times. During 5 years of period the highest investment of Nabil Bank in loan and advances is 3.32 times in FY 2009/10 and lowest ratio is 2.19 times in the FY 2010/11. The S.D of this bank is 0.42 times and C.V is 15.84%.

The loan and advances to fixed deposit ratio of NCCBL has ranged between 2.54 times in FY 2007/08 to 10.00 in FY 2008/09. The ratio has increasing trend at the beginning of the periods but later the ratio goes on falling from FY 2009/10. The average ratio, standard deviation and C.V of the ratio of loan and advances to fixed deposit ratio are 5.09 times, 2.75 time and 54% respectively.

Siddhartha Bank has an average mean ratio of 1.78 times. It has highest ratio of Loan and advances with respect to fixed deposit ratio is 2.06 times in the FY 2007/08 and lowest ratio of 1.34 times in the FY 2010/11. The S.D of the concern bank is 0.28 times and C.V is 15.48%.

Figure 4.8 - Loan and advances to fixed deposit ratio Graphical

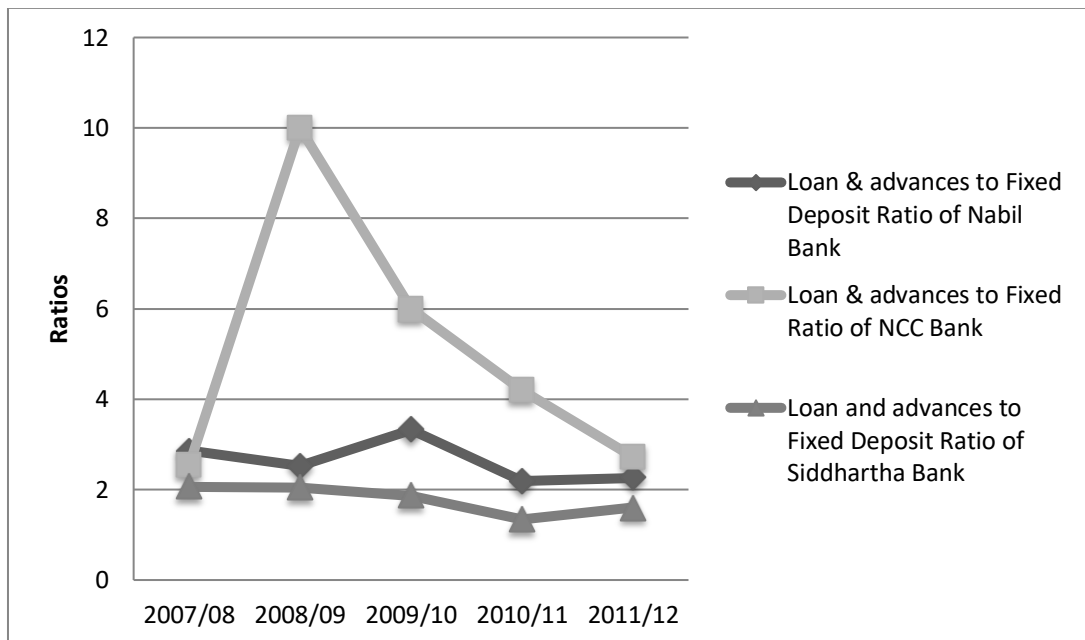


Figure 4.8 shows that NCC Bank has maintained more loan and advances compared to fixed deposit than that of Nabil Bank & Siddhartha Bank. But the Standard deviation of the Siddhartha Bank is lesser than other two banks. It has an impact on coefficient of variation. It shows that C.V of Nabil Bank is 15.84%, NCC Bank has maintained 54% & Siddhartha Bank is 15.48%. Since Siddhartha Bank has lower ratio of C.V it indicates more consistency in this regard. From this we can conclude that Siddhartha Bank is better off in terms of performance regarding advancement of loans and utilizing its fixed deposit for income generating purpose.

3. Loan and advances to total deposit ratio:

This ratio shows the relationship between loan and advances to total deposit. In another word, loan and advances to total deposit ratio measures the ability of the bank for the utilization of the total deposit made in the bank account.

[Loan and advances to total deposit ratio is calculated by dividing loans and advances with the total deposit.]

Table 4.9

Loan and advances to total deposit ratio (Times)

(Rs. In Million)

Fiscal Year	Bank Name	Loan and Advances	Total Deposit	Ratios (Times)	Average	S.D	C.V
2007/08	NABIL Bank	15545.78	23342.29	0.67	0.71	0.04	5.53
2008/09		21365.05	31915.05	0.67			
2009/10		27589.93	37348.26	0.74			
2010/11		32268.87	46410.70	0.70			
2011/12		38034.10	49696.11	0.77			
2007/08	NCC Bank	4417.85	6500.30	0.68	0.73	0.04	5.00
2008/09		5083.90	7302.23	0.70			
2009/10		6858.19	9127.74	0.75			
2010/11		7994.72	10824.69	0.74			
2011/12		8535.19	10951.43	0.78			
2007/08	Siddhartha Bank	6222.59	6625.08	0.94	0.84	0.09	10.92
2008/09		9335.60	10191.44	0.92			
2009/10		13328.62	15854.80	0.84			
2010/11		13653.85	20197.03	0.68			
2011/12		18384.03	21575.65	0.85			

Source: Annual Reports of the concern banks of fiscal year 2007/08 to 2011/12.

Table 4.9 shows the amount of loan and advances to total deposit ratio of the respective sample banks. The average loan and advances to fixed deposit ratio of Nabil Bank is 0.71 times. During 5 years of periods, the highest investment of Nabil Bank in loan and advances is 0.77 times in FY 2011/12 and lowest ratio is 0.67 times in the FY 2007/08 and FY 2008/09. The S.D of this bank is 0.04 times and C.V is 5.53%.

The loan and advances to total deposit ratio of NCCBL has ranged between 0.68 times in FY 2007/08 to 0.78 in FY 2011/12. The ratio has increasing trend at the beginning of the periods but later the ratio goes on falling from FY 2009/10. The average ratio, standard deviation and C.V of the ratio of loan and advances to fixed deposit ratio are 0.73 times, 0.04 times and 5% respectively.

Siddhartha Bank has an average mean ratio of 0.84 times. It has highest ratio of Loan and advances with respective to total deposit ratio is 0.94 times in the FY 2007/08 and lowest ratio of 0.68 times in the FY 2010/11. The S.D of the concern bank is 0.09 times and C.V is 10.92%.

Figure 4.9 - Loan and advances to total deposit ratio

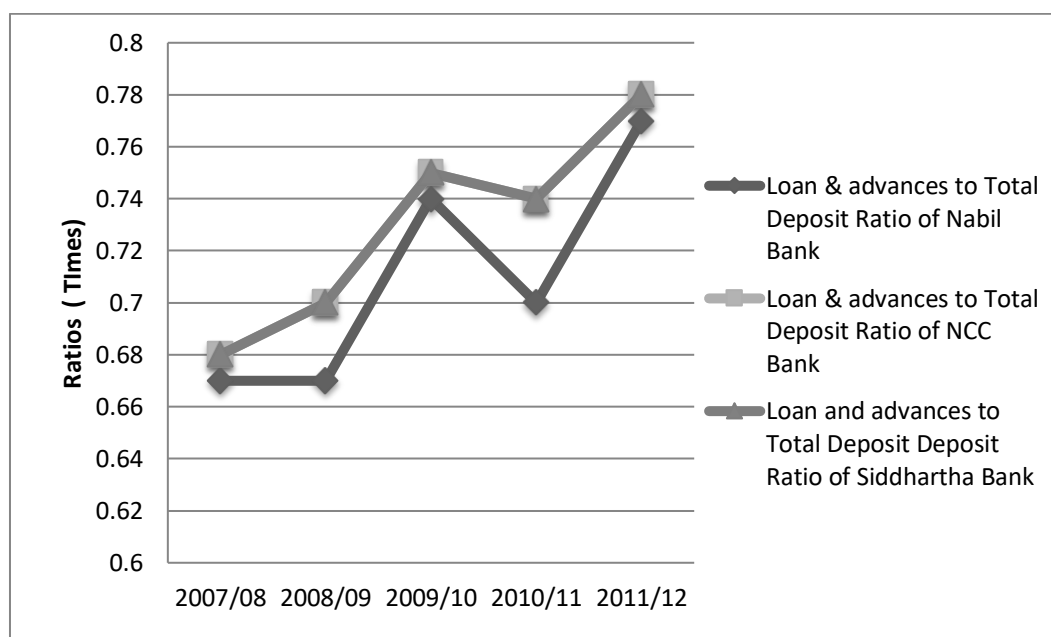


Figure 4.9 shows that Siddhartha Bank has maintained more loan and advances compared to total deposit than that of Nabil Bank & NCC Bank. But the Standard deviation of the NCC and Nabil Bank are lesser than Siddhartha

banks. It has an impact on coefficient of variation. It shows that C.V of Nabil Bank is 5%, NCC Bank has maintained 5.53% & Siddhartha Bank is 10.92%. Since NCC Bank has lower ratio of C.V it indicates more consistency in this regard. From this, we can conclude that Loan and Advances to total deposit ratios indicates higher ability to spend on investment sectors. Higher the ratio, higher would be return.

4. Investment to total deposit ratio:

Investment to total deposit ratio is the financial calculation made for the measurement of mobilization of total deposit on the investment.

[Investment to total deposit ratio is calculated by dividing investment with total deposit amount.]

Table 4.10
Investment to total deposit ratio (%)

(Rs. In Million)

Fiscal Year	Bank Name	Investment	Total Deposit	Ratios (%)	Average	S.D.	C.V
2007/08	NABIL Bank	8945.31	23342.29	38.32	30.86	4.04	13.09
2008/09		9939.77	31915.05	31.14			
2009/10		10826.38	37348.26	28.99			
2010/11		13703.02	46410.70	29.53			
2011/12		13081.21	49696.11	26.32			
2007/08	NCC Bank	1236.62	6500.3	19.02	19.84	3.15	15.88
2008/09		1900.78	7302.23	26.03			
2009/10		1583.10	9127.74	17.34			
2010/11		1947.67	10824.69	17.99			
2011/12		2061.35	10951.43	18.82			
2007/08	Siddhartha Bank	835.19	6625.08	12.61	12.30	0.83	6.77
2008/09		1150.10	10191.44	11.28			
2009/10		2176.43	15854.80	13.73			
2010/11		2452.48	20197.03	12.14			
2011/12		2537.91	21575.65	11.76			

Source: Annual Reports of the concern banks of fiscal year 2007/08 to 2011/12.

Table 4.10 shows that the ratio of Investment to total deposit ratio. Nabil Bank is in decreasing trend throughout the sample period. The mean ratio of Nabil Bank is 30.86%. The S.D is 4.04 and C.V is 13.09%. It has the highest ratio of investment of 38.32% in the FY 2007/08 and lowest ratio of investment of 26.32 in the FY 2011/12.

The mean ratio of NCCBL is only 19.84% and ratios are also in fluctuating trend during 5 years of period. It has the highest ratio of investment of 26.03% in the FY 2008/09 and lowest ratio of investment of 17.34% in the FY 2009/10. The Standard Deviation and C.V of the NCC bank are recorded as 3.15% and 15.18% respectively.

Similarly, Siddhartha Bank has an average mean ratio of 12.30%. It has highest ratio of investment to total deposit ratio is 13.73% in the FY 2009/10 and lowest ratio of 11.28% in the FY 2008/09. The S.D of the concern bank is 0.83% and C.V is 6.77%.

Figure 4.10 - Investment to total deposit ratio

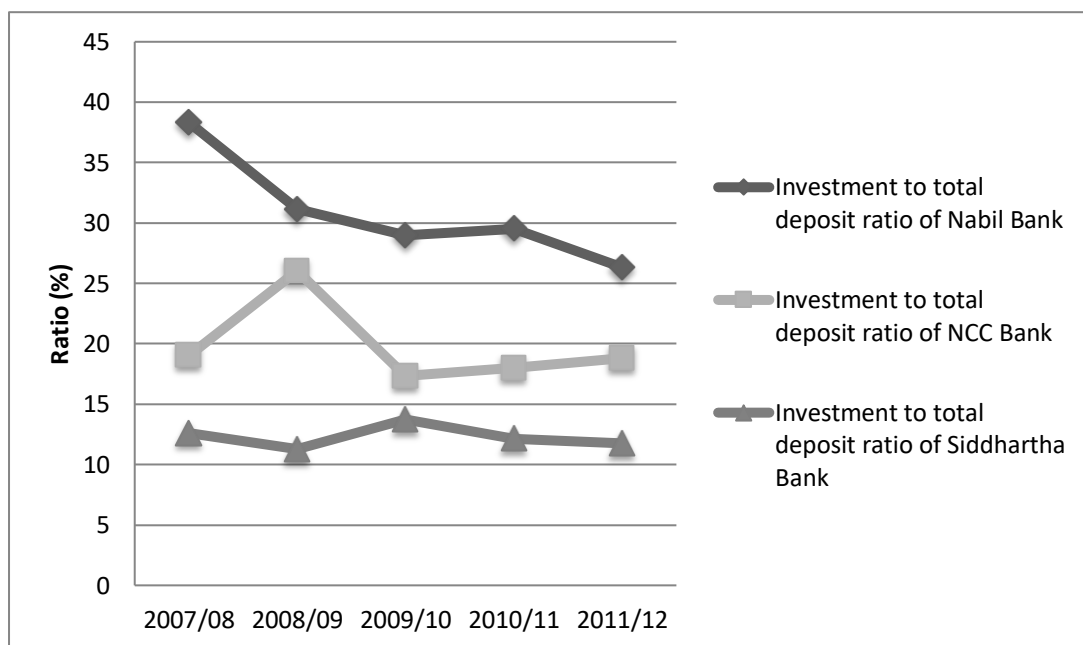


Figure 4.10 shows that Nabil Bank has higher mean ratio than that of NCCBL and Siddhartha Bank. C.V of Siddhartha Bank is lower than that of Nabil Bank and NCC Bank. This represents more consistency of investment procedure of Siddhartha Bank. It seems that Siddhartha Bank is more uniform

in investment procedure but on the other hand Nabil Bank has more investment alternative than that of Siddhartha bank as well as NCC Bank as it has higher mean ratio.

4.1.1.3. Profitability Ratios

In a simple word, the difference between the revenue earned and expenditure at a certain period of time interval can be defined as profit. The banks needs profit for the growth and survival in the competitive world. It measures the efficiency of a business in terms of profit. Profitability ratio can be measured in the following ways:

1. Interest earned to total assets ratio:

Generally, interest is one of the main sources of income for all the commercial banks. The financial position of the bank can be determined on the basis how far the bank able to earned the interest by utilizing the total assets. It also shows how efficiently and effectively banks are performing their activities.

[Interest earned to total assets ratio is calculated by dividing the amount of interest with the total assets.]

Table 4.11**Interest earned to total assets ratio (%)***(Rs. In Million)*

Fiscal Year	Bank Name	Interest Earned	Total Assets	Ratios (%)	Average	S.D.	C.V
2007/08	NABIL Bank	1587.76	27253.39	5.83	6.87	1.36	19.76
2008/09		1978.70	37132.76	5.30			
2009/10		2798.48	43867.40	6.38			
2010/11		4049.71	52151.68	7.77			
2011/12		5254.03	58141.44	9.04			
2007/08	NCC Bank	246.78	6036.67	4.09	7.31	1.96	26.78
2008/09		576.60	8241.33	7.00			
2009/10		758.36	10590.8	7.16			
2010/11		1042.24	12761.07	8.17			
2011/12		1342.87	13264.86	10.12			
2007/08	Siddhartha Bank	481.52	7954.66	6.05	7.85	1.87	23.78
2008/09		729.87	11668.36	6.26			
2009/10		1265.58	17881.75	7.08			
2010/11		2018.29	22802.43	8.85			
2011/12		2690.29	24405.87	11.02			

Source: Annual Reports of the concern banks of fiscal year 2007/08 to 2011/12.

Table 4.11 shows that the amount of interest earned to total assets and respective ratios of the bank in different periods. The interest earned to total assets ratio of Nabil Bank has ranged between 5.30% in FY 2008/09 to 9.04% in FY 2011/12, the ratio has more or less showed fluctuating trend throughout the periods. The average ratio, standard deviation and C.V of the ratio interest earned to total assets are 6.87%, 1.36% and 19.76% respectively.

