CHAPTER – I
INTRODUCTION

1.1 Background of the Study

Capital structure is in itself a powerful force in the success or failure of an enterprise. Although firms exist to fulfill their missions, there comes a point in their development where the quality of their services must be matched by the quality of their business management and an appropriate capital structure. When firms focus single-mindedly on the delivery and expansion of program and neglect the business side, program is eventually undermined. Therefore, most firms work hard to improve their business operations and management. Many do so without thinking about how their overall capitalization needs, in other words, the size and mix of their long- and short-term assets and liabilities, affect their capacity and programs.

Capital structure is related to but distinct from program management or operating capacity, but it has a strong effect on both. A firm's capital structure refers to the mix of its financial liabilities. As financial capital is an uncertain but critical resource for all firms, suppliers of finance are able to exert control over firms. Debt and equity are the two major classes of liabilities, with debt-holders and equity-holders representing the 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 relevance in the past few years, with researchers examining linkages to strategy and strategic outcomes. The modern financial

theory and strategic management are based on very different paradigms, resulting in opposing conclusions. Thus, more integrative research is required to resolve the controversies. Strategic management scholars exhibit disparate opinions regarding the possibility of such integration. A theoretical integration between the two disciplines is indeed possible, and that transaction cost economics and agency theory provides possible avenues. In contrast, the scope for integration is limited, if at all possible.

Strategy researchers should neither import empirical results from finance, nor should they work towards integration of strategic and financial research. Therefore, while strategy should expand its domain to study areas traditionally considered in finance, researchers should be careful to maintain a strategic perspective. 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 alike, namely: Does it matter how firms finance their assets? and do different modes of financing make a difference? While anecdotal 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 able to contribute to sustainable competitive advantage. The financial management function 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 (be they debt-holders or equity-holders) when raising capital for strategic assets. The right to partake 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 a 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 Statement of the Problem

The determination of a company's capital structure constitutes a difficult decision, one that involves several and antagonistic factors, such as risk and profitability. That decision becomes even more difficult, in times when the economic environment in which the company operates presents a high degree of instability. Therefore, the choice among the ideal proportion of debt and equity can affect the value of the company, as much as the return rates can. The capital structure decisions i.e. the choice of equity and debt portion in the firms capital structure, ultimately affect the profitability of the organization.

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 that 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. So, this concise study revolves around ascertaining 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. How efficiently NABIL and NIBL are managing their capital structure?
b. Whether the selected banks are able to mobilize their resources properly?
c. How does the leverage decision affect the profitability of the banks?
d. What are the major factors affecting capital structure of banks?

1.3 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 objectives have 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.

1.4 Significance of the Study

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 revolve 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. So, this study is beneficial to:

a. The internal groups as well as external groups to find out the Pros & Cons of financial position, rate of growth, liquidity position & turnover.
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 banks.
d. The potential investors, customers & shareholders in taking the right investment decisions.
e. The students to conduct essential research projects.

1.5 Limitations of the Study

The major limitations of the study are as follows;

a. This study will attempt to analyze the capital structure and profitability only and does not cover the other aspect of finance.
b. The study is limited to only two banks, namely Nabil Bank Limited and Nepal Investment Bank Limited, and thus may not represent the whole banking industry of Nepal.
c. This reliability of the secondary data highly depends on the accuracy of the annual report of the concerned banks, and the validity of the primary data depends upon the responses of the respondents.
d. The study covers only five years ranging from fiscal year 2005/06 to 2009/10.

1.6 Organization of the Study

The entire study has been organized into five main chapters as:

Chapter-I: Introduction

The first chapter deals with background of the study, statement of problem, objective of the study, significance of the study and limitations of the study.

Chapter-II: Review of Literature

The second chapter deals with conceptual framework including the fundamental concept capital structure. It also includes the brief review of previous research work.

Chapter-III: Research Methodology

The third chapter deals with the research methodology which has been followed to achieve the purposes of the study. It consists of research design, the period covered, nature and sources of data, tools to be used, research variable etc.

Chapter-IV: Data Presentation and Analysis

The fourth chapter deals with presentation and analysis of data. It gives a clear picture of how the collected data has been presented on the study and how it has been analyzed.

Chapter-V: Summary, Conclusion and Recommendations

And at last, the fifth chapter shows the summary of whole study, conclusion drawn and recommendations given. This ends the study paper.

Besides these chapters, Bibliography and Appendix are included in this research paper.

CHAPTER – II
REVIEW OF LITERATURE

2.1 Conceptual Framework

In this section various books written by different writers as well as journals and articles, and thesis, are reviewed. This makes clear about the conceptual foundation of this study. It provides the chance of examining views of different writers and scholars so that the new idea can be generated.

2.1.1 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. If the current liabilities are removed from it, we get capital structure (Mathur, 1979: 239)."

"Capital structure refers to the combination of long term sources of fund, such as debentures, long term debt, preference shares capital and equity capital including reserves and surpluses. Capital structure represents the relationship among different kinds of long term sources of capital and their amount. Normally a firm raises long term capital through the issue of common shares, sometimes accompanied by preference shares. The share capital is often supplemented by debt securities and other long term borrowed capital. In some cases, the firm accepts deposits. In a going concern, retained earnings or surpluses too form a part of capital structure, except for the common shares, different kinds of external financing, i.e. preference shares as well as the borrowed capital carry fixed return to the investors (Solomon, 1993: 87)." 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. Thus a firm's capital structure is only a part of its financial structure (Keister, 2000: 68)."

"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, Stewart and Myers, 1985: 400)." In other words, equity capital includes common stock, paid in capital, reserve and surplus and retained earnings. "One should be clear about the key differences between two types of capital, relative to voice in management, claim on income and assets, maturity and tax treatment. Debt holders are preferred stockholders to not have voice in management. However, in default, they may receive a voice in management, otherwise only common stock holders have voting rights. Debt holders have a higher priority of claim against any earning or assets available for payment. Generally, life of debt capital is stated, but equity capital remains in the firm for an indefinite period of time. Tax can be saved in interest payment where as payment of dividend is non-tax deductible expenditure. Tax must be paid before payment of dividend to the share holders. It should be clear that due to its secondary position (in income and assets) relative to debt suppliers of equity capital take greater risk and therefore must be compensated with higher expected return those suppliers of debt capital (Mathur, 1979: 242-243)."

2.1.2 Optimal Capital Structure

Capital structure means the proportion of security issued by the firm. Optimal Capital structure consists of reasonable proportion of debt and equity, which

can help 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: 47).”

“Optimal Capital Structure can be defined as that mix of debt and equity which will maximize the market value of a company. If such an optimum does exist, is two fold. 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 (Soloman, 1993: 93).”

“The Capital structure patterns can be simple or complex. A simple capital consists of equity and preference share but the complex structure consists of multi-securities as equity shares, preference share, bonds, debenture etc. It can be dealt with three different level of complexity i.e.

- Static View
- The Comparative Static View
- Dynamic view

The concept of static view reveals that according to the relevant information about the firm’s asset structure, the quality of expected earnings and capital market condition, management should obtain the mix of financial claims that maximize the cost of capital. Hence capital structure is viewed as the active policy variable.

The concept of comparative static view gives different values of cost of capital and capital structure, as some of the underlying parameter change. Thus changes in the existing assets structure, the quality of expected earnings and the

capital market conditions generate new equilibrium solution between the financing mix and the cost of fund.

The Dynamic view gives the optimal value within the constraints at the time and place where the decisions were made (Keister, 2000: 72-75)."

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 suggestion in tanning the capital structure for establishing new company is crucial;

- The debt-equity ratio does note exceeds 2:1.
- 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).
- The ratio of preference capital to equity does not exceed 1:3
- Promoters hold at least 25% of the equity capital (Korajczyk and Levy, 2003: 297-298)."

2.1.3 Checklist for Capital Structure Decision

"A firm must consider the following factors, which have an important, though hard to measure, bearing on the choice of a target capital structure (Weston & Brigham, 1987: 619-623)."

a) **Sales Stability:** A firm whose sales are relatively stable can safely take on more debt and insure higher fixed charges then company with unstable sales. Utility companies, because of their stable demand, have historically been able to use more financial leverage than industrial firms.

b) Asset Structure: Firms whose assets are suitable as security for loan fend to use debt rather heavily. Thus real estate companies are usually highly leveraged, while companies involved in technological research employ less debt.

c) Operating Leverage: Other thing the same, a firm with less operating leverage is better able to employ financial leverage because as the interaction of operating and financial leverage determines the overall of a dealing in sales on operating income and net cash flow.

d) Growth Rate: Other the same, faster growing firms must rely more heavily on external capital. Further, the flotation costs involved in selling common stock exceed those incurred in selling common stock exceed those incurred when selling debt. Thus, rapidly growing firms tend to use somewhat more debt than slower growing firms.

e) Profitability: One after observe that firms with very high rate of return on investment use relatively little debt. Although there is no theoretical justification for these facts, one possible explanation is that; very profitable firms such as IBM, Kodak, simply does not debt financing their high rates of return enable them to do most of their financing with retained earnings.

f) Taxes: Interest in deductible expenses, while divided is not. Hence the higher a firm's corporate tax rate, the greater the advantage of losing debt.

g) Control: The effect that debt or stock might have on a management's control position may influence its capital structure decision. If management have voting control (over 5% of the stock) but is not in a position to but any more stocks; it may chose debt for new financing. On the other hand, a management group that is not concerned about voting control may decide to

use equity rather debt if the firm's financial situation is so weak that the use of debt might subject the firm to serious risk of default, if the firm gives into default, the manager will almost surely lose their jobs. However, if little debt is used, management runs the risk of a takeover control considerations do not necessarily suggest the use of debt or equity. The type of capital that best protects management will vary from situation to situation, but if management is at all insecure, it will take the effects of capital structure on control into account.

h) Management Attitudes: In the absence of proof that one capital structure will lend to higher stock prices than another, might be able to exercise its non judgment about a proper choice. Some management tends to be more conservative than others and thus use less debt than the average firm in their industry, while for other management the reverse is true.

i) Lender & Voting Agency Attitudes: Regardless of managers' own analyses of the proper leverage factors for their firms, there is no question but that lenders and rating agencies attitudes are frequently important determinants of financial structures. In the majority of cases the corporation discusses its financial structure with lenders and rating agencies and gives much weight to their advices. But when management is so confident of the future that it seeks to use leverage beyond the norms for its industry, lenders may be unwilling to accept such debt increases or may do so only at a high price.

j) Market Conditions: Conditions in the stock and bond markets undergo both long and short-run changes than can have an important bearing on a firm's optimal capital structure. For example, during the credit crunch in the winter of 1982, there was simply no market at any ‘reasonable’ interest rate for new long-term bonds rated below A. Therefore, low-rated companies that needed capital were forced to go to the stock market or

to the short-term debt market, regardless of their target capital structures. Later financings might, however, bring the capital structure back to the target level.

k) **The Firm's Internal Condition:** A firm's own internal condition can also have a bearing on its target capital structure. For example, suppose a firm has just successfully completed on R & D program, and it projects higher earnings in the immediate future. However, the new earnings are yet anticipated by investors and hence are not reflected in the price of the stock. This company would not want to issue stock-it would prefer to finance with debt until the higher earnings materialize and are reflected in the stock price, at which time it might want to sell an issue of common stock, retire that debt, and return to its target capital structure.

l) **Financial Flexibility:** It has been noted that from an events a lot more money from good capital budgeting and quantity decisions than they can from good financing decisions.

2.1.4 Capital Structure Planning

"Capital structure means all the sources through which a firm finances its operation. 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: 53)."

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.

Generally companies do not plan their capital structure. It occurs as the result of financial decisions taken by the financial manager. But it is necessary to plan because it helps and guides in using the available funds in possibly best way.

"Capital structure planning is made in order to obtain the optimum capital structure which is reflected by its market price of the share at the highest value. Determination of appropriate capital structure needs great consideration and involves formidable task. Number of factors influence capital structure decision which are highly psychological, complex and qualitative and do not follow the accepted theory. So exploration of appropriate capital structure goes beyond the theory and such decisions should be taken under the imperfect market with risk (Michaelas, 1998: 183)."

"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: 185)."

A) EBIT-EPS Approach

This approach helps in analyzing the effect of debt on the earning 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.

