

CHAPTER – I

INTRODUCTION

1.1 General Background

Nepal is least developed landlocked country with area of 147181 square kilometers. It is surrounded by giant countries China and India whose economic status is growing rapidly. Economic status of Nepal is poor. Nepalese economy is dominated by agriculture sector; more than 69% of the whole population depends upon agriculture. Industry is very crucial factor for the economic progress and plays the role of the lubricant for economic prosperity of the country. The history of industry was written with the establishment of Biratnagar Jute Mill in 1936 A.D. Both agriculture and industrial sector should be promoted for the economic development of a country. The development process of a country involved the mobilization and development of resources. Development of trade, commerce and industry are the prime request for the attainment of the economic, political and social goals. In underdeveloped country like Nepal, resources are either underutilized or unutilized in productive sector or even other purpose due to lack of technical knowledge and financial resources.

For the rapid economic development in the underdeveloped countries like Nepal there should be proper utilization of resources. Due to various difficulties or even ignorance of the people, such resources have not been properly utilized. Hoarding could be one of the reasons for this. So, financial institutions play a vital role in encouraging thrift and discouraging hoardings by mobilizing the resources and removing the habits of hording. They pursue rapid economic growth, developing the banking habit among the people, collecting the small-scattered resources in one bulk and utilizing them in further productive purposes and rendering other valuable services to the country. Thus, this gives the individuals an opportunity to borrow funds against future income, which may improve the economic well-being of the borrowers. In this course the banks play the most important role in modern economic organization. Their business mainly consists of receiving deposits, giving loans and financing the trade of a country. Bank is a business organization where monetary transaction occurs. It creates funds from its client's saving and lends the same to needy person or business companies in term of loan, advances and investment. So, proper financial decision making is more important in banking transaction for its efficiency and profitability. Most of the financial decisions of the bank are concerned with current assets and current liabilities. Capital structure is the liabilities part, therefore it is highly riskier and sensitive. Bank is the main financial

institution, which plays important role in the economic development of the nation. It is the backbone as well as the foundation for the development of the country. Its principal operations are concerned with the accumulation on the temporary idle money of the public for advancing others for expenditures. In other words, Bank is an institution that deals and makes loans and derives a profit from the difference in the interest rates paid and charged respectively. Depositor may be either individuals or institutions, deposit may be Current, Saving, Fixed and the tenure depends upon the mutual agreements between the bank. The tenure of the loan may vary as per the demand criteria and the usefulness of the loan. Some banks have the power to create money like Rastra Bank of Nepal which is the central bank of Nepal.

Commercial banks are the major financial institutions that occupy quite an important place in the framework in the economy; the economic sectors as well as saving and investment sectors. Commercial banks are suppliers of finance for trade and industry and play a vital role in the economic and financial life of country. They provide an opportunity in the development of individual industries, trade and business organization by investing saving and collecting deposits. By collecting deposits and investing sectors in productive sector, they help in formation of capital. Besides they also render numerous services to its customers in a view of providing facilities to their economic and social life in the community.

1.1.1 An Overview of Capital Structure and Performance Analysis

Finance, the art and science of managing money, affect the lives of every person and every organization. Finance is concerned with the process, institutions, market and instruction involved in the transfer of money among and between individuals, business and government. Previously finance was limited for pronouncement of long-term fund. The traditional concept of finance is changed due to industrialization, technological innovation and intense competition. While specifics vary among organizations, the key finance functions are the investment, financing and dividend decision for organization. Funds are raised from external financial sources and allocated for different uses.

Capital plays an important role in the business. It is required from the promotional stage up to the end of the business. The term capital refers to the fund raised to finance different assets; short term or long term. Capital is the total value of assets of a person less liabilities or the money contributed by the proprietors to and organization to enable it to function. In economic theory, the man-made factor of production, usually either machinery and plant (physical capital) or money (financial capital). However the concept can be applied to a

variety of other assets such as human capital or intellectual capital. Capital is generally used to enhance the productivity of other factors of production (e.g. combine harvest enhances the productivity of land, tools enhances the value of labor) and its return is reward following from this enhancement. In general, the rate of return on capital is called profit.