The average mean ratio of NCCBL is 7.31%. Considering the data of the NCCBL, it has able to maintained 10.12% as highest ratio in FY 2011/12 whereas the lowest ratio was recorded at 4.09% in FY 2007/08. The standard deviation and C.V are 1.96% and 26.78% respectively.

Siddhartha Bank has maintained an average ratio of 7.85% as interest earned to total assets. It also has increasing trend throughout the periods. It has maintained highest ratio of 11.02% in the FY 2011/12 and lowest ratio of 6.05% in the FY 2007/08. The S.D of SBL is 1.87% and C.V is 23.78% respectively.

Figure 4.11 – Interest earned to total assets ratio

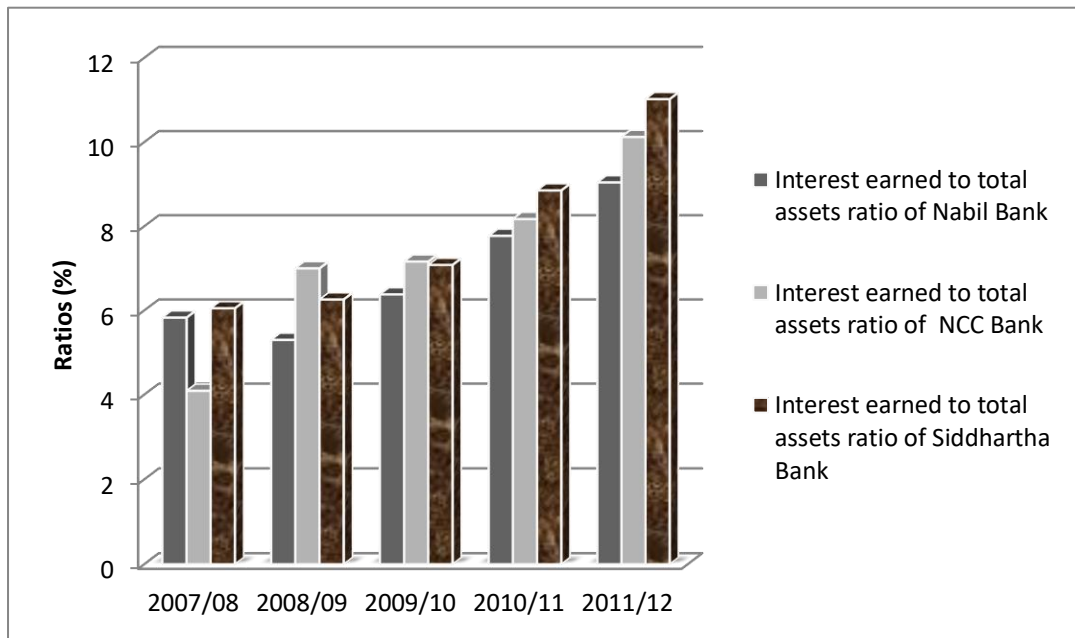


Figure 4.11 shows that Siddhartha Bank has maintained more interest collection from its total assets as compared with Nabil Bank & Siddhartha Bank. However, the Standard deviation of the Nabil Bank is lesser than other two banks. It has an impact on coefficient of variation. It shows that C.V of Nabil Bank is 19.76%, whereas NCC Bank has maintained 26.78% & Siddhartha Bank is 23.78%. Since Siddhartha Bank has lower ratio of C.V it indicates more consistency in this regard. From this we can conclude that NCCBL and Nabil Banks has not more efficiently utilized its total assets for interest earning purpose because the average ratios are lesser as compared to Siddhartha Bank.

2. Interest paid to total assets ratio:

Interest on deposits form the most important expenses of the bank. Another important interest expenses is the interest owed on short-term borrowings in the money market, mainly borrowings of federal funds from other banks and borrowings backed by security repurchase agreements. This is such type of the cost of the bank that can never be avoided. After accepting deposits, the bank must pay interest on deposits according to the existing rules and bank's commitment made at the time of accepting deposits. Large amount of bank earning is utilized in paying interest to the deposit accepted by the bank under various accounts. Like interest earned, bank's profitability also depends upon interest paid. That is the type of the cost of a bank, which can never be avoided.

[Interest paid to total assets ratio is calculated by dividing interest paid by total assets.]

Table 4.12
Interest paid to total assets ratio (%)

(Rs. In Million)

Fiscal Year	Bank Name	Interest Paid	Total Assets	Ratios (%)	Average	S.D.	C.V
2007/08	NABIL Bank	555.71	27253.39	2.04	3.11	1.17	37.58
2008/09		758.44	37132.76	2.04			
2009/10		1153.28	43867.40	2.63			
2010/11		1960.11	52151.68	3.76			
2011/12		2955.43	58141.44	5.08			
2007/08	NCC Bank	315.80	6036.67	5.23	4.61	1.22	26.45
2008/09		278.72	8241.33	3.38			
2009/10		352.05	10590.8	3.32			
2010/11		580.17	12761.07	4.55			
2011/12		873.28	13264.86	6.58			
2007/08	Siddhartha Bank	271.71	7954.66	3.42	5.10	1.71	33.50
2008/09		408.19	11668.36	3.50			
2009/10		813.62	17881.75	4.55			
2010/11		1406.49	22802.43	6.17			
2011/12		1925.24	24405.87	7.89			

Source: Annual Reports of the concern banks of fiscal year 2007/08 to 2011/12.

Table 4.12 shows the amount of interest paid to total assets and respective ratios of the bank for different periods. The interest earned to total assets ratio of Nabil Bank has ranged between 2.04% in FY 2007/08 to 5.08% in FY 2011/12, the ratio has more or less showed fluctuating trend throughout the periods. The average ratio, standard deviation and C.V of the ratio interest earned to total assets are 3.11%, 1.17% and 37.58% respectively.

The interest paid to total assets of NCCBL has ranged between 3.32% (FY 2009/10) to 6.58% (FY 2011/12), the ratios has more or less showed fluctuating trend throughout the periods. The average ratios, standard deviation and C.V ratio of Interest paid to total assets are 4.61%, 1.22% and 26.45% respectively.

Siddhartha Bank has maintained an average ratio of 5.10% as interest earned to total assets. It also has increasing trend throughout the periods. It has maintained highest ratio of 7.89% in the FY 2011/12 and lowest ratio of 3.42% in the FY 2007/08. The S.D of SBL is 1.71% and C.V is 33.50% respectively.

Figure 4.12 – Interest paid to total assets ratio

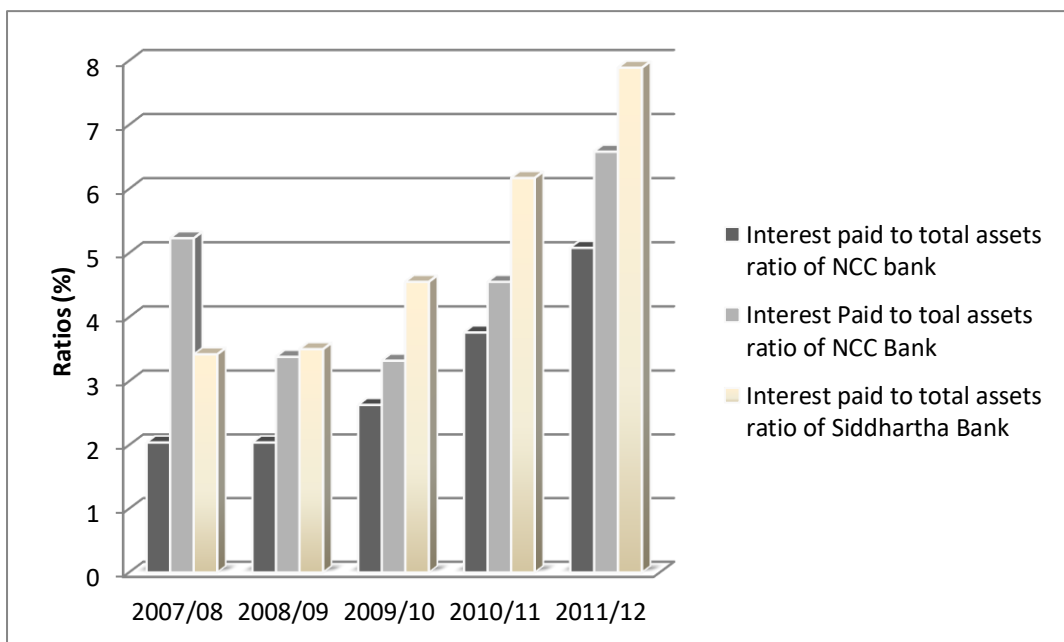


Figure 4.12 shows that Siddhartha Bank has maintained more interest payment from its total assets as compared with Nabil Bank & NCC Bank. However, the Standard deviation of the Nabil Bank is lesser than other two

banks. It has an impact on coefficient of variation. It shows that C.V of Nabil Bank is 37.58%, whereas NCC Bank has maintained 26.45% & Siddhartha Bank is 33.50%. Since NCC Bank has lower ratio of C.V it indicates more consistency in this regard. From this we can conclude that Interest paid is always compared with the interest earnings to arrive at the conclusion of the bank. Thus, in case of NCCBL in FY 2007/08, FY2008/09 and FY 2009/10 seems less efficient than in FY 2010/11 to 2011/12 because in the earlier three fiscal year the interest earning of NCCBL is higher than in two fiscal years' even though interest paid is high.

3. Return on total assets ratio:

Return on total assets (ROA) is defined as the ratio of bank's net after tax income divided by its total assets. ROA is primarily an indicator of managerial efficiency. It indicates how competently the management has been converting the assets into net earnings. The return on total assets ratio, therefore, points out how successfully a bank has utilized its total assets.

[Return on total assets ratio is calculated by dividing net profit after tax (loss) by total assets.]

Table 4.13**Return on total assets ratio (%)***(Rs. In Million)*

Fiscal Year	Bank Name	Net Profit (Loss)	Total Assets	Ratios (%)	Average	S.D.	C.V
2007/08	NABIL Bank	673.96	27253.39	2.47	2.26	0.16	6.92
2008/09		746.47	37132.76	2.01			
2009/10		1031.05	43867.40	2.35			
2010/11		1141.05	52151.68	2.19			
2011/12		1337.75	58141.44	2.30			
2007/08	NCC Bank	-115.92	6036.67	-1.92	2.61	2.66	102.15
2008/09		498.75	8241.33	6.05			
2009/10		415.46	10590.8	3.92			
2010/11		423.77	12761.07	3.32			
2011/12		220.88	13264.86	1.67			
2007/08	Siddhartha Bank	95.31	7954.66	1.20	1.20	0.07	6.19
2008/09		143.17	11668.36	1.23			
2009/10		217.92	17881.75	1.22			
2010/11		240.85	22802.43	1.06			
2011/12		311.41	24405.87	1.28			

Source: Annual Reports of the concern banks of fiscal year 2007/08 to 2011/12.

Table 4.13 shows the amount of net profit (loss) to total assets and respective ratios of the bank for different periods. . The return on total assets ratio of Nabil Bank has ranged between 2.01% in FY 2008/09 to 2.47% in FY 2007/08, the ratio has more or less showed fluctuating trend throughout the periods. The average ratio, standard deviation and C.V of the ratio return to total assets are 2.26%, 0.16% and 6.92% respectively.

The net profit (loss) to total assets ratio of NCCBL has ranged between -1.92% (FY 2007/08) to 6.05% (FY 2008/09), the ratio is more or less fluctuating trend throughout the periods. The average ratio, standard deviation and C.V of ratio of profit (loss) to total assets are 2.61%, 2.66% and 102.15% respectively.

Siddhartha Bank has maintained an average ratio of 1.20% as return to total assets. It also has increasing trend throughout the periods has maintained highest ratio of 1.28% in the FY 2011/12 and lowest ratio of 1.06% in the FY 2010/11. The S.D of SBL is 0.07% and C.V is 6.19% respectively.

Figure 4.13 – Return on Total Assets Ratio

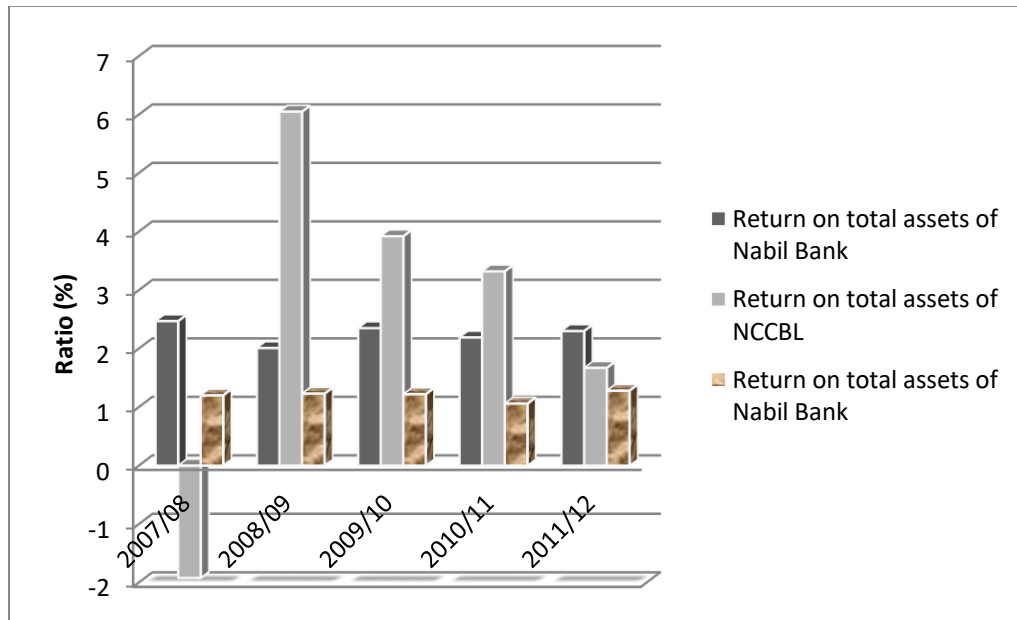


Figure 4.13 shows that NCC Bank has maintained more return on assets (ROA) as compared with Nabil Bank & Siddhartha Bank. The mean ratio was considerably higher in NCC Bank than that of Siddhartha Bank and Nabil Bank, which signifies that the profitability position of NCC Bank in the relation to this ratio is better than other two banks. If bank earns high profit, it will ensure its goodwill in the competitive market at it can give attractive bonus and dividend to staffs and shareholders respectively. From the above analysis, profitability of NCC Bank is better than Siddhartha Bank and Nabil Bank and whole credit goes to good management of banking sectors. CV of the ratio was also higher in NCC Bank that also signifies that it is readiness for the risk bearing capacity in the market. In total, the three banks profitability positions were in satisfactory.

4. Return to total deposit ratio:

Return to total deposit ratio shows the relationship between the net profit or loss after tax and total deposit of the bank. The sum of deposits accepted by the bank under various accounts is termed as total deposit. The difference between the interest received and paid by the bank is its profit. It would also be reasonable, meaningful and important from every angle to show the relationship between the net profit and total deposits.

[Return on total deposits ratio is calculated by dividing net profit after tax (loss) by total deposits.]

Table 4.14
Return to total deposit ratio (%)

(Rs. In Million)

Fiscal Year	Bank Name	Net Profit (Loss)	Total Deposits	Ratios (%)	Average	S.D.	C.V
2007/08	NABIL Bank	673.96	23342.29	2.89	2.63	0.20	7.63
2008/09		746.47	31915.05	2.34			
2009/10		1031.05	37348.26	2.76			
2010/11		1141.05	46410.70	2.46			
2011/12		1337.75	49696.11	2.69			
2007/08	NCC Bank	-115.92	6500.3	-1.78	3.11	2.89	92.98
2008/09		498.75	7302.23	6.83			
2009/10		415.46	9127.74	4.55			
2010/11		423.77	10824.69	3.91			
2011/12		220.88	10951.43	2.02			
2007/08	Siddhartha Bank	95.31	6625.08	1.44	1.37	0.09	6.75
2008/09		143.17	10191.44	1.40			
2009/10		217.92	15854.80	1.37			
2010/11		240.85	20197.03	1.19			
2011/12		311.41	21575.65	1.44			

Source: Annual Reports of the concern banks of fiscal year 2007/08 to 2011/12.

