CHAPTER – I
INTRODUCTION

1.1 Background of the Study

The inseparable part of fund which is required at the time of commencement as well as essential during the period of operation of any organization is known as Capital. On the other hand, structure is the way in which something is arranged or organized. Hence, the capital used by any organization in the appropriate proportion to maximize its value can be generalized as Capital Structure. Every organization mobilizes its Capital Structure mainly from two sources i.e. Equity and Debt. Capital Structure in itself is a powerful force in the success or failure of an enterprise. The component Equity includes common share, preference share and retained earnings; while Debt includes bonds, debentures, mortgaged loan, secured loan, long term bank loan etc.

Even though capital structure is related but also distinct from program management or operating capacity as it has a strong effect on both. A firms' capital structure refers to the mix of its financial liabilities. As financial capital is an uncertain but vital resource for all firms and suppliers of finance to be able to apply control over firms. Debt and equity are the two major classes of liabilities, with debt-holders and equity-holders representing two types of investors in the firm. Each of these is associated with different levels of risk, benefits and control.

While debt-holders exert lower control, they earn a fixed rate of return and are protected by contractual obligations with respect to their investment. Equity-holders are the residual claimants, bearing most of the risk and correspondingly have greater control over decisions. Questions related to the choice of financing (debt versus equity) have increasingly gained importance in management research. Traditionally examined in the discipline of finance, these issues have gained importance in the past few years, with researchers examining linkages to strategy and strategic outcomes. The modern financial theory and strategic management are based on different aspects, resulting in opposing conclusions. Thus, more integrative research is required to resolve the controversies. Strategic management scholars exhibit different opinions regarding the possibility of such integration. A theoretical integration between the two disciplines is indeed possible.

Some management researchers have viewed capital structure decisions as arising from the preferences of various stakeholders such as managers, board of directors and institutional investors. Other researchers have viewed capital structure as an antecedent to firm strategy, such as diversification into new businesses. While these studies have definitely contributed to some understanding of the linkages between strategic management and capital structure; they have largely ignored some basic issues confronting researchers and managers. Does it matter how firms finance their assets? And do different modes of financing make a difference? While unreliable evidence suggests that the amount and type of financing should be closely tied to a firm's strategy few researchers have looked at the strategy/financing interaction.

A firm consists of a bundle of resources; some of them are able to contribute to sustainable Competitive advantage. The financial management functions of a firm - including its capital structure decision - deals with the management of the sources and uses of finances. Firms enter into transactions with suppliers of finance (either they are debt-holders or equity-holders) when raising capital for strategic assets. The right to assist of the cash flows generated from the assets lies with these suppliers. The debt-to-equity ratio of a firm determines how these cash flows will be shared between debt-holders and equity-holders. In other words, if firms are set up to maximize equity-holder's wealth, then the proportion of cash flows disbursed to debt-holders becomes important. The different types of financing, however, are also associated with different levels of costs. An examination of the net benefit of firm's assets should incorporate these cost differences along with the value of such assets. Summing up, the study focuses on examining the relationship between the capital structure and the profitability.

1.2 Concept of Commercial Bank

Generally speaking a place where money is lent or exchanged, or put for safety and to acquire interest is known as bank. In the modern context, bank has diversified its limitations and working area into the wide range. After the growth of consciousness about bank among the general public, bank has fragmented its work by giving different names, like Government Bank, Agricultural Bank, Commercial Bank, Co-operatives etc...Here we focus on the study of one branch i.e. Commercial Bank.

A lexicon meaning with reference to the Black's Law Dictionary for Commercial Bank is that; a bank authorized to receive both demand and time deposits, to engage in trust services, to issue letter of credit, to rent time-deposit boxes and to provide similar services.

Likewise Section 2(a) of the Commercial bank Act 2031 (1974) has defined that "Commercial Bank" means a bank which operates currency exchanges transactions, accepts deposits, provides loan; performs dealing relating to commerce except the banks which have been specified for the co-operatives, agricultural, industry of similar other specific objective.

For this reason, commercial banks are the important source of institutional credit in the money market. A commercial bank is a profit-seeking business firm, dealing in money or rather dealing in claims to money. It is a FI (Financial Institute) that creates deposits and liabilities which circulates as money unlike the deposits of other FIs. In fact, the greater part of money supply is the direct consequence of the profit-seeking or money-creating activities of commercial banks.

1.3 Profile of the Selected Banks

1.3.1 NABIL Bank Limited

NABIL Bank Limited, the first joint venture bank of Nepal, commenced its operation on 2041/03/29 (July12, 1984). The bank was listed in the Nepal Stock Exchange in the year 1986 A.D. (2042 B.S.) Dubai Bank Limited, Dubai was the first joint venture partner of NABIL Bank with 50% equity investment. Currently, NB (International) Limited, Ireland is the foreign partner. Nepal Arab Bank Limited was used to be the name of NABIL Bank till December 31, 2001. Currently it is widely recognized as NABIL Bank since January 1, 2002.NABIL has 49 branch network and 63 ATM counters in all major cities. The corporate banking body, which is also the head office of this very prestigious bank, is in Kamaladi, Katmandu. It is known by the name NABIL House. Its number of outlets in the country is the highest among the joint venture and private banks operating in Nepal. By this, it becomes the largest bank among the privately owned banks in Nepal. The main objective of NABIL Bank is to be a bank of the first choice.

NABIL team always feels these 5 core competencies (C. R. I. S. P.) have always been a catalytic engine that always powers the spirit of team NABIL. The Banker, the publication of the financial

Times- London, has honored the NABIL Bank as Bank of the Year 2004 and it is a matter of prestige to be lending bank of the country.

1.3.2 Nepal Investment Bank Ltd. (NIBL)

Nepal Investment Bank Ltd. (NIBL) was the 2nd joint Venture bank opened in the country, it was previously known by the name of Nepal Indosuez Bank Ltd. and established in 1986 as a joint venture between Nepalese and French Partners. The French partner (holding 50% of the capital of NIBL) was Credit Agricole Indosuez, a subsidiary of one of the largest banking group of companies comprising of bankers, professionals, industrialists and businessmen, has acquired on April 2002 the 50% shareholding of Credit Agricole Indosuez in Nepal Indosuez Ltd. The ownership of this bank at present context is fully handover to the Nepalese investors. So, right now this bank is no more a joint venture, but fully a commercial bank. The name of the bank has also been changed to Nepal Investment Bank Ltd. Upon the approval of bank's Annual General Meeting, Nepal Rastra Bank and Company Register's office. NIBL has its head office at Darbar marg, Kathmandu and it has 40 branches and 70 ATM counters spread over the country. 'The Banker', the publication of the Financial Times, London has honored the Nepal Investment Bank as "Bank of the Year 2003", " Bank of the Year 2005" ," Bank of the Year 2008" and "Bank of the Year 2010". It is really a great matter of prestige to be a leading bank of the country for time and again.

1.4 Statement of the Problem

Today every rational citizen, who is conscious and concerned about the present scenario of Nepalese politics, unemployment problem etc, can easily give a lecture for hours about the poor economy of the country. Having so many potentials to enhance the economic status, Nepal is still compelled to ask for foreign aids and funds. It is said, there is always a room for hope. So despite facing these problems the poverty and other economy related problems can be easily rectified by the participation of commercial banks in national economy. Commercial banks are enthusiastically operating in Nepal even in the peak hour of recession. This enthusiasm can really be helpful for them unless and until they maintain the appropriate proportion between debt and equity, i.e. Capital Structure. If the ratio is unbalanced then, it is sure for any bank to be away from the market i.e., bankruptcy is certain. Therefore, the choice among the ideal proportion of debt and equity can heavily affect the value of the bank.

The equity portion reduces the risk of bankruptcy and avoids the burden of meeting maturing interest and principal payments but does not provide any tax benefits and due to transaction cost, issue of share a lengthy and expensive process whereas employment of debt to acquire capital resources is cheaper in comparison to equity financing but increases the risk of bankruptcy. Thus, it is seen in the practice that capital structure management is really the important factor. It could enhance the ultimate performance of the organization by cutting down irrelevant expenses and encouraging the management to be conscious enough in choosing the favorable equity debt mix.

Profitability of any organization depends more or less under the operation of organization and the structure of capital. So, this concise study revolves around determining the relationship between the capital structure and the profitability of the selected banks in Nepal, namely NABIL Bank Limited (NABIL) and Nepal Investment Bank Limited (NIBL) for the study, the following research questions have been raised:

a. Are NABIL and NIBL managing their capital structure efficiently?
b. Are the selected banks able to mobilize their resources properly?
c. In what way does the leverage decision affect the profitability of the banks?
d. What are the major factors affecting capital structure of banks?

1.5 Objectives of the Study

The main objective of the study is to examine and interpret the impact of capital structure on profitability of selected banks of Nepal. To achieve such objectives, the following major objectives have been formulated:

a. To analyze the capital structure of NABIL and NIBL
b. To evaluate the return on equity of the selected banks.
c. To provide the appropriate suggestions on the basis of finding.

1.6 Significance of the Study

It may sound pessimistic, but nobody can escape from the bitter truth that prosperity of a nation without its economic development is practically impossible. Banks are playing vital role in the development process. Hand in hand growth in multinational banking in the nation has helped to

improve the living standard of the people and their society. The financial mix decision affects the entire valuation of the firm in the long run. As, every firm desire to have high valuation of their shares, the great care must be taken while determining the composition of liabilities. The more employment of ownership capital in financing mix lessens the risk but may bring down the performance due to secured position.

On the other hand, the maximum employment of debt increases the risk but helps to improve the profitability during the economic boom. Therefore, this study seems relevant as it attempts to analyze & determine the right capital structure mix for the selected banks so that their value ultimately increases. It attempts to explore the financial strength and weakness of the selected banks of Nepal and whole of the discussion revolves around the capital structure pattern. The result of the study shows the actual condition of the banks and the necessary ways to overcome issues if any, so that their performance can be improved. Hence, this study is beneficial to:

a. The internal groups as well as external groups to find out the advantages and disadvantages of financial position, rate of growth and liquidity position.

b. The shareholders in obtaining the information about the impact of capital structure on profitability of banks to understand the security of their investment.

c. The policy makers for formulating the policy regarding Capital Structure of commercial banks.

This study is obviously beneficial for the concerned banks to make policies. It may be equally important material for library and other researchers who are interested to explore more about the concerned topic.

1.7 Limitations of the Study

In context of Nepal, data problem is the foremost problem for study. There is significant place for arguing about accuracy and reliability. There are many limitations, which weaken the generalization e.g. periods taken and other variables. Besides this the major limitations of the study are as follows:

a. This study attempts to analyze the capital structure and profitability only and does not cover other aspects of finance.

b. The study is limited with only three banks, namely NABIL Bank Limited, Nepal Investment Bank Limited and Nepal Industrial and commercial Bank Limited and thus

may not represent the whole banking industry of Nepal.

c. This reliability of the secondary data blindly depends on the accuracy of the annual report of the concerned banks.

d. The study covers only five years ranging from fiscal year 2007/08 to 2010/11.

1.8 Organization of the Study

This study has been divided into five chapters:

Chapter 1 – INTRODUCTION

This chapter consists of general background of the study, a brief introduction of NABIL and NIBL statement of problem, objectives of the study, significance of the study, limitations of study and organization of the study.

Chapter 2 – REVIEW OF LITERATURE

This chapter includes review of theoretical / conceptual framework, related articles, previous related studies and research gap.

Chapter 3 – RESEARCH METHODOLOGY

This chapter consists of research design, population and sample, data collection procedure and tools & techniques of analysis.

Chapter 4 – DATA PRESENTATION & ANALYSIS

This chapter includes the presentation and analysis of collected data through tables, diagrams, graphs, formats, financial and statistical techniques and tools.

Chapter 5 – SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter deals with the summary of the study, conclusion, suggestions and recommendations.

Bibliography

Appendices

CHAPTER-II
REVIEW OF LITERATURE

The focal point of this chapter is based on past knowledge. Previous studies cannot be ignored because they provide the foundation to the present study. This chapter helps to discover what other research in the area has uncovered. So this chapter is based on review of literature relevant

to the problems, theoretical / conceptual framework given by different authors, articles and also reviewed studies performed previously by thesis writer.

2.1 Conceptual Review

As the study focuses on capital structure and profitability, here it is most important to open up with the conceptual thought behind it. Capital is a scarce sources and much more essential to maintain smooth operation of any firm. The available capital and financial sources should be utilized so efficiently that could generate maximum return. Capital structure is considered as the mix of debt and equity and to operate in long run prospect, a firm must concentrate in its proportion.

All the sources of secondary data are literature for every researcher. A literature review is a piece of discursive prose rather than describing or summing one piece of literature after another (Adhikari, 2010).

Capital structure is the mix (or proportion) of a firm's permanent long term financing represented by debt, preferred stock and common stock equity. (Van Horne, 1997:240)

The financial manager is concerned with determining the best financial mix or capital structure where the optimal financing mix would exist, in which market price per share could be maximized. (Pandey, 1988:203)

Capital structure of the firm is the permanent financing represented by long term debt, preferred stock and shareholder's equity. Thus, a firm's capital structure is only part of its financial structure. (Weston and Brigham, 1978:565)

"Capital structure is made up of debt and equity securities which comprise a firm's finance of it's assets. It is the permanent financing of a firm represented by long term debt plus preferred stock plus net worth". (Kulkarni; 1983:363)

"The term 'capital structure' means the proportion of different types of securities issued by a firm. The optimal capital structure is the set of proportion that maximizes the total value of the firm". (Schall and Haley; 1983: 339).

"profit plan is estimation and predetermination of revenues and expenses that estimates how much income will be generated and how it should be spent in order to meet investment and profit requirements. In the case of institutional operations it presents a plan for spending income in manner that does not result in a loss" (Niemeyer & schinimidgall; 1986:189)

Profit plan represents an overall plan of operations, cover a definite period of time and formulates the planning decision of the management. It can be viewed as one of the major important approaches that have been developed to facilitate effective performance of the management process.