Capital Structure refers to the combination of long term sources of funds such as debentures, long term debt, preferred share capital and equity share capital including reserve and surplus (Gautam&Thapa. 2061, p12). Capital structure is the composition of debt and equity securities that comprise a firm's financing of its assets. Both debt and equity securities are used in most large corporations. The choice of the amount of debt and equity is made after a comparison of certain characteristics of each kind of securities of internal factors related to the firm's operation and external factor that can affect the firm (Hampton, 1980, P33). Capital Structure is the mix of long term debt and equity maintained by the firm (Gitman, 1988, p22). Capital structure is the mix (or proportion) of firm's permanent long term financing represent by debt, preferred stock and commonstock equity (Van Horne and Wachowich, 1997, p240).

A firm fulfills its financial needs using different sources of financing. These sources of financing may be long term and short term. Short-term sources of financing mature within one year or less whereas fund raised from long-term sources of financing can be used for several years. When the firm expands its business or activity, it needs capital. The term capital denotes the long-term funds of the firm. All of the items on the liabilities side of firm's balance sheet, excluding current liabilities are sources of capital. The total capital can be divided into two Components: Debt Capital and Equity Capital.

Capital plays important role in the business. No business can be operated without capital so capital is labeled as "Life Blood of Business". The capital can be collected from various sources; the sources are shares, debentures, public deposits, bank loan etc. The financial manager should decision about the source or their combination to raise such funds. Capital structure decision is one of the most important decisions that are taken by financial manager because it affects weighted average cost of Capital (WACC), value of the firm and risk position of the firm. For maximization of profit and maximization of shareholders wealth, optimal capital structure is more significant for every business organization irrespective to their nature.

Financial Analysis is the process of identifying the financial strength and weakness of the firm by properly establishing relationship between the items of the balance sheet and profit

and loss account. In financial analysis, a ratio is used as an index or yardstick for evaluating the financial position and performance of the firm. Analysis and interpretation of various ratios should give an experienced and skilled analyst a better understanding of financial condition and performance of a firm than he would obtain from analysis of the financial data alone. Quantitative relation can be used to diagnose strength and weakness in firm's performance. It provides a framework for financial planning and control.

1.1.2 Optimal Capital Structure

The optimal capital structure in general is that mix of sources of long-term funds that maximizes the value of shares and minimizes the overall cost of capital. The financing or capital structure decision is a significant managerial decision; it influences the shareholders' return and risk. Consequently, the market value of the firm may be affected by capital structure decision. There are persistent differences across industries in the financial structure of the liabilities side of their balance sheet. If there is an optimal capital structure for a company, it will minimize the opportunity cost of capital and maximize shareholder's wealth. The goals of optimal capital structure are to maximize wealth by increasing the stock price and to minimize the overall cost of capital or weighted average cost of capital.

1.1.3 Types of Capital

The capital structure is made of debt and equity securities which comprise a firm's finance of its assets. It is the permanent source of financing represented by long term debt, plus preferred stock, plus net worth; the determination of the degree of liquidity of a firm is no simple task. In the long run, liquidity may depend on the profitability of a firm but whether it services to achieve long run profitability depends to some extent on its capital structure. This term includes only long term debt and total stockholders' investment. It may be defined as one including both short term and long term fund (Western and Brigham, 2003, p898).

Debt Capital

Debt capital includes all long term borrowing incurred by the firm. Debentures, bonds, long-term loan etc. are major sources of debt or borrowed capital. A firm employs sustainable amount of debt capital because of tax deductibility of interest payment, flexibility and lower effective cost. However, excess amount of debt exposes high risk.

Equity Capital

Generally, it is the part of the share capital of a company owned by ordinary shareholders. For certain purpose, such as pre-emption rights, other classes of shareholders may be deemed to share in the equity capital and there for entitled to share in the profits of the company or any surplus assets on winding up. Equity capital includes common stock, paid in capital (Share Premium), reserve and surplus, and retained earnings (Gautam and Thapa, 2060)

1.1.4 Introduction to Banking

A bank is an institution which deals with money and credit. It accepts deposit from the public and mobilizes the fund to productive sectors. It is also provides remittance facility to transfer money from one place to another. Generally, Bank accepts deposit from business institutions and individuals, which is mobilized into productive sectors mainly in business and consumers lending. Bank is therefore, known as an institution accepting deposits and disbursing loan. In addition to this bank performs other functions such as remittance, exchange currency, joint venture, underwriting, bank guarantee, discounting bills etc. In a short, the term modern bank refers to an institution having the following features.

It deals with money: It accepts deposit and advance loans.