2.1.5 The Capital Structure Decision

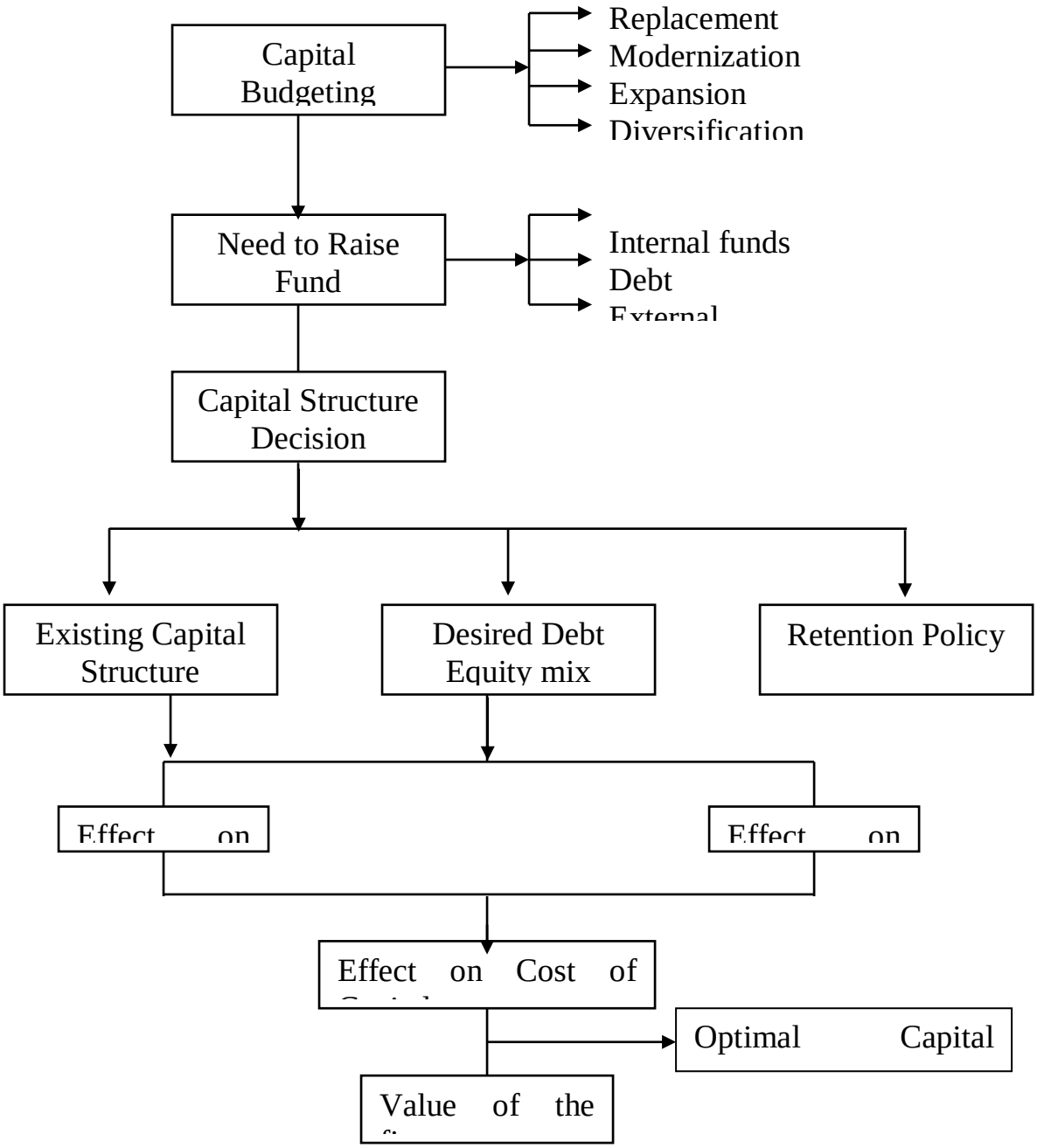
“Capital is a scarce resources and much more essential to maintain smooth operation of any firm. The available capital and financial resources should be utilized so efficiently that it could generate maximum return.

Capital structure is considered as that mix of debt and equity and to operate in long run prospect. A firm must concentrate in its proportion. A firm can raise required fund by issuing various types of financial instrument. Investors and creditors being the key suppliers of capital, they hold greater degree of risk and hence have claims over firm's assets and cash flow.

Capital structure decision can be identified into existing capital structure, desired debt equity mix and payout policy out of which existing capital structure and desired debt equity mix will directly effects on risk and return in the firm and also effects on cost of capital. Capital structure decision ultimately increases the value of the firm if the decision on the management of the capital is maintained properly and gives result to the optimum capital structure (Harris and Raviv, 1991: 67).”

Figure 2.1

Capital Budgeting Decision



(Harris and Raviv, 1991: 68)

In the above chart, the main objective of the firm is to maximize the value of the firm with limited optimum capital structure. For capital budgeting decision funds need for the replacement of the capital, modernization of the capital, expansion of the capital and diversification of the capital. Once the capital

decision is made the firm needs to raise funds either from the internal funds, debts or from external equity from which capital structure decision is made.

Either fund is raised by debt or equity financing risk is associated in proportion of its uncertainty is being paid off. The required rate of return expected by investors according to their risk is cost of capital. Therefore a firm should try to obtain necessary fund at lower cost. This cost of capital is fully dependent upon the proportion of debt and equity i.e. financial leverage, which is actually the capital structure used by the firm.

The capital structure decision affects the overall cost of capital, total value of the firm and earning per share. Therefore it should be well planned. It aims to maximize value of firm and earning per share by minimizing cost of capital without effecting operating earning of the firm.

"An optimum capital structure would be obtained at the combination of debt and equity that maximizes the value of the firm or minimizes the weighted average cost of capital (Pandey, 1992: 147)."

"There are four dimensional lists when thinking about the capital structure decision; (Hall, Hutchinson and Michaelas, 2004: 35-37)."

1) Taxes

If the company is the tax paying and increase in leverage reduces the income tax paid by the company and increase the tax paid by the investor. If the company has large accumulated loss, as increase in leverage cannot reduce corporate tax but does increase personal taxes.

2) Bankruptcy Cost

With presence of bankruptcy cost, financial distress is costly other things equal, distress is more likely for the firms generally issue less debt.

3) Assets Type

The cost of distress is likely to be greater for firms whose value depends on growth opportunity of intangible assets. These firms are more likely to go for profitable opportunities and default occurs, their asset may erode rapidly. Hence, firms whose assets are weighted forward intangible assets should borrow significantly less on average their firms holding assets you can kick.

4) Financial Slack

In the long operating decision than on financing therefore, you want to make sure your firm was in sufficient financial slacks, so that financing is quickly accessible when good investment opportunities arises. Financial slack is most valuable firm that has able positive NPV growth opportunity. That is another reason why growth companies usually aspire to conservative capital structure.

2.1.6 Theory of Capital Structure

"The optimum capital structure may be defined as the capital structure or combination of debt and equity that leads to the maximum value of the firm. In theory, capital structure can affect the value of a company by affecting either its expected earning or the cost of capital or both. The capital structure decision can influence the value of the firm through the earning available to the share holders (Khan & Jain, 2003: 111)."

- Net Income Theory
- Net Operating Income Theory
- Modigliani Miller Theory
- Traditional Theory

2.1.6.1 Net Income Theory

NI Theory to valuation is based on three assumptions. "First, there are no taxes; second, the cost of debt is less than of equity. Capitalization votes on the cost of equity: found that the use of debt doesn't change the risk perception

of investors. That the financial risk perception of the investors doesn't change with the introduction of debtor change in leverage implies that due to change in leverage, there is no change in either the cost of debt or the cost of equity. The implication of the three assumptions under laying the NI Theory is that as the degree of leverage increases, the proportion of a cheaper source of funds that is debt in the capital structure increases. As a result, the weighted average cost of capital tends to decline, leading to an increase in the total value of the firm. Thus, with the cost of debt and cost of equity being constant, the increased use of debt (increase in leverage), will magnify the shareholder's earning and thereby, the market value of the underway shares (Pandey, 1992: 175)."

The financial leverage is, according to the NI Theory, an important variable to the capital structure of a firm. With a judicious mixture of debt and equity, firms can evolve the highest and the overall cost of capital is the lowest. At that structure, the market price per share would be maximum.

If the firm uses no debt or if the financial leverage is in zero, the overall cost of capital will be equal to the equity capitalization vote. The weighted average cost of capital will decline.

Capital Structure policy includes a trade off between risk and return, using more debt raises the riskiness of the firms' earning stream, but it also raises the expected vote of return on equity. Higher risk tends to lower the stack's price, but a higher expected rate of return raises it. The optimal capital structure strikes that balance between risk and return which maximizes the price of the stock. This same optimal capital structure also minimizes the firm's overall cost of Capital.

2.1.6.2 Net Operating Income Theory

Another theory of capital structure is the net operating income (NOI) theory. This theory is dramatically opposite to the NI theory. The essence of this theory is that the capital structure decision of a firm is irrelevant. Any change in leverage will not lead to any change in the total value of a firm and the market price of shares as well as the overall cost of capital is independent of the degree of leverage. The NOI theory is based on the following propositions:

a. Overall Cost of Capital/Capitalization Role (K_0) is constant: The NOI theory to valuation argues that the overall capitalization rate of the firms remains constant, for all degrees of leverage. The value of the firm the level of EBIT is determined by:

V = EBIT / K0

In other words, the market evaluates the firm as a whole. The split of the capitalization between debt and equity is therefore not significant.

b. Residual value of Equity: The value of equity is a residual value which is determined by deducting the total value of debt (B) from total value of the firm (V). Symbolically,

Total market of equity capital (S) = V – B

c. Charges in Cost of Equity Capital: The equity-capitalization rate/cost of equity capital (K_e) increases with the degree of leverage. The increase in the proportion of debt in the capital structure relative to equity shares would tend to and increases in the financial risk to the ordinary shareholders. To compensate for the increased risk, the shareholders would expect a higher rate of return on their investment. The increase in the equity, capitalization rate (or the lowering of the price earning ratio) would match the increase in the debt-equity ratio:

The K_e would be = $K_0 + (K_0 – K_i) \times B/S$

d. Cost of Debt: The cost of debt (K_i) has two parts: explicit cost which is represented by the rate of interest, irrespective of the degree of leverage, the firm is assumed to be able to borrow at a given rate of interest. This implies that the increasing proportion of debt in the financial structure does not affect the financial risk of the lenders and they do not penalize the firm by charging higher interest and another is implicit cost. As shown in the assumption relating to the changes in K_e, Increase in the degree of leverage in the proportion of debt to equity causes an increase in the cost of equity causes an increase in the cost of equity capital. This increase in K_e, being attributable to the increase in debt, is the implicit part of K_i. Thus, the advantage associated with the use of debt, supposed to be cheaper sources of funds in terms of the explicit cost, is exactly neutralized by the implicit cost represented by the increase in K_e. As a result, the real cost of debt and the real cost of equity, according to the NOI theory, use the same and equal K_0.

The total value of the firm is unaffected by its capital structure. No matter what the degree of leverage is, the total value of the firm will remain constant. The market price of shares will also not change with the change in the debt equity ratio. There is nothing such as optimum capital structure. Any capital structure is optimum according to the NOI theory.

2.1.6.3 Modigliani Miller (MM) Theory

There are three basic proposition of the MM theory; the overall cost of capital (K_0) and the value of the firm (V) are dependent of its capital structure. The K_0 and V are constant for all degrees of leverage. The total value is given by capitalizing the expected stream of operating saving at a discount rate appropriate for its risk class.

The second proposition of the MM theory is that the K_e is equal to the capitalization rate of a pure equity stream plus a premium for financial

risk equal to the difference between the pure equity capitalization rates (K_e) and (K_i) time the ratio of debt to equity. In other word, K_e increases in a manner to offset exactly the use of a less expensive source of funds represented by debt.

Third proposition of the MM theory is that the unit off rule for investment purpose is completely independent of the way in which an investment is framed. The proposition that the weighted average cost of capital is constant irrespective of the type of capital structure is based on the following assumption:

a) Perfect Capital Market: The implication of a perfect capital market is that
   - securities are infinitely divisible
   - investors are free to buy/sell securities
   - Investors can borrow without restrictions on the share terms and conditions as firm.
   - there are not transaction cost
   - information is perfect i.e. another investors has the same information which is readily available to him without cost
   - investors are rational and behave accordingly

b) Given the assumption of perfect information and rationally, all investors have the same expectation of firm's net operating income (EBIT) with which to evaluate the value of firm.

c) Business risk is equal among all firms within similar operating investments. That means all firms can be divided into equivalent risk class. The term equivalent risk class means that the expected earnings have identical risk characteristics. Firms within and industry as assumed to have the same risk characteristics. The categorization of firms into equivalent risk class is on the basis of the industry group to which the firm belongs.

d) The dividend payment ration is 100%.

e) There are no taxes. This assumption is removed later.