2.2 Capital Structure

Generally, the sources of capital can be divided into two parts. The first is owner's capital and the second is borrowed capital. Sometimes, the owner's capital may be more appropriate for the business. But sometimes it may be inappropriate. The financial manager has to choose appropriate capital for the business. The process that leads to the final choice of capital formation is referred to as the capital structure planning or decision.

Capital structure concept holds major place in the field of financial management. Capital structure is the composition of various types of long term sources of fund, namely debt, prefer stock, debenture and equity including retain earnings (reserve and surplus) Sometimes it is also referred as financial structure ,if there is no short term liability (Khan and Jain ,1992).

Capital Structure means the composition of sources of finding for the business, and it may consist of debt, preference capital and equity capital. Capital structure refers to the 'Liabilities and Equities ' side of balance sheet (Pandey & *et. al.,* 2005).

Capital Structure refers to the proportion of different sources of finance i.e. equity and debt to the total capitalization. A business organization should be able to choose such a capital structure that can be maximize the return of shareholders and value of the firm.

Capital is the life blood of business. Without Sufficient Capital, no business can run efficiently and effectively. For smooth running of any organization, they need adequate supply and balance

flow of capital. Simply, capital refers to the claim of the owners and outsiders against the business resources or properties that are held by the company. Capital is the amount which is invested into the business in terms of kinds or cash at the start or any time as requirement of organization. The capital required for the business is invested by the owners. The capital requirement may also be arranged from outsiders. Outsider capitals are bank loan, debentures, bond, loan from money lender etc. The combination of different sources of capital is known as capital structure (Koirala & *et. al.,* 2011).

Optimal capital structure is designed by considering the prospective earnings capacity and possible risk factor.

Capital structure refers to the mix of long term sources of fund (Pandey, 1999). Such as, Debenture, long term debt, preference share capital and equity share capital including reserve and surplus.

Capital plays an important role in the business. It requires from the promotional stage up to the end of a business. No business can be operated without capital. So, that capital is labeled as 'life blood of business.' The capital can be collected from two different sources. The different sources are shares, debenture, public deposits, bank loan etc. The financial manager has thus to make decision about the source or their combination to raise such funds.

The capital structure decision involves two risks: Business risk and financial risk. Any operational problem can be classified as business risk. It is the riskiness of the firm's operating even if it does not use the debt. It can be defined as the risk associated with projections of a firm's future operating income.

The formation between the owner's capital and borrowed capital is known as capital structure. The owner's capital includes equity shares, preference shares and retained earnings borrowed capital includes debentures, bonds and long term loan (Dangol, 2008).

Capital Structure is a mix of a company's Long-Term Debt, specific Short-Term Debt, common equity and preferred equity. The capital structure is how a firm finances its overall operations and

growth by using different sources of funds. (www.creditflux.com) Debt comes in the form of bond issues or long-term notes payable, while equity is classified as common stock, preferred stock or retained earnings. Short-term debt such as working capital requirements is also considered to be part of the capital structure.

The term Capital Structure is the combination of long term debt and equity. It is a part of financial structure i.e. comprised to the total combination of preferred stock, common stock, long-term debt and current liabilities (Mathur, 1979). If the current liabilities are removed from it, we get capital structure.

Capital Structure refers to the relative Proportions of equity capital and debt capital within a company's balance sheet (Collin, 2009).

Financial structure refers to the compositions of all sources and amount of funds collected to use or invest in the business. In other words, financial structure refers to the capital and liabilities side of balance sheet. Therefore, it includes shareholder's funds, long term loans as well as short term loans. It is different from capital structure as capital structure includes only the long term sources of financing while financial structure includes both long term and short term sources of financing (Keister, 2000). Thus a firm's capital structure is only a part of its financial structure.

All of the items on the liabilities side of firms' balance sheet excluding current liabilities are source of capital. The total capital can be divided into two components: debt capital and equity capital. Debt capital includes all long term borrowing incurred by the firm, i.e. Debenture, bonds, long term loan, etc. and Equity capital consists of the long term fund provided by the firm's owners (Bearly, & *et.al.,* 1985).

The following symbols are employed in capital structure theories:

1. B= Total market value of the debt.
2. S= Total market value of the equity share.
3. Ke= Equity Capitalization rate
4. I= Total interest payment.
5. EBIT/NOI= Earnings before interest and tax to net operating income.
6. EAT= Earnings after tax.

7.   Ko= Overall capitalization rate/weighted average cost of capital

8.   V= Total market value of the firm i.e. V=S+B

9.   Ki= Cost of debt.

2.2.1 Optimal Capital Structure

Basically, Capital structure refers to the proportion of security issued by any organization. To be more specific the reasonable proportion of debt and equity is also known as optimal Capital structure. This helps to maximize the value of the firm and ultimately maximizes the shareholders wealth.

An optimal capital structure would be obtained at the combination of debt and equity that maximizes the total value of the firm or minimizes the weighted average cost of capital (Pandey, 1992).

Optimal Capital Structure can be defined as that mix of debt and equity which will maximize the market value of a company (Soloman, 1993). If such an optimum does exist, is twofold. If maximize the value of the company and hence the wealth of its owners it minimizes the company's cost of capital which is in turn increase its ability to new wealth creating investment.

Thus, the capital structure management means the appropriate mix of long -term capital and short-term capital, which gives the company sufficient profit. Optimal capital structures have certain risk and appropriate return. This is done by good management. In this study, one gets certain question, which is, How much debt is appropriate varies company to company as well as firm to firm? In this regard, the following suggestions for establishing new company can play the crucial role:

1)   The debt-equity ratio does note exceeds 2:1.

2)   For large capital intensive projects a higher debt-equity ratio of 4:1 or even 6:1 may be allowed. (Debt for this purpose is defined long term debt plus preference capital, which is redeemable after 12 years).

3)   The ratio of preference capital to equity does not exceed 1:3

4)   Promoters hold at least 25% of the equity capital (Korajczyk and Levy, 2003).

2.2.2 Features of an Optimum Capital Structure

To be more specific and simple optimum capital structure can be defined as the combination of different capital components in capital structure that guides to the maximum value and minimum overall cost of capital. Thus, a sound or appropriate or optimum capital structure is an indicator of efficient financial practice. (Pandey, 1991) has explained the features of optimum capital structure in the following way:

Risk: Optimum capital structure should not be the subject of higher risk. The use of excessive debt threatens the solvency position of the firm. To the point, debt does not add significant level of risk it should be used, otherwise its use should be avoided.

Return: Optimum capital structure should provide maximum returns to shareholders without any additional cost.

Capacity: The capital structure should be determined with the additional debt capacity of the company. The debt capacity of a company depends on its ability to generate future cash flows. It should have enough cash flows to pay creditor's fixed charges (Interest) and principal sum.

Control: The capital structure is said to be optimum when the control of the company is in the desired level. The capital structure should involve minimum risk of loss of control in the company.

Flexibility: The capital structure should be flexible. It should be possible for a company to adopt its capital structure with a minimum cost. Similarly, it should be possible for the company to provide funds whenever needed to finance its profitable opportunities.

2.3 Meaning of Bank Capital

Generally speaking, capital indicates the resources employed in production process to generate more wealth and profit. But if we go with the jargons of finance and accounts the term capital is defined as the excess amount of assets over liabilities. Financial institutions and commercial banks produce loans and financial innovation (or financial products) to facilitate trade transactions. Because of special role they play in the economy, they are heavily regulated by concerned authorities. Thus the capital and composition of the capital components is different in these institutions. The Commercial Banks Act 2031 B.S. has defined Capital funds of a bank as,

paid-up equity, statutory reserve, retained profit and any other reserve prescribed by Nepal Rastra Bank from time to time. According to the Nepal Rastra Bank Act 2058 and NRB Directives, the capital funds of a bank comprise the following:

i. Core Capital: Core Capital of a bank includes:
   a. Paid up equity
   b. Share premium
   c. Non-redeemable preference shares
   d. General reserve
   e. Accumulated profit and loss

ii. Supplementary Capital: Supplementary capital includes:
   a. General loan loss provision (GLLP)
   b. Exchange fluctuation reserve
   c. Assets revaluation reserve
   d. Hybrid capital instruments
   e. Unsecured subordinated term debt
   f. Other free reserves

Nepal Rastra Bank Act is effective from 1st Shrawan 2058 (July 16, 2001). According to the NRB, minimum paid-up capital requirement for establishment of commercial bank is as under:
   i. Rs.250 million to operate all over Nepal except Kathmandu Valley
   ii. Rs.1000 million to operate all over Nepal.
   iii. All existing commercial banks are required to raise their capital base to Rs.2000 million by mid July, 2009.

2.4 Capital Structure Planning

All the sources through which an organization finances its overall operation in short is called capital structure. It includes long term debt sources and equity share capital. As raising capital from both debt and equity sources involve floatation cost, transaction cost, holding cost, thus to maximize and economize the use of funds, the capital structure planning is very essential (Omet and Nobanee, 2001).

Usually a finance manager plans the optimum capital structure that means selects the right proportion of debt and equity funds in the firm's capital structure. It assures value maximization. Besides, proper financing mix helps the firm to raise enough capital at the time of requirement.

Capital structure is planned at the time of incorporation. While deciding about the proportions of debt and equity in the structure, the target capital structure should be considered as well because the items in present balance sheet decide the future balance sheet as well. Capital structure decision is the continuous one. It is made when the firm requires the fund.

There are three common approaches to decide about a firm's capital structure (Michaelas, 1998).

A) EBIT-EPS Approach

This approach helps in analyzing the effect of debt on the earnings per share of the firm.

B) Valuation Approach

This approach is used for analyzing the impact of debt on the shareholder s value.

C) Cash Flow Approach

This approach is used for analyzing the firm s ability to service debt and meet the maturing fixed obligation. It determines the solvency position of the firm.

2.4.1 Profit & Profitability

The excess of revenue over cost in any form of business is known as profit. In other words, business profits are the residual income, which is equal to sale proceeds minus costs. In a simple term, profits mean the residual balance of earnings expected to be available with the firm that is obtained after deducting entire expenses, costs, charges and provision from total revenue of a period of time. Profit is the resources left to the firm for future growth and expansion or reward to be distributed to the entrepreneurship in the form of dividends (Richard, 1996).

2.4.2 Profitability of Commercial Banks

Unlike in any other organizations, there are various forms of stakeholders in the Bank. So, the bank also has to make the best efforts to meet the interests of the stakeholders. The majority of the needs of the stakeholders are related with the profitability of the banks. For example, in case the bank earns profits, the investors get dividends, employees get bonus, government gets benefits in forms of taxes etc. Thus, the foremost objective of the banks is the profit maximization.

The major source of funds of the bank is the public deposit. The bank in most of the cases has to pay certain rate of interest to the public in their deposit. Thus, the banks have to mobilize these funds in the profitable sectors, which derive maximum return on the assets. Hence, the investment or granting of loan and advances by them are highly influenced by profit margin. The profit of the bank is dependent on the interest rate, volume of loan and time period of loan. However, the bank at the same time has to ensure that their investment is safe from default.

Although the banks have to invest in order to earn profits. But, at the same time have to set aside some of its fund in order to maintain their liquidity. As the major source of bank s fund is public deposits, the bank has to be able to allow the depositors to withdraw their deposit in terms of need. Thus, the bank cannot invest all its funds in the profitable sectors. Thus, a successful bank is one who invests most of its funds in different earnings asset standing safely from the problem of liquidity i.e. keeping cash reserves to meet the daily requirements of the depositors. Lower the liquidity, higher the profitability and higher the liquidity, lower the profitability. So, profitability and liquidity maintain a highly negative co-relation. Since both are equally important, banks cannot afford to ignore any of the m. So, the management has to make a crucial decision regarding a mixture of liquidity and profitability (William, 1990).

2.4.2.1 Theories of Profit

Economists have propounded several theories of profits to explain profits of entrepreneurs. Most of the theories are centered on the controversy about the role of the entrepreneur. In the following section some of the fundamental theories of profit have reviewed in brief.

A) Theory of Risk and Uncertainty Bearing

It was F.B. Hawley who first developed the theory of risk bearing and concluded that profit is a reward of the entrepreneurs for bearing risks. But, the theory was picked up by Professor F.H.

Knight who divided risks into insurable and non-insurable risks and concluded that profit is a reward for bearing non-insurable risks and uncertainties. Thus according to Knight, profit is a reward to the entrepreneur for his non-transferable function of bearing non- insurable risk and uncertainties.

B) Dynamic Theory of Profit

This theory was propounded by J.B. Clark. According to this theory, „dynamic changes in the economy are the basic causes of emergence of profits. There is no profit in a static economy as no changes take place. In a dynamic economy there are constant changes in population, capital, methods of production and industrial set up. These changes multiply wants of consumers, which earn profits to the entrepreneur.

C) Innovation Theory of Profits

Joseph Schumpeter singled out „innovation form the dynamic theory of profits and developed the innovation theory of profits. According to Schumpeter changes take place in a dynamic economy and innovation in the schanging world gives rise to profits. In his view, the entrepreneur plays an important role of introducing innovation in an economy and profits are the rewards for his role as an innovator. The innovation could be changes or techniques that reduces cost of production or increases demand for the product.

2.5 Review of Related Articles

Raheman, & *et.al.,* (2007), in their article, Capital Structure and Profitability shows the Case of Islamabad Stock Exchange, have stated that firstly there is negative relationship between the long term debt and profitability verifying first hypothesis, which means that firms with having more long term debt are less profitable. This can be attributed to the interest cost bear by the company for a long term debt financing, which increase the fixed costs of the product and resultantly decrease the profitability. Secondly numeric verifications and statistical analysis shows negative relationship between net operating profitability and debt ratio.