It also deals with credit: It has the ability to create credit by expanding its liabilities.

It is commercial institution: its aim is earning profit.

Banks are principal source of credit for millions of individuals and families and for many units of government. They are among the most important financial institution in the economy. Moreover, for small local businesses ranging from grocery store to automobile dealers, banks are often the major source of credit to stock the shelves with merchandise. Banks grant more installment loan to costumers than any other financial institution.

A commercial bank is a business profit seeking organization. So, the main objective of bank is profit maximization. Bank earns profit from the investment of the available resources. The existence of a bank depends upon the beliefs of the clients. People believe that bank deposit is liquid as the cash itself. People believe that bank is always able to meet their obligation. So, the bank must gain the confidence and trust of the people so as to create credits.

It is notable that the bankers are to be considered not only as dealers in money but also the lenders in development works. It is not just the store house of the country's wealth but a

reservoir. So, commercial bank is the industrialized organization established for the purpose of gearing the economy with accepting the deposit from the public and disbursing the accumulated resources to the needed sectors. The functions and services of modern commercial banks are Accepting Deposit, Granting Loan and Deposits, Guarantee on Behalf of Customers, Issuance of Traveler's Cheque, Opening of Travel's Cheque, Opening Letter of Credit, Remittance Function and other services.

1.1.5 Development of Banking in Nepal

The word 'bank' may be new and very common but the banking business in Nepal is very old. Since Lichchhavi era, we have record to be in existence of such business. There was a cast Tankadhari in Malla era whose sole job was to collect money and lend them to people. Shankhadhar Sakhkwa related myth also proves that this business is too old. He made all payments of loan holders in Kirtipur City.

In Nepal, 'Tejarath Adda' functioned like bank. It was established during the tenure of Prime Minister Ranodeep Singh (B.S. 1933). It was the 1st step towards the institution as development of Banking in Nepal. Its main function was to grant loan to government employees at the 5% interest rate. The loan used to be given from government treasury. It was beneficial for the government employees only, not for general public. It did not collect deposits from the general public.

Later in 1933 B.S, in initiation of SardarGunjman Singh SumsherRana established Nepal Bank Limited. It was developed and advanced form of TejarathAdda which is semi-government organization. It became a unanimous leader in banking industry for about two decades. It played a vital role in expanding banking habit among people. After issuance of Nepali notes in 2002 B.S. It played an important role of making people habit transact in Nepali notes.

Nepal Rastra Bank (NRB), the central Bank of Nepal, was established in 1956 under the Nepal Rastra Bank Act, 1955, to discharge the central banking responsibilities including guiding the development of the embryonic domestic financial sector. Since inception, there has been a significant growth in both the number and activities of the domestic financial institutions. The bank is eminently aware that, for the achievement of the above objectives in the present dynamic environment, sustained progress and continued reform of the financial sector is of utmost important. Continuously aware of this great responsibility, NRB is

seriously pursuing various policies, strategies and actions, all of which are conveyed in the annual report of monetary policy.

Industry and Commerce sector are the backbone of our country. This sector needs long term loans. Nepal Industrial Development Corporation (NIDC) bank was established to give facilities for industries in 2016 B.S. It provides long term and sometimes mid-term loans for industrial sector.

Rastriya Banijya Bank (RBB) is the fully government owned, and is the largest commercial bank in Nepal. RBB was established on January 23, 1966 (2022 Magh 10 B.S) under the RBB Act. RBB provides various banking services to a wide range of customers including banks, insurance companies, industrial trading houses, airlines, hotels, and many other sectors. RBB has Nepal's most extensive banking network with over 123 branches. Through its branch network, RBB has been contributing to Nepal's economic development by providing banking services throughout the country.

Agriculture Development Bank, Nepal was established in 1968 under the ADBN Act 1967, as successor to the cooperative Bank. Agriculture Development Bank Limited (ADBL) is an autonomous organization largely owned by Government of Nepal. The bank has been working as a premier rural credit institution since the last three decades, contributing a more than 67 percent of institutional credit supply in the country. Hence, rural finance is the principal operational area of ADBL. Besides, it has also been executing Small Farmer Development Program (SFDP), the major poverty alleviation program launched in the country. Furthermore, the bank has also been involved in commercial banking operation since 1984.