2.1.6.4 Traditional Theory

Traditional theory is midway between net income and net operating income theory. It partakes of some features of both these theories. It is also known as the intermediate theory. It resembles the net income theory in arguing that cost of capital and total value of the firm are not independent of the capital structure. But it doesn't subscribe to the view (Of NI theory) that value of a firm will necessarily increase for all degree of leverage. In other respect it shares a feature with the net operating theory that beyond a certain degree of leverage, the overall cost of capital increases leading to a decrease in the total value of the firm. But it differ from the net operating theory in that is does not argue that the weighted average cost of capital is constant for all degree of leverage.

The crux of the traditional view relating to leverage and valuation is that through judicious use of debt equity proportion, a firm can increase its total value and thereby reduce its overall cost of capital. The rationale behind this view is that debt is a relatively cheaper source of funds as compared to ordinary shares. With a change in leverage, that is, using more debt in place of equity; a relatively cheaper source of funds replaces sources of funds which involve a relatively higher cost. Thus obviously causes a decline in the overall cost of capital. If the debt- equity ratio is raised further the firm would become financially more risky to the investors who would penalize the firm by demanding a higher equity capitalization rate. But the increase in equity capitalization rate may not be as high as to neutralize the benefit of using cheaper debt. In other words, the advantages arising out of the use of debt is so large that, even after allowing for higher equity capitalization rate the benefit of the use the cheaper source of funds is still available.

If however, the amount of debt is increased further, two things are likely to happen, owing the increased financial risk, equity rate will record a substantial rate and the firm would become very risky to the creditors who also would like

to be compensated by a higher return such that cost of debt will rise. The use of debt beyond a certain point will, therefore, have the effect of raising the WACC and conversely the value of the firm. Thus up to a point degree of leverage the use of debt will favorably affect the value of a firm; beyond that point use of debt will adversely affect it. At that level of debt-equity ratio, the capital structure is an optimal capital structure.

2.1.7 Profit & Profitability

"In business, profits are the excess of revenue over cost. 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 earning 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: 80)."

2.1.8 Need for Profit

Profit is a must for the following reasons:

A) Measurement of Performance

"Profit is only one factor to measure the management efficiency, productivity and performance. Profit is the most widely used yardstick to see what really is to be achieved and where the firm is to go in the future (Saunders & Cornett, 2004: 61)."

B) Premium to Cover Costs of Staying in Business

"Business environment is full of risks and uncertainties. To grasp the globally changing technologies, to stay in the market uncertainties, to replace and acquire assets and enhancing business scope etc. require a profit margin (Saunders & Cornett, 2004: 61)."

C) Ensuring Supply of Future Capital

"Profit is necessary to plough back in the investments like innovations, business expansion and self-financing. It also attracts investors for further investment (Mishkin, 1998: 26)."

D) Return to the Investors

"Shareholders provide equity capital to the business because they expect the entity will provide return to their funds at least equal or above market rate of return. To maintain the shareholders expectation, it is most important that a firm should earn sufficient profit so that it can distribute dividends (Mishkin, 1998: 26)."

2.1.9 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 earning 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 them. So, the management has to make a crucial decision regarding a mixture of liquidity and profitability (William, 1990: 32-34)."

2.1.10 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 changing 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.

2.2 Review of Related Studies

Mesquita & Lara (2006), in their article *"Capital Structure and Profitability: The Brazilian Case",* have shown a great dispersion among the several capital sources used by the Brazilian companies, exception to the equity, the main component, and the one that presents smaller variability. As to the relationship between return rates and debt, the results indicate inverse relationship for the long run financing, and direct relationship for short-run financing and equity.

The facts of the most lucrative companies are the ones with lowest debt are in consonance with other empiric evidences. However the low debt level, when compared to the debt level of more developed economies, such as United States, Japan, Germany and United Kingdom, indicates that the Brazilian companies are using debt in a extremely conservative way. Perhaps the high interest rates practiced at the Brazilian market, the instability of the exchange rate politics and remaining atmosphere of uncertainty of the local economy which conveys operational and financial risks that hinder the managerial

planning and inhibit the adoption of more sophisticated debt politics can explain that fact.

Raheman, Zulfiqar and Mustafa (2007), in their article, *"Capital Structure and Profitability: 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?"* 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 period 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 period is different than the 2003-2009 period. 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 firms' 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 firms' 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 firms' 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 firms' profitability, which means that although firms take into consideration their interdependence they prefer to compete with each other than to cooperate.

2.3 Review of Thesis

Banjada (2006), has made a study on, *"The Capital Structure of Nepal Bank Ltd."* The basic objective of the study made by him was to analyze the interrelationship and trends among some of the component parts of capital and assets structure and to provide suggestions for the development of an appropriate capital structure.

The study reiterates that the bank is composition of loan and advances, cash investment and other assets. Between all these components, loan and advance are the major portions. During the study, total assets and capitals are in increasing trend. But increasing rate of component is different. So the interrelationship of the component is fluctuating. The average growth rate of total deposits and other liabilities is higher than the average growth rate of net profit, and higher than the growth rate of total expenses. The total income and total expenses aren't under control of the bank, and the net profit is only 40.64% of the total income. The study suggested that the bank must control total deposit and the bank must also control investment. The bank needs to reduce its expenses and control fluctuations in the earnings per share to improve its market price per share.

Dahal (2007), has made as study on, *"Capital & Assets Structure of Nepal Bank Limited".* The basic objective of this study was to analyze interrelation between different ratio, analysis of component parts of capital structure; debt equity ratio, net worth, deposit/investment ratio etc.

The study remarked that the total deposit and total investment were not significantly related. Further, the study concluded that the net worth was used in unproductive assets of the bank and further commented that the bank needs to have productive use of its net worth.

Sigdel (2007), has made a study on, *"A Comparative Analysis of Capital Structure Between Lumbini Sugar Factory Limited and Birjung Sugar Factory Limited."* The purpose of this study was to analyze the various ratio of capital structure decision, net worth, earning before interest and tax and to suggest measures to improve the policy of the companies.

According to the study, both the companies were facing serious deterioration in earnings according to the net operating income approach. The study noted down both the companies had defective capital structure as debt equity ratio were not so much satisfactory. Birgunj Sugar Factory had high debt equity ratio indicating more financial risk while Lumbini Sugar Mills had low debt equity ratio which indicates access power of equity holders. And both the companies were unable to pay interest because they were operating at loss. As Birgunj sugar Factory was highly levered Lumbini Sugar Factory was unlevered both the companies had defective capital structure. The study suggested that it should change the debt equity ratio for sound capital structure management to maintain it in 1:1 ratio.

Rana (2008), has made a study on, *"A Study of the Capital Structure of Selected Manufacturing Companies"* with a purpose to access the debt serving capacity of the mentioned manufacturing companies, examine the relation between return on equity and total debt, return on equity and debt ratio, earning after tax and total debt and interest and earning before interest and tax.

The study revealed that Nepal lever Ltd has not been using long term debt and it was fully equity based. The bottlers Nepal Ltd is free of long term debt because of improved cash flows and effective management. The Sriram spinning mills has 66.33% of assets financed with debt and hence there is less flexibility to the owners. The degree of financial leverage analysis of Jyoti spinning mills shows the failure of the company to gain expected profits. And

the Arun Vanaspati Udhyog has a fluctuation Debt Equity ratio. Its long term debt is decreasing and only creditors make a small share of equity.

Gautam (2009), in his study, *"Capital Structure and the Cost of Capital of Nepalese Listed Companies",* has the main objective to examine the capital structure and the cost of capital of the sampled companies. The other specific objectives are to test the relationship between the cost of capital and capital structure and to examine the relationship between the cost of equity and capital structure of selected listed companies.

The study shows that the regression coefficient of leverage against cost of capital was negative on manufacturing and trading sector and positive on banking and finance sector. In addition, the t-value showed the beta coefficient was not statistically significant in both sectors. Finally, the study stated that there were not strong enough to establish relationship between cost of capital and capital structure and with other exploratory variables.

Maharjan (2009), has made a study on, *"Comparative Evaluation of Capital Structure Between Selected Manufacturing and Trading Companies of Nepal."* The study aims on debt serving capacity of the companies and as well as return on equity, debt ratio, following the calculation earning before interest and tax , earning per share.

The study observed that manufacturing companies had a higher risk with higher return on the interest and debt and low dividend. The study further indicated that the amount of profit earned could only meet the interest and because of that had to suffer losses. It has concluded that there was not enough return to pay interest, debt and dividend for both types of companies although maintaining a high risk of debt. Finally, the study recommended for a regular check up the level of debt, earning before interest and tax (EBIT), earning

before tax (EBT) and earning per share (EPS) by monitoring authority, so that the companies would not fall into a weaker position.

Dangol (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 has found that as compared to the shareholder's equity and the trend of debt equity the ratio was increasing everyday, 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 earnings 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 has 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.

2.4 Research Gap

All of the above reviewed studies are concerned with either determine the capital structure or determining the capital structure and cost of capital. However, the studies have ignored the relationship of capital structure and the profitability, the ultimate goal, of the firms. Thus, the present study detects this gap, and tries to fulfill such gap by evaluating the relationship between these two variables. Further, the study conducts primary data analysis to determine the major determinant of capital structure and to collect opinion for having the optimum capital structure.

CHAPTER – III
RESEARCH METHODOLOGY

3.1 Research Design

Generally, research design is the plan, structure and strategy of investigation conceived so as to obtain answer to research questions and to control variance. It is arrangement for collection and analysis of data. To achieve the objective of this study, descriptive and analytical research design has been used. Some financial and statistical tools have been applied to examine facts and descriptive techniques have been adopted to evaluate the relationship between capital structure and profitability of the banks.

3.2 Population and Sample

Currently 30 commercial banks are operating in Nepal. The study of all these banks on the ground of capital structure and profitability will be somewhat absurd and onerous within this study paper. Thus, only two banks, namely Nabil Bank Limited (NABIL) and Nepal Investment Bank Limited (NIBL), have been chosen as sample from the total population.

3.3 Nature and Source of Data

The study is based on primary data as well as secondary data. To evaluate the capital structure, profitability and the relationship between them of the banks, the secondary data have been analyzed, whereas to trace out the major determinants of capital structure and to collect the suggestions for adopting the optimal capital structure, the primary data have been analyzed.

The sources of secondary data are mainly AGM reports of NABIL, NIBL and NRB and other concerned organizations, bulletins, publication, researches, journals, articles, unpublished thesis reports, newspapers, books, authorized websites and internet. Whereas the source of primary data is the collection of

opinions from shareholders and depositors of the observed banks through questionnaire.

3.4 Data Collection Techniques

The research consists of both primary and secondary data. Since the nature of these two types of data is different; the data collection procedure also varies. To collect the secondary data, the researcher has visited the different libraries, NABIL, NIBL and NRB, and other useful book stores, and collection related publications and periodicals. Official websites are searched in order to collect required information. On the other hand, the primary data are merely collected through questionnaire from different personnel related to the observed banks.

3.5 Analytical Tools

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 been no meaning if such data are not analyzed. To analyze the data in this research, the researcher has used some financial and statistical tools.

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.

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

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 riskier than those which finances through short term debt.

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

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, the higher the ratio, the more risk that company is considered to have taken on.

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

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 will be to continue meeting 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.

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

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.

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

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) Earning Per Share

Earning per share serves 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. An earning per share is 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.

$$\text{Earnings per Share} = \frac{\text{Net Profit after Tax} - \text{Dividend paid on Preference Share}}{\text{No. of Common Outstanding Shares}}$$

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.

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

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’.

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

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.

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

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

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,

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

Where, n is the number of observations.

B) Standard Deviation

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.

$$S.D. = \sqrt{\frac{\sum (X - X)^2}{N}}$$

C) Coefficient of Variation

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,

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

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 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;

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

E) Probable Error

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

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

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) Regression Lines

The regression line is the line that gives the best estimate of one variable for any given value of the other variable. The simple regression equation of dependent variable (Y) on the independent variable (X) is given by;

$$y = a + bx$$

We shall get the normal equation for estimating "a" and "b" as.

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

$$\sum XY = a\sum Y + b \sum Y^2$$

Where,

X = the value of independent variable

Y = the value of dependent variable

a = Y-intercept

b = slope of the trend line/coefficient of regression

N = number of pairs of observations.

$a = Y - b X$

G) 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;

$$Y_c = a + bx \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \text{(i)}$$

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

4.1 Secondary Data Analysis

This section of the study analyzes the secondary data, extracted mainly through the annual report of the banks, to examine the capital structure and profitability of the banks. Under this section, the capital structure of the banks, the solvency of banks to pay the debt, the profitability of the banks, and the effect of capital structure on profitability of the bank have been measured.

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.

4.1.1.1 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.