Table 4.14 shows the amount of net profit (loss) to total deposit and respective ratios of the bank for different periods. . The return on total deposits ratio of Nabil Bank has ranged between 2.89% in FY 2007/08 to 2.47% in FY 2010/11, the ratio has more or less showed fluctuating trend throughout the periods. The average ratio, standard deviation and C.V of the ratio return to total assets are 2.63%, 0.20% and 7.63% respectively.

The net profit (loss) to total deposits ratio of NCCBL has ranged between - 1.78% (FY 2007/08) to 6.83% (FY 2008/09), the ratio is more or less fluctuating trend throughout the periods. The average ratio, standard deviation and C.V of ratio of profit (loss) to total assets are 3.11%, 2.89% and 92.98% respectively.

Siddhartha Bank has maintained an average ratio of 1.37% as return to total deposits. It also has increasing trend throughout the periods has maintained highest ratio of 1.44% in the FY 2007/08 and FY 2011/12 and lowest ratio of 1.19% in the FY 2010/11. The S.D of SBL is 0.09% and C.V is 6.75% respectively.

Figure 4.14 – Return to total deposit ratio

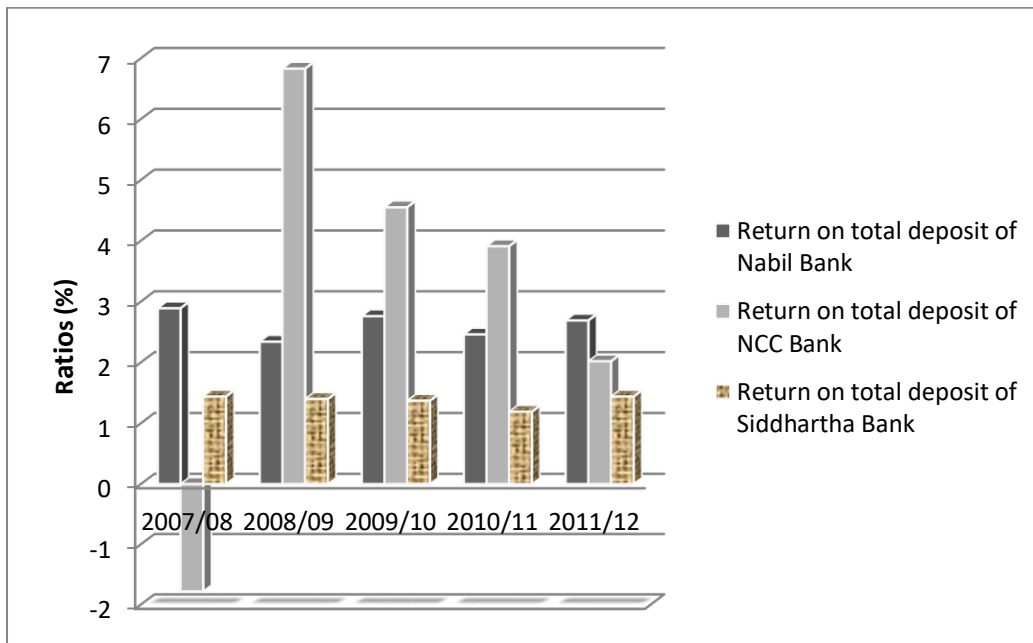


Figure 4.14 shows that NCC Bank has maintained more return on total deposits as compared with Nabil Bank & Siddhartha Bank. The mean ratio was considerably higher in NCC Bank than that of Siddhartha Bank and Nabil Bank, which signifies that the profitability position of NCC Bank in the relation to this ratio is better than other two banks. From the above analysis profitability of NCC Bank is better than Siddhartha Bank and Nabil Bank and whole credit goes to good management of banking sectors. CV of the ratio was also higher in NCC Bank that also signify that it is readiness for the risk bearing capacity in the market. In total, the three banks profitability positions were in satisfactory.

5. Return on net worth ratio/ Shareholders' equity (ROE):

Return to net worth ratio shows the relationship between the net profit or net loss after tax and net worth or total equity or capital fund. This ratio reveals how efficiency the bank has seen able to utilize its owner's fund. The ratio is greater interest to present as prospective shareholders' and also of great significance to management, which has the responsibility maximizing the owners' welfare. So, higher is desirable. Net worth refers the owner's claim on banks. It is also called net profit to shareholders equity ratio on shareholders equity simply denoted by ROE. Table shows the ratios of return on net worth of sample banks for the last five-year's period.

[Return on shareholders equity ratio is calculated by dividing net profit after tax (loss) by net worth.]

Table 4.15
Return on net worth ratio (%)

(Rs. In Million)

Fiscal Year	Bank Name	Net Profit(Loss)	Net Worth	Ratios (%)	Average	S.D.	C.V
2007/08	NABIL Bank	673.96	2057.05	32.76	31.09	1.54	4.96
2008/09		746.47	2437.20	30.63			
2009/10		1031.05	3120.24	33.04			
2010/11		1141.05	3836.71	29.74			
2011/12		1337.75	4566.52	29.29			
2007/08	NCC Bank	-115.92	-510.34	22.71	34.76	20.68	59.48
2008/09		498.75	685.08	72.80			
2009/10		415.46	1098.92	37.81			
2010/11		423.77	1522.71	27.83			
2011/12		220.88	1744.24	12.66			
2007/08	Siddhartha Bank	95.31	793.71	12.01	14.63	1.76	12.01
2008/09		143.17	1068.35	13.40			
2009/10		217.92	1278.45	17.05			
2010/11		240.85	1603.54	15.02			
2011/12		311.41	1988.40	15.66			

Source: Annual Reports of the concern banks of fiscal year 2007/08 to 2011/12.

Table 4.15 denotes that the return on net worth ratio in Nabil showed fluctuating trend. The return on net worth of Nabil bank has ranged between 29.29% (FY 2011/12) to 32.76% (FY 2007/08), which is totally unbalanced ratio. The average ratio, standard deviation and C.V of the ratio are 31.09%, 1.54% and 4.96% respectively.

In NCCBL, the ratio was increasing trend up to 2nd year and then it started to fall. The maximum ratio was 72.80% maintained in FY 2008/09 whereas the minimum ratio was 12.66% in FY 2011/12. The average ratio, standard deviation and C.V of the ratio are 34.76%, 20.68% and 59.48% respectively.

Siddhartha Bank has maintained an average ratio of 14.63% as return on net worth. It also has fluctuating trend throughout the periods has maintained highest ratio of 17.05% in the FY 2009/10 and FY whereas lowest ratio of 15.02% in the FY 2010/11. The S.D of SBL is 1.76% and C.V is 12.01% respectively.

Figure 4.15 – Return on net worth ratio

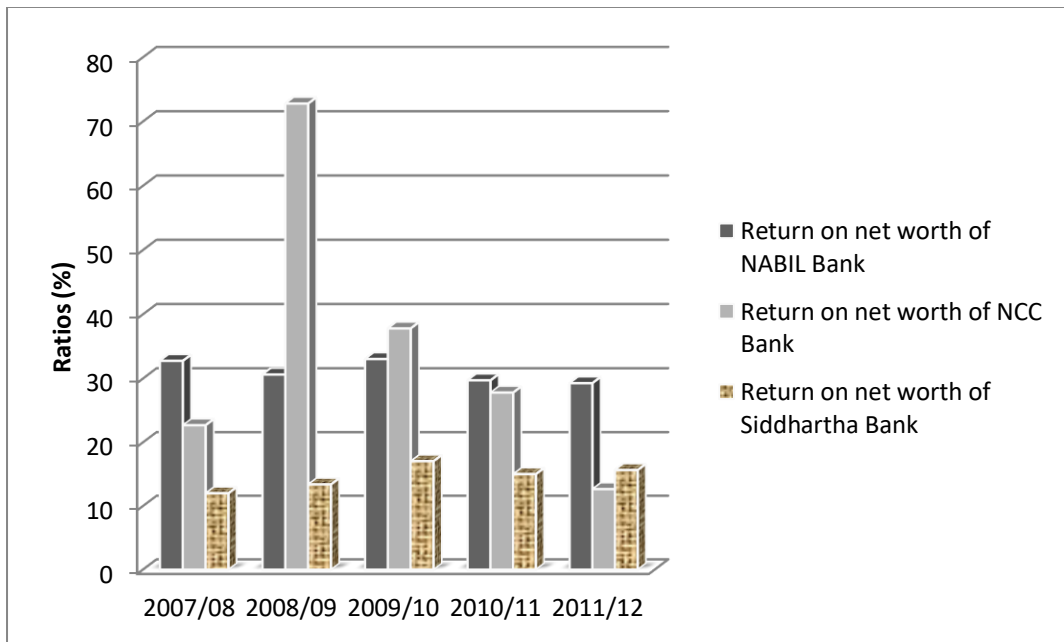


Figure 4.15 shows that NCC Bank has maintained more return on net worth as compared with Nabil Bank & Siddhartha Bank. The mean ratio was

considerably higher in NCC Bank than that of Siddhartha Bank and almost thrice of Nabil Bank, which signifies that the profitability position of NCC Bank in the relation to this ratio is better than other two banks. It also indicates that NCC has effectively utilized the owners' capital and able to give regular & significant return on them. CV of the ratio remained greater in NCC, which means that the ratio is NCC highly as against Nabil and SBL.

4.1.1.4 Capital Structure Ratios:

The capital structure ratio, also known as leverage ratio or debt management ratio, indicates the extent to which debt financing is being used by a bank. It highlights the light on the long term solvency of a bank as reflected its ability to assure long term creditors with regard to periodic payment of interest during the period of the loan and repayment of principal on maturity or in pre-determined installments at due dates. In relation to financial analysis, it is important to analyze leverage position from two aspects: first, how bank is using the borrowed funds to finance its assets; second, how far the bank is able to serve its debts in terms of satisfying regular fixed charges.

1. Total debt to total assets ratio:

This ratio measures the financial security of outsiders and owners on the total assets of the bank.

[Total debt to total assets ratio is calculated dividing total debt by total assets.]

Table 4.16
Total debt to total assets ratio

(Rs. In Million)

Source: Annual Reports of the concern banks of fiscal year 2007/08 to 2011/12.

Fiscal Year	Bank Name	Total Debt	Total Assets	Ratios (%)	Average	S.D.	C.V
2007/08	NABIL Bank	24224.86	27253.39	88.89	89.47	0.54	0.60
2008/09		33515.05	37132.76	90.26			
2009/10		39329.56	43867.40	89.66			
2010/11		46785.60	52151.68	89.71			
2011/12		51646.71	58141.44	88.83			
2007/08	NCC Bank	-1209.45	6036.67	-103.16	48.74	75.96	155.86
2008/09		7320.23	8241.33	88.82			
2009/10		9127.75	10590.8	86.19			
2010/11		11031.59	12761.07	86.45			
2011/12		11326.23	13264.86	85.39			
2007/08	Siddhartha Bank	7055.08	7954.66	88.69	89.95	1.13	1.25
2008/09		10396.57	11668.36	89.10			
2009/10		16410.17	17881.75	91.77			
2010/11		20679.80	22802.43	90.69			
2011/12		21848.42	24405.87	89.52			

Table 4.16 shows the mean of the ratios came slightly greater in Siddhartha Bank as compared to Nabil bank and highly greater compared to NCC bank, which signifies that the former followed more aggressive policy in raising capital. On the other hand, capital structure of NCC bank is less risky. The debt-assets ratio of Nabil bank has ranged between 88.83% (FY 2011/12) to 90.26% (FY 2007/08), which is quiet nearer to each other. The average ratio, standard deviation and C.V of the ratio are 89.47%, 0.54% and 0.60% respectively.

In NCCBL, the ratio was in decreasing trend at -103.16% in FY 2007/08 and then it started to rise continually up to FY 2010/11. The maximum ratio was 88.82% maintained in FY 2008/09. The average ratio, standard deviation and C.V of the ratio are 48.74%, 75.96% and 155.86% respectively.

Siddhartha Bank has maintained an average ratio of 89.95% as debt to total assets. It also has increasing trend up to the periods of FY 2009/10. It has maintained highest ratio of 91.77% in the FY 2009/10 and FY whereas lowest

ratio of 88.69% in the FY 2007/08. The S.D of SBL is 1.13% and C.V is 1.25% respectively.

Figure 4.16 – Total Debt to Total Assets Ratio

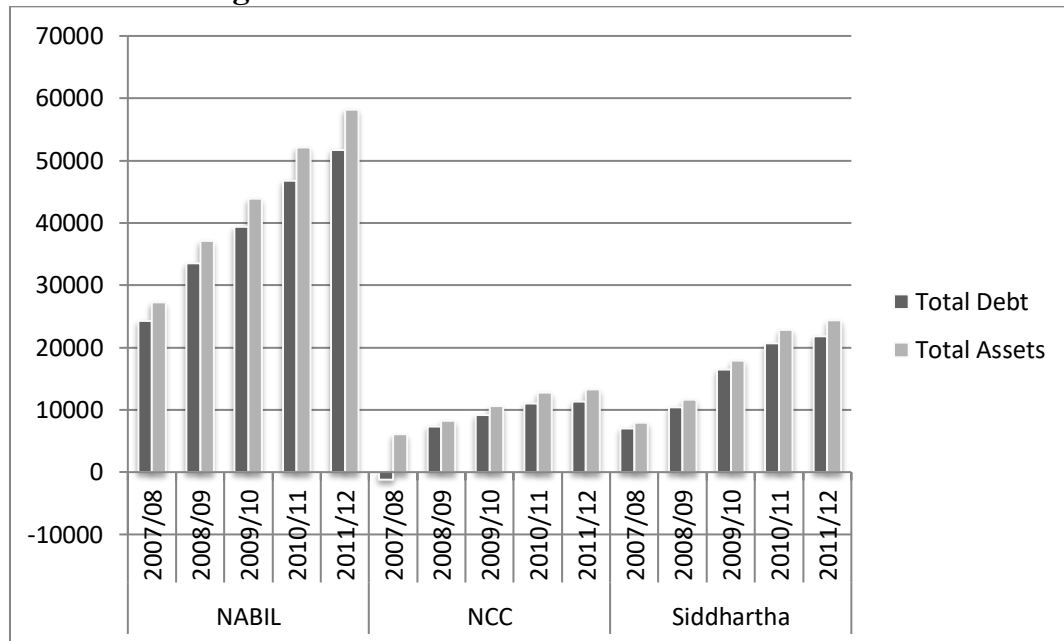


Figure 4.16 shows the debt to total assets ratio of respective banks. Higher ratio in Siddhartha Bank indicates that the greater portion of the banks assets has been financed through outsider's fund. Higher the debt to asset ratio indicates higher financial risk. In the same time, it increases outsiders claim in total assets. Similarly, lower indicates lower financial risk as well as decreased claims of outsiders. Conventionally a ratio of 1:2 is considered to be satisfactory, although no hard and fast rules exist.

2. Total debt to total equity ratio:

Total debt to total equity ratio reflects claim of them on the assets of the bank. It determines the measurement of bank's obligation towards its creditors and owners in relation to the funds invested by them.

[Total debt to total equity ratio is calculated dividing total debt by total equity.]

Table 4.17
Total debt to total equity ratio

(Rs. In Million)

Fiscal Year	Bank Name	Total Debt	Total Equity	Ratios (times)	Average	S.D.	C.V
2007/08	NABIL Bank	24224.86	2057.05	11.78	12.33	0.83	6.75
2008/09		33515.05	2437.20	13.75			
2009/10		39329.56	3120.24	12.60			
2010/11		46785.60	3836.71	12.19			
2011/12		51646.71	4566.52	11.31			
2007/08	NCC Bank	-1209.45	-510.34	2.37	7.02	2.72	38.77
2008/09		7320.23	685.08	10.69			
2009/10		9127.75	1098.92	8.31			
2010/11		11031.59	1522.71	7.24			
2011/12		11326.23	1744.24	6.49			
2007/08	Siddhartha Bank	7055.08	793.71	8.89	11.07	1.61	14.57
2008/09		10396.57	1068.35	9.73			
2009/10		16410.17	1278.45	12.84			
2010/11		20679.80	1603.54	12.90			
2011/12		21848.42	1988.40	10.99			

Source: Annual Reports of the concern banks of fiscal year 2007/08 to 2011/12.