Nepali customers were enjoying the facility of only two commercial banks RBB and ADBL before the government adopted liberal economic policy and allowed establish banks from private sector and jointly with foreign local partner. In 2041 B.S Nepal Arab bank limited was established, it was the milestone in the banking history as it is the first joint venture bank in Nepal. The foreign partner of this bank was Dubai Bank limited (U.A.E), Nepali partner were Rastriya Bema Sasthan and Security exchange limited. After about one decade Dubai bank limited withdraws its share and now it's all shareholders are Nepali persons and institutions. Nepali banking sector has been competitive now with the introduction of modern techniques.

After the restoration of multiparty democracy, the newly formed government adopted liberalized policies aimed at accelerating economic growth and considerably reducing state interference in business. The government encourages foreign and private investment by offering attractive incentives and facilities including 100% ownership in all but few sectors. This help to create conducive business environment for banking. As a result, additional commercial banks came into existence. When the internal violence shows green signal to manage and NRB make ease for rules and regulations, many new commercial banks are coming existence and existing development banks and financial institutions are upgrading them as commercial banks. At present with the upgraded of SinamaBikas Bank into Commercial the total number of commercial banks reached to 33.

1.1.6 About the Institution under Study

Nepal investment Bank Limited (NIBL)

Nepal Investment Bank Ltd. (NIBL), previously Nepal Indosuez Bank Ltd., was established in 1986 as a joint venture between Nepalese and French partners. The French partner (holding 50% of the capital of NIBL) was Credit Agricole Indosuez, a subsidiary of one the largest banking group in the world.

With the decision of Credit Agricole Indosuez to divest, a group of companies comprising of bankers, professionals, industrialists and businessmen, had acquired on April 2002 the 50% shareholding of Credit Agricole Indosuez in Nepal Indosuez Bank Ltd. The name of the bank has been changed to Nepal Investment Bank Ltd. upon approval of bank's Annual General Meeting, Nepal Rastra Bank and Company Registrar's office with the following shareholding structure.

- A group of companies holding 50% of the capital.
- RashtriyaBanijya Bank holding 15% of the Capital.
- RashtriyaBeemaSansthan holding the same percentage.
- The remaining 20% being held by the General Public (which means that NIBL is a Company listed on the Nepal Stock Exchange).

Recently the bank has completed its 25 years of operation in Nepal. During this NIBL has made drastic change in its operation, NIBL started its operation with 3 Crore Rupees paid up capital now it has reached to 30 million now its capita reached to 3billion. In terms of deposit, loan, total capital and number of customers it is the Nepal's largest bank among the

private bank of Nepal. NIBL has won bank of the year 2003, 2005, 2008 and 2010 which is nominated by a magazine published from London “London Financial Times”. Till this date NIBL has more than 4 Lakh and 28 thousand customers. NIBL has 877 competent and committed staff which was started with only 44 staffs. From its operation to till date it has distributed 2 billion and 450 million dividend to its shareholders and paid 2 billion and 750 million to government of Nepal as a tax. World renown rating agency of India “International Credit Rating Agency” (ICRA) which is associated with “ Moody’s Investor Group” has rated this bank in category ‘A’, this is the only one organization getting such a high rank in Nepalese banking history.

NILB’s mission is to be the leading Nepali bank, delivering world class service through the blending of state-of-the-art technology and visionary management in partnership with competent and committed staff, to achieve sound financial health with sustainable value addition to all our stakeholders. NIBL is committed to do this mission while ensuring the highest levels of ethical standards, professional integrity, corporate governance and regulatory compliance.

1.1.6.1 Core Values and Ethical Principles:

Customer Focus: NIBL’s prime focus is to make perfect customer service. Customers are given first priority and driving force. It wishes to gain customer confidence and be their trusted partner.

Quality: NIBL believe a quality service experience is a paramount to customers and it is strongly committed in fulfilling this ideal.

Honesty and Integrity: NIBL ensure the highest level of integrity to customers, creating an ongoing relationship of trust and confidence. It treats its customers with honesty, fairness and respect.

Belief in our people: NILB recognize that employees are its most valuable asset and its competitive strength. It respect the worth and dignity of individual employees who devote their careers for the progress of the Bank.

Teamwork: NILB is a firm believer in team work and feel that loyal and motivated teams can produce extraordinary results. It is derived by a performance culture where recognition and rewards are based on individual merit and demonstrated track record.