Table 4.1

Debt-Equity Ratio (Ratio in Times)

FY	NABIL			NIBL		
	LTD	**SE**	**D/E**	**LTD**	**SE**	**D/E**
2005/06	173.20	1874.99	0.09	550.00	1415.44	0.39
2006/07	882.57	2057.05	0.43	800.00	1878.12	0.43
2007/08	1600.00	2437.20	0.66	1050.00	2686.79	0.39
2008/09	1981.31	3130.24	0.63	1088.80	3907.84	0.28
2009/10	374.90	3834.22	0.10	1087.31	4585.40	0.24
Mean			**0.38**			**0.34**
S.D.			**0.25**			**0.07**
C.V.%			**64.72**			**21.19**

(Source: Appendix II)

The table illuminates that the usage of long term debt amount in NABIL is in increasing trend, except in the fiscal year 2009/10, which means that the bank is depending more on outside fund in each fiscal year in financing the total assets. The long term debt of the bank has increased from Rs. 173.20 millions in the fiscal year 2005/06 to Rs. 1981.31 millions in the fiscal year 2008/09. Similarly, the shareholders' equity of NABIL has ranged from Rs. 1874.99 millions in the fiscal year 2005/06 to Rs. 3834.22 millions in the fiscal year 2009/10. With regard to the trend of both these variables, the debt equity ratio of the bank has increased for the first three fiscal years and thus has ranged from 0.09 times in the fiscal year 2005/06 to 0.66 times in the fiscal year 2007/08, while in the fiscal year 2009/10, it is 0.10 times. The debt equity ratio emblazons that in each fiscal year the usage of equity capital is greater than the usage of long term debt capital. Nonetheless, in average the debt equity ratio of the bank is 0.38 times and the variation in the ratio is 64.72%, indicating high inconsistency.

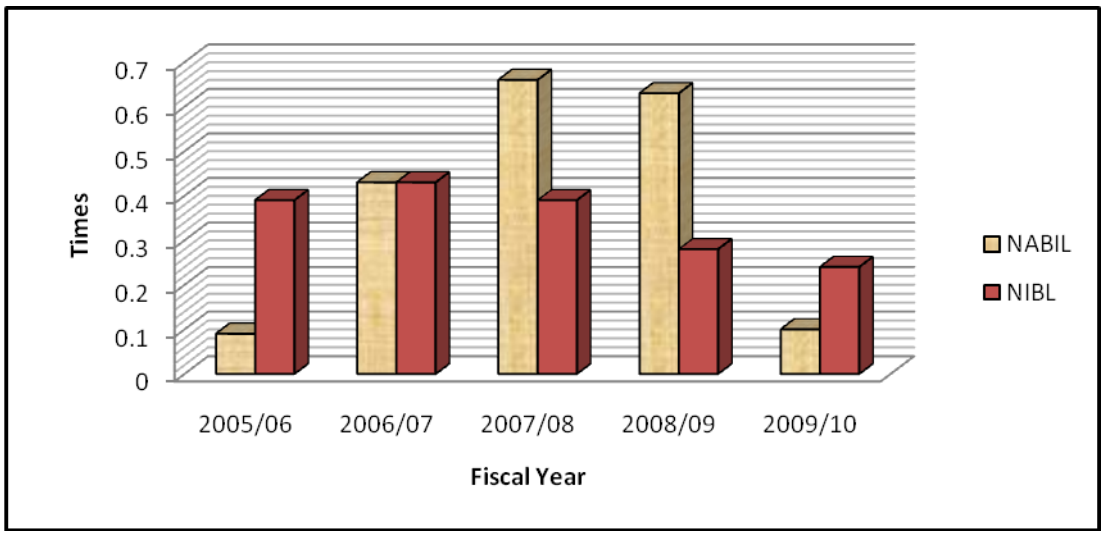
Similarly in NIBL, it has been observed that the bank has continuously increased its long term debt in the observed period, except in the fiscal year

2009/10 when there is negligible decrement, and thus the long term debt has ranged from Rs. 550 millions to Rs. 1088.80 millions in the fiscal year 2008/09. In concomitant with the increment in the long term debt, the bank has also increased its equity capital, by issuing the shares and accumulating profit. The share capital of NIBL has ranged from Rs. 1415.44 millions in the fiscal year 2005/06 to Rs. 4585.40 millions in the fiscal year 2009/10. However, 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 0.43 times in the fiscal year 2006/07 and in lowest, the debt equity ratio of NIBL is 0.24 times in the fiscal year 2009/10. In average, the debt equity ratio of the bank is 0.34 times, and the coefficient of variation is 21.19%.

Nevertheless, it can be concluded that both of the observed banks believes in financing the total assets through the extensive use of internal fund, since the debt financing of the bank is lower than the equity financing in each fiscal year. However, comparing the banks on the basis of the debt equity ratio, it can be assumed that NABIL is more risk taker than NIBL. Since, the debt equity ratio of NABIL is greater than that of NIBL, and as a result the capital structure of NABIL is more dominated by the debt capital percentage than in NIBL.

Figure 4.1

Debt-Equity Ratio



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.

Table 4.2

Long Term Debt to Total Debt (Ratio in %)

FY	NABIL			NIBL		
	LTD	TD	Ratio	LTD	TD	Ratio
2005/06	173.20	20454.98	0.85	550.00	19914.70	2.76
2006/07	882.57	25196.34	3.50	800.00	25712.72	3.11
2007/08	1600.00	34695.56	4.61	1050.00	36186.52	2.90
2008/09	1981.31	40737.15	4.86	1088.80	49102.96	2.22
2009/10	374.90	48245.50	0.78	1087.31	52720.01	2.06
Mean			**2.92**			**2.61**
S.D.			**1.78**			**0.40**
C.V.%			**61.00**			**15.45**

(Source: Appendix II)

The ratio in the table elucidates that both 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 2008/09, i.e. from 0.85% in the fiscal year 2005/06 to 4.86% in the fiscal year 2008/09, and finally it has decreased to 0.78%, the lowest recorded ratio in the period. In average, long term debt has only met 2.92% of the total debt finance of the bank, and other 97.08% of the debt has been covered by short term debt.

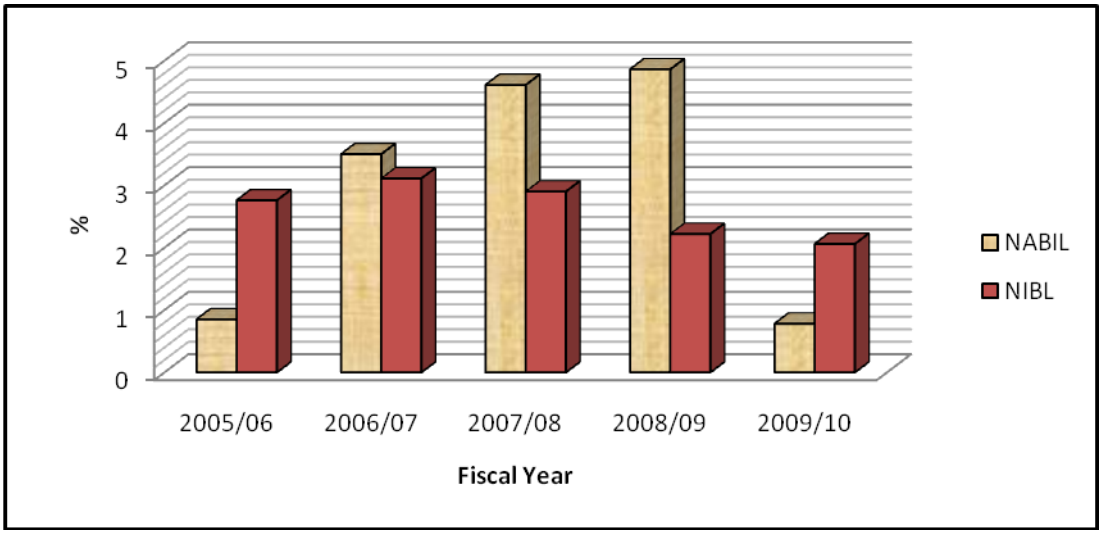
In contrast to NABIL, the ratio of long term debt to total debt of NIBL has fluctuated during the periods, and thus it has ranged from 2.06% in the fiscal year 2009/10 to 3.11% in the fiscal year 2006/07. However, the practice of meeting the fund requirement of the bank through debt capital has been

increased in each fiscal year, as a result the total debt of the bank has increased from Rs. 19914.70 millions in the fiscal year 2005/06 to Rs. 52720.01 millions in the fiscal year 2009/10. 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.

Paraphrasing the analysis, it can be concluded that the bank extensively uses short term to meet the debt capital. Nonetheless, on the basis of the long term debt to total debt, it has been determined that NIBL is more risk taking than NABIL, since the usage of short term debt in total debt is higher in NIBL, and thus ultimately the short term debt carries higher risk than long term debt.

Figure 4.2

Long Term Debt to Total Debt



4.1.1.3 Debt Ratio

Debt Ratio is a financial ratio that indicates the percentage of a company's assets that are provided via debt. 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 other assets such as 'goodwill').

Table 4.3

Debt Ratio **(Ratio in %)**

FY	NABIL			NIBL		
	TD	**TA**	**Ratio**	**TD**	**TA**	**Ratio**
2005/06	20454.98	22329.97	91.60	19914.70	21330.14	93.36
2006/07	25196.34	27253.39	92.45	25712.72	27590.84	93.19
2007/08	34695.56	37132.76	93.44	36186.52	38873.31	93.09
2008/09	40737.15	43867.39	92.86	49102.96	53010.80	92.63
2009/10	48245.50	52079.72	92.64	52720.01	57305.41	92.00
Mean			**92.60**			**92.85**
S.D.			**0.60**			**0.49**
C.V.%			**0.65**			**0.53**

(Source: Appendix II)

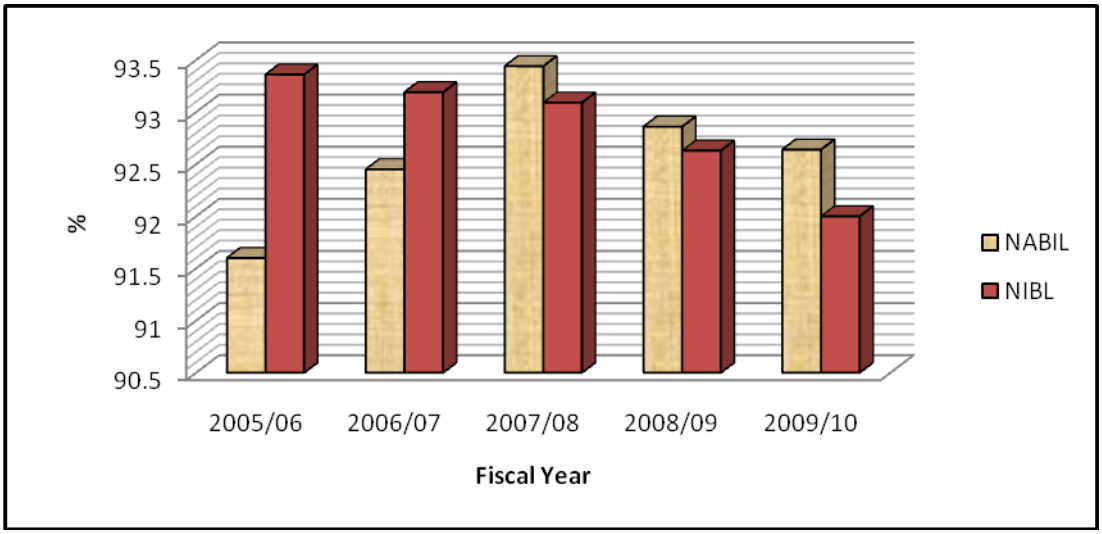
The practice of financing the total assets through debt capital has increased in NABIL for the first three fiscal years, i.e. from 91.60% in the fiscal year 2005/06 to 93.44% in the fiscal year 2007/08, and then it is slightly increased from the fiscal year 2008/09 onward, and thus it has finally reached to 92.64% in the fiscal year 2009/10. In average, 92.60% 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 0.65%, 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 2005/06 to 92.00% in the fiscal year 2009/10. In average, 92.85% of the total assets of NIBL has 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. More specifically, the total assets of NIBL is slightly risky than that of NABIL, since the debt coverage is slightly greater in NIBL than in NABIL.

Figure 4.3

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 delineates 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.