Table 4.17 shows the amount of total debt to total equity ratio of sample banks. The debt-equity ratio of Nabil bank has ranged between 11.31% (FY 2011/12) to 13.75% (FY 2007/08), which is quiet nearer to each other. The average ratio, standard deviation and C.V of the ratio are 12.33%, 0.83% and 6.75% respectively.

In NCCBL, the ratio was in totally fluctuating in trend. It was 2.37% in FY 2007/08, which gradually increased up-to 10.69% in FY 2008/09 and again starts to fall thereafter. The maximum ratio was 10.69% maintained in FY 2008/09. The average ratio, standard deviation and C.V of the ratio are 7.02%, 2.72% and 38.77% respectively.

Siddhartha Bank has maintained an average ratio of 11.07% as debt to total equity. It also has increasing trend up to the periods of FY 2010/11 and recorded the highest ratio by 12.90%. The S.D of SBL is 1.61% and C.V is 14.57% respectively.

Figure 4.17 – Total debt to total equity ratio

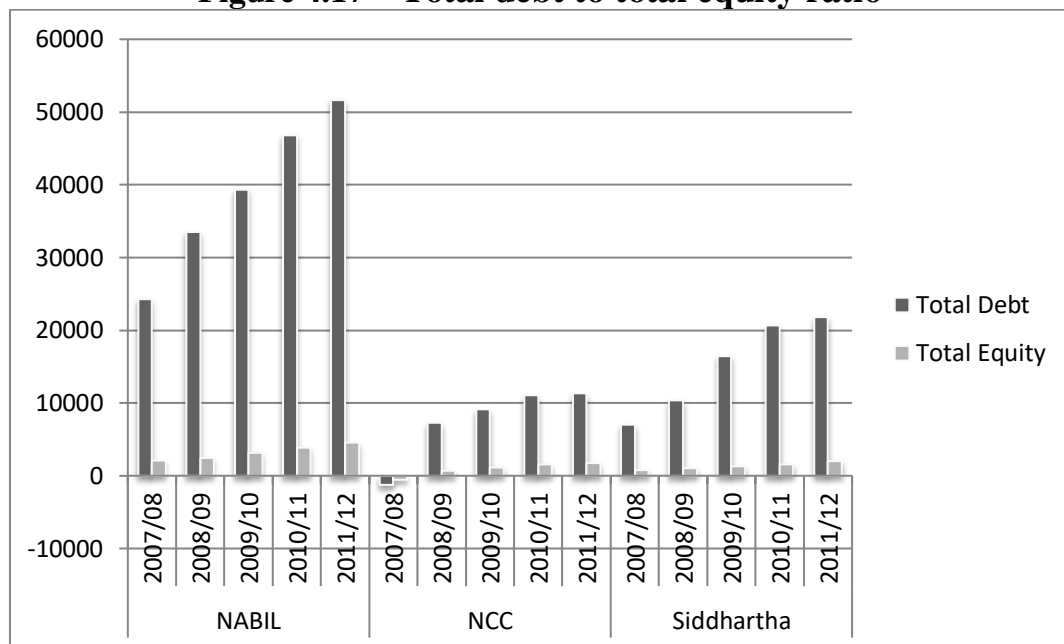


Figure 4.17 shows the debt to total equity ratio of respective banks. Higher average ratio in Nabil Bank introduces in flexibility in the bank's operation due to the increasing interference and pressure from creditors. From the above analysis we can say that the three banks seemed levered. In other word, capital structure of Nabil bank is riskier than that of Siddhartha and NCC bank. CV of Nabil is also lower, which also clarifies that the ratios of Siddhartha and NCC are less consistence.

3. Long-term debt to total assets ratio (%):

Long-term debt to total assets ratio represents the uses of the long-term debt capital in terms of total assets of the bank.

[Long-term debt to total assets ratio is calculated dividing long-term debt by total assets.]

Table 4.18
Long Term Debt to Total Assets Ratio (%)

(Rs. In Million)

Fiscal Year	Bank Name	Long-Term Debt	Total Assets	Ratios (%)	Average	S.D.	C.V
2007/08	NABIL Bank	6317.77	27253.39	23.18	26.51	3.36	12.67
2008/09		9824.09	37132.76	26.46			
2009/10		9992.02	43867.40	22.78			
2010/11		14786.06	52151.68	28.35			
2011/12		18491.43	58141.44	31.80			
2007/08	NCC Bank	1736.58	6036.67	28.77	17.78	8.73	49.09
2008/09		508.48	8241.33	6.17			
2009/10		1145.54	10590.8	10.82			
2010/11		2127.16	12761.07	16.67			
2011/12		3512.58	13264.86	26.48			
2007/08	Siddhartha Bank	3065.56	7954.66	38.54	42.92	3.26	7.60
2008/09		4767.85	11668.36	40.86			
2009/10		7485.80	17881.75	41.86			
2010/11		10540.73	22802.43	46.23			
2011/12		11503.27	24405.87	47.13			

Source: Annual Reports of the concern banks of fiscal year 2007/08 to 2011/12.

Table 4.18 shows the amount of long-term debt to total assets ratio of sample banks. The long-term debt-equity to total assets ratio of Nabil bank has ranged between 31.80% (FY 2011/12) to 22.78% (FY 2009/10), which is in fluctuating trend. The average ratio, standard deviation and C.V of the ratio are 26.51%, 3.36% and 12.67% respectively.

In NCCBL, the ratio was in totally fluctuating in trend. It was 28.77% in FY 2007/08 recorded as the maximum ratio of the sample years, which gradually

decreased up-to 6.17% in FY 2008/09, the shortest ratio and again starts to rise thereafter. The average ratio, standard deviation and C.V of the ratio are 17.78%, 8.73% and 49.09% respectively.

Siddhartha Bank has maintained an average ratio of 42.92% as long term debt to total assets ratio. It also has increasing trend through out the sample year i.e. FY2007/08 to FY 2011/12. The S.D of SBL is 3.26% and C.V is 7.60% respectively.

Figure 4.18 – Long-term debt to total assets ratio (%)

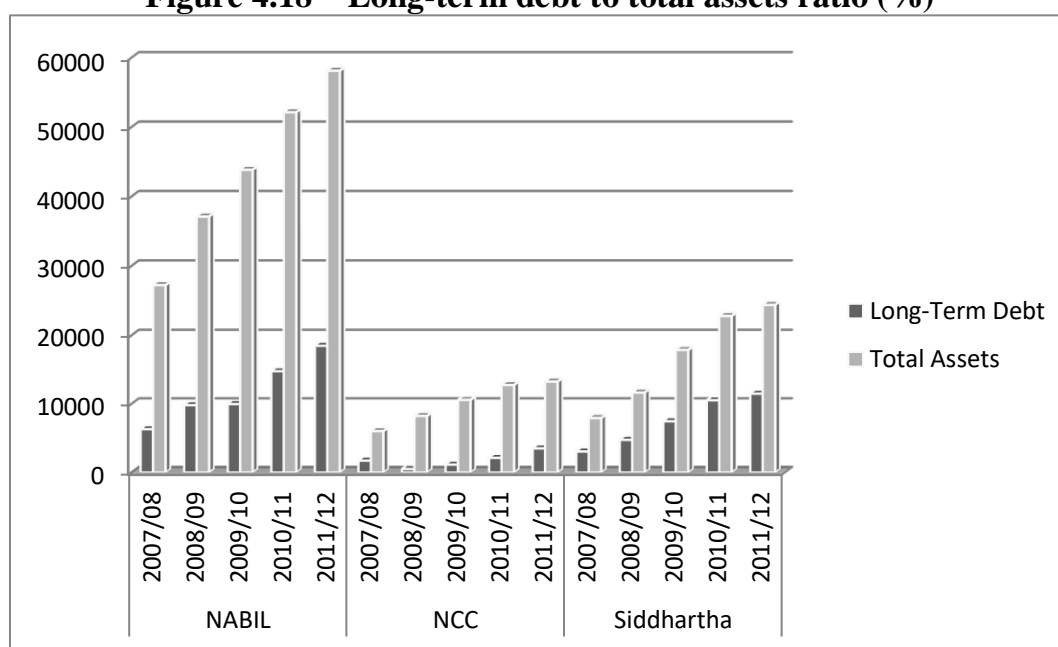


Figure 4.18 shows the long-term debt to total assets ratio of respective banks. Higher average ratio in Siddhartha Bank indicates higher financial risk. The bank as used minimum amount of long-term debt in FY beginning years and later it fluctuates with increasing and decreasing trend. The higher ratio of the sample banks shows that the banks have adopted aggressive financial policy, which makes its venture much more risky.

4. Interest coverage ratio:

Interest coverage ratio is calculated in order to determine bank's ability to meet the interest obligations. In this study, total interest denotes all kinds of interest payable on the both the deposit and borrowings.

[Interest coverage ratio is calculated dividing Net profit or Earning before interest and tax by interest expenses or interest charges.]

Table 4.19
Interest coverage ratio (Times)

(Rs. In Million)

Fiscal Year	Bank Name	EBIT	Interest	Ratios (times)	Average	S.D.	C.V
2007/08	NABIL Bank	1551.0	555.71	2.79	2.08	0.55	26.57
2008/09		1846.78	758.74	2.43			
2009/10		2631.70	1153.28	2.28			
2010/11		3158.40	1960.11	1.61			
2011/12		3790.0	2955.43	1.28			
2007/08	NCC Bank	-554.26	315.8	-1.76	-0.35	0.71	-201.68
2008/09		-75.8	297.88	-0.25			
2009/10		41.5	406.30	0.10			
2010/11		31.10	462.08	0.07			
2011/12		34.21	469.58	0.07			
2007/08	Siddhartha Bank	1735.53	271.71	6.39	4.74	1.70	35.83
2008/09		2821.91	408.19	6.91			
2009/10		3753.45	813.62	4.61			
2010/11		4380.01	1406.49	3.11			
2011/12		5127.61	1925.24	4.74			

Source: Annual Reports of the concern banks of fiscal year 2007/08 to 2011/12.

Table 4.19 shows the interest coverage ratio of sample banks. The interest coverage ratio of Nabilbank has ranged between 2.79% (FY 2007/08) to 1.28% (FY 2011/12), which is in decreasing trend. The average ratio, standard deviation and C.V of the ratio are 2.08%, 0.55% and 26.57% respectively.

In NCCBL, the ratio was in totally fluctuating in trend. It was -0.25% in FY 2008/09 recorded as the minimum ratio of the sample years. The average ratio, standard deviation and C.V of the ratio are -0.35%, 0.71% and -201.68% respectively.

Siddhartha Bank has maintained an average ratio of 4.74% as interest coverage ratio. It also has fluctuating trend through out the sample year i.e. FY2007/08 to FY 2011/12. The S.D of SBL is 1.70% and C.V is 35.83% respectively.

Figure 4.19 Interest coverage ratio

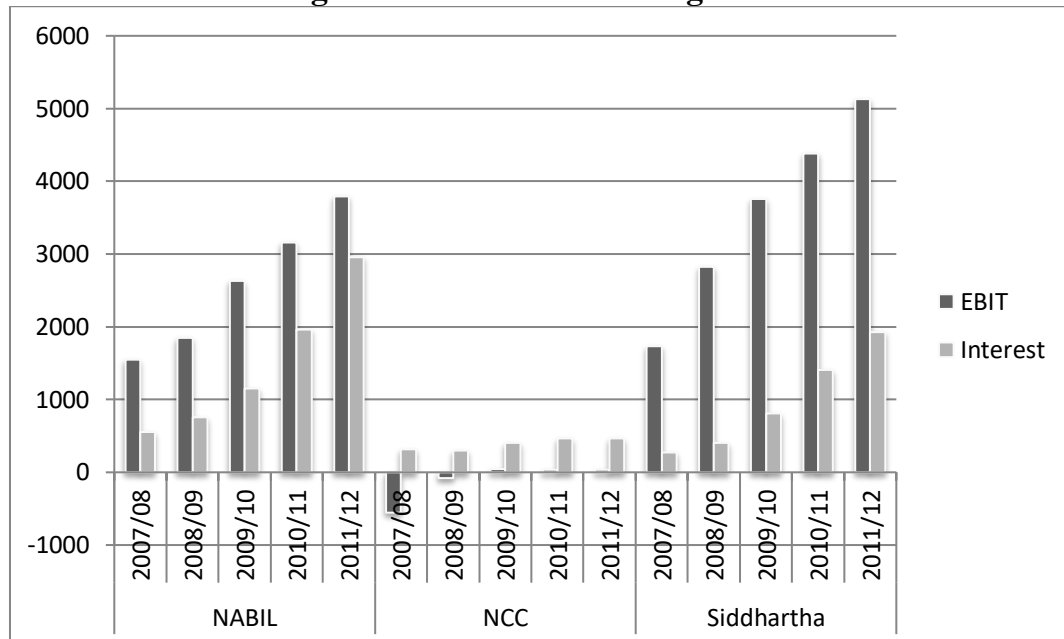


Figure 4.19 shows the interest coverage ratio of respective banks. The NCCBL has got negative interest coverage ratio. The lower or negative interest coverage ratio, which is not considered to be a good sign. The lower or negative interest ratio indicates that the bank is using excessive debt and is unable to assure the creditors for paying back interest or even means inefficiency in its operation. Hence, the bank has to invest its resources into more productive sectors in order to earn more profit.

5. Long term debt to total capital employed ratio:

The ratio shows the relationship between long-term debts and the capital employed.

[Long-term debt to total capital employed ratio is calculated dividing long-term debt by capital employed.]

Where, Capital employed = Total Net Worth + Long Term Debt]

Table 4.20**Long term debt to total capital ratio (%)***(Rs. In Million)*

Fiscal Year	Bank Name	Long Term Debt	Capital Employed	Ratios (%)	Average	S.D.	C.V
2007/08	NABIL Bank	6317.77	8374.82	75.44	78.27	40.04	51.16
2008/09		9824.09	12261.29	80.12			
2009/10		9992.02	13112.26	76.20			
2010/11		14786.06	18622.77	79.40			
2011/12		18491.43	23057.95	80.20			
2007/08	NCC Bank	1736.58	1226.24	141.62	71.33	40.04	56.14
2008/09		508.48	1993.56	25.51			
2009/10		1145.54	2244.46	51.04			
2010/11		2127.16	3649.87	58.28			
2011/12		3512.58	5256.82	80.20			
2007/08	Siddhartha Bank	3065.56	3959.27	77.43	83.31	40.04	48.06
2008/09		4767.85	5836.2	81.69			
2009/10		7485.80	8764.25	85.41			
2010/11		10540.73	12144.27	86.80			
2011/12		11503.27	13491.67	85.26			

Source: Annual Reports of the concern banks of fiscal year 2007/08 to 2011/12.

Table 4.20 shows the amount of long-term debt to total capital employed ratio of sample banks. The long-term debt to total capital ratio of Nabil bank has ranged between 80.20% (FY 2011/12) to 75.44% (FY 2007/08), which is in fluctuating trend. The average ratio, standard deviation and C.V of the ratio are 78.27%, 40.04% and 51.16% respectively.

In NCCBL, the ratio was in totally fluctuating in trend. It was 141.62% in FY 2007/08 recorded as the maximum ratio of the sample years, which gradually decreased up-to 25.51% in FY 2008/09, the shortest ratio and again starts to rise thereafter. The average ratio, standard deviation and C.V of the ratio are 71.33%, 40.04% and 56.14% respectively.

Siddhartha Bank has maintained an average ratio of 83.31% as long term debt to total capital employed ratio. It also has increasing trend through out the sample year i.e. FY2007/08 to FY 2010/11 but slightly decreased into FY 2011/12. The S.D of SBL is 40.04% and C.V is 48.06% respectively.