Thirdly the relationship of profitability with percentage of equity in the total financing has direct relationship meaning thereby more equity leads to more profits. Fourthly size with profitability numerical calculations have accepted that with the increase in size of the firm the profitability

increases. The study has taken the N-log of sales as proxy for growth in size and the increase in sales result in more profits.

Driffield & Pal (2008), in their article, Evolution of Capital Structure in East Asia: Corporate Inertia or Endeavors? They have stated that many firms in the worst affected countries indulged in some reckless capital structure behavior. There is evidence that firms in the worst affected countries not only have higher leverages (being the result of high debt even in a situation of deteriorating assets), but also tend to have lower speed of adjustment than their counterparts in the least affected countries. This general ranking is robust to various alternative specifications and sample selections.

The case of Malaysia is particularly interesting in this context: while by virtue of its rigorous institutional and legal environment and also access to market based finance, the country was successful to restrict leverages to a generally lower level, it was not so successful to ensure speedy adjustment of capital structure and was among the worst affected countries hit by the crisis. This analysis also identifies some important adjustment mechanisms: (a) adjustment speeds are greater for larger firms and firms in the top leverage quartile who tend to have access to cheaper credit, as reflected in a comparison of effective interest rates. (b) Firms with more cash flow tend to have faster speed of adjustment. (c) Firms with only long-term debt however have lower speed of adjustment. (d) Firms in countries with tighter regulations and access to equity finance tend to have lower leverage and higher speed of adjustment (with the exception of Malaysia). (e) In general financially distressed firms in most countries tend to have higher speed of adjustment, revealing cases of sudden adjustment; the latter is especially evident in the post-crisis period, highlighting the fact that lessons have been learnt after the crisis.

Abor (2008), in his article, Determinants of the Capital Structure of the Ghanaian Firms, has examined the determinants of capital structure decisions of publicly quoted firms, large unquoted firms and SMEs in Ghana. Publicly quoted and large unquoted firms were found to have higher debt ratios than SMEs. Overall, listed and unquoted firms exhibit different financing behavior from that of SMEs. Short term debt constitutes a relatively high proportion of total debt of Ghanaian firms.

Listed firms are better positioned to raise equity finance from the stock market, and large unquoted firms are also able to access equity finance from institutional investors usually through private placements. Firm size was found to have a positive relationship to short-term debt ratio of SMEs and debt ratios of quoted firms, but negative with respect to long-term debt ratio in the case of unquoted firms. The results of this study seem to support the pecking order hypothesis, given that both long-term and short-term debts have inverse associations with profitability in all the sample groups. Firm growth was found to have a positive association with long-term debt for the unquoted firms sample and short-term debt ratio for SMEs. Limited liability companies are more likely to obtain long-term debt finance relative to sole-proprietorship businesses.

The issue of capital structure is an important strategic financing decision that firms have to make. Clearly, the pecking order theory appears to dominate the Ghanaian capital structure story. It is therefore important for policy to be directed at improving the information environment.

Frank and Goyal (2008), in their article, Profits and Capital Structure, have stated that the empirical relationship between profits and corporate use of debt finance has been widely misinterpreted. More profitable firms tend to issue more debt and they tend to repurchase equity. Firm size matters. Larger firms tend to be more active in the debt markets while smaller firms tend to be more active in the equity markets.

However, there is a particular group of firms that has had a big influence on the common rejection of the trade-off theory. Large, low-profit firms typically have high debt levels and they often increase their debt by quite a bit despite their low profit status. Further, these firms experience an even larger increase in the market value of their equity. Apparently, the market is expecting significant future profits from these firms despite low current profits. Thus, if the market is correct on average, the debt issuance by these firms may not be so surprising.

Overall, the empirical evidence on issuance seems rather easy to understand from the perspective of the static trade-off theory. Firms with more profits are less likely to issue equity, and more likely to repurchase equity. Firms with more profits do tend to issue debt. Market conditions also seem to have a fairly natural effect on issuance. The effect of bad market conditions is particularly strong on small

and low-profit firms. Larger firms and more profitable firms are less strongly affected.

Mahmood and Zakaria (2009), in their article, Profitability and Capital Structure of the Property and Construction Sectors in Malaysia, have assessed the profitability and capital structure among property developers and contractors in Malaysia. The study uses a sample of 25 property companies and 20 construction companies for a period of eight years from 2000 through 2008.

The study provides insight into the performance of property developers and contractor s profitability and factors impacting capital structure decisions of these firms to the Malaysia economy. Thus, the key contributions of the study were to explore and expand on existing literature from a Malaysian perspective. The study presented that the developers in Malaysia are larger and more profitable compared to contractors counterparts. This is because their capital gearing and debt equity ratio are less than those of contractors. Further, contractors are heavily burden with debt and the need to service this debt is very high and thus, this led to low pre-tax profit margin as well as profit margin. The results from the regression analysis indicate that capital gearing is negatively related with net profit margin and price earnings ratio for both property and construction sectors. The simple argument for the result is that the high gearing firms have to service their large amount of debt which in turn will reduce their profit margin and PE ratio, regardless of sector size.

Hutchison and Cox (2010), in their article, The Causal Relationship between Bank Capital and Profitability, have demonstrated that for banks in the U.S. there is a positive relationship between financial leverage and the return on equity for both the 1996-2002 and the 2003-2009 periods. Furthermore, the proportionality of financial leverage to return on equity appears to have been more or less maintained between the later more regulated time periods as opposed to the earlier freer period. Moreover, when viewing the return on assets relationship a similar pattern as the return on equity to capital relationship is observed. That is, ROA is inversely related to financial leverage. Again, there seems to be a dearth of evidence to sustain the notion that the 1996-2002 periods are different than the 2003-2009 periods. Bank performance has been robust to the regulatory environment that they have faced. Eriotis, Frangouli, Ventoura-Neokosmides (2010), in their article, Profit Margin and Capital Structure: An Empirical Relationship, have stated that financial structure is a very important element for firms' profitability. Firms may use their debt-to-

equity ratio to affect profitability. Some firms choose a high debt-to-equity ratio, whereas others prefer to choose a lower one. The successful selection and use of the debt-to-equity ratio is one of the key elements of the firms' financial strategy. Most of the studies undertaken to examine the impact of financial indices on firm's profitability have used industry level data. Studies, which have used various financial indices to capture the financial structure, found either a positive or a negative impact on firm's profitability. This study has used firm level data from various industries and we have found a strong negative impact of the debt-to-equity ratio on firm's profitability. Generally, this means that either the cost of borrowed capital is higher than the benefit from investment or that firms which prefer to finance their investment activities through self-finance are more profitable than firms which finance investment by borrowed capital. In our study we may say that the firms that finance their investment activities by retained profits are more profitable than those that finance their activities through borrowed capital. We also found a negative and statistically significant impact of concentration on firm's profitability, which means that although firms take into consideration their interdependence they prefer to compete with each other than to cooperate.

Pandey's (1981) study is concerned with the test of relationship between the cost of capital and leverage, effect of leverage, Cost equity and, effect of tax deductibility on cost of capital in Indian context. In the cross-sectional analysis of 131 observations drawn from Cotton, Chemical, Engineering and Electricity industries for the years 1986, 1969 and 1970, he found that the conclusion of MM independent hypothesis does not hold reliable conclusion specially in the context of India. Matta (1984) found the negative relationship between debt, equity ratio and growth rate.Garg (1988) suggested that there existed the relationship between business risk and debt equity ratio. Pandey (1904) did the attitude survey of the practicing managers of 30 Indian companies and drew the conclusion that Indian practicing manager have the concept of optimal capital structure and it should be maintained by every company.

Monohar Krishna Shrestha (1985) His study on "analysis of capital structure in selected public enterprises" argue that most of public enterprises have confusing capital structure since the corporation are not guided by any objectives based financial plan and policies. The corporations are using least combination of debt with equity to avoid financial burden as far as possible. According to Mr. Shrestha, the debt-equity ratio should neither be highly levered to create too

much financial obligations that lie beyond capacity to meet not should be much lower low levered to infuse operational strategy to bypass responsibilities without performance. He used ratio analysis as the tool of analysis and found the selected public enterprises. He further added that in many instances aphorism become the basis of capital structure and most of them want to eliminate debt if possible to relieve financial obligations.

2.6 Review of Previous Related Thesis

Shrestha, Ranjana (2010), has made a Study on *"Capital Structure Management"* (With special reference to the Listed Multinational Manufacturing Companies in Nepal).

The objectives of the study were as follows:

    a. To examine the capital structure of selected companies.

    b. To analyze cost of capital and return on capital in relation to the capital employed.

    c. To decide the proportion of equity capital and debt capital to make the capital structure balanced and maximize the shareholder's wealth of the selected companies.

She had pointed the following major findings:

She had calculated averages of different financial ratios, leverage as well as DU- point system analysis

    a. The average of DOL (Degree of Operating Leverage) for UNL and BNL were 14.10 and 5.93. UNL had high DOL, which indicated the riskiness of the company.

    b. The average DFL for UNL was higher in comparison to BNL.

    c. The average of Long Term Debt as a percentage of Total Debt for UNL and BNL had zero value, which showed the unlevered condition.

    d. The average ratio was above 50 for the UNL, this situation indicated that the debt amount was comparatively high for assets financing as per the figure of the ratio.

    e. The profit margin of the companies had not shown a satisfactory picture during the study. The profit margin for UNL was higher than BNL which indicated the good earning capacity of the company by selling its products.

Dangol, Dhurba Lal (2010), has made a study on,*"Study on Capital Structure Management of Gorakhkali Rubber Udyog Ltd"*. The basic objective was to analyze the debt equity ratio, interest coverage ratio with some of the measures to improve the policy. The study had analyzed all the variables in the form of ratio analysis.

The study had found that as compared to the shareholders equity and the trend of debt equity the ratio was increasing every day, and company's debt serving capacity was very poor due to the negative interest coverage ratio. In addition, the operational performance was not satisfactory due to negative earning and low volume of sales revenue, and the company was not able to utilize its capacity more than 50% which result the huge losses. Eventually, the study had suggested lowering down the amount of debt and obtaining additional funds through issue of equity share, improving its working capital and reducing over staff, making strategic plans and developing the motivations management.

Dongol, Sunita (2010), has researched on the topic, *"Capital Structure of Hydropower Company"* (With special reference of Butwal Power Company Ltd. and Chilime Hydropower Company Ltd. and National Hydropower Company)

Main objective of the study was to identify, analyze, interpret and show the right picture of the Capital Structure of Selected Companies in Nepal. Study had analyzed the effect the financial leverage on returns and risk and also pick out the relationship between Capital Structure and related variables.

The specific objectives of the study were as follows:
1) To know the composition structure and characteristics of Capital Structure of listed hydro power companies.
2) To compute the Correlation between Long term debt and capital
3) To analyze the impact of debt financing on profitability.
4) To examine the relationship of leverage with different financial indicators (ratios).

During the research the major findings made were as follows:
At the time of study, three hydro powers listed on Nepal Stock Exchange. Three hydro powers were running in same industry in Nepal. But their initial stage Capital Structure was moving on same trends i.e. replace Long Term Debt by Equity.
1) Capital employed to net worth ratio had not given different information that first Leverage tools. It analyzed firm's financial strength. All three companies had sound net worth.

2) The CV of BPCL, CHPCL and NCPCL were 0.1024, 0.1021 and 0.2055 respectively. BPCL, CHPCL had almost same risk but NHPCL had comparatively highest risk.

3) Capital employed to net worth ratio had not given different information than first leverage tools. It analyzed firm financial strength. All three companies had sound net worth.

4) Debt equity ratio analyzed data like debt ratio but on another side, it looked the percentage of interest bearing debt on basis of net worth or shareholder funds. Actually, net worth was the surely of safety margin of debt. While acquisition of loan forms creditors net worth and debt get more importance. Debt ratio less than 1 means total debt was less than shareholder equity and more than 1 was vice versa. BPCL had been less than 2 debt ratio from first year till date. Debt ratio of CHPCL has more than 1 for last four year. NHPCL brings down this ratio to 0.54 in fifth year. This data said Nepalese hydro power companies were safe for lenders on point of view of debt equity ratio

Bhattatai, S. (2010), has completed his thesis on the topic *"Impact of Capital structure on Profitability of commercial Banks"*.

To achieve such objectives, the following objectives had been formulated:

a) To analyze the Capital Structure of banks.

b) To examine the solvency position of banks under study.

c) To evaluate the effect of Capital Structure Capital Structure on Profitability of banks.

d) To compute the return on equity and return on assets of the selected banks.

The major findings of the study were as follows:

a. The equity capital financing of both the banks were greater than the Long Term Debt Financing, as a result the Debt Equity ratio of NSBL was 0.84 times and of EBL was 0.27 times in average.

b. The usage of Long Term Debt in term of Total Debt was higher in NSBL than in EBL. Consequently the average Long Term Debt to Total Debt of NSBL was 6.87% and that of EBL was 1.84%.

c. The EBIT of EBL was stronger than that of NSBL in meeting the interest liability. The interest Coverage ratio of EBL was 41.80% and that of NSBL was 33.47% in average.

d. The trend analysis showed that the D/E ratio would be 0.97 times in NSBL and 0.06 times in EBL, and the NPAT would be Rs. 65.80 million in NSBL and Rs. 1166.85 million in EBL by the end of the fiscal year 2013/14.

Neupane, Durga (2011) has made her research on the topic of "*Ascertaining Relationship between Capital Structure and Profitability of Banks*"

The main objective of the study was to examine and interpret the impact of Capital Structure on Profitability of selected banks of Nepal.

To achieve such objectives, the following objectives had been formulated

a) To analyze the Capital Structure of NABIL and NIBL.
b) To examine the Solvency position of the selected banks.
c) To evaluate the effect of Capital Structure on Profitability of banks.
d) To Compute the return on equity and return on assets of the selected banks.