Good Corporate Governance: Effective Corporate Governance procedures are essential to achieve and maintain public trust and confidence in any company, more so in a banking company. NIBL is committed in following best practices resulting in good corporate governance.

Corporate Social Responsibility: As a responsible corporate citizen, NIBL consider important to act in a responsible manner towards the environment and society. Its commitment has always been to behave ethically and contribute towards the improvement of quality of life of people, the community and greatly the society, of which we are an integral part.

1.1.6.2 Strategic Objectives

To develop a customer oriented service culture with special emphasis on customer care and convenience.

- To increase our market share by following a disciplined growth strategy
- To leverage our technology platform and pen scalable systems to achieve cost-effective operations, efficient MIS, improved delivery capability and high service standards
- To develop innovative products and services that attracts our targeted customers and market segments
- To continue to develop products and services that reduce our cost of funds
- To maintain a high quality assets portfolio to achieve strong and sustainable returns and to continuously build shareholders' value.
- To explore new avenues for growth and profitability

1.1.6.3 Corporate Social Responsibility

NIBL is committed to building and maintaining a strong relationship between the Bank and the larger community. NIBL have come to an age of Capital philanthropy, which demands philanthropy to be an inevitable part of business. Hence, although Corporate Social Responsibility has become more mandatory than optional, NIBL prefer doing good to the society as large not just for the sake of getting through the duty but more so for the pleasure of being part of the national development.

Since the early days of its inception, Nepal Investment Bank Limited has been investing heavily on the issues of social causes, whose profit will go to each individual and even nation

at large. NIBL has tried to lend our hands on as diverse issues from environment conservation, health care, education to natural disaster victims.

NIBL have briefly listed some of the major events supported by Nepal Investment Bank Limited.

KantipurRastriyaBipattiSahayogKosh/ Annapurna Post BadhipiditSahayogKosh,B.P. Koirala Eye Foundation, Tenzing Hillary Everest Marathon, Centre for Economic and Social Studies, Nepal, Peoples with Spinal Cord Injury, All Nepal Lawn Table Tennis Association, Til Ganga Eye Center, Nepal Golf Association, Federation of Contractors Association of Nepal, UNHCHR, Western Region Development Forumand recently it has announced Marathon Run to Restore and Conserve our Heritage worth 0.5 million.

1.1.6.4 Services of NIBL

NIBL provides a wide range ofRetail Bankingservices:

1. Deposits, Loans and Lockers
2. Mobile Bill Payment, Utility Payment
3. eBanking, Alert Services
4. Mobile (SMS) Banking (VAS)
5. Credit Cards & Debit Cards
6. Domestic Remittance

Corporate Finance

1. Business Loan
2. Import/Export Loan
3. Bank Guarantee
4. Other Loan
5. Letter of Credit

Remittance:

1. SWIFT, Demand Draft Cash Management Services
2. Prithivi Express

Online Services:

1. Buy movie tickets
2. Buy holiday from my trip2nepal.com
3. Online subscription of Kantipur, The Kathmandu Post, Annapurna Post and The Himalayan Times

1.2 Focus of study

Financial institutions assist in the economic development of the country. The concept of financial institutions in Nepal was introduced when the first commercial bank, the Nepal Bank Ltd was established on 30th Kartik 1994 B.S as a semi-government organization. In the fiscal year 2039/40 new banking policy was introduced for the establishment of new banks by the joint investment with foreign nations. The establishment of joint venture banks gave a new horizon to the financial sector of the country. Commercial banks are the heart of the financial system, which plays significant role by collecting scattered surplus funds and deploying these funds in the productive sectors as an investment. They fund available through lending and investing activities to borrowers, individuals, business firms and government establishments.

The main focus of study is to know the liabilities part of Nepal Investment Bank Limited (NIBL) as well as the composition of debt and equity. How NIBL is getting highly success in the market. To maximize value of the firm and shareholders' return financial manager has to determine the optimal capital structure, which is undertaken in this thesis with the study of combination of debt and equity of NIBL. So this study is a reference regarding the capital structure of NIBL.

1.3 Statement of the Problems

Capital Structure concept is not taken seriously by the Nepalese companies, therefore optimal capital does not exist at all. Among the listed commercial bank in the stock exchange very few are using the debt capital and contrary to this some of the companies are ruined by the excess burden of the cost of debt capital. Generally every company has its own policy in determining capital structure for operating business activities. Some of the business use only equity capital some use only debt and some business use both debt and equity capital. Therefore determination of capital structure largely depends upon the company policy and cost of capital.