Figure 4.20 – Long-term debt to total capital employed ratio (%)

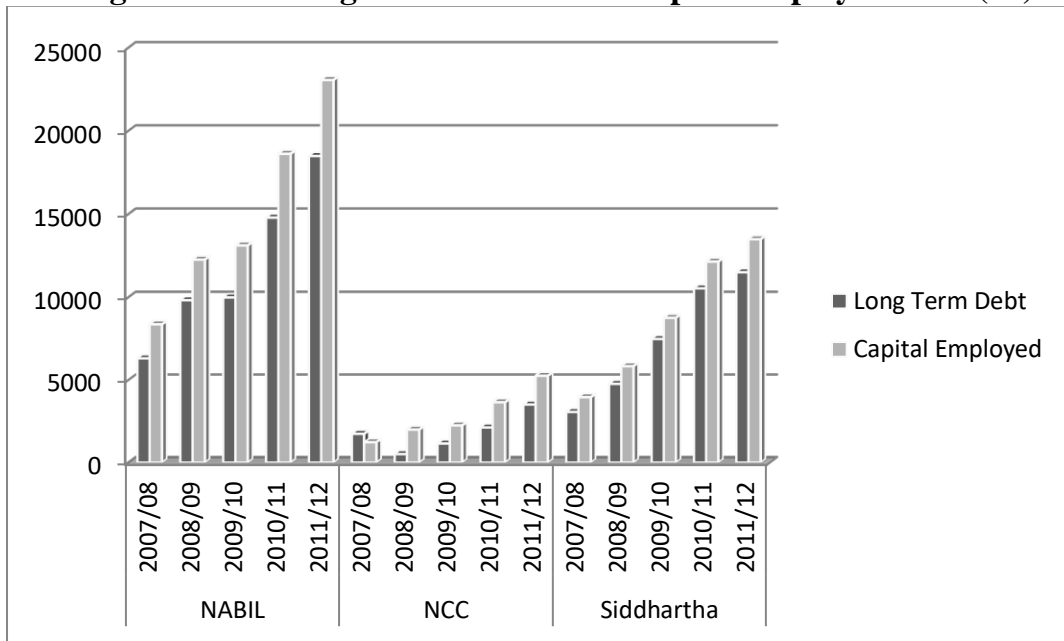


Figure 4.20 shows the long-term debt to total capital employed ratio of respective banks. Higher average ratio in Siddhartha Bank indicates higher financial risk. The banks does not have a satisfactory level of long term debt to capital employed ratio. Higher the long term debt to capital employed ratio indicates higher risk to the creditors as well as owners. Long term debt to capital employed ratio is not favorable in any banks. The figure in FY 2007/08 of NCCBL shows the bank has excessive long term debt and capital employed ratio than other periods, which ultimately indicates the banks’s inefficiency in mobilizing the long term dent effectively in productive sector. Thus, it should always be in optimum level.

4.1.1.5 Other Indicators

Above stated ratio shows light on various aspect of the banks management, investment & creditors can get information regarding their investment. Besides the above-analyzed ratios, indicators have been tested to have the boarder knowledge of financial performance of the bank. For this, EPS, P/E ratio and MVPS to BVPS have been analyzed.

1. Earning per share (EPS):

Earning per share refers to the income available to the common shareholders on per share basis. It is computed as;

[Earning per share can be calculated dividing earning available to common shareholders by number of equity shareholders outstanding.]

Table 4.21
Earning per share

FY	2007/08	2008/09	2009/10	2010/11	2011/12	Mean	S.D.	C.V
NABIL	137.08	115.86	113.44	83.81	70.67	104.17	23.84	22.89
NCCBL	-16.56	35.63	29.35	30.28	15.78	18.90	18.89	100.01
SBL	15.88	17.29	22.89	21.99	19.82	19.57	2.67	13.66

Source: Annual Reports of the concern banks of fiscal year 2007/08 to 2011/12.

Figure 4.21 – Earning per share ratio

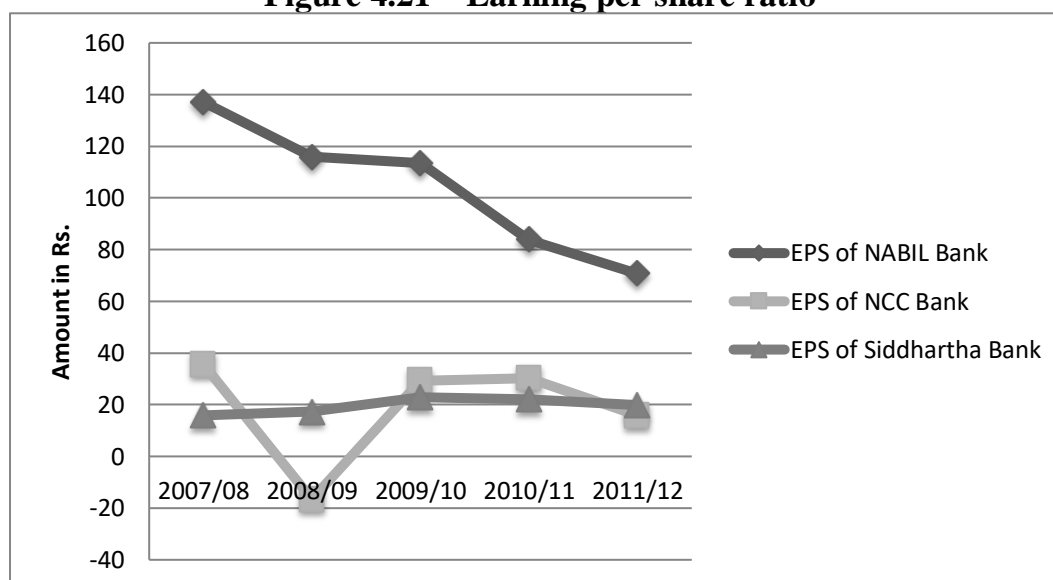


Table 4.21 and Figure 4.21 indicates that mean of EPS was much higher in Nabil bank in contrast to Siddhartha and NCC bank; which indicates that the profitability position of the former is far better than that of the latter. In this sense, Nabil Bank seems more successful to attract the investors. Net profit earned by Nabil is greater than that of Siddhartha bank and NCC bank but number of equity share outstanding in Siddhartha bank is greater than remaining banks. So, the EPS was seemed well than that of other banks.

2. Price-Earning ratio (P/E ratio)

P/E ratio widely used to evaluate the banks performance as expected by investors. It represents the investor's judgments or expectation about the growth in banks earning. In other word, it measures how the market is responding toward the earning performance of the concerned banks.

[Price-Earning ratio can be obtained by market value per share divided by earning per share.]

Where, Book value per share=total equity/Number of outstanding shares of common stock.

Table 4.22- Price earning ratio

FY	2007/08	2008/09	2009/10	2010/11	2011/12	Mean	S.D.	C.V
NABIL	36.84	45.53	43.19	30.33	19.00	34.98	9.58	27.40
NCCBL	-19.08	12.83	11.41	9.08	10.58	4.96	12.08	243.41
SBL	48.98	63.04	43.70	20.19	13.62	37.91	18.39	48.52

Source: Annual Reports of the concern banks of fiscal year 2007/08 to 2011/12.

Figure 4.22- Price earning ratio



Table 4.22 and Figure 4.22 displays that the P/E ratios of Nabil bank and Siddhartha bank showed increasing trend to FY 2007/08 and FY 2008/09 whereas the ratio was in negative in FY 2007/08 as compared to NCC bank. The ratio starts to decline slightly after FY 2008/09. Mean ratios of SBL appeared higher than Nabil and NCC. It indicates that the investors are well satisfied with the performance of the bank or market has positively judged the performance of Nabil and SBL. At the CV analysis, NCCBL has higher CV than other two banks, which indicates that the ratios varied in the bank.

3. Market value per share to book value per share (MVPS/BVPS)

The ratio measures the value that the financial market attaches to the management and organization of the banks as a growing concern.

[Market value per share to book value per share can be obtained by market value per share divided by book value per share.]

Table 4.23- Market value per share to book value per share

FY	2007/08	2008/09	2009/10	2010/11	2011/12	Mean	S.D.	C.V
NABIL	36.84	45.53	43.19	28.45	17.72	34.35	10.20	29.71
NCCBL	-19.08	12.83	11.41	9.08	10.58	4.96	12.08	243.42
SBL	48.99	63.04	43.69	20.19	13.62	37.91	18.39	48.53

Source: Annual Reports of the concern banks of fiscal year 2007/08 to 2011/12.

Figure 4.23- Market value per share to book ratio (%)

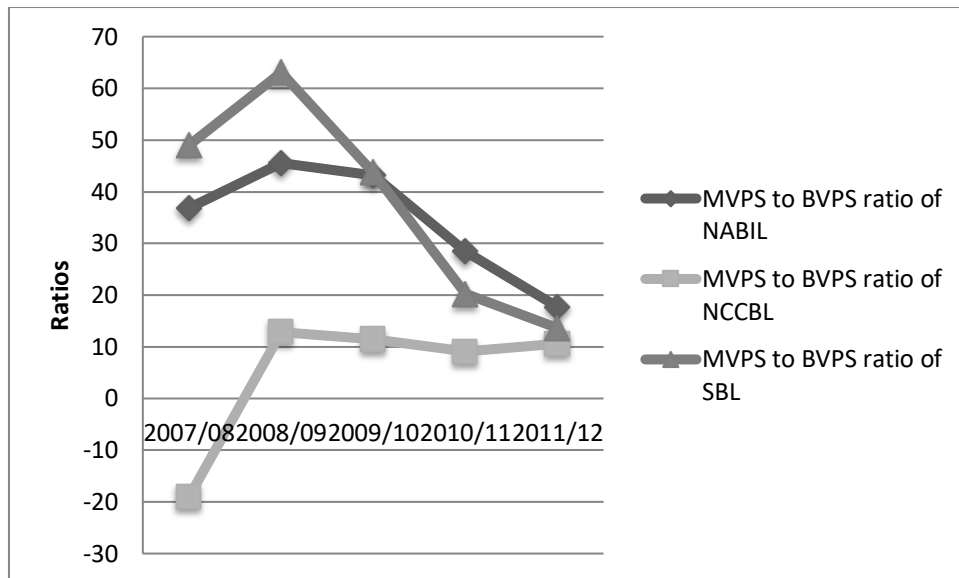


Table 4.23 & Figure 4.23 exhibit that the indicators showed decreasing trend of all the sample banks. Mean value of the indicators appeared greater in SBL, which indicates comparatively stronger management and organization in Nabil than Siddhartha and NCC.

CV of the indicators came less in Nabil, which means the indicators, varied less over the period of the study.

4.2 Income and Expenditure Analysis

Income and expenditure is one of the very important tools to measure the financial performance of the banks. In competitive environment for the survival of banks should earn profit. If banks should earn profit, its market value of share will increased; banks will be able to give regular dividend to shareholders and interest to debenture holders; staffs can enjoy better salary and bonus and enhanced facilities which will increase the productivity of banks. So, the income and expenditure analysis is important not only in the banks but also in other field. If banks are able to decrease unnecessary expenditure it will directly affect in the profit. The analysis covers the following heading in income and expenditure analysis:

- Operating Income Analysis
- Operating Expenditure Analysis
- Operating Profit (Loss) Analysis

4.2.1 Operating Income Analysis

Commercial banks generate income from the investment made in various sectors. The banks, being one of the service-oriented organization, do not produce physical goods. They produce loan and advances as well as innovations and sell the same. Operating Income analysis is regarded as one of the important financial tool for the analysis of financial performance of the financial institutions. It shows the proportionate contribution of different source of income for generating total income. The major sources of income of banks are interest received from loans and advances, government securities, commission and discount earned and other miscellaneous incomes. The higher level of operating income shows the better financial indication or position/status of the bank.

In the course of carrying out their functions, they receive income from various sources, which have been spilt up into the different headings.

- Interest Income
- Commission and discount earned
- Other operating income

The following table shows the operating income generated from different sources & its respective percentage in total operating income of the bank

Table 4.24- Operating Income analysis of Nabil, NCC & SBL*(Rs. In Million)*

Fiscal Year	Bank Name	Interest Earned	%	Commission & Discount Earned	%	Other Income	%	Total	%
2007/08	NABIL Bank	1587.76	86.96	150.61	8.25	87.57	4.80	1825.94	100
2008/09		1978.70	88.64	156.23	7.00	97.44	4.36	2232.37	100
2009/10		2798.48	89.63	179.69	5.75	144.16	4.62	3122.33	100
2010/11		4049.71	91.02	215.48	4.84	184.02	4.14	4449.21	100
2011/12		5254.03	91.72	290.86	5.08	183.44	3.20	5728.33	100
2007/08	NCC Bank	246.78	94.38	9.59	3.67	5.1	1.95	261.47	100
2008/09		576.61	96.21	13.21	2.20	9.53	1.59	599.35	100
2009/10		758.36	85.21	55.45	6.23	76.17	8.56	889.98	100
2010/11		1042.24	85.20	52.66	6.55	59.02	8.26	1223.34	100
2011/12		1342.87	93.15	49.22	3.41	49.48	3.43	1441.57	100
2007/08	Siddhartha Bank	730.00	92.76	21.00	2.67	36.00	4.57	787	100
2008/09		729.87	93.26	21.45	2.74	31.29	4.00	782.61	100
2009/10		1265.58	94.13	32.55	2.42	46.35	3.45	1344.48	100
2010/11		2018.29	95.57	42.76	2.02	50.69	2.40	2111.74	100
2011/12		2690.29	95.38	68.05	2.41	62.25	2.21	2820.59	100

Source: Annual Reports of the concern banks of fiscal year 2007/08 to 2011/12.

a) Interest Income

Interest is the main and major source of the income in the commercial banks. These banks charged interest on loan & advances provide by them. They also received interest from investment made in government securities i.e. treasury bills and developmental bonds, debentures and inter-banking lending. Higher interest earned ratio indicates better operational efficiency or higher level of risk in the business.

Table 4.24 highlight that interest income of Nabil Bank Limited was slightly increasing trend. Interest income ranged from 86.96% in FY 2007/08 to 91.72% in last year. So, the proportion of interest income with compared to total operating income shows slightly increasing trend. Similarly, the interest income in NCCBL was shows increasing trend up to FY 2008/09 and later it starts to decline up to FY 2010/11 and again picked up its level in FY 2011/12. Interest income ranged from 85.20% in FY 2010/11 to 96.21% in FY 2008/09. In the same way, the interest income of Siddhartha Bank was found to be increasing trend. Highest of the income in Siddhartha Bank was recorded to be 95.57% in FY 2010/11 and the lowest income was recorded as 92.76% in FY 2007/08.

b) Commission and Discount earned

Another source of operating income of the bank remains the commissions and discounts. This ratio also reflects the extent of services provided to the customers by the banks. Commission and discounts includes commission and discount received from the letter of credit, letter of guarantee, collection fees, bank guarantee fee, remittance fees and other service fees and commissions. For making such facilities available, they receive certain charges in form of commission and discount. It also covers significant portion of total operating income.

Table 4.24 depicts that the commission and discount earned by Nabil in the respective years of the study period shows the decreasing trend. It ranged from 4.84% in FY 2010/11 to 8.25% in FY 2007/18. Averagely, the ratio does not show the good symptom for the bank in the sample years. Similarly, the ratio shown by NCC bank is also satisfactory in trend. It has fluctuating trend through out the period. It ranged from 2.20% to 6.55% recorded in 2nd year and 4th year. Likewise, the commission and discount earned by Siddhartha bank were observed both decreasing trend and increasing trend. It ranged from 2.02% in 4th year to 2.74% recorded as the highest ratio in 2nd year respectively.

c) Other Incomes

Besides the above-mentioned sources of income of the bank, banks still earns its income from other income generating sources falling under income headings. Other income includes foreign exchange fluctuations, miscellaneous income and other general operating incomes.

Table 4.24 highlight that the other income in Nabil revealed fluctuating trend. It was seemed least in 5th year i.e. 3.20% and most in 1st year i.e. 4.80% of total operating income. In the same way, the other income of NCC also showed fluctuating trend. It ranged from 1.59% in 2nd year to 8.56% in 3rd year. Similarly, other income of Siddhartha revealed decreasing trend. It was seemed most in 1st year i.e. 4.57% and gradually decline which finally reached at 2.21% in last year. It shows that the income received by from this source appeared to be less consistent in Siddhartha Bank.

4.2.2 Operating Expenses Analysis

Expenses are the cost incurred in course of operating various activities. The banks need to pay interest for the deposits and borrowings. To handle all other resources, there is a team of personnel whom the bank pays salaries and provides other facilities. Besides, a significant portion of income is spent for day to day operation. Operating expenses analysis is another precious tool for making financial performance of the banks. The operating expenses understands for interest expenses includes interest expenses for deposits, borrowings, staff expenses, office operating expenses, provision for staff bonus and all other expenses directly related to the operation of the bank. For the study purpose, evaluation of the following form of expenses has been made:

- Interest expenses
- Staff expenses
- Office operation expenses
- Provision for staff bonus

The following Table shows the operating expenses on different headings and their respective percentages on total operating expenses of sample banks.