Major findings were generating from the two sources i.e. from Secondary and Primary data canalization:

Major Findings as per the Secondary Data Analysis

a) The average debt ratio of NIBL was greater than that of NABIL. So, total assets of NIBL was more risky in comparison to NABIL
b) The result of the debt equity ratio of NABIL was greater than that of NIBL, even then the equity capital financing of both the banks were greater than the Long Term Debt Financing.

Findings from Primary Data Analysis

a) 52% of the respondents had opined that the Capital Structure of the bank had high impact on Profitability. Further, 48% of the respondents had stated that the Capital Structure had medium effect on Profitability.
b) Half of the respondents had opined that the Capital Structure reflects high equity Capital.

Consequently, 40% had stated that the Capital Structure should reflect high debt Capital and 10% remained bewildered and said that they had no idea on this issue.

c) 28% of the respondents had said that the growth and stability of the bank affects the capital structure most. Meanwhile, 18% had pointed out component cost of capital, 24% had claimed nature and size of business, 10% had stated management attitude, 4% had affirmed corporate tax rate, 10% had confirmed cash flow stability and 6% had said other factors to be major determinant of capital structure.

Nepal, Sushil (2011), has made a study on, *"A study on Capital structure of selected commercial banks in Nepal"*. The basic objectives were to see the relationship between debt and return, EBIT and Interest payment, interest payment & interest income and Debt equity ratio & NPAT.

The study had found that the correlation between Debt and Return, EBIT and Interest payment, Interest payment and Interest income of all sampled bank was positive and significant.

Bhusal, Shuresh (2011) has completed his research work on the title *"Impact of Capital Structure on Profitability of Himalayan Bank Limited. (HBL)"*

The main objective of the study was to evaluate the Capital Structure of Himalayan Bank Ltd. It was the study about the Capital Structure and Profitability of HBL by taking the financial data. It tried to analyze the overall Capital Structure and Profitability. The specific objectives were as follows:
   a) To evaluate whether the Capital Structure affects the cost of equity of HBL.
   b) To analyze the debt serving capacity of HBL.
   c) To analyze the relationship of Capital Structure with Profitability, cost of capital and EPS of HBL.

From the study, the bank was found to be highly lever. The company's financial mix account was a higher proportion of Long Term Debt and it was in increasing trend every year. The study revealed the following results:

1) Fixed deposit of HBL was increasing year by year from FY 2005/06. On an average,

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collection of fixed deposit of bank was 8.77% but its trend was in fluctuating rate. Fixed deposit was fluctuating from 2005/06 in total liabilities during the study period. Also fixed deposit was fluctuating since 2005/06 in total debt. But it claimed more than two- third in total liabilities and total debt.

2) The major expenses of the bank were interest and commission fund 49.16% of total expenses, which covered 53.33% of total income on an average. Office operating expenses was second major expenses, which was fund 22.21% of total expenses, which covered 24.10% total income on an average. It was found that, it was the most important role on profit. If expenses were increased that profit of the company should be decreased and vice versa.

3) PIE ratio of HBL was fluctuating over the study period. The maximum ratio was 31.56 times in 2008/09 and lowest ratio was 18.57 times in 2006/07. It was found that market appraisal of the performance of the bank was well.

4) The Correlation Coefficient between K_o and DER was negative relationship and the calculated value of 't' was less than the tabulated value of 't'. Hence, it was insignificant relation.

5) The Regression Coefficient of KE on DER was positively related. So this indicated that increase in funded debt to shareholders fund leads to increase in K_e Regarding Correlation Coefficient was also positive which means the average in DER leads to increase in K_e and 't' statistic was insignificant. So regression result was closely with traditional view.

2.7 Research Gap

The researcher when committed to write thesis as a partial fulfillment of the requirement for the degree of master went through different topics. It was really a troublesome task to select the topic, even then, after the thorough review on prior thesis, the researcher came to know that the previous researchers analyzed the capital structure by using secondary sources of information which were concerned with either determining the capital structure and cost of capital or simply the relationship between the capital structure and Profitability. But actually speaking, appropriate

capital structure can be determined by various factors. After the study it was found that the previous scholars couldn't submit the present facts and ignored the powerful financial tool i.e. trend analysis. Therefore, Present study tries to use the same ignored but powerful tool to forecast the components of Capital Structure. In addition this research is different among others on the basis that the researcher has included the overall data presentation table with analysis and explanation at the end of chapter four. Thus, the present study detects this gap, and tries to fulfill such gap. The intuition of researcher gives him the confidence that this thesis is going to be very useful and important in the banking sector as well as among the group of investors.

CHAPTER-III
RESEARCH METHODOLOGY

This chapter has a fine blend of the overall approach of the research process, from the theoretical support to the collection and analysis of data.

3.1 Introduction

First chapter of this study has already been employed to give a brief introduction on the subject matter. Besides, the reviews of literature with possible review of ideas, theories and research finding have also been presented in second chapter. Now, this is the crucial part of the study to have choice of research methodology. It helps to make the analysis meaningful. So, this chapter deals with the methodology adopted for the study. Research methodology refers to the various sequential steps to be adopted by the researcher in studying a problem with certain point of view. In this study, research methodology has been paid due attention to achieve the objectives of the study.

The research methodology is defined as the scientific, organized and systematic method (or technique) of solving the research problem (Silwal, 2005). If helps to give the solution of the problems, like: how research is conducted scientifically?

Research methodology is a way to systematically solve the research problem (Kothari, 1990). In the new, complex and competitive business scenario development banks have faced different challenges.

3.2 Research Design

Research Design is a plan outlining how information is to be gathered for an assessment or evaluation that includes identifying the data gathering method(s), the instruments to be used/ created, how the instruments will be administered, and how the information will be organized and analyzed. In short we can say that it is a plan for collecting and utilizing data so that desired information can be obtained with sufficient precision or so that a hypothesis can be tested properly (Adhikari, 2010).
"Research design constitutes the blueprint for the collection measurement and analysis of data" (Cooper & Schinder, 2006).

A research design is the arrangement of conditions and analysis of data that aims to combine relevance to the research purpose with economy in procedure (Claire S. and *et.al*., 1962).

A research design is the specification of methods and procedures for acquiring the information needed. It is the overall operational pattern of framework, of the project that stipulates what information is to be collected from which sources by what procedure (Joshi, 2010). If it is a good design, it will ensure that the information obtained is relevant to the research questions and that is was collected by objective and economical procedures.

Research design is the plan, structure and strategy of investigation conceived so as to obtain answers to research questions and to control variance, the plan is the overall scheme or program of the research. It includes an outline of what the investigator will do from writing the hypothesis and their operational implications to the final analysis of data. The structure of the research is more specific. It is the outline of the scheme of the paradigm of the diagrams that outline the variables and their relation and combination. We build structural schemes for accomplishing operational research purposes. Strategy as used here is also more specific than plan (Kothari, 1994). In other words, strategy implies how the research objectives will be reaches and how the problem encountered in the research will be tackled".

Research design is a systematic and purposeful plan (or strategy) of study (or action) to be carried out, during the process of research, in order to find the solution of research problem. It is the plan (or strategy or scheme) for the collection, analysis and the interpretation of data. The collection and analysis of data are important aspects of research but research design covers other aspects of research like identification, selection and formulation of problem, testing of hypothesis and drawing logical conclusion (Silwal, 2005).

Research design is the plan structure and strategy of investigation conceived so as to obtain answers to research question and to control variance (Wolf and Pant, 1975).

Basically, the research design has two purposes. The first is to answer the research question and second is to control variance.

3.3 Population and Sample

Among the 32 commercial banks, only three commercial banks are taken for the study. They are:

⟩ Nabil Bank Limited (NABIL)

⟩ Nepal Investment Bank Limited (NIBL)

3.4 Data Collection Procedure

The study is based on secondary data. To evaluate the capital structure, profitability and the relationship between them of the banks, the secondary data have been analyzed.

The required data for the study are collected from the followings sources:

⟩ Library research study.

⟩ Internet browsing

⟩ Annual reports of NABIL and NIBL Bank

⟩ Newspaper articles, journals, bulletins and unpublished thesis

3.5 Data Analysis Tools and Methods

To analyze the data in this study, the researcher has used some financial and statistical tools to achieve the objective of this study. The data collected from various sources leads to the logical conclusion, only if the appropriate tools and techniques are adapted to analyze such data. The collected data has no meaning if such data are not analyzed.

3.5.1 Financial Tools

Generally the ratio analysis has been conducted on the secondary data analysis. The major ratios carried down have been enumerated below;

A) Capital Structure

It is a mix of a company's Long-Term Debt, specific Short-term Debt, common equity and preferred equity. The capital structure is how a firm finances its overall operations and growth by using different sources of funds.

Debt comes in the form of bond issues or long-term notes payable, while equity is classified as common stock, preferred stock or retained earnings. Short-term debt such as working capital

requirements is also considered to be part of the capital structure.

i) Debt-Equity Ratio

Debt/equity ratio is equal to long-term debt divided by common shareholders' equity. Investing in a company with a higher debt/equity ratio may be riskier, especially in times of rising interest rates, due to the additional interest that has to be paid out for the debt. It is important to realize that if the ratio is greater than 1, the majority of assets are financed through Long Term Debt. If it is smaller than 1, assets are primarily financed through equity.

$$\text{Debt --Equity Ratio} = \frac{\text{Long Term Debt}}{\text{Total Equity Capital}}$$

Where, Long-Term Debt includes, Bonds payable, Mortgage loan, Debenture, Other long-term loan, Secured loan

Total Equity Capital includes, Equity share capital, Preference share capital, General reserve, Reserve & surplus, Retained earnings, Accumulated profit, Capital reserve, Share premium, Share premium, Share forfeiture, Reserve for contingency, Sinking fund, Dividend equalization fund, Capital redemption reserve, P/L account (cr.)

Less: Miscellaneous expenditures (Preliminary expenses, underwriting commission, Discount on issue of share or debentures), Accumulated loss or profit and loss account (Dr. Balance)

A high Debt-Equity Ratio indicates that the financing from creditor is higher than the owner. Hence it is risky. It shows the margin to the owners. On the other hand, a low Debt-Equity Ratio indicates that financing from owner is higher than the creditor. It indicates the margin to the creditors. The creditors prefer the Low Debt-Equity Ratio.

ii) Long Term Debt to Total Debt

This ratio computes the proportion of a company's Long-Term Debt compared to its Total Debt. By using this ratio, investors can identify the amount of leverage utilized by a specific company and compare it to others to help analyze the company's risk exposure. Generally, companies that

finance a greater portion of their total debt via Long Term Debt are considered less risky than those which finances through Short Term Debt.

$$\text{Long Term Debt to Total Debt Ratio} = \frac{\text{Long Term Debt}}{\text{Total Debt}} \times 100$$

Where, Total Debt = Long Term Debt + Current Liabilities

The higher Long Term Debt to Total Debt Ratio shows the high proportion of Long Term Debt over the Total Debt and vice versa.

iii) Debt Ratio

The Debt Ratio compares a company's Total Debt to its Total Assets, which is used to gain a general idea as to the amount of leverage being used by a company. A low percentage means that the company is less dependent on leverage, i.e., money borrowed from and/or owed to others. The lower the percentage, the less leverage a company is using and the stronger its equity position. In general, higher the ratio, the more risk that company is considered to have taken on.

$$\text{Debt Ratio} = \frac{\text{Total Debt}}{\text{Total Assets}} \times 100$$

Where, Total Assets = Fixed assets + Current assets

Fixed assets=Goodwill, Equipment, Copyright, Plant and machinery, Furniture, Fixture and Fittings, Investment (Long term), Land and Building, Leasehold premises, Motor vehicles, Premises, Patent right and Freehold premises

Current assets= Cash in hand, Cash at bank, Sundry Debtors, Marketable Securities, Closing stock or inventory, Short- term investment, Bills receivable, Prepaid or advance expenses, Accounts receivable, Accrued income etc.

The high Debt Ratio indicates that the Total Assets includes more proportion of Total Debt and vice versa.

B) Solvency Ratio

The Solvency Ratio measures the size of a company's after-tax income; excluding non-cash depreciation expenses, as compared to the firm's total debt obligations. It provides a measurement of how likely a company is able to meet its debt obligations.

i) Current Assets to Short Term Debt

The ratio is mainly used to give an idea of the company's ability to pay back its Short-Term Liabilities (debt and payables) with its Short-Term Assets (cash, inventory, receivables). The higher the current ratio, the more capable the company is of paying its obligations. A ratio under 1 suggests that the company would be unable to pay off its obligations if they came due at that point. While this shows the company is not in good financial health, it does not necessarily mean that it will go bankrupt - as there are many ways to access financing - but it is definitely not a good sign.

$$\text{Current Assets to Short Term Debt} = \frac{\text{Current Assets}}{\text{Total Short Term Debt}} \times 100$$

Where, Short Term Debt = Current Liabilities = Bills payable, Accounts Payable, Notes Payable, Sundry Creditor, Short term bank loan, Bank overdraft, outstanding expenses, Unearned or Advance income, Tax payable/Provision for tax, Dividend payable and proposed dividend/ unclaimed dividend

ii) Interest Coverage Ratio

The Interest Coverage Ratio is used to determine how easily a company can pay interest expenses on outstanding debt. The ratio is calculated by dividing a company's Earnings before Interest and Taxes (EBIT) by the company's interest expenses for the same period. The lower the ratio, the more the company is burdened by debt expense. When a company's Interest Coverage Ratio is only 1.5 or lower, its ability to meet interest expenses may be questionable.

$$\text{Interest Coverage Ratio} = \frac{\text{EBIT}}{\text{Interest on Borrowed Capital}}$$

This ratio gives the debt serving capacity of the firm. Higher ratio is desired.