The problem faced by the banking industry is the lack of optimal capital structure in the commercial banks. The success and prosperity of a bank relies heavily on maximization of the wealth of the shareholders or return on equity. Nepalese bank do not take capital structure seriously, the combination of debt and equity used in the capital structure is not appropriate which in turn affects the value maximization of the bank. Most of the banks make low cost of capital structure. In initial period of any company, they want to use only equity capital and do not want to include debt in their capital due to high interest. The key factors; risk and return can be used for decision. The present study will try to analyze and examine the practice of capital structure in the commercial banks in Nepal. This study specially deals with the following problems.

- What is the significance of Capital Structure of Nepal Investment Bank Limited?
- What factor affects the capital structure of the bank?
- What are the important features of capital structure management in banks of Nepal?
- How does optimal capital structure provides stable earnings to its shareholders?
- How capital structure supports to achieve important objectives of the firm?
- How far commercial banks have been able to use their resource?
- What is the financial performance of NIB LTD.?
- What is the relationship between Capital Structure and financial performance of NIB LTD.

1.4 Objective of the study

Each and every research study is conducted with a view of achieving some objectives and the study is of no exception. The main objective of the study is to examine and analyze the capital structure of Nepal Investment Bank Limited. The specific objectives of this study are as follows:

- To examine the existing capital structure of NIBL.
- To analyze the composition of debt and equity capital of NIBL.
- To examine the different profitability ratios of NIBL.
- To determine the relationship between Capital Structure and financial performance of NIB Ltd.
- To suggest and recommend the financial position of NIBL.

1.5 Limitations of the study

Each study is conducted under some constraints and limitations. Likewise this study is also limited by some common constraints. This study is prepared for partial fulfillment of MBS degree which has to be finished within a short span of time and under different constraints. Some of the basic limitations are as follows:

This study is basically based on secondary data collected from annual report and financial statements.

- The study covers only six years period (i.e. from F/Y 2005/06 to 2010/11).
- The study is concerned about capital structure of NIBL so the conclusion drawn from the study may not be relevant for other commercial banks.
- Capital structure is influenced by various factors, but this study excludes all those factors.
- Due to limited time frame the study could not be able to analyze all sector of the capital structure.
- The study has been conducted to fulfill for the partial requirements of MBS program.

1.6 Organization of the study

The study will be organized into five chapters, each devoted to some aspects of the study of capital structure and performance analysis followed by commercial banks of Nepal. The study is organized in the following chapters in order to make the study easy to understand.

Chapter I-Introduction

The first chapter is an introductory chapter which contains general background of the study, statement of problem, focus of the study, objectives of the study and limitations of the study. This chapter will provide mission, objectives and direction of the study.

Chapter II – Review of Literature

It is one of the important parts of our study which gives attractive, readable and simplicity report. It includes a discussion on the conceptual framework and review of the major studies. It gives an overview of the related literature done in the past related to this study. The possible spot of literature is library, different books, past thesis, journals, websites, class discussion etc. In the review of literature different view towards the capital structure and performance analysis are organized, the related variables are also explained with meaningful.

Chapter III – Research Methodology

It is the most important part of the study. It deals with the research methodology, which is applied to collect the data and analyze them in this study. It consists of research design, the period covered, nature and sources of data, tools to be used, research variable etc. It is followed to achieve the purpose of the study.

Chapter IV – Presentation and Analysis of Data

This chapter gives clear picture of how the collected data has been presented on the study and how it has been analyzed. It is a process of input-process-output system. Collection and presentation data is input, analysis of data is process and summary and conclusion is output. Presentation and analysis of data is done through defined courses of research methodology with financial and statistical analysis. Major findings of the study are presented at the end of this chapter.

Chapter V - Summary, Conclusion and Bibliography

This is the last part of the study, which provides summary and conclusion, suggestions and recommendations for improving the future performance of the sample bank. In the bibliography section name of the reference books and their authors, past thesis, journal and articles, different websites etc. are mentioned from where articles, notes, quotations and data are extracted.