Table 4.25 - Operating Expenses analysis of Nabil, NCC & SBL

(Rs. In Million)

Fiscal Year	Bank Name	Interest paid	%	Staff expenses	%	Office operating expenses	%	Provision for Bonus	%	Total	%
2007/08	NABIL Bank	555.71	51.29	240.16	22.16	188.18	17.37	99.51	9.18	1083.56	100
2008/09		758.44	56.14	262.91	19.46	220.75	16.34	108.90	8.06	1351	100
2009/10		1153.28	60.51	339.90	17.83	265.16	13.91	147.67	7.75	1906.01	100
2010/11		1960.11	69.41	366.94	12.99	334.19	11.83	162.52	5.76	2823.76	100
2011/12		2955.43	73.85	454.04	11.35	401.43	10.03	190.94	4.77	4001.84	100
2007/08	NCC Bank	283.01	66.00	56.16	13.10	89.62	20.90	0.00	0.00	428.79	100
2008/09		278.72	54.85	76.07	14.97	95.93	18.88	57.41	11.30	508.13	100
2009/10		352.06	59.38	93.39	15.75	96.09	16.21	51.37	8.66	592.91	100
2010/11		580.17	68.36	105.11	12.39	111.35	13.12	52.03	6.13	848.66	100
2011/12		873.28	76.89	108.31	9.54	122.29	10.77	31.81	2.80	1135.69	100
2007/08	Siddhartha Bank	271.71	72.46	33.62	8.97	55.72	14.86	13.91	3.71	374.96	100
2008/09		408.19	74.27	48.25	8.78	71.48	13.01	21.70	3.95	549.62	100
2009/10		813.62	78.36	79.38	7.65	114.82	11.06	30.50	2.94	1038.32	100
2010/11		1406.50	81.74	103.68	6.03	175.74	10.21	34.86	2.03	1720.78	100
2011/12		1925.24	80.51	155.80	6.52	265.48	11.10	44.77	1.87	2391.29	100

Source: Annual Reports of the concern banks of fiscal year 2007/08 to 2011/12.

a) Interest Expenses

It is one of the major parts of operating expenses. Commercial banks pay interest on various types of deposits, loans and advances taken from other banks and financial institutions, government etc. Since transfer of money from the excess units to the deficits unit is the significant function of the commercial banks, interest occupies more than three-fourth of operating expenses.

Table 4.25 depicts that interest expenses of Nabil Bank showed increasing trend. It ranged from 51.29% in 1st year to 73.85% in last year. It showed that the Nabil bank has collected high amount of deposit in recent days, which incurred the higher interest expenses. Likewise, the interest expenses out of the total expenses of NCC bank showed decreasing up to 3rd year and then increasing thereafter. The ratio was just 66% in the 1st year, which fall up to 54.85% in 2nd year. The highest ratio was maintained in 76.89% in last year, which also showed the same result that the collection of deposit seems to be higher in the last year. In the same way, Siddhartha bank exhibits the interest expenses in increasing trend as well. It has the highest in FY 2010/11 i.e. 81.74% and lowest in FY 72.46% i.e. 2007/08. It signifies that interest expenses in the total mix of the operating expenses remained more consistences in recent days of all three-sample banks.

b) Staff Expenses

Staff expenses understand for total expenses made on salaries and allowances, contribution to provident fund, staff expenses and other personnel expenses. This is one of the major headings under operating expenses of the bank. In any bank or organization, work force plays vital role in the success or failure of that organization. Well-motivated staffs are the ornaments of the organization. In return, of the service provided by them, they need to be paid remuneration, which is included under this heading. Staff expenses include salary, different form of allowances, incentives, fringe benefits etc.

Table 4.25 reveals that the staff expenses in Nabil bank is in decreasing trend. It ranged from 11.35% in 5th year to 22.16% in 1st year of the study period. Similarly, the staff expenses in NCC shows decreasing trend. It ranged from 9.54% in last year to 15.75% in 3rd year. Likewise, the staff expenses in Siddhartha also showed decreasing trend. It ranged from 8.97% in 1st year to 6.03% in 4th year. From the above study, it can be analyzed that the banks are more attentive towards minimizing the cost of staff for the higher profit goals

c) Other Operating Expenses

Another important component of operating expenses of the bank is office-operating expenses. Office expenses includes house rent, water and electricity, charges, telephone, fax, telex, daily travelling allowances, repair and maintenance, printing and stationary, book and periodicals, fuel expenses, advertising and public relation expenses and al other expenses directly related to daily office operation. Generally, these expenses occupy second major portion in the composition of total expenses. For the routine work of the commercial banks, considerable amount of the expense is incurred.

Table 4.25 indicates that the office operating expenses in Nabil showed decreasing trend. It was highest in 1st year i.e. 17.37% and lowest in last year i.e. 10.03%. Similarly, the office operating expenses in NCC showed decreasing trend. The proportion of these expenses ranged from 20.90% to 10.77% in 1st to 5th year respectively. Likewise, the office operating expenses in Siddhartha also showed fluctuating trend over the study period. It ranged from 10.21% in 4th year to 14.86% in 1st year. From the above study, it can be conclude that the operating expenses are in decreasing trend in all three sample banks which means it maintained less consistency in making office operation expenses over the study period.

d) Staff Bonus Facilities (Provision)

When the bank earns profit, dividend is paid to the owners. Similarly, a part of profit is paid to the staff as bonus, which is as the reward for their services. In other word, bonus refers to the extra incentive provided to employees for their efficient services to the banks. It is distributed form the profit earned by the banks. Generally, staff prefers that bank pays greater percentage of bonus. It acts as the motivator for them but it increases the volume of operating expenses.

Table 4.25 shows that bonus or provision of Nabil bank showed decreasing trend. It ranged from 4.77% in last year to 9.18% in 1st year. Similarly, the staff bonus provision in NCC showed fluctuating trend. It was recorded 0% in 1st year which gradually increased by 11.30% in 2nd year and then it starts to fall thereafter. It reached at 2.80% in last year. Likewise, the staff bonus provision in Siddhartha showed fluctuating trend in the study period. It ranged from 1.87% in last year to 3.95% in 2nd year. From the above study, it can be concluded that all three sample banks are reducing its bonus provision to the staff for higher operating profit level.

4.2.3 Operating Profit/Loss Analysis

Operating profit (loss) is the difference between total operating income and total operating expenses. If total operating income is higher than that of total, operating expenses than its operating profit otherwise operating loss. If the bank's profit has to examine from the profit view point of all investors (both lenders and owners'), the appropriate measure of profit is operating profit. It shows the earning gained from commercial operation of business without effect of financing. The following table show the operating income, operating expenses and operating profit of Nabil, NCC and SBL banks.

Table 4.26
Operating profit analysis of Nabil, NCC and SBL

(Rs. In Million)

	NABIL			NCC			SBL		
FY	Op. Income	Op. Exp	Op. Profit	Op. Income	Op. Exp	Op. Profit	Op. Income	Op. Exp	Op. Profit
2007/08	1825.94	1083.56	742.38	261.47	428.79	-167.32	787	374.96	412.04
2008/09	2232.37	1351	881.37	599.35	508.13	91.22	782.61	549.62	232.99
2009/10	3122.33	1906.01	1216.3	889.98	592.91	297.07	1344.48	1038.32	306.16
2010/11	4449.21	2823.76	1625.5	1223.34	848.66	374.68	2111.74	1720.78	390.96
2011/12	5728.33	4001.84	1726.5	1441.57	1135.69	305.88	2820.59	2391.29	429.3
Mean	3471.64	2233.23	1238.4	883.14	702.84	180.31	1569.3	1214.99	354.29
S.D	1443.22	1066.19	390.39	423	258.35	197.97	792.64	750.88	73.94
C.V	41.57	47.74	31.52	47.90	36.76	109.80	50.51	61.80	20.87

Source: Annual Reports of the concern banks of fiscal year 2007/08 to 2011/12.

Table 4.26 shows the operating profit, operating expenses and operating profit of Nabil was greatest than NCC & SBL and greater in SBL than NCC. Similarly, the amount of income was greater than that of total expenses for three banks, except NCC in FY 2007/08. Therefore, due to higher income than expenditure, three banks can earn average operating profit.

At CV analysis, NCC has highest CV than Nabila & SBL. Whereas, comparing with SBL and Nabil, Nabil has higher one with respect to operating income, operating expenses and profit i.e. 50.51% > 47.90% > 47.74%, 61.80% > 47.74% > 36.76% and 109.80% > 31.52% > 20.87% respectively.

4.3 Correlation Analysis

Correlation analysis is the statistical tools that can be used to describe the degree to which one variable is linearly related to other variable. Two or more variables are said to be correlated if change in the value of one variable appears to be related or linked with the change in the value of the other variable. Correlation is an analysis of the covariance between two or more variables and correlation analysis deals to determine the degree of relationship between two or more variables. In the correlation analysis, only one variable is treated as the dependent variable and one or more variables are treated as independent.

4.3.1 Correlation analysis between total deposit and loan & advances

The correlation between total deposits and loan & advances to measure the relationship between major financial sources i.e. total deposit and major components of income generating assets i.e. loans and advances. In correlation analysis, deposit is the independent variable (Y) and loan and advances is dependent variable (X). The purpose of computing the coefficient of correlation is to justify whether the deposits are significant used in loan and advances or not whether there is any relationship between these two variables.

Table 4.27

Correlation coefficient and Probable error between total deposits and loan & advances of Nabil, NCC and SBL

Banks	r_{xy}	PE(r)	6PE(r)	Condition
Nabil	0.9894	0.0064	0.0382	$r_{xy} > 6PE(r)$
NCCBL	0.9957	0.0026	0.0155	$r_{xy} > 6PE(r)$
SBL	0.9535	0.0274	0.1644	$r_{xy} > 6PE(r)$

(Source: Appendix 1.1)

Table 4.27 denotes that the correlation coefficient of Nabil, NCCBL and SBL is highly strong. Also they have significant relationship between total deposit and loan & advances because of correlation coefficient came greater than six times the probable error i.e. $r_{xy} > 6PE(r)$. This indicates that the three sampled banks seems to increase or decrease the investment in loans and advances portfolio with the increase or decrease in the deposit. Among three banks, NCCBL shows better relationship as well as utilization of deposits on loans and advances than Nabil and SBL due to higher value of r.

4.3.2 Correlation analysis between total deposit and Net profit

Coefficient of correlation between total deposits and net profit measures the degree of relationship total deposits and net profit. In correlation analysis deposit is the independent variable (Y) and net profit is dependent variable (X). The purpose of computing the coefficient of correlation is to justify whether the banks significantly utilizing of deposits for income generating purpose or not and whether there is any relationship between these two variables. To find out the correlation (r) various calculations are done.

Table 4.28

Correlation coefficient and Probable error between total deposits and net profit of Nabil, NCC and SBL

Banks	r_{xy}	PE(r)	6PE(r)	Condition
Nabil	0.9654	0.0205	0.1231	$r_{xy} > 6PE(r)$
NCCBL	0.3919	0.2553	0.1644	$r_{xy} > 6PE(r)$
SBL	0.9747	0.0151	0.0904	$r_{xy} > 6PE(r)$

(Source: Appendix 1.2)

As shown in table 4.28, the coefficient of correlation strongly or near to perfect i.e. +1 for all banks. This indicates positive relation between deposit and net profit. The empirical test of significance of correlation with the help of probable error shows that the net profit depends upon deposits. Among three banks, SBL seems to be more efficient regarding the utilization of the deposits for income generating purpose as reveals by greater coefficient of correlation in SBL.

4.3.3 Correlation analysis between EPS and MVPS

Correlation coefficient between EPS and MVPS measures the degree of the relationship between two variables. In correlation analysis, EPS is the independent variable (Y) and MVPS is dependent variables (X). The purpose of computing the coefficient of correlation is justify whether the MVPS significantly relation in EPS or not and whether there is any relationship between these two variables. To find out the correlation (r) various calculations are done.

Table 4.29
Correlation coefficient and Probable error between EPS and MVPS of
Nabil, NCC and SBL

Banks	r_{xy}	PE(r)	6PE(r)	Condition
Nabil	0.9894	0.0064	0.0382	$r_{xy} > 6PE(r)$
NCCBL	0.2885	0.2765	1.6592	$r_{xy} > 6PE(r)$
SBL	-0.2154	0.2876	1.7259	$r_{xy} > 6PE(r)$

(Source: Appendix 1.3)

Table 4.29 exhibits that the coefficient of correlation of Nabil, NCCBL and SBL is moderate or negative. The relationship between EPS and MVPS is insignificant due to $r_{xy} < 6PE(r)$. To sum up, the relationship between EPS and MVPS is negative and insignificant.

4.4 Trend Analysis

This is the most frequently employed forecasting method. This method is also known as trend projection, extrapolation or curve fitting method. It is one of the most reliable method which also minimizes the weaknesses of the ratio analysis to some extent. The main assumption of the trend method is that the past rate of change will continue in future. Whenever a turning point occurs, the trend projection breaks down. But a forecaster could normally expect to be right in forecast if the turning point are few and spaced at long intervals from each other.

Trend analysis is very useful to predict the future events on the basis of the past tendencies. This method is based on the assumption that past tendency continues in the future.

The future of any variables is forecasted using the equation,

$$Y_c = a + bX$$

Where,

Y_c = dependent variable

A = Y-intercept

B = slope of the trend line

X = year

The normal equation on fitting the trend equation are:

$$Y = Na + b\sum X$$

$$\sum XY = a\sum X + b\sum X^2 \text{ since } \sum X = 0 \quad a = \frac{\sum Y}{N}, b = \frac{\sum XY}{\sum X^2}$$

With the help of the trend equation, future values of the following variables for coming five years have been predicted:

- ✓ Total deposits
- ✓ Loan and Advances
- ✓ Net worth
- ✓ Net profit

4.4.1 Trend analysis of Total Deposits

Table 4.30

Least Square Trend Equation & its determinant of Total deposits

(Rs. In Million)

Bank	a	b	$Y_c = a + bX$
Nabil	37742.40	6720.33	37742.40 + 6720.33X
NCCBL	8941.28	1242.47	8941.28 + 1242.47X
SBL	14888.80	3990.67	14888.80 + 3990.67X

(Source: Appendix 2.1)

Table 4.30 depicts that the total deposits in Nabil, NCCBL and SBL showed increasing trend. On the average, total deposits in Nabil, NCCBL and HBL increased by Rs 6,720.33, Rs 1,242.47 & Rs 3,990.67 millions per year in the

past period respectively. Therefore, trend equation of the total deposit in Nabil, NCCBL and SBL are:

$$Y_c = 37742.40 + 6720.33X;$$

$$Y_c = 8941.28 + 1242.47X \text{ \&}$$

$$Y_c = 14888.80 + 3990.67X \text{ respectively.}$$

On the basis of the trend equation, the forecasted value of the total deposit in Nabil, NCCBL and SBL for FY 2012/13 was Rs 57,903.39 million, Rs 12,668.69 million & 26,860.81 million respectively. And total deposits of three banks for 2013/14 would be Rs 64,623.72 million, 13,911.16 million and 30,851.48 million respectively.

Between three banks, average deposits and rate of increment in total deposits seem higher in Nabil. In other words, total deposits of Nabil will increase in higher rate for forecasted periods if the past trend continues.

4.4.2 Trend analysis of Loans and advances

Table 4.31

Least square trend equation and its determinant of loan and advances

(Rs. In Million)

Bank	a	b	$Y_c = a + bX$
Nabil	26960.80	5588.05	$26960.80 + 5588.05X$
NCCBL	6637.98	1174.55	$6637.98 + 1174.55X$
SBL	12184.94	2864.11	$12184.94 + 2864.11X$

(Source: Appendix-2.2)

Table 4.31 highlights that loans and advances of all banks revealed increasing trend throughout the study period. On the average, loan and advances in Nabil, NCCBL and SBL increased by Rs 5588.05, 1174.55 & 2864.11 millions respectively per year in the past period. Therefore, trend equation of loans & advances in Nabil, NCCBL and SBL are:

$$Y_c = 26960.80 + 5588.05X$$

$$Y_c = 6637.98 + 1174.55X$$

$$Y_c = 12184.94 + 2864.11X$$

On the basis of above trend equation, the forecasted value of the loan and advances for FY 2012/13 are Rs 43,724.95 million, Rs 10,161.63 & Rs 20,777.27 million respectively. And total deposits of three banks for 2013/14 would be Rs 49,313 million, Rs 11,336.18 million & Rs 23,641.38 million respectively.