C) Profitability Ratios

It is a class of financial metrics that are used to assess a business's ability to generate earnings as compared to its expenses and other relevant costs incurred during a specific period of time. For most of these ratios, having a higher value relative to a competitor's ratio or the same ratio from a previous period is indicative that the company is doing well.

i) Earnings per Share

The money earned in dividends per share, shown as a percentage of the market price of one share (Collin, 2009)

Earnings per share serve as an indicator of a company's profitability. It is the portion of a company's profit allocated to each outstanding share of common stock. Earnings per share are generally considered to be the single most important variable in determining a share's price. It is also a major component used to calculate the price-to-earnings valuation ratio.

$$\text{Earnings per Share} = \frac{\text{Net Profit After Tax - Dividend Paid On Preference Share}}{\text{No. of Common Outstanding Share}}$$

Where, NPAT = NPBT-Tax

ii) Return on Equity

The return on equity is the amount of net income returned as a percentage of shareholders equity. Return on equity measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested.

$$\text{ROE} = \frac{\text{NPAT}}{\text{Equity Capital}} \times 100$$

iii) Return on Assets

Return on asset is an indicator of how profitable a company is relative to its total assets. ROA gives an idea as to how efficient management is at using its assets to generate earnings. Calculated by dividing a company's annual earnings by its total assets, ROA is displayed as a percentage. Sometimes this is referred to as return on investment.

$$\text{ROA} = \frac{\text{NPAT}}{\text{Total Assets}} \times 100$$

iv) Return on Total Deposit

Return on Total Deposit Ratio measures how efficiently the deposits have been mobilized. It

reveals the relationship between Net Profit after Tax and Total Deposits.

$$ROD = \frac{NPAT}{Total\ Deposits} \times 100$$

Where, Total Deposits = Non-interest bearing accounts+ Interest bearing accounts

Non-interest bearing accounts =Current deposits+ Margin deposits +others

Interest bearing accounts = Saving deposits + Fixed deposits + Call deposits + Foreign Currency + Certificate of deposits

3.5.2 Statistical Tools

The analysis could not have been done without using the statistical tools. The following Statistical tools have been effectively utilized for data analysis:

A) Mean/Average

An Average is a single value selected from a group of typical of all the values in the group (Waugh, 1952).

The inherent inability of the human mind to grasp in its entirety a large body of numerical data compels us to seek relatively few constants that will adequately describe the data (Fisher, 1948).

The averages are the measures which condense a huge unwieldy set of numerical data into single numerical values which are representative of the entire distribution (Gupta, 2011).

Arithmetic mean or simply a mean of a set observation is the sum of all the observations divided by the number of observations. Arithmetic mean is also known as the arithmetic average.

Let x_1, x_2, x_3 …………………., x n be the n values of the variable then their arithmetic mean be denoted by x is defined by,

$$X = \frac{x_1 + x_2 + x_3 + \ldots\ldots\ldots\ldots.x_n}{n}$$

Where, 'n' is the number of observations.

B) Standard Deviation

Standard deviation, usually denoted by the letter ∃ (small sigma) of the Greek alphabet was first suggested by Karl Pearson as a measure of dispersion in 1983. It is defined as the positive square root of the arithmetic mean of the squares of the deviations of the given observations from their arithmetic mean (Gupta, 2011).

The standard deviation is the absolute measure of dispersion in which the drawbacks present in other measures of dispersion are removed. It is said to be the best measure of dispersion as it satisfies most of the requisites of a good measure of dispersion.

$$S.\ D. = \sqrt{\frac{\phi(x - \overline{x})^2}{N}}$$

C) Coefficient of Variation

Coefficient of Variation is a statistical tool which studies the relationship between two variables and correlation analysis involves various methods and techniques used for studying and measuring the extent of the relationship between two variables (Gupta, 2011).

A measure of the spread of statistical data, which is equal to the standard deviation multiplied by 100 (Collin, 2009).

The coefficient of dispersion based on standard deviation multiplied by 100 is known as the coefficient of variation (C.V.). Less the C.V., more will be the uniformity and more the C.V., less will be uniformity. The C.V. is defined by,

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

Less C.V. % is preferred.

D) Correlation Coefficient

When the relationship is of quantities nature, the appropriate statistical tool for discovering and measuring the relationship and expressing it in a brief formula is known as correlation. If the values of the variables are directly proportional then the correlation is said to be positive. On the other hand, if the values of the variables are inversely proportional, the correlation is said to be negative, but the correlation coefficient always remains within the limit of +1 to -1. By Karl Pearson, the simple correlation coefficient (r) is:

$$r = \frac{\phi dx.dy}{\sqrt{\phi dx^2}.\sqrt{\phi dy^2}}$$

E) Probable Error

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

$$\text{Probable Error (P.E.)} = 0.6745 \; ||\frac{1\text{-}r^2}{\sqrt{n}}$$

Where, r = the value of correlation coefficient

n = number of pairs of observations

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

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

If P.E. < r < 6 P.E., nothing can be concluded.

F) Trend Analysis

A widely and most commonly used method to describe the trend is the method of least square. Let the trend line between the dependent variable y and the independent variable x (i.e. time) be represented by;

Y = a + bx ………………………… (i)

Where,

a = y intercept or value of y when x = 0

b = slope of the trend line or amount of change that comes in y of a unit change in x.

CHAPTER-IV

DATA PRESENTATION AND ANALYSIS

This chapter deals with comparative analysis and presentation of available data as express in the research methodology. Necessary figures, tables, various tools & techniques are also presented in this chapter to describe and analyze the study. The researcher has analyzed and interpreted the relevant data of NABIL & NIBL by applying the following activities to judge the relationship between Capital Structure and Profitability of the banks.

4.1 Financial Analysis

4.1.1 Capital Structure of Banks

When people refer to capital structure they are most likely referring to a firm's debt-to-equity ratio, which provides insight into how risky a company is. Usually a company more heavily financed by debt poses greater risk, as this firm is relatively highly levered. A bank needs to have strong capital structure to augment the profitability of the banks. Debt and equity capital are the components of the capital structure of the bank, and thus a bank needs to adopt good composition of these components.

Capital structure means the mixture of share capital and other long term liabilities. In the company, we know that liability of each shareholder is limited but how much be the total liability of shareholder is the important question? It can be decided by choosing best capital structure. In capital structure, we include equity share capital, preference share capital, debenture and long term debt. Suppose, our company's capital structure may show 50% equity share capital, 30% pref. shares capital and 20% debentures. But all companies' capital structure may not be equal because different business needs different type of capital structure which will be suitable according to the need of business.

Some of companies want to become smart. They slowly decrease equity share capital and increases loan excessively which may be very risky because these company has to pay fixed cost of interest and has to manage repayment of loan after some time. Some mistake in it, may be risky for its solvency. So, decision relating to capital structure is very important for commercial banks.

4.1.1.1 Year wise Debt-Equity Ratio

The debt-to-equity ratio is a financial ratio indicating the relative proportion of shareholders' equity and Long Term Debt used to finance a company's assets. The two components are often

taken from the firm's balance sheet or statement of financial position. The debt-to-equity ratio can be calculated by using following formula:

$$\text{Debt–Equity Ratio} = \frac{\text{Long Term Debt}}{\text{Total Equity Capital}} \times 100$$

The D/E Ratio shows that the percentage of Long Term Debt with respect to Total Equity Capital. It is a powerful tool of the company for risk measurement

Table 4.1

Debt –Equity Ratio (%)

Year	NABIL	NIBL
2006/07	9.24	38.86
2007/08	42.90	42.60
2008/09	65.65	39.08
2009/10	63.30	27.86
2010/11	9.78	23.71
Mean	38.17	34.42
S.D.	24.71	7.30
C.V.%	64.74	21.21

Sources: Appendix 1

Figure 4.1:

Year wise Multiple Diagram of D/E Ratio
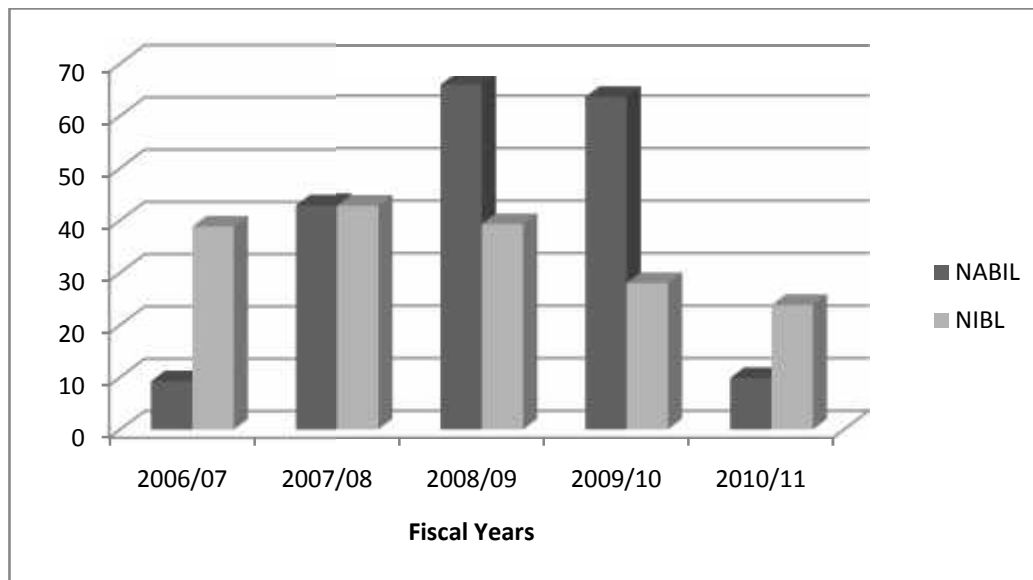
Above the table and figure show that NABIL, the trend of above both variables i.e., the Debt Equity Ratio of the bank has increased for the first three fiscal years and thus has ranged from 9.24 % in the fiscal year 2006/07 to 65.65% in the fiscal year 2008/09, while in the fiscal year 2010/11, it is 9.78%. The debt equity ratio displays that in each fiscal year the usage of equity capital is greater than the usage of Long Term Debt Capital. However, in average, the Debt Equity Ratio of the bank is 38.17 and the variation in the ratio is 64.74%, indicating high inconsistency.

However, Similarly with regard to NIBL, it has been observed that the debt equity ratio of the bank has oscillated during the periods, and thus indicates that the increment in debt capital is not precisely equal to the increment in equity capital. In highest, the debt equity ratio is 42.60% in the fiscal year 2007/08 and in lowest, the Debt Equity Ratio of NIBL is 23.71% in the fiscal year 2010/11. Talking about the average, the Debt Equity Ratio of the bank is 34.42%, and the coefficient of variation is 21.21%.

According to the table 4.1, the D/E ratio of NABIL has the highest ratio i.e. 65.65% and Nabil has the lowest ratio with 9.24% in FY 2006/07. On the same way NABIL has highest D/E ratio and NIBL has the lowest D/E ratio in FY 2008/09. Again NABIL has the highest and NIBL has the lowest D/E ratio in FY 2009/10.

4.1.1.2 Long Term Debt to Total Debt

Debt capital should be limited up to a level, which the earning capacity of the firm can support.

Otherwise, the company has to sell its assets and be forced to go into liquidation. The ratio of Long Term Debt to Total Debt indicates what percentage of company's Total Debts is included in the form of Long Term Debt. The Long Term Debt to Total Debt can be calculated by using following formula:

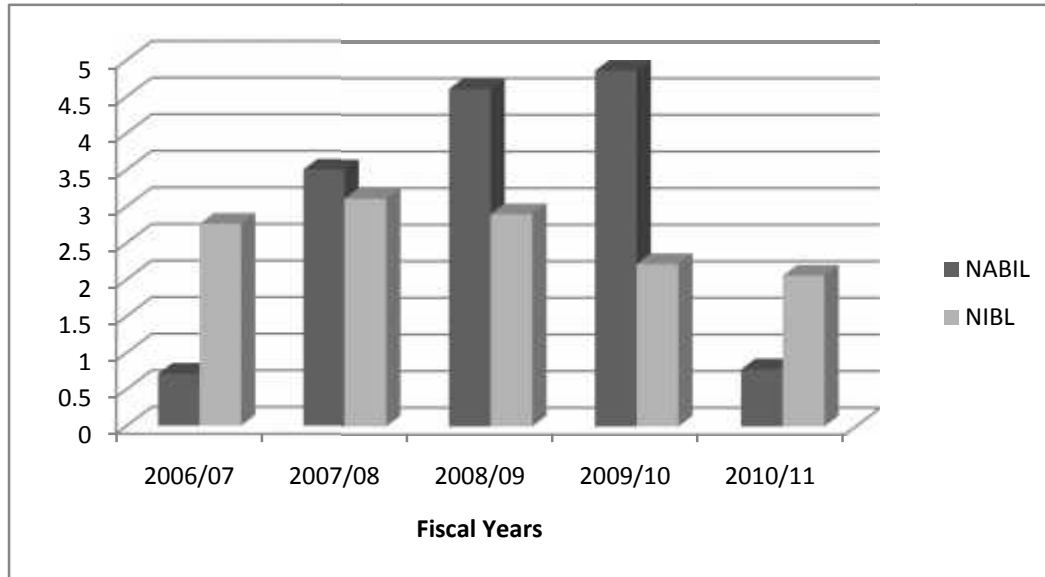$$\text{Long Term Debt to Total Debt Ratio} = \frac{\text{Long Term Debt}}{\text{Total Debt}} \times 100$$

The Long Term Debt to Total Debt Ratio simply indicates the percentage of Long-Term Debt over the Total Debt.