Table 4.4

Current Assets to Short Term Debt (Ratio in Times)

FY	NABIL			NIBL		
	CA	STD	Ratio	CA	STD	Ratio
2005/06	22010.88	20281.78	1.09	20986.69	19364.70	1.08
2006/07	26966.50	24313.77	1.11	26831.38	24912.72	1.08
2007/08	36534.72	33095.56	1.10	37903.22	35136.52	1.08
2008/09	43206.40	38755.84	1.11	51950.05	48014.16	1.08
2009/10	51298.24	47870.60	1.07	56169.16	51632.70	1.09
Mean			**1.10**			**1.08**
S.D.			**0.02**			**0.00**
C.V.%			**1.47**			**0.35**

(Source: Appendix II)

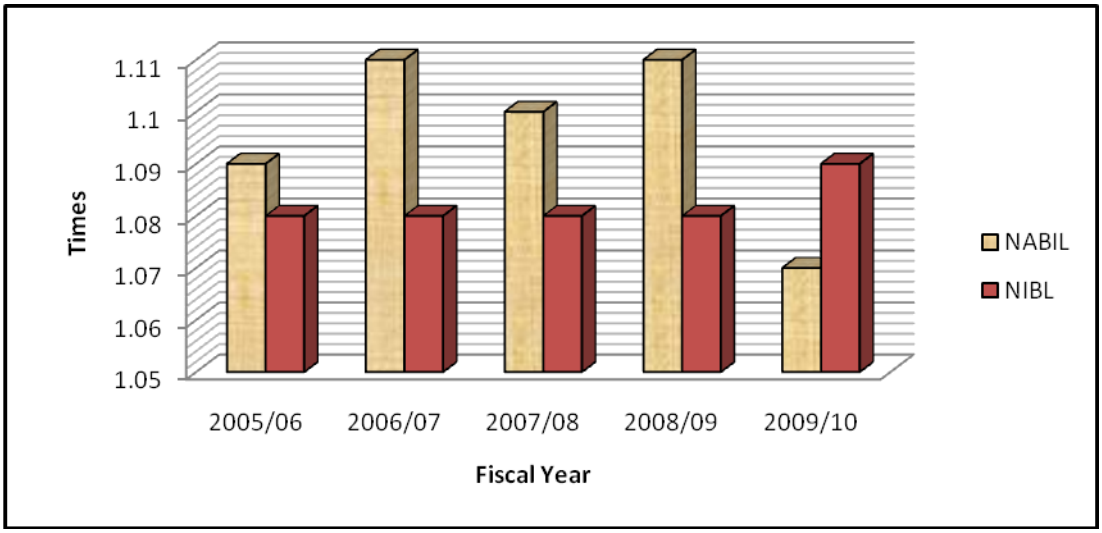
The table signifies that the banks are almost in quite satisfactory solvency position to repay the short term debt that they have mobilized in financing the current assets. Both the current assets and the short term debt of both the banks have increased in each fiscal year. However, the increment rate 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 ranged from 1.07 times in the fiscal year 2009/10 to 1.11 times in the fiscal year 2006/07 and 2008/09. In average, NABIL has maintained the ratio of 1.10 times and the variation in the ratio is just 1.47%, indicating uniformity.

In contrast to NABIL, there is more uniformity in the ratio in NIBL. NIBL has kept a single ratio of 1.08 times for the four initial periods, and there is slight increment to 1.09 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 1.08 times, with only 0.35% variation.

Though both the banks are in quite satisfactory position to meet the immediate short term debt payment, the solvency position of NABIL is greater than that of NIBL, since the average ratio of NABIL is comparatively higher than that of NIBL.

Figure 4.4

Current Assets to Short Term Debt



4.1.2.2 Interest Coverage Ratio

Interest Coverage is a great tool when 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 of NABIL and NIBL has been presented in the table below.

Table 4.5

Interest Coverage Ratio (Ratio in Times)

FY	NABIL			NIBL		
	EBIT	**Int.**	**ICR**	**EBIT**	**Int.**	**ICR**
2005/06	1255.16	357.16	3.51	995.87	490.95	2.03
2006/07	1550.76	555.71	2.79	1408.91	685.53	2.06
2007/08	1847.43	758.44	2.44	2012.12	992.16	2.03
2008/09	2631.94	1153.28	2.28	2985.57	1686.97	1.77
2009/10	3584.59	1960.11	1.83	4362.06	2553.85	1.71
Mean			**2.57**			**1.92**
S.D.			**0.56**			**0.15**
C.V.%			**21.94**			**7.71**

(Source: Appendix II)

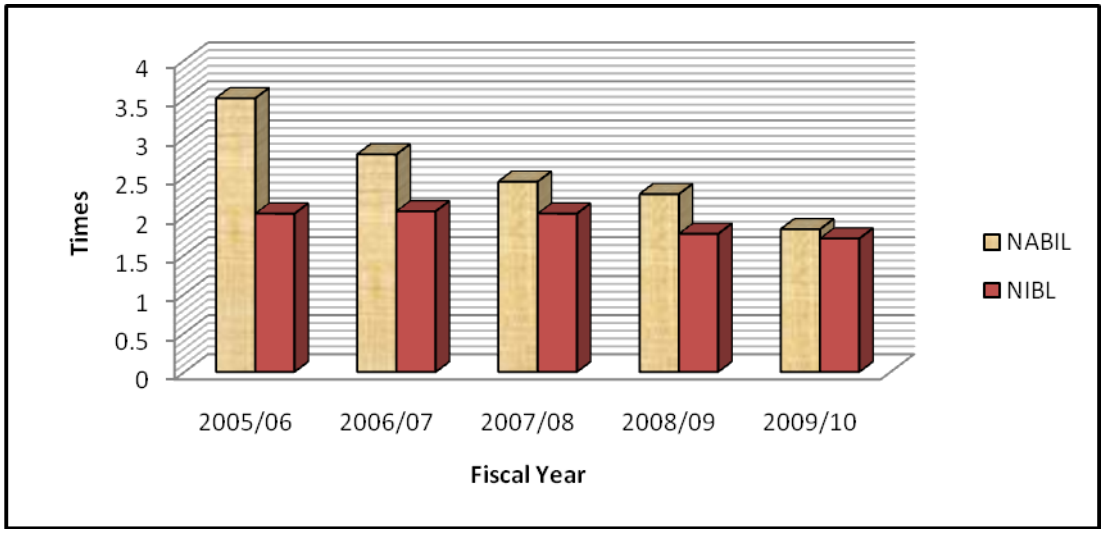
It seems that the interest expenses of the bank accounts less for NABIL in decreasing the bank's profitability, though the interest expenses is in increasing trend, i.e. from Rs. 357.16 millions in the fiscal year 2005/06 to Rs. 1960.11 millions in the fiscal year 2009/10. In other word, the EBIT of 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 2005/06 to 1.83 times in the fiscal year 2009/10. In average, the interest coverage ratio of the bank is 2.57 times with 21.94% variation.

Alike in NABIL, the interest expenses of NIBL has increased over the observed periods, i.e. from Rs. 490.95 millions in the fiscal year 2005/06 to Rs. 2553.85 millions in the fiscal year 2009/10. However, the interest coverage ratio of NIBL has fluctuated during the periods, ranging from 1.71 times in lowest in the fiscal year 2009/10 to 2.06 times in highest in the fiscal year 2006/07. In average, the interest coverage ratio of the bank is 1.92 times with 7.71% 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 both the banks are capable to meet the interest expenses.

Figure 4.5

Interest Coverage Ratio



4.1.3 Profitability of Banks

Profit is the 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.

4.1.3.1 Earning Per Share

Earnings per share (EPS) are the earnings returned on the initial investment amount. Earning per share refers 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.

Table 4.6

Earning Per Share **(Unit in Rs.)**

FY	NABIL	NIBL
2005/06	129.21	59.35
2006/07	137.08	62.57
2007/08	108.31	57.87
2008/09	106.76	37.42
2009/10	78.61	52.55
Mean	**111.99**	**53.95**
S.D.	**20.40**	**8.88**
C.V.%	**18.22**	**16.45**

(Source: Appendix II)

The earning per share of NABIL has increased up to the fiscal year 2006/07, 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 2006/07, and then it has started to decrease and finally it has reached to Rs. 78.61, the lowest recorded EPS, in the fiscal year 2009/10. 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.

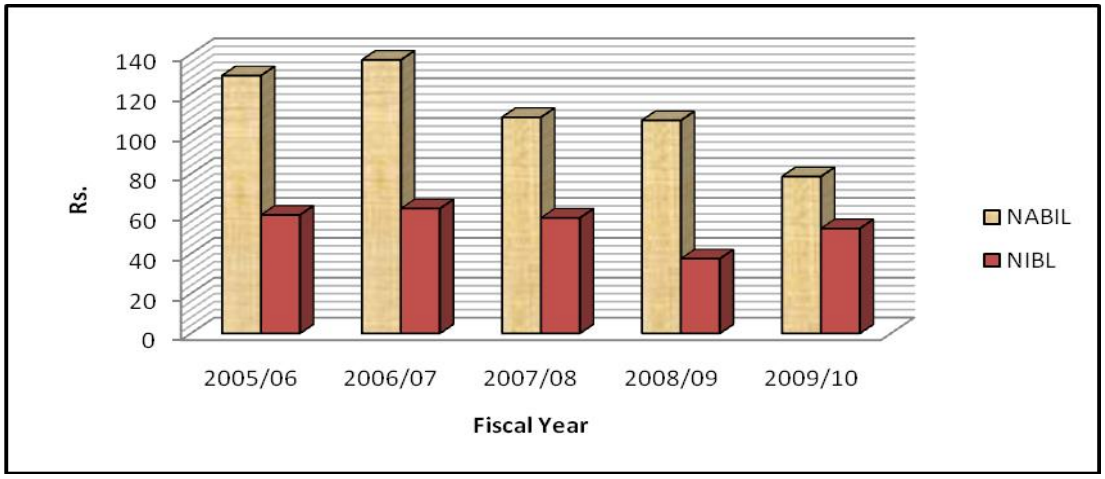
Likewise, the EPS of NIBL has also increased up to the fiscal year 2006/07. At the beginning of the observed periods, the EPS is Rs. 59.35 which has been raised to Rs. 62.57 in highest in the fiscal year 2006/07. At the end of the fiscal year, the EPS of the bank is Rs. 52.55. In average, NIBL has earned Rs. 53.95 per share, with the variation of 16.45%.

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 more than two fold of that of NIBL. Despite this, it can be said that

the EPS of NABIL has been debilitated during the observed periods. The bank has faced lowest EPS in the recent year, 2009/10.

Figure 4.6

Earning Per Share



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).

Table 4.7

Return on Equity **(Ratio in %)**

FY	NABIL			NIBL		
	NPAT	SE	ROE	NPAT	SE	ROE
2005/06	635.26	1874.99	33.88	350.54	1415.44	24.77
2006/07	673.96	2057.05	32.76	501.40	1878.12	26.70
2007/08	746.47	2437.20	30.63	696.73	2686.79	25.93
2008/09	1031.05	3130.24	32.94	900.62	3907.84	23.05
2009/10	1138.57	3834.22	29.69	1265.95	4585.40	27.61
Mean			**31.98**			**25.61**
S.D.			**1.56**			**1.59**
C.V.%			**4.88**			**6.19**

(Source: Appendix II)

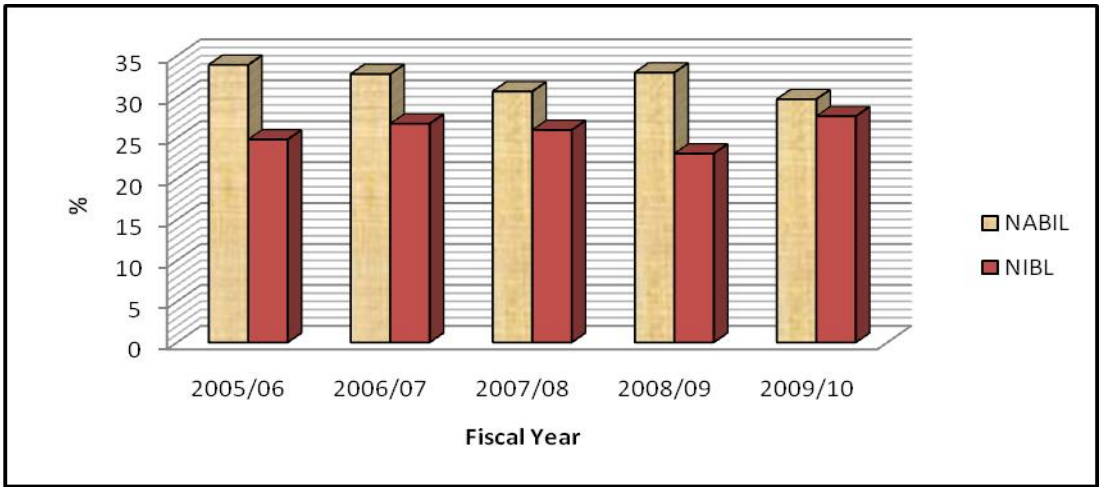
The table depicts that the net profit and shareholders' equity of both the banks have increased during the observed periods. Along with the increment in shareholders' equity, the net profit of NABIL has also increased in each fiscal year. The net profit of the bank has been raised from Rs. 635.26 millions in the fiscal year 2005/06 to Rs. 1138.57 millions in the fiscal year 2009/10. However, the pace of growth in net profit could not cope with the pace of growth of shareholders' equity, as a result the return on equity of the bank has followed fluctuating trend. In highest, the ROE of the bank is 32.94% in the fiscal year 2008/09 and in lowest, the ROE of the bank is 29.69% in the fiscal year 2008/09. 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 net profit in NIBL has also followed increasing trend. The net profit of NIBL has increased from Rs. 350.54 millions in the fiscal year 2005/06 to Rs. 1265.95 millions in the fiscal year 2009/10. However, 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 2008/09 to 27.61% in the fiscal year 2009/10. 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. However, NIBL has made laudable achievement in generating highest profit in the fiscal year 2009/10.