Between three banks, average loans and advances and rate of increase both seem higher in Nabil. In other words, loan and advances will increase with higher rate in Nabil forecasted periods if the past trend continues.

4.5 Major Findings of the Study

The thesis has been based on the financial analysis of sample bank with certain finding based on the analysis conducted under the analytical section are going to be revealed in the following heads:

i) Liquidity Position

The analysis of liquidity position of these three banks have shows different position. The study reveals the fact that the current ratio of the banks seems to be in a satisfactory level as liquidity position is concerned. According to conventional standard, the ratio should be 2:1. Comparing the current ratio of investment on priority sector of current assets and current liabilities, NCCBL has mobilized higher ratio of current assets and current liabilities than that of Nabil Bank and Siddhartha Bank. At the CV analysis, quick ratio, cash and bank balance to current assets, cash and bank balance to total deposit ratio, fixed deposit to total deposit seems more variation in the ratio of Nabil than NCCBL and SBL because it has more CV whereas other remaining ratio whereas other remaining ratio like, saving deposit to total deposit ratio, loan & advance to current assets ratio seems more variation in the ratio of NCC and SBL.

ii) Activity/Turnover Position

The conclusion extracted about turnover position of these three banks are differing from each other. Ratios i.e. loan & advances to saving deposit & loan & advances to total deposits shows better in SBL and then loan & advances to fixed deposits shows better in NCCBL whereas investment to total deposit is better in Nabil. In other words, Nabil utilizes its income generating assets more efficiently than NCCBL and SBL. If we looks at the CV analysis, loans & advances to total deposits is lesser in NCCBL which indicates that there is mire uniform in utilization of its resources. Likewise, investment in total deposit ratio of Siddhartha shows more uniformity in investment procedure due to lower CV.

iii) Profitability Position

The analysis of profitability of three banks with the help of profitability ratios have been drawn different conclusion. Some ratios shows the earning position and profit position of SBL is better and effective than Nabil and NCCBL. In term of ROA and ROE within these last five years is better profitable in NCCBL is better profitable than other two banks. In summary, expenses of NCCBL is higher, its profit making capacity also efficiency as compared to Nabil and SBL.

iv) Capital Structure Position

The analysis of capital structure ratios of debt-equity ratio and debt assets ratio is higher in Nabil. Likewise, interest coverage ratio of Nabil is higher which indicates that it has better debt servicing capacity than other two banks. Long term debt to total assets and long term debt to total capital are greater in SBL. This analysis shows Nabil seems more levered than NCCBL and SBL.

v) Other Financial Position

- Greater in EPS in Nabil shows that earning on per share basis is highly consistence in Nabil. EPS greatly varied from mean in NCCBL and SBL.
- Higher P/E ratios in Nabil than in NCCBL and SBL indicates greater expectation of market towards the achievement of bank. In the same way, Nabil has greater variability from mean than two banks.
- Higher mean ratio and greater variation of MVPS to BVPS ratio in SBL signifies strong management and organization in SBL than in Nabil and NCCBL.

CHAPTER 5

SUMMARY, CONCLUSION & RECOMMENDATIONS

5.1 Summary

In the present context, the Nepalese economy is rising slowly. Even though, many up's and down's are being faced and happened, banks are still rising which shows the good symptoms to not only the investors but also, the individuals, farmers, women, small business-man & so on. Nepal has not been able to reach at the peak of development due to the lack of financial problems. It has many sectors to develop, which can be done by government or private sector. For the development of country's economy, commercial bank can plays vital role.

The presentation and analysis of data has been made comparative analytical and their interpretation has done in chapter four by applying the wide varieties of methodology as stated in chapter three. It includes the various financial and statistical tools. In case of financial tools and income & expenditure analysis is done. Ratio analysis includes liquidity, turnover, profitability, solvency, capital adequacy & other indicators. Other indicators consist of EPS, P/E ratio and MPS. Various statistical tools such as arithmetic mean, standard deviation, coefficient of correlation and trend analysis have been applied to fulfill the objective of this study. The analysis has been done mainly through secondary level of data collection.

In the context of Nepal, there are 32 commercial banks already in operation and few more are in the process of obtaining their operational license. Despite choosing so many other private and joint venture banks, the researcher choosing Nabil, NCCBL and SBL for research purpose is to study the financial position. The private and joint venture banks have played significant role in the economic development of the country. They have focused their service on commerce, trade and industry along with general public. But the intense competition and lack of sufficient investment opportunities have created threats to the banks. Therefore,

the study has been conducted to evaluate the performance to private commercial banks in order to find out their strengths and weaknesses.

Financial performance as part of the financial management is the main indicators of the success or failure of eth bank. So, the financial performance analysis can be considered as the heart of financial decision the growth and development of the banks. There are different persons and stakeholders as well as institutions that are affects by the financial decision of the bank, stakeholders such as owners, managers, creditor, tax authorities etc directly interrelated in the final information analysis of bank's position. Ratio analysis is techniques of analysis and interpretation of financial statement through mathematical expression. It may be defined as the mathematical expression of the relationship between two accounting figures. To evaluate the different performance of an organization by creating the ratios from the figures of different accounts is terms as Ratio Analysis. In short, ratio analysis can be defined as an analysis of financial statements with the help of ratios.

Therefore, the study has been conducted to evaluate the financial performance of Nabil Bank Limited, Nepal Credit and Commerce Bank Limited (NCCBL) and Siddhartha Bank Limited (SBL) and to find out their strength and weakness. The objectives of this study are to investigate whether the sample banks i.e. NABIL, NCCBL & SBL are financially sound or not. To fulfill these objectives financial data are collected from above mentioned sample banks for the period of five years, from fiscal year 2007/08 to fiscal year 2011/12. After they have been organized in suitable table, chart financial position and performance of three banks has been analyzed with the help of ratio analysis. To fulfill this objective and other specific objectives are described in chapter one, an appropriate research methodology has been adopted which includes financial tools.

The operational efficiency of the bank is found unsatisfactory because of the series of operational loss over last few years. The allocation of loan and

advances by the banks does not seem as meaningful as the productive sectors portfolio. As compare to social and other loans, agriculture sector and service sector loans are quite negligible. As a result, the profitability of the bank is not satisfactory in recent years. The lower return on investment of the bank and prevailing pay-out ratio is not justified at all. Lower market value is a reflection of a weaker financial performance of the banks. The growth rate of total investment is not proportionate. In financial analysis, the net worth and net profit, investment and total deposit & total loan of sampled banks are observed fluctuating trend. The liquidity ratio is much higher than that required of the bank or as prescribed by the Nepal Rastra Bank. But all the other activity, leverage and profitability ratios are growing slowly. The return on equity and earning per share are in nominal level.

5.2 Conclusion

After analyzing the data in chapter four, the conclusion is that the financial performance of such types of commercial banks is found improved year by year. The study reveals the fact that the current ratio of the banks doesn't seem to be in a satisfactory level as liquidity position is concerned. According to conventional standard, the ratio should be 2:1. The sampled banks are holding too less than actually required except in FY 2008/09 and FY 2010/11 in NCCBL. During the study periods, the researcher analyze that the average ratio 1.04, 1.72 & 1.38 times are recorded in Nabil, NCCBL & SBL. Similarly, the Nabil and NCCBL has kept more saving deposit than SBL that indicates the bank give more short-term debt than other periods. The returns on total assets ratio of the banks are far from the satisfactory level. The average ratio of the Nabil, NCCBL and SBL are 2.26%, 2.61% and 1.20% respectively. NCCBL suffered loss in FY 2007/08. Therefore, the positive aspect being the profit, which bank has maintained in fluctuating trend throughout the study period, helps to assume that it can not improve its performance and can not do better further if the past trend continues.

Analysis of utilization of assets ratio of the bank under the study, the bank has given a satisfactory turnover in terms of giving loans and advances to fixed deposits and loan & advances to saving deposits, all these ratio indicates that the bank can't lending its available deposits but holding the fund and deposits to own custody.

In commercial banks, the liquidity portion affects the external and internal factors such as saving for investment situation, internal banks requirement, the lending policies, management capabilities, prevailing interest rate etc. Liquidity and profitability trend move opposite direction as they have negative correlation. To meet the liquidity needs, the banks need cash reserve, which are not earning assets. Profit on the other hand derived from loan and advances. So, from the point of view of profitability the three banks are at the satisfactory level but they are poor liquidity position especially current and quick ratios, which are below the prescribed standard. In summary, financial performance of sample banks are seemed satisfactory. In comparison, profitability, turnover position, capital structure and other indicators (EPS, P/E ratio, MVPS to BVPS ratio) are better than in Nabil as compared to NCCBL and SBL. In totality, Nabil banks is better as compared to NCCBL & SBL because Nabil is less risky than other two banks and it is successful to attract the investor and have strong management. In other word, Nabil bank is investing in less risky sectors. Total operating income and financial indicators between the three sampled banks do not differ significantly except the leverage or capital structure position.

5.3 Recommendations

A clear financial picture can be viewed from all above presentation. In the light of above facts and figures, some valuable and timely suggestions and recommendations are put forwarded on the basis of findings and conclusion or literally their functional pictures in order to revitalize financial success or to improve their operating financial performance of Nabil, NCCBL and SBL are listed below:-

1. These banks could not maintain the conventional standard of liquidity and quick ratios. It indicates the poor liquidity position in these banks especially in Nabil and SBL. It may create the problem of working capital if they need to pay the short-term obligation at demand. With the delay in paying of liabilities of banks may lose their goodwill and may have the problem in winning the confidence of current depositors and short term lenders. So, the three banks are recommended to maintain the adequate net working capital.
2. The banks must collect more funds from current deposits, compared to other interest bearing deposits. The banks must located and explore new techniques and facilities for collection of funds. There should be continuous flow of financial information among various groups of employees. The goal and objective of banks should be carefully communicated to lower level of management too.
3. The leverage ratio of the bank is not satisfactory. The long term debt to total assets ratio means percentage of total assets that has been financed by long term debt for generating income or profit. For this, banks should provide higher long term debts to the more profitable sectors, which gives more return of the overall banks.
4. All three banks have maintained total deposit ratio remarkable higher than standard level prescribed by NRB. The fund tied to NRB balance cannot

yield a good return. So these banks are suggested to lower this ratio and invest the surplus fund in other current assets such as loans and advances, bill purchase, discount and money at call & short notice. The bank have employed a considerably greater portion of debt in their capitals. Therefore, they should be aware of possible risk that may arise due to slackness in the business activities. In this regard NCCBL and SBL should adopt suitable measures so as to check the risk factors.

5. Turnover of fund raised from outsiders appeared less satisfactory in SBL than Nabil and NCCBL. So, SBL has to allocate the deposits in income generating sectors. It will be better for these three banks to open branches in other cities and rural areas in order to find more profitability opportunities.
6. Since the operating expenses of the banks are higher and earns little income. The bank should reduce its operating expenses and earn high incomes to generate desired operating profit.
7. The SBL and NCCBL has failed to utilize its assets for making proper investments. Thus, it becomes necessary for the bank to search for better investment opportunity sectors and invest in it. It is necessary for the bank to increase the extent of its promotion and marketing function in order to increase its business transaction than it is today.
8. Bank should regularly follow the credit customer to confirm that whether the customers have utilizes their credit for the same purpose committed at the time of taking credit from the bank.
9. Although, profit needs to be earned for survival and growth of any institutions, it should not be the one and only goal. The country has expected services from the financial sectors in such a way that it encompasses the balanced development. Economic level of the country can be raised only when the level of the people depending upon commerce and

industry. So, the bank is suggested to diversify its loans in priority and deprived sectors as per the directive of NRB.

10. Maximize the profitability by gearing up the irregular credits and make proper evaluation of the credit norms while sanctioning the loan.
11. The bank should adopt efficient and modern management concept to make more capable to their activities as well as fulfil the growing demand of current financial services.
12. Necessary to diversity the bank's credit investment from commercial and consumption sector to productive sector. It can make capable utilizing its resources efficiently and fulfil the goal of flourishing industry and agriculture in the country.
13. When so may new entrants (banks) to the banking sectors are already making sound financial standing in the banking sector and have good repute among the other banks but still SBL and NCCBL are struggling to maintain its goodwill and still have not succeeded as well. So, it has earn more profit and make proper disbursement without any outsiders' pressures and learn to have commercial natures as it is done by other newly set up competing private and other joint venture banks do it.

BIBLIOGRAPHY

- Annual Report (2007/08 to 2011/12), *Nepal Credit and Commerce Bank Limited, Nepal Arab Bank Limited & Siddhartha Bank Limited, Kathmandu, Nepal.*
- Amatya, A. (2008). *A Comparative Study on financial policy of commercial bank and finance companies of Nepal* (Unpublished Master's Thesis), Central Department of Management, T.U., Kathmandu, Nepal.
- Bajracharya, B.B. (2008). *Monetary Policy and Deposit Mobilization in Nepal.* Kathmandu: Journal of New Business age
- Bhattra, R. (2009). *Something is Rotten with the State of Commercial Banking in Nepal.* New Business Age.
- Brigham, E.F & J.F (1996). *Essential Managerial Finance*, The Dryden press
Harcourt Brace College Publishers
- Crosse, H.D. (n.d). *Management policies of commercial Banks*, New Jersey:
Englewood cliffs, prentice hall Inc.
- Gupta S.P. (2008). *Fundamental of Statistics.* New Delhi: Vikas Publishing House Pvt. Ltd.
- Joshi, J. (2009). *Financial Analysis of commercial banks in Nepal: A Comparative study of Everest Bank Limited, Nabil Bank Limited & Bank of Kathmandu*, (Unpublished Master's Thesis), Central Department of Management, T.U., Kathmandu, Nepal.
- Joshi, S. (2008). *Banking and Insurance Mangement*, Kathmandu: Taleju Prakashan.
- K.C, J.(2007). *Comparative Peformance Analysis of Everest Bank Limited and Bank of Kathmandu*, (Unpublished Master's Thesis), Central Department of Management, T.U., Kathmandu, Nepal.
- Kothari, C.R (2008). *Research Methodology Methods and Techniques*, New Delhi :Wiley Eastern Ltd.
- Lamichhane, S. (2011). *Investment Policy of Commercial Bank in Nepal: A comparative study of Everest Bank Limited with NABIL Bank and Bank of Kathmandu*, (Unpublished Master's thesis), Shankar Dev Campus, T.U., Kathmandu
- Pandey, I.M. (2007). *Financial Management.* New Delhi: Vikas Publishing House Pvt. Ltd.

- Ross, S.A., R.W. and B.D. J. (2007). *Fundamental of corporate Finance*. New Delhi
- Sayers, R.S. (2007). *Modern Banking*. London, Oxford University Press
- Sharma, M.P & Bhatt, M.P (2007). *Priority Receiver Sector*
- Shrestha, S. (2009). *Portfolio Behavior of Commercial Banks Sector*
- Shrestha, S. (2010). *A Case study of Nepal Investment Bank Limited*, (Unpublished Master's thesis), Shankar Dev Campus, T.U., Kathmandu, Nepal
- Limbu, Y.B. (2068). *Accountancy and Auditing*, Kathmandu, Nepal: Ratna Pustak Bhandar.