Table 4.2

Long Term Debt to Total Debt (%)

Year	NABIL	NIBL
2006/07	0.71	2.76
2007/08	3.5	3.11
2008/09	4.61	2.90
2009/10	4.86	2.22
2010/11	0.78	2.06
Mean	2.89	2.61
S.D.	3.08	0.4
C.V.%	62.63	15.33

Sources: Appendix 2

Figure 4.2

Year wise Multiple Diagram of LTD to TD

The ratio in the table explains that all three banks have the practice of borrowing Long Term Debt extremely very lower than the Short Term Debt to meet the fund requirement. The ratio of Long Term Debt to Total Debt of NABIL has though increased in small percent to the fiscal year 2009/10, i.e. from 0.71% in the fiscal year 2006/07 to 4.86% in the fiscal year 2009/10, but finally it has decreased to 0.78%. It is the lowest recorded ratio in the study period. In average, Long Term Debt has only met 2.89% of the Total Debt finance of the bank, and other 97.11% of the debt has been covered from Short Term Debt.

In contrast to NABIL, the ratio of Long Term Debt to Total Debt of NIBL has fluctuated during the periods, and thus it has ranged from 2.06% in the fiscal year 2010/11 to 3.11% in the fiscal year 2007/08. In average, NIBL has met 2.61% of the Total Debt fund financing through Long Term Debt, and 97.39% of the Total Debt through Short Term Debt. Interpreting the analysis, it can be concluded that the bank extensively uses short term to meet the debt capital.

According to the table 4.2 the LTD to TD ratio of NABIL is the highest in FY 2006/07 and during the same period such ratio is the lowest in. In FY 2008/09 NABIL bank has the highest and NIBL has the lowest ratio.

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4.1.1.3 Debt Ratio

It is the ratio of Total Debt (the sum of current liabilities and long-term liabilities) and Total Assets (the sum of Current Assets, fixed assets, and intangible assets such as goodwill).

$$\text{Debt Ratio} = \frac{\text{Total Debt}}{\text{Total Assets}} \times 100$$
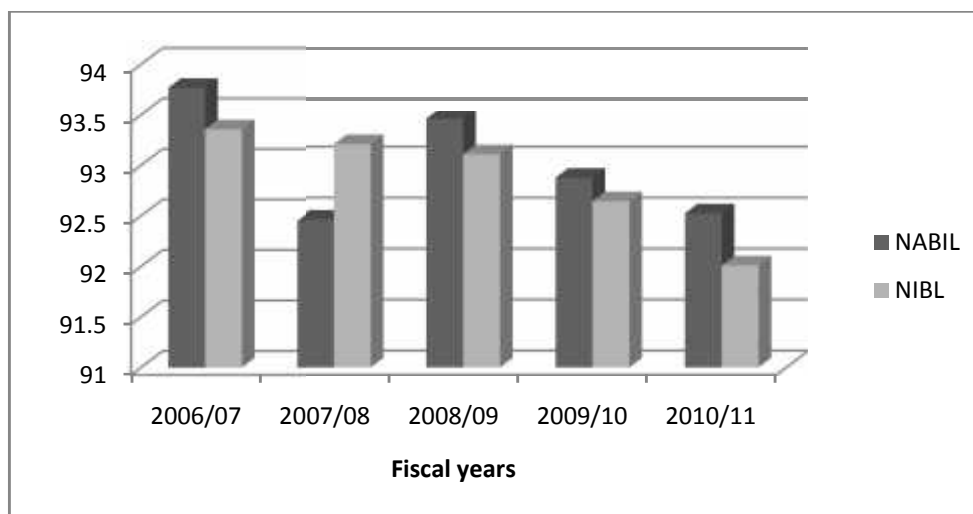
Debt Ratio is a financial ratio that indicates the percentage of a company's assets that are provided via debt.

Table 4.3

Debt Ratio (%)

Year	NABIL	NIBL
2006/07	93.77	93.36
2007/08	92.45	93.19
2008/09	93.44	93.09
2009/10	92.86	92.63
2010/11	92.51	92.00
Mean	93.01	92.85
S.D.	0.52	0.49
C.V.%	0.56	0.53

Sources: Appendix 3

Figure 4.3

Year wise Multiple Diagram of Debt Ratio

Fiscal years

Above the table and figure show that the practice of financing the Total Assets through debt capital has slightly fluctuated in NABIL for the study period, i.e. from 92.45% in the fiscal year 2007/08 to 93.77% in the fiscal year 2006/07. In average, 93.01% of the Total Assets of the bank have been financed through Total Debt, indicating greater risk taking attitude of the bank, and the variation in the ratio is just 0.56%, indicating high stability.

Unlike in NABIL, the debt capital to Total Assets of NIBL has decreased for the observed periods, i.e. from 93.36% in the fiscal year 2006/07 to 92.00% in the fiscal year 2010/11. In average, 92.85% of the Total Assets of NIBL have been financed through debt capital with the variation of 0.53% in the ratio.

Summarizing the analysis, it can be inferred that total asset of the banks relies on the outside financing and thus the inside financing has little contribution to meet the required fund. Thus, the Total Assets of each bank bears high risk.

In the above figure 4.3, the Debt Ratio of NABIL is decreased in FY 2007/08 from 2006/07, increased in FY 2008/09 and continuously decreased up to FY 2009\10. Thus, the overall Debt ratio of NABIL is in stable trend. Similarly, this ratio of NIBL is continuously deceased during the study period and we can say that this bank has decreasing trend of Debt Ratio.

4.1.2 Solvency Position of Banks

Solvency, in finance or business, is the degree to which the Current Assets of an individual or entity exceed the current liabilities of that individual or entity. Solvency position explains the

capability of the bank to meet the Short Term Debt that it has borrowed for financing the Current Assets. Under this, the Current Assets to Short Term Debt and Interest Coverage Ratio of the banks have been measured.

4.1.2.1 Current Assets to Short Term Debt

Funds raised from sources of short term financing should not be used to acquire fixed assets like land and building, plant and machinery, furniture, vehicles etc. It is used to increase level of Current Assets and to increase working capital. Thus, the bank should be in good solvency position to meet such Short Term Debt repayment. Current Assets to Short Term Debt =

$$\frac{\text{Current Assets}}{\text{Total Short Term Debt}} \times 100$$
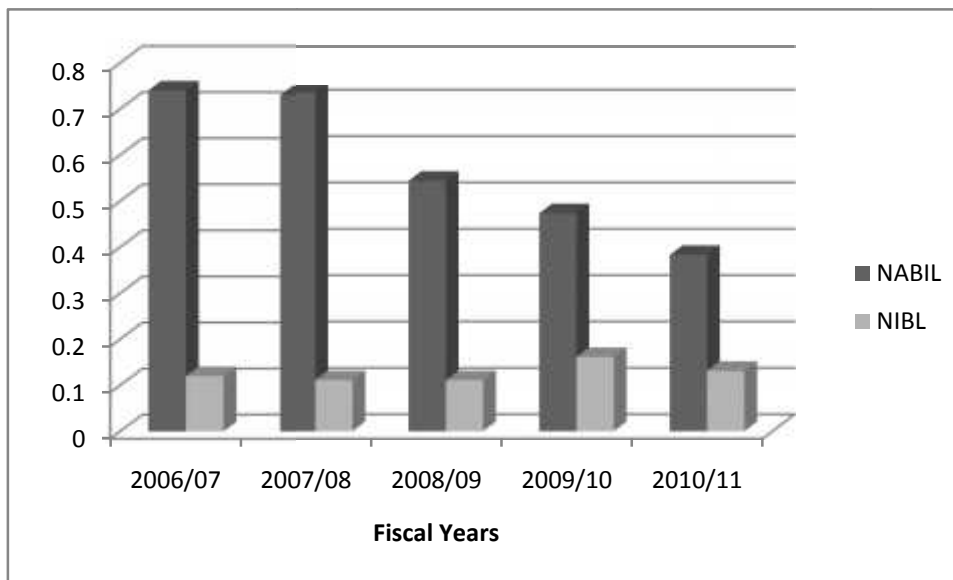
A ratio under 1 suggests that the company would be unable to pay off its obligations if they came due at that point.

Table 4.4

Current Assets to Short Term Ratio

Year	NABIL	NIBL
2006/07	0.74	0.12
2007/08	0.73	0.11
2008/09	0.54	0.11
2009/10	0.47	0.16
2010/11	0.38	0.13
Mean	0.57	0.13
S.D.	0.14	0.02
C.V.%	24.81	15.38

Sources: Appendix 4

Figure 4.4

Year wise Multiple Diagram of CA to STD

The table and figure 4.4 show that signifies that the banks are almost in quite satisfactory solvency position to repay the Short Term Debt that they have mobilized in financing the Current Assets. Both the Current Assets and the Short Term Debt of all three banks have increased in each fiscal year. However, the increment rate in Current Assets of NABIL does not synchronize with the increment rate in Short Term Debt, as a result the Current Assets to Short Term Debt financing has fluctuated during the periods, i.e. it has arrayed from 0.38 times in the fiscal year 2010/11 to 0.74 times in the fiscal year 2006/07. In average, NABIL has maintained the ratio of 0.57 times and the variation in the ratio is just 24.81%, indicating instability.

In contrast to NABIL, there is a little uniformity in the ratio in NIBL. NIBL has kept a nearly uniform ratio from 0.11 to 0.12 for the first three initial periods, and there is slight increment to 0.16 times in the fiscal year 2009/10. Thus, there is good harmony between the increment rate of Current Assets and the increment rate of Short Term Debt in NIBL. In average the ratio is 0.13 times, with 15.38% variation. According to the Current Assets to Short Term Debt Ratio of NABIL is leading all over the study period.

4.1.2.2 Interest Coverage Ratio

Interest Coverage Ratio is a great tool while measuring a company's ability to meet its debt obligations. When the Interest Coverage Ratio is smaller than 1, the company is not generating enough cash from its operations EBIT to meet its interest obligations. The Interest Coverage Ratio

can be calculated as follows:

$$\text{Interest Coverage Ratio} = \frac{\text{EBIT}}{\text{Interest on Borrowed Capital}}$$

This ratio gives the debt serving capacity of the firm. Higher ratio is desired. The Interest Coverage Ratio of NABIL and NIBL have been presented in the table below:

Table 4.5

Interest Coverage Ratio

Year	NABIL	NIBL
2006/07	3.51	2.03
2007/08	2.79	2.06
2008/09	2.44	2.03
2009/10	2.28	1.76
2010/11	1.83	1.70
Mean	2.57	1.92
S.D.	0.56	0.14
C.V.%	21.79	7.29

Sources: Appendix 5

Figure 4.5

Year wise Multiple Diagram of Interest Coverage Ratio
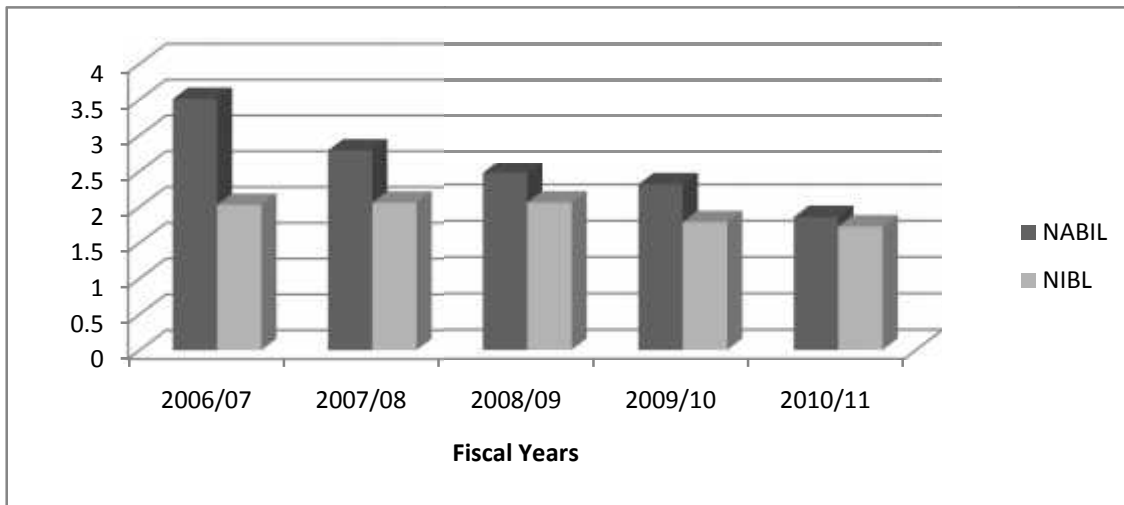
The EBIT of the bank is sufficient to cover the interest expenses; however, the Interest Coverage Ratio of the bank has decreased gradually during the observed periods, i.e. from 3.51 times in the fiscal year 2006/07 to 1.83 times in the fiscal year 2010/11. In average, the Interest Coverage Ratio of the bank is 2.57 times with 21.79% variation.

However, the Interest Coverage Ratio of NIBL has fluctuated during the periods, ranging from 1.70 times in lowest in the fiscal year 2010/11 to 2.06 times in highest in the fiscal year 2007/08. In average, the Interest Coverage Ratio of the bank is 1.92 times with 7.29% variation.

Comparing the banks, it can be assumed that the EBIT of NABIL has greater capacity to meet the interest expenses than that of NIBL. Nevertheless the all three banks are capable to meet the interest expenses.

According to the Interest Coverage Ratio of NABIL is the highest in each fiscal year. From this result, we can infer that NABIL has higher capacity to pat interest expenses in comparison to other two banks.

4.1.3 Profitability of Banks

Profit is the prime and ultimate goal of every business organization. Without it, the organization cannot sustain in the long run. The bank should also need to accumulate profit to secure its position in the market and to meet the expectations of the investors. Thus, the profitability position of the banks has been measured using different financial tools.