Figure 4.7

Return on Equity



4.1.3.3 Return on Assets

Return on assets is an indicator of how profitable a company is before leverage, and is compared with companies in the same industry. Return on assets is a common figure used for comparing performance of financial institutions (such as banks), because the majority of their assets will have a carrying value that is close to their actual market value.

Table 4.8

Return on Assets **(Ratio in %)**

FY	NABIL			NIBL		
	NPAT	TA	ROA	NPAT	TA	ROA
2005/06	635.26	22329.97	2.84	350.54	21330.14	1.64
2006/07	673.96	27253.39	2.47	501.40	27590.84	1.82
2007/08	746.47	37132.76	2.01	696.73	38873.31	1.79
2008/09	1031.05	43867.39	2.35	900.62	53010.80	1.70
2009/10	1138.57	52079.72	2.19	1265.95	57305.41	2.21
Mean			**2.37**			**1.83**
S.D.			**0.28**			**0.20**
C.V.%			**11.91**			**10.84**

(Source: Appendix II)

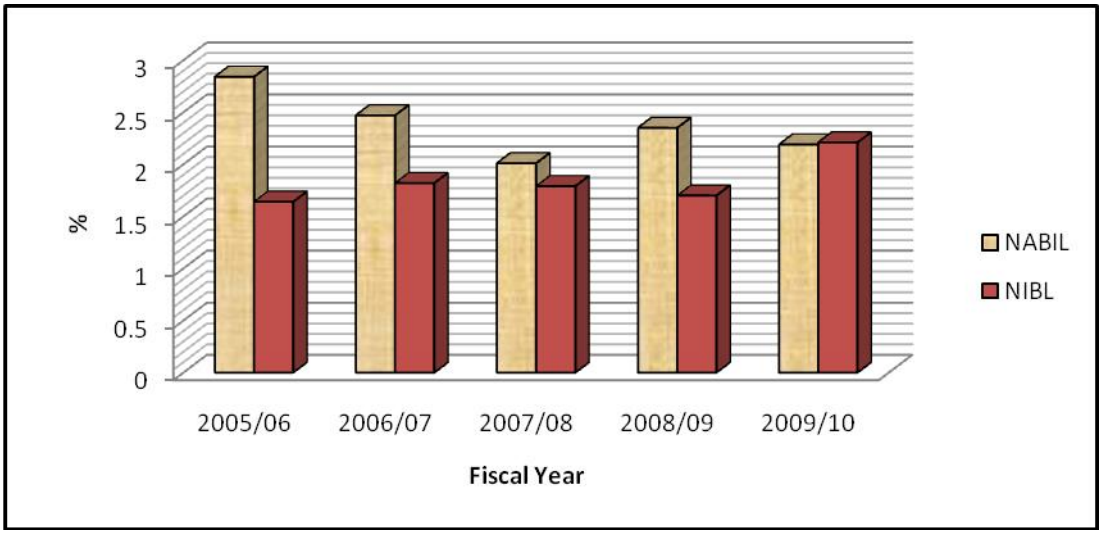
In concomitant with the increment in net profit of the bank, the total asset of NABIL has also increased in each fiscal year. The total asset of the bank has ranged from Rs. 22329.97 millions in the fiscal year 2005/06 to Rs. 52079.72 millions in the fiscal year 2009/10. Inversely the ROA of NABIL has decreased for the first three fiscal years, i.e. from 2.84% in the fiscal year 2005/06 to 2.01% in the fiscal year 2007/08, and then it has increased to 2.35% in the fiscal year 2008/09 and finally it has decreased to 2.19% in the fiscal year 2009/10. Nevertheless the bank has kept the ROA of 2.37% in average, and the variation in the ratio is 11.91%, indicating quite consistency. The average ratio implies that the bank has generated Rs. 2.37 net profit from Rs. 100 mobilization of total assets.

Similarly, the total asset of NIBL is also in increasing trend, and thus it has increased from Rs. 21330.14 millions in the fiscal year 2005/06 to Rs. 57305.41 millions in the fiscal year 2009/10. Further, the ROA of the bank has fluctuated during the periods, indicating that the net profit of the bank has not increased in the same pace that the total assets has followed. The ROA of NIBL is just 1.64% in the fiscal year 2005/06, however, it has been increased to 2.21% by the end of the fiscal year 2009/10. In average, the ROA of the bank is 1.83%, indicating generating of Rs. 1.83 net profit from Rs. 100 investment of total assets, and the coefficient of variation in the ratio is 10.84%, indicating quite consistency.

Comparing the banks on the base of ROA, it can be concluded that NABIL is more efficient than NIBL in effectively mobilizing the total assets, since the net profit generation from mobilizing equal amount of total assets is higher in NABIL than in NIBL. Thus, it can be inferred that the profitability management of NABIL is much robust than that of NIBL.

Figure 4.8

Return on Assets



4.1.3.4 Return on Deposits

Deposit is the major source of banks' fund. 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. The return on deposits of NABIL and NIBL has been presented in the table below.

Table 4.9

Return on Deposits **(Ratio in %)**

FY	NABIL			NIBL		
	NPAT	Dep.	ROD	NPAT	Dep.	ROD
2005/06	635.26	19347.40	3.28	350.54	18927.31	1.85
2006/07	673.96	23342.29	2.89	501.40	24488.86	2.05
2007/08	746.47	31915.05	2.34	696.73	34451.73	2.02
2008/09	1031.05	37348.25	2.76	900.62	46698.10	1.93
2009/10	1138.57	46340.70	2.46	1265.95	50094.72	2.53
Mean			**2.75**			**2.08**
S.D.			**0.33**			**0.24**
C.V.%			**12.17**			**11.38**

(Source: Appendix II)

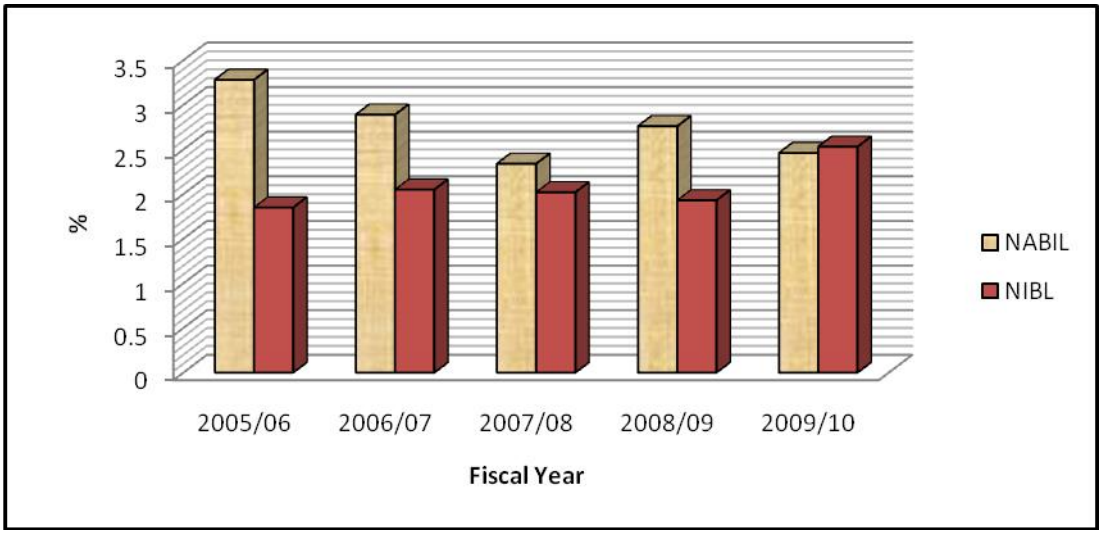
The table reveals that the net profit in comparison to total deposit of NABIL has been almost in decreasing trend, regardless of the increasing trend of deposit, which has increased from Rs. 19347.40 millions in the fiscal year 2005/06 to Rs. 46340.70 millions in the fiscal year 2009/10. Thus, the return on deposit has ranged from 3.28% in the fiscal year 2005/06 to 2.34% in the fiscal year 2007/08, while in the fiscal year 2009/10, it is 2.46%. In average, NABIL has earned 2.75% of the total deposit and the variation in such earning percentage is 12.17%.

Alike in NABIL, the total deposit of NIBL has also been ascertained in increasing trend, i.e. the total deposit has increased from Rs. 18927.31 millions in the fiscal year 2005/06 to Rs. 50094.72 millions in the fiscal year 2009/10. However, the ROD of the bank has been in fluctuating trend during the observed periods. The ratio is 1.85% in lowest in the fiscal year 2005/06 and 2.53% in highest in the fiscal year 2009/10. In average, NIBL has earned 2.08% of the total deposit as net profit and the instability in such ratio is just 11.38%.

Comparing the banks on the basis of return on deposit, it can be undoubtedly said that NIBL possess greater efficiency than NABIL in mobilizing the total deposit to achieve high net profit. Further, there is high security in return on total deposit of NABIL than in that of NIBL. Thus, the profitability position of NABIL is better in comparison to that of NIBL.

Figure 4.9

Return on Deposits



4.1.4 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 four fiscal years have been estimated.

4.1.4.1 Relationship between D/E ratio and NPAT

It is obvious that the net profit of the bank somewhat depends on the capital structure, but to what extent is just a dilemma. Thus, to measure the impact of debt equity ratio on net profit, the correlation coefficient and regression analysis have been performed.

Table 4.10

Relationship between D/E ratio and NPAT

Bank	r	P.E.	6 P.E.	Regression	Remark
NABIL	-0.0441	0.3011	1.8064	NPAT = 858.80 - 35.97 D/E	Insignificant
NIBL	-0.9041	0.0551	0.3306	NPAT = 2118.62 – 3975.65 D/E	Significant

(Source: Appendix III)

The table depicts that the D/E ratio has negative relationship with NPAT of both NABIL and NIBL, as the correlation coefficient between these two

variables is -0.0441 in NABIL and -0.9041 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.

Further, the regression analysis shows that with 1% increase in D/E ratio leads to Rs. 35.97 million decrease in net profit of NABIL, and Rs. 3975.65 millions decline in net profit of NIBL. 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. 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. However, in case of NIBL, the absolute value of correlation coefficient |0.9041| is higher than the 6 P.E. |0.3306|, thus it can be said that the D/E ratio has inverse relationship with the net profit of the bank. Thus, the relationship between net profit and D/E ratio of NIBL is statistically significant, and it would be better if NIBL decreases the debt capital.

4.1.4.2 Relationship between Debt Ratio and NPAT

To measure the impact of debt ratio on profitability of the bank, the net profit has been considered as the dependent variable on debt ratio.

Table 4.11

Relationship between Debt Ratio and NPAT

Bank	r	P.E.	6 P.E.	Regression	Remark
NABIL	0.3516	0.2644	1.5862	NPAT = -10115.93 + 118.37 DR	Insignificant
NIBL	-0.9831	0.0101	0.0605	NPAT = 60320.09 – 641.62 DR	Significant

(Source: Appendix III)

It is ubiquitous that there is low positive correlation between total debt to total assets ratio and net profit of NABIL and high negative relationship between these two variables in NIBL. The correlation coefficient between these two

variables is 0.3516 in NABIL and -0.9831 in NIBL. The positive relationship indicates that an increment in total debt capital can cause net profit to increase in NABIL. Also the regression analysis enlightens that 1% increase in total debt to total assets can increase Rs. 118.37 millions net profit in NABIL, if the other variable remains constant, and can decrease Rs. 641.62 millions net profit in NIBL, if the other variable remains stable. Comparatively, the effect of total debt to total assets on net profit is higher in NIBL than in NABIL. However, the relationship between these two variables is statistically insignificant in NABIL, since the 'r' value is lower than the 6 P.E. and thus the net profit may not increase in the same way as the regression analysis suggests. In contrast, the relationship between these two variables is statistically significant, and thus the debt ratio has inverse relationship with the net profit of NIBL.