Websites:

- www.nrb.org.np
- www.nabilbank.com
- www.nccbank.com.np
- www.siddharthabank.com
- www.google.com

Appendix-1

1.1 (A) Calculation of Correlation coefficient between total deposit and loan & advances of Nabil bank

<i>Rs. In Million</i>					
Year	Total Deposit (X)	X ²	Loan & advances (Y)	Y ²	XY
2007/08	23342.29	544862502.4	15545.78	241671275.8	362874105
2008/09	31915.05	1018570417	21365.05	456465361.5	681866639
2009/10	37348.26	1394892525	27589.93	761204237.4	1030435879
2010/11	46410.7	2153953074	32268.87	1041279971	1497620845
2011/12	49696.11	2469703349	38034.1	1446592763	1890146817
	$\sum X =$ 188712.4	$\sum X^2 =$ 7581981868	$\sum Y =$ 134803.73	$\sum Y^2 =$ 3947213609	$\sum XY =$ 5462944285

$$r_{xy} = \frac{n \sum XY - \sum X \sum Y}{\sqrt{[n \sum X^2 - (\sum X)^2] [n \sum Y^2 - (\sum Y)^2]}}$$

$$= \frac{5 \times 5462944285 - 188712.4 \times 134803.73}{\sqrt{[5 \times 7581981868 - (188712.4)^2] [5 \times 3947213609 - (134803.73)^2]}}$$

$$= \frac{1875586008}{47932.66 \times 39547.72}$$

$$= 0.9894$$

Probable Error of Correlation Coefficient PE(r)

$$P. E(r) = 0.6475 \times \frac{1 - r^2}{\sqrt{n}}$$

$$= 0.6745 \times \frac{1 - (0.9894)^2}{\sqrt{5}}$$

$$= 0.0064$$

And, $6PE(r) = 6 \times 0.0064$

$$= 0.0382$$

B) Calculation of Correlation Coefficient between total deposit and loan and advances of NCCBL

<i>Rs. In Million</i>					
Year	Total	X ²	Loan &	Y ²	XY

	Deposit (X)		advances (Y)		
2007/08	6500.3	42253900.1	4417.85	19517399	28717350.4
2008/09	7302.23	53322563	5083.9	25846039	37123807.1
2009/10	9127.74	83315637.5	6858.19	47034770	62599775.2
2010/11	10824.69	117173914	7994.72	63915548	86540365.6
2011/12	10951.43	119933819	8535.19	72849468	93472535.8
	$\Sigma X =$ 44706.39	$\Sigma X^2 =$ 415999833	$\Sigma Y =$ 32889.85	$\Sigma Y^2 =$ 229163224	$\Sigma XY =$ 308453834

$$r_{xy} = \frac{n \Sigma XY - \Sigma X \Sigma Y}{[\sqrt{n \Sigma X^2 - \Sigma(X)^2}] [\sqrt{n \Sigma Y^2 - \Sigma(Y)^2}]}$$

$$= \frac{5 \times 308453834 - 44706.39 \times 32889.85}{\sqrt{5 \times 415999833 - (44706.39)^2} \sqrt{5 \times 229163224 - (32889.85)^2}}$$

$$= \frac{71882708.86}{9018.75 \times 8004.62}$$

$$= 0.9957$$

Probable Error of Correlation Coefficient PE(r)

$$P. E(r) = 0.6475 \times \frac{1 - r^2}{\sqrt{n}}$$

$$= 0.6745 \times \frac{1 - (0.9957)^2}{\sqrt{5}}$$

$$= 0.0026$$

And, $6PE(r) = 6 \times 0.0026$

$$= 0.0155$$

C) Calculation of Correlation Coefficient between total deposit and loan and advances of SBL

<i>Rs. In Million</i>					
Year	Total Deposit (X)	X ²	Loan & advances (Y)	Y ²	XY
2007/08	6625.08	43891685.01	6222.59	38720626.31	41225156.6
2008/09	10191.44	103865449.3	9335.6	87153427.36	95143207.3
2009/10	15854.8	251374683	13328.62	177652111.1	211322604
2010/11	20197.03	407920020.8	13653.85	186427619.8	275767218
2011/12	21575.65	465508672.9	18384.03	337972559	396647397
	$\Sigma X =$ 74444	$\Sigma X^2 =$ 1272560511	$\Sigma Y =$ 60924.69	$\Sigma Y^2 =$ 827926343.6	$\Sigma XY =$ 1020105583

$$r_{xy} = \frac{n \Sigma XY - \Sigma X \Sigma Y}{\sqrt{[n \Sigma X^2 - (\Sigma X)^2]} \sqrt{[n \Sigma Y^2 - (\Sigma Y)^2]}}$$

$$= \frac{5 \times 1020105583 - 74444 \times 60924.69}{\sqrt{5 \times 1272560511 - (74444)^2} \sqrt{5 \times 827926343.6 - (60924.69)^2}}$$

$$= \frac{565050292.60}{28651.24 \times 20683.66}$$

$$= 0.9535$$

Probable Error of Correlation Coefficient PE(r)

$$P. E(r) = 0.6475 \times \frac{1 - r^2}{\sqrt{n}}$$

$$= 0.6745 \times \frac{1 - (0.9535)^2}{\sqrt{5}}$$

$$= 0.0274$$

And, $6PE(r) = 6 \times 0.0274$

$$= 0.1644$$

1.2 (A) Calculation of correlation coefficient between total deposit and net profit of Nabil

<i>Rs. In Million</i>					
Year	Total Deposit (X)	X ²	Net profit (Y)	Y ²	XY
2007/08	23342.29	544862502	673.96	454222.08	15731769.8
2008/09	31915.05	1018570417	746.47	557217.46	23823627.4
2009/10	37348.26	1394892525	1031.05	1063064.1	38507923.5
2010/11	46410.7	2153953074	1141.05	1301995.1	52956929.2
2011/12	49696.11	2469703349	1337.75	1789575.1	66480971.2
	$\sum X =$ 188712.41	$\sum X^2 =$ 7581981868	$\sum Y =$ 4930.28	$\sum Y^2 =$ 5166073.8	$\sum XY =$ 197501221

$$r_{xy} = \frac{n \sum XY - \sum X \sum Y}{[\sqrt{n \sum X^2 - (\sum X)^2}] [\sqrt{n \sum Y^2 - (\sum Y)^2}]}$$

$$= \frac{5 \times 197501221 - 188712.41 \times 4930.28}{\sqrt{5 \times 7581981868 - (188712.41)^2} \sqrt{5 \times 5166073.8 - (4930.28)^2}}$$

$$= \frac{57101084.23}{47932.62 \times 1233.98}$$

$$= 0.9654$$

Probable Error of Correlation Coefficient PE(r)

$$P. E(r) = 0.6475 \times \frac{1 - r^2}{\sqrt{n}}$$

$$= 0.6745 \times \frac{1 - (0.9654)^2}{\sqrt{5}}$$

$$= 0.0205$$

And, $6PE(r) = 6 \times 0.0205$

$$= 0.1231$$

(B) Calculation of correlation coefficient between total deposit and net profit of NCCBL

<i>Rs. In Million</i>

Year	Total Deposit (X)	X ²	Net profit (Y)	Y ²	XY
2007/08	6500.3	42253900.1	-115.92	13437.446	-753514.78
2008/09	7302.23	53322563	498.75	248751.56	3641987.21
2009/10	9127.74	83315637.5	415.46	172607.01	3792210.86
2010/11	10824.69	117173914	423.77	179581.01	4587178.88
2011/12	10951.43	119933819	220.88	48787.974	2418951.86
	$\sum X =$ 44706.39	$\sum X^2 =$ 415999833	$\sum Y =$ 1442.94	$\sum Y^2 =$ 663165.01	$\sum XY =$ 13686814

$$r_{xy} = \frac{n \sum XY - \sum X \sum Y}{[\sqrt{n \sum X^2 - \sum (X)^2}] [\sqrt{n \sum Y^2 - \sum (Y)^2}]}$$

$$= \frac{5 \times 13686814 - 44706.39 \times 1442.94}{\sqrt{5 \times 415999833 - (44706.39)^2} \sqrt{5 \times 663165.01 - (1442.94)^2}}$$

$$= \frac{3925431.61}{9018.75 \times 1110.74}$$

$$= 0.3919$$

Probable Error of Correlation Coefficient PE(r)

$$P. E(r) = 0.6475 \times \frac{1 - r^2}{\sqrt{n}}$$

$$= 0.6745 \times \frac{1 - (0.3919)^2}{\sqrt{5}}$$

$$= 0.2553$$

And, 6PE(r) = 6 × 0.0274

$$= 0.1644$$

(C) Calculation of correlation coefficient between total deposit and net profit of SBL

<i>Rs. In Million</i>					
Year	Total Deposit (X)	X ²	net profit(Y)	Y ²	XY
2007/08	6625.08	43891685	95.31	9083.9961	631436.375
2008/09	10191.44	103865449	143.17	20497.649	1459108.46
2009/10	15854.8	251374683	217.92	47489.126	3455078.02
2010/11	20197.03	407920021	240.85	58008.723	4864454.68
2011/12	21575.65	465508673	311.41	96976.188	6718873.17
	ΣX= 74444	ΣX²= 1272560511	ΣY= 1008.66	ΣY²= 232055.68	ΣXY= 17128950.7

$$r_{xy} = \frac{n \sum XY - \sum X \sum Y}{\sqrt{[n \sum X^2 - (\sum X)^2]} \sqrt{[n \sum Y^2 - (\sum Y)^2]}}$$

$$= \frac{5 \times 17128950.70 - 74444 \times 1008.66}{\sqrt{5 \times 1272560511 - (74444)^2} \sqrt{5 \times 232055.68 - (1008.66)^2}}$$

$$= \frac{10556068.46}{28651.24 \times 378.00}$$

$$= 0.9747$$

Probable Error of Correlation Coefficient PE(r)

$$P.E(r) = 0.6475 \times \frac{1 - r^2}{\sqrt{n}}$$

$$= 0.6745 \times \frac{1 - (0.9747)^2}{\sqrt{5}}$$

$$= 0.0151$$

And, 6PE(r) = 6 × 0.0151

$$= 0.0904$$

1.3 (A) Calculation of Correlation coefficient between EPS and MVPS of Nabil bank

<i>Rs. In Million</i>					
Year	MVPS (X)	X ²	EPS (Y)	Y ²	XY
2007/08	5050	25502500	137.08	18790.926	692254
2008/09	5275	27825625	115.86	13423.54	611161.5
2009/10	4899	24000201	113.44	12868.634	555742.56
2010/11	2384	5683456	83.81	7024.1161	199803.04
2011/12	1252	1567504	70.67	4994.2489	88478.84
	$\sum X =$ 18860	$\sum X^2 =$ 84579286	$\sum Y =$ 520.86	$\sum Y^2 =$ 57101.47	$\sum XY =$ 2147439.94

$$r_{xy} = \frac{n \sum XY - \sum X \sum Y}{\sqrt{[n \sum X^2 - (\sum X)^2]} \sqrt{[n \sum Y^2 - (\sum Y)^2]}}$$

$$= \frac{5 \times 2147439.94 - 18860 \times 520.86}{\sqrt{5 \times 84579286 - (18860)^2} \sqrt{5 \times 57101.47 - (520.86)^2}}$$

$$= \frac{1048780.10}{8197.37 \times 119.22}$$

$$= 0.9894$$

Probable Error of Correlation Coefficient PE(r)

$$P. E(r) = 0.6475 \times \frac{1 - r^2}{\sqrt{n}}$$

$$= 0.6745 \times \frac{1 - (0.9894)^2}{\sqrt{5}}$$

$$= 0.0064$$

And, $6PE(r) = 6 \times 0.0064$

$$= 0.0382$$

B) Calculation of Correlation Coefficient between EPS and MVPS of NCCBL

<i>Rs. In Million</i>					
Year	MVPS (X)	X ²	EPS (Y)	Y ²	XY
2007/08	316	99856	-16.56	274.23	-5232.96
2008/09	457	208849	35.63	1269.49	16282.91
2009/10	335	112225	29.35	861.42	9832.25
2010/11	275	75625	30.28	916.87	8327
2011/12	167	27889	15.78	249.0	2635.26
	∑X= 1550	∑X²= 524444	∑Y= 94.48	∑Y²= 3571.03	∑XY= 31844.46

$$r_{xy} = \frac{n \sum XY - \sum X \sum Y}{\sqrt{n \sum X^2 - \sum (X)^2} \sqrt{n \sum Y^2 - \sum (Y)^2}}$$

$$= \frac{5 \times 31844.46 - 1550 \times 94.48}{\sqrt{5 \times 524444 - (1550)^2} \sqrt{5 \times 3571.03 - (94.48)^2}}$$

$$= \frac{12778.30}{468.74 \times 94.49}$$

$$= 0.2885$$

Probable Error of Correlation Coefficient PE(r)

$$P.E(r) = 0.6475 \times \frac{1 - r^2}{\sqrt{n}}$$

$$= 0.6745 \times \frac{1 - (0.2885)^2}{\sqrt{5}}$$

$$= 0.2765$$

And, 6PE(r) = 6 × 0.2765

$$= 1.6592$$

C) Calculation of Correlation Coefficient between EPS and MVPS of SBL

<i>Rs. In Million</i>					
Year	MVPS (X)	X ²	EPS (Y)	Y ²	XY
2007/08	778	605284	15.88	252.17	12354.64
2008/09	1090	1188100	17.29	298.94	18846.1
2009/10	1000	1000000	22.89	523.95	22890
2010/11	444	197136	21.99	483.56	9763.56
2011/12	270	72900	19.82	392.83	5351.4
	∑X= 3582	∑X²= 3063420	∑Y= 97.87	∑Y²= 1951.46	∑XY= 69205.7

$$r_{xy} = \frac{n \sum XY - \sum X \sum Y}{[\sqrt{n \sum X^2 - (\sum X)^2}] [\sqrt{n \sum Y^2 - (\sum Y)^2}]}$$

$$= \frac{5 \times 69205.70 - 3582 \times 97.87}{\sqrt{5 \times 3063420 - (3582)^2} \sqrt{5 \times 1951.46 - (97.87)^2}}$$

$$= \frac{-4541.84}{1576.82 \times 13.37}$$

$$= -0.2154$$

Probable Error of Correlation Coefficient PE(r)

$$P. E(r) = 0.6475 \times \frac{1 - r^2}{\sqrt{n}}$$

$$= 0.6745 \times \frac{1 - (-0.2154)^2}{\sqrt{5}}$$

$$= 0.2876$$

And, 6PE(r) = 6 × 0.2876

$$= 1.7259$$

Appendix-2

2.1 Calculation of Least Square Trend Value of Total Deposits

Year	X (Year 2009/10)	X ²	Nabil		NCCBL		SBL	
			Y ₁	XY ₁	Y ₂	XY ₂	Y ₃	XY ₃
2007/08	-2	4	23342	-46684.58	6500.3	-13000.6	6625.1	-13250.2
2008/09	-1	2	31915	-31915.05	7302.2	-7302.23	10191	-10191.0
2009/10	0	0	37348	0	9127.8	0	15855	0
2010/11	1	2	46411	46410.7	10825	10824.69	20197	20197.0
2011/12	2	4	49696	99392.22	10951	21902.86	21576	43151.2
Σ	0	10	188712	67203.29	44706.4	12424.72	74444	39906.7

Nabil

$$a = \frac{\sum Y_1}{N} = \frac{188712}{5} = 37742.40$$

$$b = \frac{\sum XY_1}{\sum X^2} = \frac{67203.29}{10} = 6720.33$$

NCCBL

$$a = \frac{\sum Y_2}{N} = \frac{44706.4}{5} = 8941.28$$

$$b = \frac{\sum XY_2}{\sum X^2} = \frac{12424.72}{10} = 1242.47$$

SBL

$$a = \frac{\sum Y_3}{N} = \frac{74444}{5} = 14888.80$$

$$b = \frac{\sum XY_3}{\sum X^2} = \frac{39906.73}{10} = 3990.67$$

2.2 Calculation of Least Square Trend Value of Loan and Advances

Year	X (Year 2009/10)	X ²	Nabil		NCCBL		SBL	
			Y ₁	XY ₁	Y ₂	XY ₂	Y ₃	XY ₃
2007/08	-2	4	15546	-31091.56	4417.9	-8835.7	6222.6	-12445.1
2008/09	-1	2	21365	-21365.05	5083.9	-5083.9	9335.6	-9335.6
2009/10	0	0	27590	0	6858.2	0	13329	0
2010/11	1	2	32269	32268.87	7994.7	7994.72	13654	13653.8
2011/12	2	4	38034	76068.2	8835.2	17670.38	18384	36768.0
Σ	0	10	134804	55880.46	33189.9	11745.5	60924.7	28641.1

Nabil

$$a = \frac{\sum Y_1}{N} = \frac{134804}{5} = 26960.80$$

$$b = \frac{\sum XY_1}{\sum X^2} = \frac{55880.46}{10} = 5588.05$$

NCCBL

$$a = \frac{\sum Y_2}{N} = \frac{33189.90}{5} = 6637.98$$

$$b = \frac{\sum XY_2}{\sum X^2}$$

SBL

$$a = \frac{\sum Y_3}{N} = \frac{60924.70}{5} = 12184.94$$

$$b = \frac{\sum XY_3}{\sum X^2} = \frac{28641.13}{10} = 2864.11$$