Effects of capital structure on profitability

The present study mainly analyses how far the capital structure (CS) affects the Profitability (P) of corporate firms in India. The study tries to establish the hypothesized relationship as to how far the CS affects the business revenue of firms and what the interrelationship is between CS and Profitability. This study is carried out after categorizing the selected firms into three categories based on two attributes, viz. business revenue and asset size. First, firms are grouped into low, medium and high based on business revenue. Second, firms are classified into small, medium and large based on asset size to establish the hypothesized relationship that CS has significant impact on Profitability of Information Technology (IT) firms in India. For the study, a sample of 102 it firms was chosen by the Multi- Stage Sampling Technique. The data for a period of 5 years ranging from 2006/07 to 2010/11 have been collected and considered for analysis. Regression Analysis (to analyze the unique impact of CS on Profitability), in addition to descriptive statistics such as Mean, Standard Deviation, and Ratios has been used. The study proves that there has been a strong one-to-one relationship between CS variables and Profitability variables, Return on Assets (ROA) and Return on Capital Employed (ROCE) and the CS has significant influence on Profitability, and increase in use of debt fund in CS tends to minimize the net profit of the IT firms listed in Bombay Stock Exchange in India.

4.1.3.1 Earnings per Share

Earnings per share (EPS) are the earnings returned on the initial investment amount. Earnings per share refer the rupee amount earned per share of common stock outstanding. It measures the return of each equity shareholders. The higher earning indicates the better achievements of the profitability of the banks by mobilizing their funds and vice versa.

$$\text{Earnings per Share} = \frac{\text{Net Profit After Tax - Dividend Paid On Preference Share}}{\text{No. of Common Outstanding Share}}$$
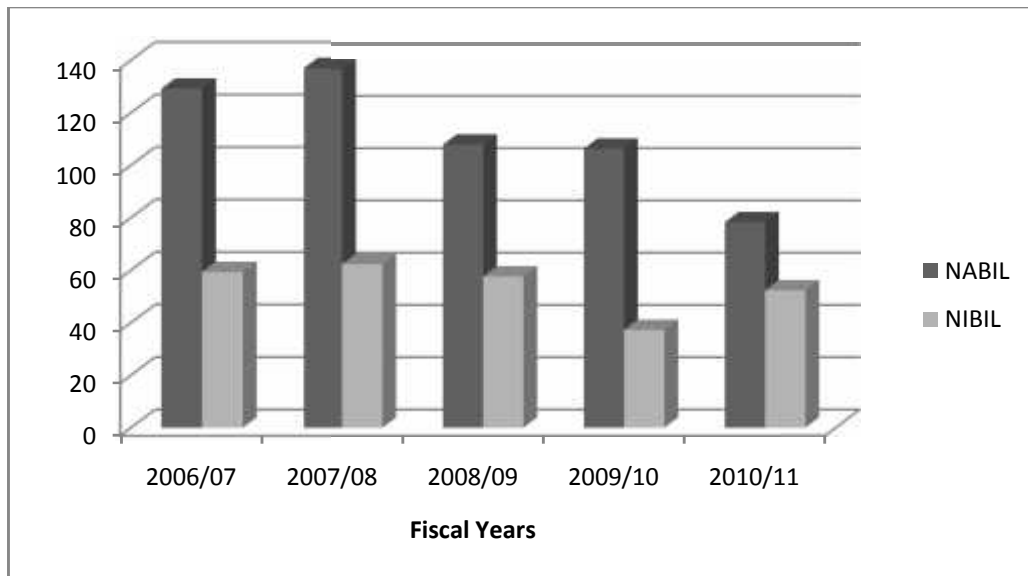
The EPS Ratio indicates the earning of each equity share.

Table 4.6

Earnings per Share (EPS) (in Rs)

Years	NABIL	NIBIL
2006/07	129.21	59.35

2007/08	137.08	62.57
2008/09	108.31	57.87
2009/10	106.76	37.42
2010/11	78.61	52.55
Mean	111.99	53.95
S.D.	20.40	8.88
C.V.%	18.22	16.45

Sources: Appendix 6

Figure 4.6

Year wise Multiple Diagram of EPS

Above the table and figure show that the earnings per share of NABIL have increased up to the fiscal year 2007/08, and then it has followed decreasing trend. At the inception of the observed

periods, the EPS of the bank is Rs. 129.21, which has increased to Rs. 137.08 in the fiscal year 2007/08, and then it has started to decrease and finally it has reached to Rs. 78.61, the lowest recorded EPS, in the fiscal year 2010/11. Although the net profit of the bank has followed increasing trend, this decrement in EPS indicates that the bank has issued share to increase the equity capital. In average, NABIL has earned Rs. 111.99 per share with the variation of 18.22%, indicating inconsistency.

Likewise, the EPS of NIBL has also increased up to the fiscal year 2007/08. At the beginning of the observed periods, the EPS is Rs. 59.35 which has been raised to Rs. 62.57 in highest in the fiscal year 2007/08. In the fiscal year 2010/11 the EPS of the bank is Rs. 52.55. In average, NIBL has earned Rs. 53.95 per share, with the variation of 16.45%. And in the fiscal years 2008/09 the earning per share is 108.31 and 57.87 of NABIL and NIBL.

Comparing the banks on the basis of EPS, it can be undoubtedly said that the NABIL is stronger than NIBL in terms of profitability, since the EPS of NABIL is really more than other two banks. Despite this, it can be said that the EPS of NABIL has been injured during the observed periods. The bank has faced lowest EPS in the recent year, 2010/11.

The figure 4.6 shows that the EPS of NABIL is increased in FY 2007/08 and continuously decreased up to FY 2010/11.Hence we can say that the EPS of NABIL is in decreasing trend as a whole, NIBL has the stable trend in overall study period.

4.1.3.2 Return on Equity

Return on Equity (ROE) measures the rate of return on the ownership interest (Shareholders' equity) of the common stock owners. It measures a firm's efficiency at generating profits from every unit of shareholders' equity (also known as net assets or assets minus liabilities). The Return on Equity can be calculated by applying following formula:

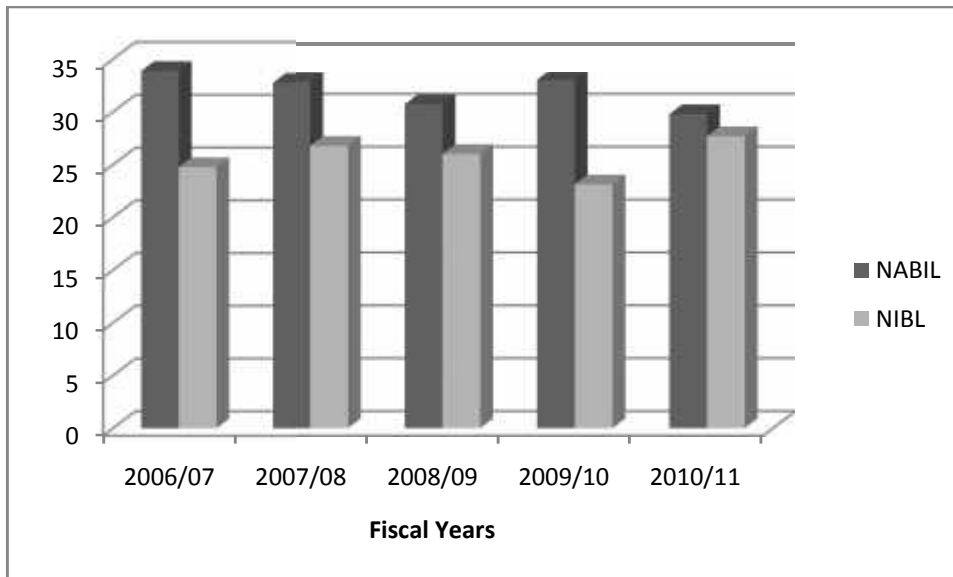$$ROE = \frac{NPAT}{Equity\ Capital} \times 100$$

The ROE Ratio shows that the percentage of earning with respect to equity capital of the firm.

Table 4.7

Return on Equity (ROE) (%)

Year	NABIL	NIBL
2006/07	33.88	24.77
2007/08	32.76	26.70
2008/09	30.63	25.93
2009/10	32.94	23.05
2010/11	29.69	27.61
Mean	31.98	25.61
S.D.	1.56	1.58
C.V.%	4.88	6.17

Sources: Appendix 7

Figure 4.7

Year wise Multiple Diagram of ROE

The table and figure depicts that the Return on Equity of NABIL bank has followed fluctuating trend. In the highest, the ROE of the bank is 32.94% in the fiscal year 2009/10 and in the lowest; the ROE of the bank is 29.69% in the fiscal year 2010/11. In average, the bank has maintained

31.98% ROE in the last five consecutive fiscal years, which means that the bank has generated Rs. 31.98 net profit from mobilization of Rs. 100 shareholders' equity.

Likewise, the Return on Equity of the bank has fluctuated during the periods, indicating weak harmony between the net profit and shareholders' equity. The ROE of NIBL has thus ranged from 23.05% in the fiscal year 2009/10 to 27.61% in the fiscal year 2010/11. In average, the ROE of the bank is 25.61%, indicating Rs. 25.61 net profit generated from Rs. 100 investment of equity capital.

Comparing the banks on the basis of ROE, it can be concluded that NABIL is more efficient in mobilizing the equity capital; as a result NABIL has earned more profit from same rupees of investment of equity in comparison with other observed banks.

4.2 Statistical Analysis

Under this section, the impact of capital structure on profitability of the bank has been measured and the trend value of debt equity ratio and the net profit for the forthcoming five fiscal years have been estimated.

Table 4.8

Correlation between D/E Ratio and NPAT

Bank	r	r^2	P.E.	6 P.E.	Relation
NABIL	-0.04	0.0016	0.30	-0.01	Insignificant
NIBL	-0.9	0.81	0.06	0.34	Insignificant

Sources: Appendix 10, 11, 12 and 16

The table depicts that the D/E ratio has negative relationship with NPAT of NABIL and NIBL, as the correlation coefficient between these two variables is -0.04 in NABIL and -0.9 in NIBL. The correlation coefficient indicates that NABIL and NIBL should decrease Long Term Debt capital

or increase shareholders equity to increase the net profit.

However, the net profit is not solely dependent on the D/E ratio; since the calculated correlation coefficient between these two variables is lower than the 6 P.E. of NABIL and NIBL. Thus, it can be assumed that the relationship between D/E ratio and net profit is statistically insignificant, and thus it is not obligatory that net profit should increase/decrease with the increase/decrease of D/E ratio in NABIL and NIBL.

Table 4.9

Correlation between Debt Ratio and NPAT

Bank	r	r^2	P.E.	6 P.E.	Relation
NABIL	0.41	0.17	0.25	0.10	significant
NIBL	0.99	0.98	0.01	0.01	significant

Sources: Appendix 13, 14 15 and 17

The table gives the clear picture that there is low positive correlation between debt ratio and net profit of NABIL, nearly perfect correlation between debt ratio and net profit of NIBL The correlation coefficient between these two variables is 0.41 in NABIL and 0.99 in NIBL. The positive relationship indicates that an increment in Total Debt capital can cause net profit to increase in all three sampled banks. In addition, the relationship between these two variables is statistically significant in all three banks as value of r is higher than the 6 P.E. and thus the net profit in this situation increases hand in hand with the increment in debt ratio

The D/E ratio has positive relationship with NPAT of NABIL and NIBL, as the correlation coefficient between these two variables is 0.41, 0.99 and 0.53 respectively. The correlation coefficient indicates that NABIL and NIBL should increase their Total Debt or decrease in Total Assets to increase their NPAT.

4.2.1 Trend Analysis of D/E ratio

The Debt Equity Ratio is the dependent variable on time period. Then the estimated value of debt equity for the forthcoming periods has been presented in the table below:
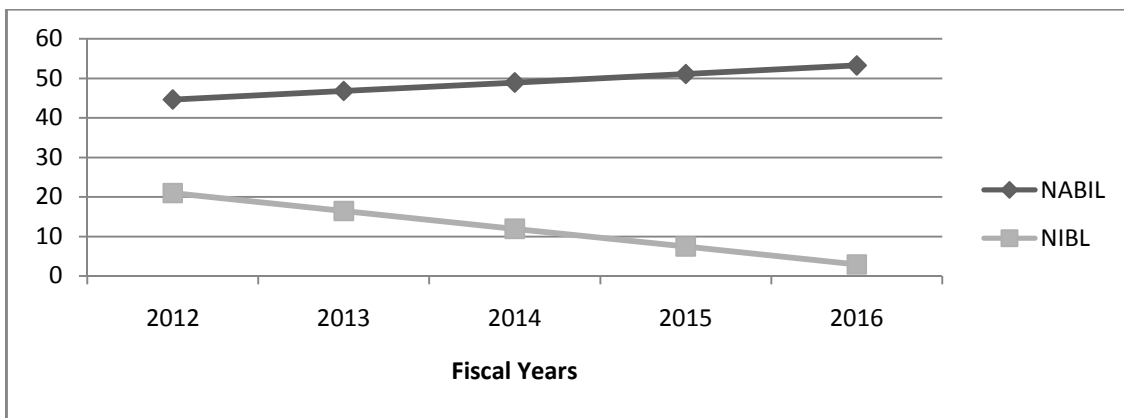
Table 4.10

Trend Analysis of D/E Ratio

Fiscal Year	NABIL	NIBL
2012	44.624	20.92
2013	46.774	16.42
2014	48.924	11.92
2015	51.074	7.42
2016	53.224	2.92

Sources: Appendix 18, 19 and 20

Figure 4.8

Trend Analysis of D/E Ratio

The table shows that NABIL is going to increase the Debt Equity Ratio in the forthcoming fiscal years, whereas NIBL will prefer to decrease the Debt-Equity Ratio. The D/E ratio of NABIL will increase by nearly 2% in each fiscal year On contrary NIBL will decrease nearly by 5% in each forthcoming year, if the other variables remain constant. By the end of the fiscal year 2015/16, the estimated value of D/E ratio of NABIL will be 53.224%, which indicates almost half usage of equity as Long Term Debt capital, and that of NIBL will be 2.92%, which indicates extensive usage of equity capital than Long Term Debt massive way.