4.1.4.3 Trend Analysis of D/E ratio

Let net profit after tax be the dependent variable on time period. Then the estimated value of net profit for the forthcoming periods and the regression equation of net profit on time period have been presented in the table below.

Table 4.12

Trend Analysis of D/E ratio

FY	NABIL	NIBL
2010/11	0.45	0.21
2011/12	0.47	0.17
2012/13	0.49	0.12
2013/14	0.51	0.08
2014/15	0.54	0.03
Regression	**D/E ratio = 0.32 + 0.02X**	**D/E ratio = 0.48 – 0.05X**

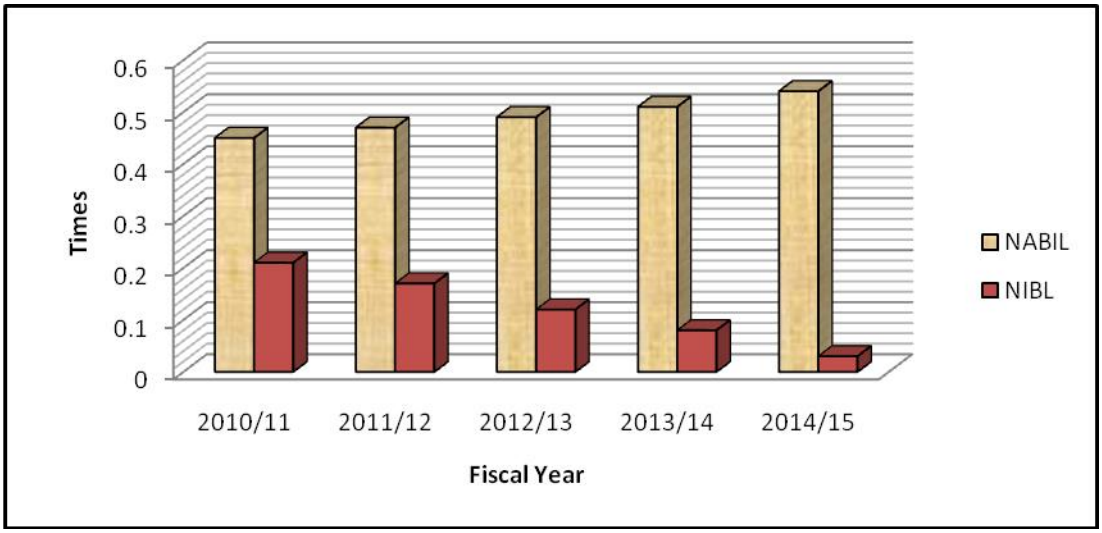
(Source: Appendix IV)

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 0.02 times in each fiscal year and that of NIBL will decrease by 0.05 times in each forthcoming years, if the

other variables remain constant. By the end of the fiscal year 2014/15, the estimated value of D/E ratio of NABIL will be 0.54 times, which indicates almost half usage of equity as long term debt capital, and that of NIBL will be 0.03 times, which indicates extensive usage of equity capital than long term debt.

Figure 4.10

Trend Analysis of D/E ratio



4.1.4.4 Trend Analysis of NPAT

To estimate the value of debt equity ratio in the forthcoming four fiscal years, the debt equity ratio has been considered as the dependent variable (Y) on the time period (X).

Table 4.13

Trend Analysis of NPAT

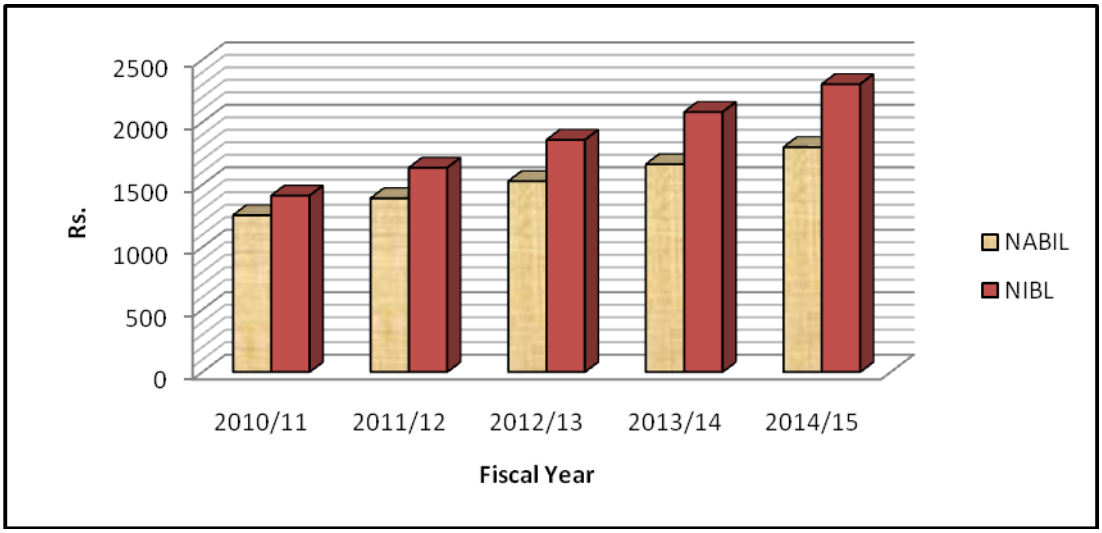
FY	NABIL	NIBL
2010/11	1254.18	1412.06
2011/12	1390.55	1635.06
2012/13	1526.92	1858.07
2013/14	1663.29	2081.07
2014/15	1799.66	2304.08
Regression	**NPAT = 435.95 + 136.37X**	**NPAT = 74.04 + 223X**

(Source: Appendix IV)

The trend analysis of net profit after tax indicates that the net profit of both the banks will have positive relationship with the time period, and thus the net profit of both the banks 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 in future. By the end of the fiscal year 2013/14, the estimated value of net profit of NABIL will be Rs. 1799.66 millions and that of NIBL will be Rs. 2304.08 millions.

Figure 4.11

Trend Analysis of NPAT



4.2 Primary Data Analysis

To collect the opinions bank related personnel regarding the capital structure and the profitability of the banks, the opinion survey has been performed. For this, a questionnaire containing 7 questions has been prepared and requested to 50 respondents; 25 shareholders and 25 depositors, to fill up the questionnaire.

4.2.1 Major Determinant of Capital Structure

While determining on how the capital structure of the bank is going to be, the bank management should at first be cautious on the various determinants that

affect the capital structure. To examine the main influencer that affects the banks' capital structure, the respondents are asked on this issue.

Table 4.14

Major Determinant of Capital Structure

Response	**Shareholder**		**Depositor**		**Total**	
	No.	**%**	**No.**	**%**	**No.**	**%**
Component Cost of Capital	5	20	4	16	9	18
Nature & Size of Business	6	24	6	24	12	24
Growth & Stability	8	32	6	24	14	28
Management Attitude	3	12	2	8	5	10
Corporate Tax Rate	0	0	2	8	2	4
Cash Flow Stability	1	4	4	16	5	10
Others	2	8	1	4	3	6
Total	**25**	**100**	**25**	**100**	**50**	**100**

(Source: Opinion Survey, 2010)

The table shows that 20% of the shareholders, 16% of the depositors and 18% of the total respondents are in the view that the component cost of capital, which indicates financial manager who prefers to use larger amount of less costly component use high debt capital, is the main influencer of capital structure. Similarly, 24% of the shareholders, 24% of the depositors and 24% of the total respondents have stated nature and size of business, small companies depends mainly upon ownership capital and vice versa, is the main influencer. Likewise, 32% of the shareholders, 24% of the depositors and 28% of the total respondents have stated that growth and stability of the bank determines capital structure, indicating rapidly growing banks tend to use somewhat more debt than slower growing banks. Further, 12% of the shareholders, 8% of the depositors and 10% of the total respondents have opined that the management attitude is the main influencer of capital structure.

Also, 8% of the depositors, which represents 4% of the total respondents, have opined that the corporate tax rate determines the capital structure, and 4% of

the shareholders, 16% of the depositors and 10% of the total respondents have stated that cash flow stability is the major determinant of capital structure, meaning high cash flow stable bank prefer to increase debt capital. Also, 8% of the shareholders, 4% of the depositors and 6% of the total respondents have said that the others, which involves period of finance, assets structure, lender attitudes, debt covenants etc., are the major determinant of capital structure. Finally, on the basis of the overall majority, it can be assumed that growth and stability of the bank mainly influences the capital structure of such bank.

4.2.2 Effect of Capital Structure to Profitability

To examine the effect of capital structure on profitability of the bank is one of the specific objectives of the study. Thus, the respondents are asked to opine on the extent of impact of capital structure on profitability.

Table 4.15

Effect of Capital Structure to Profitability

Response	**Shareholder**		**Depositor**		**Total**	
	No.	**%**	**No.**	**%**	**No.**	**%**
High	14	56	12	48	26	52
Medium	11	44	13	52	24	48
Low	0	0	0	0	0	0
Total	**25**	**100**	**25**	**100**	**50**	**100**

(Source: Opinion Survey, 2010)

The table depicts that 56% of the shareholders, 48% of the depositors and 52% of the total respondents have opined that capital structure has high impact on the profitability of the banks. While 44% of the shareholders, 11 out of 25, 52% of the depositors, 13 out of 25, and 48% of the total respondents, 24 out of 50, have viewed the medium impact of capital structure on the profitability of the banks. However none of the respondents have said that there is no impact of capital structure on profitability. Clearly, it can be concluded that capital structure of the banks has impact on profitability to some extent.

4.2.3 Reflection of Capital Structure

Capital structure is the composition of debt capital and equity capital. To examine what the capital structure of the bank should reflect mainly, the respondents are asked to express their view. The respondents obtained from them are presented in the table.

Table 4.16

Reflection of Capital Structure

Response	**Shareholder**		**Depositor**		**Total**	
	No.	**%**	**No.**	**%**	**No.**	**%**
High Equity Capital	13	52	12	48	25	50
High Debt Capital	8	32	12	48	20	40
Don't Know	4	16	1	4	5	10
Total	**25**	**100**	**25**	**100**	**50**	**100**

(Source: Opinion Survey, 2010)

The table reveals that most of the shareholders, 52% (13 out of 25), and 48% (12 out of 25) of depositors are in the view that the capital structure of the bank should reflect high equity capital than long term debt. In total 50% of the respondents, 25 out of 50, have supported this opinion. Similarly, 32% of the shareholders, 8 out of 25, and 48% of the depositors, 12 out of 25, have opined that the capital structure should reflect high long term debt capital. About 40% of the total respondents have defended for this opinion. While 16% of the shareholders, 4% of the depositors and 10% of the total respondents have said that they have no sufficient idea on this issue. Viewing the majority of the total respondents, it can be argued that most investors are fully 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.

4.2.4 Increment in Equity Capital

To investigate on what the bank should focus on, if it decides to meet the fund requirement through equity capital, the respondents are requested to express their opinions. The responses achieved from them are presented in the table.

Table 4.17

Increment in Equity Capital

Response	Shareholder		Depositor		Total	
	No.	%	No.	%	No.	%
Issue New Share	15	60	9	36	24	48
Increase Retention Rate	2	8	6	24	8	16
Right Offering	8	32	10	40	18	36
Total	**25**	**100**	**25**	**100**	**50**	**100**

(Source: Opinion Survey, 2010)

To increase the equity capital of the bank, the majority of the shareholders, 60% (15 out of 25), 36% of the depositors and 48% of the total respondents have suggested issuing public share. While 32% of the shareholders, 8 out of 25, the majority of the depositors, 40% (10 out of 25), and 36% of the total respondents, 18 out of 50, have implied the right offering as the best option for equity capital augmentation.

Similarly, 8% of the shareholders, 24% of the depositors and 16% of the total respondents have opined the increment in retention rate of the net profit by decreasing the dividend payout ratio as the major source for equity increment. Eventually, on the basis of overall majority, it can be assumed that issuing public share is the best method for increment in equity capital.

4.2.5 Increment in Debt Capital

Alternatively the bank can meet its fund requirement through debt capital instead of equity capital. But the question may arise on the form of debt capital to be quested on. To resolve such dilemma, the respondents are asked to opine their views.