CHAPTER II

REVIEW OF LITERATURE

2.1 Introduction

In this chapter, the review of various books, research studies and articles have been used to make clear about the concept of capital structure as well as to recall the previous studies made by various researchers. Literature review is basically a stock taking work of available literature. So, it proves significant knowledge in the field of research. The purpose of literature review is thus to find out what research studies have been conducted in ones field of study and what remain to be done. Review of literature provides foundation to the study. The literature survey also minimizes the risk of pursuing the dead end in research. To make meaningful research study, conceptual review has been done through the study of various books, journals and articles and research conducted by the previous researcher in the field of capital structure.

2.2 Conceptual Framework

2.2.1 Concept of Capital Structure

“The balance between the assets and liabilities of a company, the nature of its assets, and the composition of its borrowings. The assets may be fixed (tangible or intangible) or current (stock, debtors, or creditors); the borrowing may be long or short-term, fixed or floating, secured or unsecured. Ideally the assets and liabilities should be matched.” (Oxford, Dictionary of Business and Management p94).

“Capital structure is one of the most complex areas of financial decision making because of its interrelationship with other financial decision variables. Poor capital structure decision result in a high cost of capital, thereby lowering the NPVs of the project and making more of them unacceptable. Effective capital structure decision can lower the cost of capital, resulting in higher NPVs and more acceptable projects – and thereby increasing the value of the firm.” (Lawrence J. Gitman, 2009, p475).

‘Capital Structure is the proportions of debt instruments and preferred and common stock on a company’s balance sheet. (James. C. Van Horne, 2008. P271)

“The financial manager is concerned with determining the best financial mix or capital structure where the optimal financing mix would exist, in which market price per share could be maximized.” (Pandey, 1988, P203)

“Capital structure of the firm is the permanent financing represented by long term debt, preferred stock and shareholder’s equity. Thus, a firm’s capital structure is only part of its financial structure.” (Weston and Brigham, 1978, P565)

“The two principal sources of long term financing are equity and debt capital. The composition of these two long term financing is known as capital structure. Under normal economic condition, the earning per share can be increased using higher leverage. But leverage also increases the financial risk of the shareholder.” (Gautam and Thapa; 2060, P223)

“Capital structure refers to the mix of long-term sources of funds, such as debentures, long-term debt, preference share capital and equity share capital including reserves and surpluses. Theoretically, a financial manager should plan an optimum capital structure for his or her company. The optimum capital structure is obtained when the market value per share is the maximum.” (Bhattarai, 2011, P1)

A distinction is usually made between Financial Structure and Capital Structure. Financial Structure refers to all sources (both short term and long term) that are used to finance entire assets of a firm where as Capital Structure is taken as the capitalization part of form’s total financing which includes only the long term source such as long term debt & equity. Thus, the capital structure can be determined by considering relevant factors and is a part of financial structure.

The Capital Structure Management

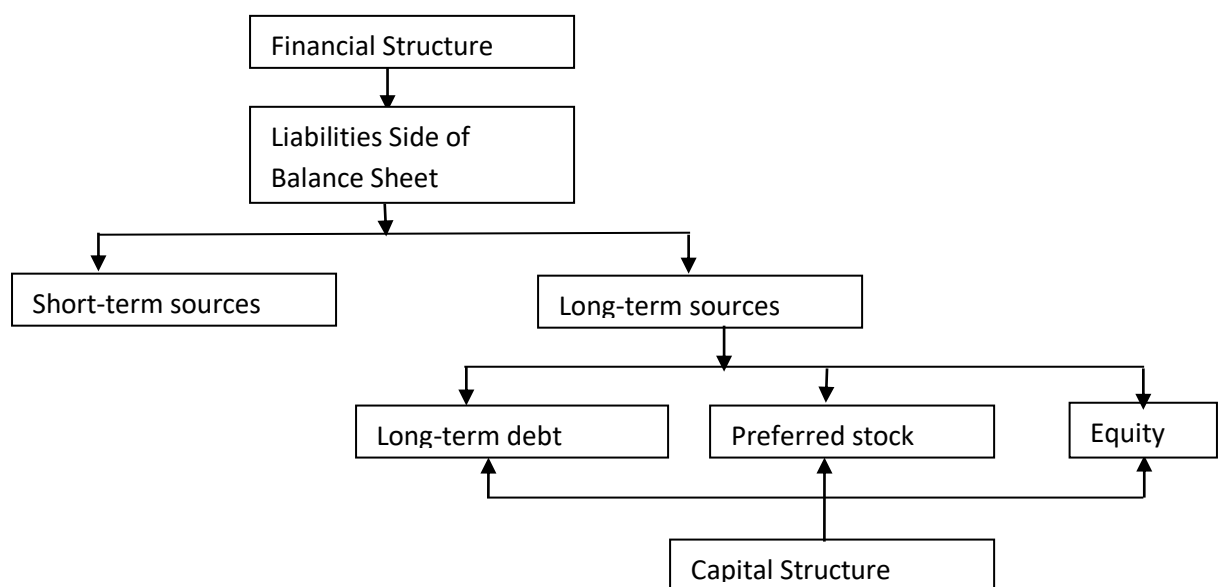


Figure: 2.1 (The Capital Structure Management)(Source: Bhattarai 2011. P2)