Figure 4.10 illustrates that the trend analysis of D/E Ratio of selected banks. The analysis shows that the D/E Ratio of NABIL is in the increasing trend up to coming five fiscal year. NIBL also has the increasing trend but has lower rate than NABIL over the next five years.

4.2.2 Trend Analysis of NPAT

To estimate the value of net profit after tax in the forthcoming four fiscal years, the Net Profit after Tax has been considered as the dependent variable (Y) on the time period (X).
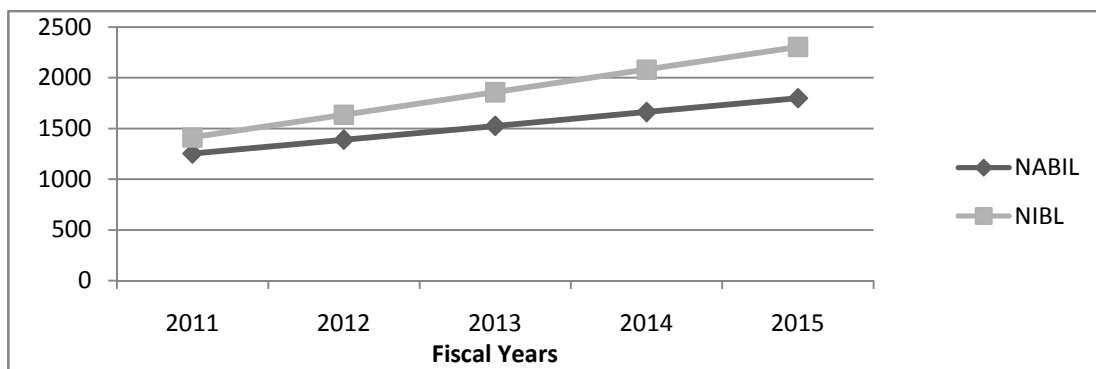
Table 4.11

Trend Analysis of NPAT

Fiscal Year	NABIL	NIBL
2011	1254.17	1412.05
2012	1390.54	1635.05
2013	1526.91	1858.05
2014	1663.28	2081.05
2015	1799.65	2304.05

Sources: Appendix 21, 22, 23

Figure 4.9

Trend Analysis of NPAT

The trend analysis of Net Profit after Tax indicates that the net profit of all three banks will have positive relationship with the time period, and thus the net profit of the banks will increases in the forthcoming fiscal years. The net profit of NABIL will increase by Rs. 136.37 millions in each fiscal year and that of NIBL will increase by Rs. 223 millions in each fiscal year in the forthcoming periods. This indicates that the pace of growth of net profit of NIBL will be greater than that of NABIL.

According to the above figure 4.11, the NPAT of NABIL and NIBL goes in the increasing trend for the next coming four years.

4.3 Year wise Capital Structure Ratios of NABIL

The Year wise Capital Structure Ratios of NABIL is presented below:

Table 4.12

Capital Structure Analysis of NABIL

S. No.	Ratios	2006/07	2007/08	2008/09	2009/10	2010/11	Mean	S.D.	C.V.%
1	Debt –Equity Ratio (%)	9.24	42.9	65.65	63.3	9.78	38.17	24.71	64.74
2	Long Term Debt to Total Debt (%)	0.71	3.5	4.61	4.86	0.78	2.89	3.08	62.63
3	Debt Ratio (%)	93.77	92.45	93.44	92.86	92.51	93.01	0.52	0.56
4	Current Assets to Short Term Ratio	0.74	0.73	0.54	0.47	0.38	0.57	0.14	24.81
5	Interest Coverage Ratio	3.51	2.79	2.44	2.28	1.83	2.57	0.56	21.79
6	Earnings per Share (EPS) (Rs)	129.21	137.08	108.31	106.76	78.61	111.99	20.4	18.22
7	Return on Equity (ROE) (%)	33.88	32.76	30.63	32.94	29.69	31.98	1.56	4.88
8	Return on Assets (ROA) (%)	2.84	2.47	2.01	2.35	2.18	2.37	0.28	11.93
9	Return on Deposits (ROD) (%)	3.28	2.89	2.34	2.76	2.46	2.75	0.33	12

Source: Appendix 1 to 9

4.4 Year wise Capital Structure Ratios of NIBL

The Year wise Capital Structure Ratios of NIBL is presented below:

Table 4.13

Capital Structure Analysis of NIBL

S. No.	Ratios	2006/07	2007/08	2008/09	2009/10	2010/11	Mean	S.D.	C.V.%
	Debt –Equity Ratio (%)	38.86	42.6	39.08	27.86	23.71	34.42	7.3	21.21
	Long Term Debt to Total Debt (%)	2.76	3.11	2.9	2.22	2.06	2.61	0.4	15.33
	Debt Ratio (%)	93.36	93.19	93.09	92.63	92	92.85	0.49	0.53
	Current Assets to Short Term Ratio	0.12	0.11	0.11	0.16	0.13	0.13	0.02	15.38
	Interest Coverage Ratio	2.03	2.06	2.03	1.76	1.7	1.92	0.14	7.29
	Earnings per Share (EPS) (Rs)	59.35	62.57	57.87	37.42	52.55	53.95	8.88	16.45
	Return on Equity (ROE) (%)	24.77	26.7	25.93	23.05	27.61	25.61	1.58	6.17
	Return on Assets (ROA) (%)	1.64	1.82	1.79	1.7	2.21	1.83	0.2	10.93
	Return on Deposits (ROD) (%)	1.85	2.05	2.02	1.93	2.53	2.08	0.24	11.54

Source: Appendix 1 to 9

4.5 Major Findings of the Study

On the basis of the analysis, the following major findings have been drawn:

1. The equity capital financing of NABIL and NIBL are greater than the Long Term Debt in overall study period, on the other hand the equity capital financing of as a result the debt equity ratio of NABIL is 38.17% and NIBL is 34.42 averages.

2. The usage of Long Term Debt in term of Total Debt is comparatively very low in all three banks. The ratio of Long Term Debt to Total Debt of NABIL is comparatively higher than other two banks, i.e. it has the average ratio of 6.24%.

3. The total asset of NABIL is more risky than that of NIBL since the average debt ratio of NABIL is 93.01% while NIBL has the average ratio of 92.85%.

4. The current asset of NABIL is more promising to meet the Short Term Debt than that of NIBL. The average current asset to Short Term Debt of NABIL is 0.57 times while that of NIBL is 0.13 times respectively. This indicates the strong solvency in NABIL.

5. The EBIT of NABIL is stronger than that of NIBL in meeting the interest liability. The Interest Coverage Ratio of is NABIL 2.57 times and that of NIBL is 1.92 times in average.

6. The EPS of NABIL is far more than that of other two banks NIBL. In average, the EPS of NABIL is Rs. 111.99; NIBL is Rs. 53.95.

7. Further, NABIL is much efficient than NIBL in mobilizing equity capital, Total Assets and total deposits to yield profit. The average of ROE is 31.98% of NABIL and NIBL is 25.61%.

8. The statistical analysis shows that the correlation coefficient between D/E ratio and NPAT is -0.0441 in NABIL and -0.9 in NIBL statistically insignificant in NABIL and NIBL. Debt Ratio and NPAT is 0.41 in NABIL and 0.99 in NIBL statistically significant inverse relationship in all three banks.

9. The trend analysis shows that the D/E ratio will be 53.224% in NABIL and 2.92% in NIBL and the NPAT will be Rs. 1799.65 million in NABIL and Rs. 2304.5 million in NIBL by the end of the fiscal year 2014/15.

CHAPTER-V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This previous chapter have discussed and explored the facts and matters required for the various parts of the study. Having completed the basic analysis required for the study, the final and vital task of the researcher is to enlist findings, issues and gaps of the study and give suggestions for further improvement.

This part is a complete suggestive package, which contains summary, conclusion and actionable plans. Summary gives the brief introduction of all the chapters of the study and shows the actual facts that have been taken from the analytical part. Findings are based on the consequences of the analysis of relevant data. Actionable plans are presented in terms of suggestions which are prepared on the basis of the findings.

5.1 Summary

To be much more specific and talking in gist we can be convinced that the percentage of capital at work in any kind of trade or business by its type is basically called capital structure. Broadly speaking, there are two forms of capital i.e. equity capital and debt capital. In the field of management, both equity capital and debt capital have their own individual benefits and drawbacks to find the perfect capital structure, in terms of risk / reward payoff for shareholders.

Capital structure concept holds a major place in the financial management which is a very important element for firm's profitability. Firms may use their debt-to-equity ratio to affect profitability. Some firms choose a high debt-to-equity ratio, whereas others prefer to choose a lower one. It differs from individual to individual whether someone is risk taker or risk averter. A perfect balance between dept and equity is required to ensure the trade-off between risk and return to shareholders. Thus, optimal capital structure means the capital structure having logical and reasonable proportion of debt and equity.

With this activity, any commercial bank can increase its return in its risk level or lower its risk level in the same class of return. Further a rational capital structure decision leads to further profit making opportunity and it may choose to increase its capital base to make it stronger and more

sustainable for facing any future threat that may come up. Hence the successful selection and use of the debt-to-equity ratio is one of the key elements of the firm's financial strategy.

Capital structure plays a role of catalyst to affect a bank's overall value through its impact on operating cash flows and the cost of capital. Since the interest expense on debt is tax deductible in most countries, a bank can reduce its after-tax cost of capital by increasing debt relative to equity, thereby directly increasing its intrinsic value. Carrying some debt increases a bank's intrinsic value because debt imposes discipline; a bank must make regular interest and principal payments, so it is less likely to pursue frivolous investments or acquisitions that don't create value. Having too much debt, however, can reduce a bank's intrinsic value by limiting its flexibility to make value-creating investments of all kinds, including capital expenditures, acquisitions, and just as important, investments in intangibles such as business building, and sales and marketing.

After doing the engrossing research work on the subject matter, it can be inferred that the banks with stable and predictable cash flows as well as limited investment opportunities should include more debt in their capital structure. Banks that face high uncertainty because of vigorous growth or the cyclical nature of their industries should carry less debt, so that they have enough flexibility to take advantage of investment opportunities or to deal with negative events. Eventually, it can be said that the capital structure has greater impact in profitability. To examine this principle, the present study has been accomplished.

5.2 Conclusion

Analyzing the data, it is assumed that growth and stability of the banks mainly influences the capital structure of such banks. And the capital structure of the banks has substantial impact on profitability. Further, it is inferred that most investors are aware about the interest cost and risk that debt capital carries, and thus they have desired secured capital structure by financing through more equity capital. Also, it is presumed that issuing public share is the best method for increment in equity capital. In addition, banks focus on borrowing Short Term Credit rather than Long Term credit or issuing debenture to meet the debt capital requirement. Also, the researcher has inferred that the adoption of the moderate policy would be the best option for banks for having strong capital structure. Among different choices, it is finally concluded that the management should give prior emphasis to minimize cost of capital for having sound capital structure. To simplify the research,

conclusions derived can be presented in two parts. They are:

Conclusions derived from the Financial Analysis

Eventually, according to Debt Ratio, it is concluded that the Total Assets of each bank bears greater risk. More specifically, the Total Assets of NABIL are slightly riskier than that of NIBL.

Since the Interest Coverage Ratio is slightly greater in NABIL than in NIBL and NIC. In addition to these, the solvency position of NABIL is greater than other two banks, as the average ratio of NABIL is comparatively higher. When we talk about EBIT, NABIL has greater capacity to meet the interest expenses on Long Term Debt.

Further, NABIL is most efficient in mobilizing the equity capital; as a result NABIL has earned more profit from same rupees of investment of equity.

Also NABIL is more efficient in effectively mobilizing the Total Assets and Total Deposit, since the net profit generation from mobilizing equal amount of Total Assets and Total Deposit is higher in NABIL than in NIBL. Hence, it can be inferred that the profitability management of NABIL is stronger than that of NIBL.

Conclusions derived from the Statistical Analysis

The statistical analysis aids to conclude that the net profit is not solely dependent on the D/E ratio, since the calculated Correlation Coefficient between these two variables is lower than the 6 P.E. of NABIL and NIBL.

5.3 Recommendations

On the basis of the analysis, the following recommendations have been pointed to improvise the capital structure and its impact on the profitability:

1)   It would be worthwhile if the banks measure the ratio of debt to equity ratio that generates higher profit and then practice such ratio, since all the banks have used less Long Term Debt in low in comparison to the equity capital.

2) The weight of Long Term Debt to Total Debt in all the banks is just meager. All the banks should raise the amount of Long Term Debt to minimize the risk, as the Short Term Debt carries high risk

3) All the three banks have more proportion of total Debt to Total Assets Ratio which shows that the largest proportion of assets is covered by external debt financing, which can be fatal for the banks. So, banks should optimize the Debt Ratio.

4) NIBL need to keep adequate current assets to meet the debt requirement and thus have sound solvency position in comparison to that of NABIL.

5) Similarly, NIBL need to decrease the operating costs to increase EBIT and thus to have strong position to meet the interest expenses.

6) NIBL has weak earning in comparison to that of NABIL, Thus, NIBL need to reengineer their capital structure, diminish cost and increase investment in high-yield profitable sectors to have strong profitability.

7) The EPS is directly proportional to the net profit of the bank, as the net profit increases the EPS also raises. Therefore, the banks should give a proper attention towards their operation to earn adequate amount of profit.

8) The impact of Debt-Equity Ratio is indifference to the profitability, which immediately demands all the banks to restructure the capital structure, might be to increase the Long Term Debt.

9) All the banks need to adopt moderate policy. This means that the banks need to have balance between the equity and debt capital to minimize the risk and increase the profit.

10) According to ROA and ROE, NIBL is not sufficiently using their assets and equity capital. Due to that reason, they are having less ROA and ROE in comparison to NABIL. So, these banks should efficiently use their assets and equity.