Table 4.18

Increment in Debt Capital

Response	Shareholder		Depositor		Total	
	No.	%	No.	%	No.	%
Issuing Debenture	4	16	2	8	6	12
Long Term Borrowing	9	36	7	28	16	32
Short Term Borrowing	12	48	16	64	28	56
Total	**25**	**100**	**25**	**100**	**50**	**100**

(Source: Opinion Survey, 2010)

The table shows that the majority of both shareholders, 48%, and depositors, 64%, and eventually the majority of the total respondents, 56%, have opined that the bank should increase its debt capital requirement by borrowing short term credit, although it is considered much risky. In contrast, 16% of the shareholders, 8% of the depositors and 12% of the total respondents have stated that the bank should fulfill its debt requirement by issuing debenture. While 36% of the shareholders, 28% of the depositors and 32% of the total respondents have affirmed that the bank should borrow long term credit for meeting the debt capital requirement. Summarizing the majority of the total respondents, it can be inferred that the bank should focus on borrowing short term credit rather than in long term credit or issuing debenture to meet the debt capital requirement.

4.2.6 Policy for Optimum Capital Structure

While making optimum capital structure, the bank has three options that best suits it; using extensively equity capital, using extensively debt capital, and using equally debt and equity capital. To know which of the above policy best suits for bank in having optimum capital structure, the responses are collected.

Table 4.19

Policy for Optimum Capital Structure

Response	**Shareholder**		**Depositor**		**Total**	
	No.	**%**	**No.**	**%**	**No.**	**%**
Conservative Policy	6	24	8	32	14	28
Moderate Policy	15	60	10	40	25	50
Aggressive Policy	4	24	7	28	11	22
Total	**25**	**100**	**25**	**100**	**50**	**100**

(Source: Opinion Survey, 2010)

The table reveals that 24% of the shareholders, 32% of the depositors and 28% of the total respondents are in the view that the bank should adopt conservative policy, which involves excessive use of equity capital than debt capital, for having sound capital structure. Similarly, 60% of the shareholders, 40% of the depositors and 50% of the total respondents have opined that the bank should adopt moderate policy, which involves equal proportion of debt and equity capital, for having optimal capital structure. Likewise, 24% of the shareholders, 28% of the depositors and 22% of the total respondents have supported aggressive policy, which indicates tremendous use of debt capital than equity capital, for optimal capital structure. On the basis of the overall majority, it can be concluded that the adoption of the moderate policy would be the best option for the bank for having strong capital structure.

4.2.7 Emphasis for Optimal Capital Structure

Maintaining optimal capital structure, which does not occur itself, is the key onus of the bank management. Thus to maintain optimal capital structure the bank has to consider on various key factors. To investigate the major factor on which the management should give greater emphasis, the responses are collected.

Table 4.20

Emphasis for Optimal Capital Structure

Response	**Shareholder**		**Depositor**		**Total**	
	No.	**%**	**No.**	**%**	**No.**	**%**
Minimizing Cost of Capital	11	44	12	48	23	46
Minimizing Risk	10	40	9	36	19	38
Flexibility	2	8	1	4	3	6
Capacity	1	4	3	12	4	8
Control	1	4	0	0	1	2
Total	**25**	**100**	**25**	**100**	**50**	**100**

(Source: Opinion Survey, 2010)

The table reveals that 44% of the shareholders, 48% of the depositors and 46% of the total respondents are in the view that the management should try to minimize the cost of capital while having optimal capital structure. Similarly, 40% of the shareholders, 36% of the depositors and 38% of the total respondents have opined that the management should pay concern on minimizing the risk that may arise in banking operation for ensuring sound capital structure. Likewise, 8% of the shareholders, 4% of the depositors and 6% of the total respondents have said that the capital structure should be flexible enough to be called as optimal capital structure, since the flexibility helps to grab market opportunity as bank can raise its fund whenever it is needed for profitable investment opportunities.

Also 4% of the shareholders, 12% of the depositors and 8% of the total respondents have decided that the optimal capital structure should be determined within the debt capacity of the bank and the bank should have enough cash to pay the creditors' fixed charges and principal sum. Finally 4% of the shareholders, which reflects 2% of the total respondents, have stated that the control power should be one of the most concerned parts of management for having optimal capital structure. Among different choices, it can be

concluded that the management should give more emphasis to minimize cost of capital for having sound capital structure.

4.3 Major Findings of the Study

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

Findings from Secondary Data Analysis

- The equity capital financing of both the banks are greater than the long term debt financing, as a result the debt equity ratio of NABIL is 0.38 times and of NIBL is 0.34 times in average.
- The usage of long term debt in term of total debt is higher in NABIL than in NIBL. Consequently the average long term debt to total debt of NABIL is 2.92% and that of NIBL is 2.61%.
- The total asset of NIBL is more risky than that of NABIL, since the average debt ratio of NIBL, 92.85%, is greater than that of NABIL, 92.60%.
- 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 1.10%, while that of NIBL is 1.08%, indicating strong solvency in NABIL.
- 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.
- The EPS of NABIL is greater than that of NIBL. In average, the EPS of NABIL is Rs. 111.99 and that of NIBL is Rs. 53.95.
- Further, NABIL is much efficient than NIBL in mobilizing equity capital, total assets and total deposits to yield profit. The average ROA, ROE and ROD of NABIL is 31.98%, 2.37% and 2.75% respectively and those of NIBL is 25.61%, 1.83% and 2.08% respectively.
- The statistical analysis shows that the correlation coefficient between D/E ratio and NPAT is -0.0441 in NABIL and -0.9041 in NIBL,

statistically insignificant in NABIL and statistically significant inverse relationship in NIBL, Debt Ratio and NPAT is 0.3516 in NABIL and -0.9831 in NIBL, statistically insignificant in NABIL and statistically significant inverse relationship in NIBL.

- The trend analysis shows that the D/E ratio will be 0.54 times in NABIL and 0.03 times in NIBL, and the NPAT will be Rs. 1799.66 million in NABIL and Rs. 2304.08 million in NIBL by the end of the fiscal year 2014/15.

Findings from Primary Data Analysis

- 28% of the respondents have said that the growth and stability of the bank affects the capital structure most. Meanwhile, 18% have pointed out component cost of capital, 24% have claimed nature and size of business, 10% have stated management attitude, 4% have affirmed corporate tax rate, 10% have confirmed cash flow stability and 6% have said other factors to be major determinant of capital structure.
- Likewise, 52% of the respondents have opined that the capital structure of the bank has high impact on profitability. Further, 48% of the respondents have stated that the capital structure has medium effect on profitability.
- Moreover, half of the respondents have opined that the capital structure should reflect high equity capital. Consequently, 40% have stated that the capital structure should reflect high debt capital and 10% remained bewildered and said that they have no idea on this issue.
- 48% of the respondents have suggested issuing new public share to collect the fund through equity capital. However, 36% of the respondents have suggested right offering and 16% of the respondents have implied increment in retention rate for the increment in equity capital.
- Similarly, 56% of the respondents have opined the short term borrowing as the best method for funding through debt capital. In contrast, 32% of

the respondents have suggested long term borrowing and 12% of the respondents have suggested issue of debenture for increasing the debt capital.

- Also, half of the respondents have opined that the bank should adopt moderate policy for having optimum capital structure. However, 28% of the respondents have advised conservative policy and 22% of the respondents have advised aggressive policy as the optimum capital structure of banks.
- Eventually, 46% of the respondents have stated that the bank management should consider the cost of capital most, while determining the capital structure. In contrast, 38% have said minimizing risk, 6% have stated flexibility, 8% have opined capacity of the firm, and 2% have said control mechanism should be given more emphasis while having optimal capital structure.

CHAPTER – V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

The term capital structure refers to the percentage of capital (money) at work in a business by type. Broadly speaking, there are two forms of capital: equity capital and debt capital. Each has its own benefits and drawbacks and a substantial part of wise corporate stewardship and management is attempting to find the perfect capital structure in terms of risk / reward payoff for shareholders. Capital 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 firm's financial strategy.

Capital structure affects a banks' 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.

Mature banks with stable and predictable cash flows as well as limited investment opportunities should include more debt in their capital structure, since the discipline that debt often brings outweighs the need for flexibility. 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 conducted.

5.2 Conclusion

Analyzing the primary data, it can be assumed that growth and stability of the bank mainly influences the capital structure of such bank. And the capital structure of the banks has substantial impact on profitability. Further, it can be inferred that 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 can be presumed that issuing public share is the best method for increment in equity capital. In addition, the bank focuses on borrowing short term credit rather than in long term credit or issuing debenture to meet the debt capital requirement. Also, it can be inferred that the adoption of the moderate policy would be the best option for the bank for having strong capital structure. Among different choices, it can be concluded that the management should give more emphasis to minimize cost of capital for having sound capital structure.

Analyzing the capital structure of the banks, it has been ascertained that NABIL is more risk taker than NIBL, since the debt equity ratio of NABIL is greater than that of NIBL, and as a result the capital structure of NABIL is more dominated by the debt capital percentage than in NIBL. However, on the basis of the long term debt to total debt, it has been found that NIBL is more risk taking than NABIL, since the usage of short term debt in total debt is higher in NIBL, and thus eventually the short term debt carries higher risk than long term debt. Eventually, it can be concluded that the total assets of each bank bears greater risk. More specifically, the total assets of NIBL is slightly risky than that of NABIL, since the debt coverage is slightly greater in NIBL

than in NABIL. In addition to these, the solvency position of NABIL is greater than that of NIBL, since the average ratio of NABIL is comparatively higher than that of NIBL. In addition to this, EBIT of NABIL has greater capacity to meet the interest expenses on long term debt.

Analyzing the profitability of the banks, it can be concluded that the NABIL is stronger than NIBL in terms of profitability, since the EPS of NABIL is higher than that of NIBL in each fiscal year. 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. Thus, it can be inferred that the profitability management of NABIL is stronger than that of NIBL. 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. However, the effect of total debt to total assets on net profit is higher in NIBL than in NABIL.

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;

- It would be worthwhile if the bank measures the ratio of debt to equity ratio that generates higher profit and then practices such ratio, since both the banks have used long term debt in low in comparison to the equity capital.
- NIBL has weak earning in comparison to that of NABIL. Thus, NIBL needs to reengineer its capital structure, diminish cost, increases investment in high-yield profitable sectors to have strong profitability.
- NIBL needs to keep adequate current assets to meet the debt requirement and thus have sound solvency position in comparison to

that of NABIL. Similarly, NIBL needs to decrease the operating costs to increase EBIT and thus to have strong position to meet the interest expenses.

- The weight of long term debt to total debt in both the banks is just meager. Both the banks should raise the amount of long term debt to minimize the risk, as the short term debt carries high risk.
- 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.
- Variable-rate debt comes with certain risks, including basis risk, put risk, bank risk, credit risk, and failed auction risk. A diversified variable-rate debt portfolio can mitigate these risks and lower the banks' overall cost of capital.
- The impact of debt-equity ratio is indifference to the profitability, which immediately demands both the banks to restructure the capital structure, might be to increase the long term debt.
- Both 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.

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APPENDIX – I

QUESTIONNAIRE

Dear Sir/Madam,

This is to bring your kind information that this is an attempt for *ASCERTAINING RELATIONSHIP BETWEEN CAPITAL STRUCTURE AND PROFITABILITY OF BANKS (WITH REFERENCE TO NABIL AND NIBL)* for the partial fulfillment of requirement of MBS degree, TU. I would be grateful to you for the contribution of your valuable time and effort in answering the questionnaire.

Respondents;

Name:

Shareholder/Depositors (Please Tick One)

1. Which of the following is the major determinant of capital structure?
   a) Component Cost of Capital [ ]
   b) Nature and Size of Business [ ]
   c) Growth and Stability [ ]
   d) Management Attitude [ ]
   e) Corporate Tax Rate [ ]
   f) Cash Flow Stability [ ]
   g) Others (Specify)…….. [ ]

2. To what extent does the capital structure of the bank affect the profitability?
   a) High [ ] b) Medium [ ] c) Low [ ]

3. The capital structure of the bank should reflect mainly……
   a) High Equity Capital [ ]
   b) High Debt Capital [ ]
   c) Don't Know [ ]

4. To raise the equity capital, the bank should give weigh more to……
   a) Issue New Share [ ]

b) Increase Reserve [ ]

c) Right Offering [ ]

5. The debt capital of bank should be mainly increased from ……..

   a) Debenture [ ]

   b) Long-Term Borrowing [ ]

   c) Short-Term Borrowing [ ]

6. For Optimum Capital Structure, the bank should adopt ……..

   a) Conservative Policy [ ]

   b) Moderate Policy [ ]

   c) Aggressive Policy [ ]

7. To have Optimal Capital Structure, the bank should give emphasis on which of the following?

   a) Minimizing Cost of Capital [ ]

   b) Minimizing Risk [ ]

   c) Flexibility of Capital Structure [ ]

   d) Capacity to Pay Debt [ ]

   e) Control [ ]

Thank you for your kind suggestions.