The nature of capital structure could differ from one company to other which is directly guided, regulated and controlled by the management of the company. However a reasonable satisfactory capital structure can be determined by considering relevant factors and analyzing the impact of alternative financial proposals on the earning per share. The major goal of the financial manager is to maximize the value of the firm's securities. For that purpose, the firm should select a financial mix, financial leverage which will help in achieving the objective of financial management with a view to maximize the value of the share. In order to attain the business goal, the firm should select appropriate capital structure.

A sound capital structure should have the following features.

A. Return

The capital structure of the company should be most advantageous. Subject to other consideration, it should generate maximum return to the shareholders without adding additional cost to them.

B. Risk

The use of excessive debt threatens the solvency of the company. To some extent debt does not add significant risk it should be used otherwise its use should be avoided.

C. Flexibility

The capital structure should be flexible that can raise helps to grab the market opportunities that can leads an organization to a profitable investment.

D. Capacity

The capital structure should be determined within the debt capacity of the company, and this capacity should not be exceeded. The debt capacity of a company depends on its ability to generate future cash flows.

E. Control

Control power is the one of the most concerned part of the management. Management always wants to maintain control over the firm. The capital structure should be maintained to that proportion so that the control power won't be transferred to other new management. Issue of excess equity shares to new investors may bring threats to control by existing manager.

2.2.2 Theories of Capital Structure

Capital Structure is an important subject, especially for firms. A bad capital structure is more expensive than a good capital structure. Firms raise investment funds in a number of different ways. A firm's mix of these different sources of capital is referred to as its capital structure.

Capital Structure is the proportion of debt, preferred stock and equity in a company's balance sheet. While determining a capital structure, a company tries to develop an optimal capital structure. The optimal capital structure is that structure which maximizes the value of a firm and minimizes the overall cost of capital (i.e. weighted average cost of capital). But, actually, does the mix of debt and equity affect the value and cost of capital of firm? The theory of capital structure deals with the relevance of the proportion of debt and equity to the value and cost of capital. The relevance of the mix of capital is studied under the theory of the capital structure. The following are the basic assumptions and definitions of this theory.

Assumptions:

These assumptions are constantly applied in the theories of the capital structure.

- I. There are no corporate or personal income taxes.
- II. There are no bankruptcy costs.
- III. The ratio of debt to equity of a firm can change many times but the total assets remain constant.
- IV. There are no transaction costs.
- V. The company pays 100 percent of its earning as dividends.
- VI. The Operating earnings of the firm remain constant; that is growth rate is equal to zero.
- VII. The expected value of the subjective probability distribution of expected future
- VIII. operating earnings for each company are the same for all investors in the market.

Definitions:

Cost of debt

$$K_d = \frac{I}{B}$$

Where,

K_d = before-tax cost of debt

I = Total Amount of Interest

B = market value of debt

Note:

It is to be noted that capital structure theory assumes the debt to be perpetual.

Cost of equity

$$K_e = \frac{\text{Earnings available to common stockholders}}{\text{Market Value of stock outstanding}} = \frac{NI}{S}$$

Where,

K_e = Cost of equity

NI = Net income available to common stockholders

S = Market value of common stock outstanding

Market value of debt

$$\text{Market value of debt (B)} = \frac{I}{K_D}$$

Market Value of equity

$$\text{Market Value of equity (S)} = \frac{NI}{K_e}$$

Market value of firm

Value of firm (V) = Market value of debt (B) + Market value of equity (S)

Weighted average cost of capital (WACC)

$K_o = W_d K_d + W_e K_e$

$$= \frac{B}{V} \times K_d + \frac{S}{V} \times K_e$$

$$= \frac{B}{B+S} \times K_d + \frac{S}{B+S} \times K_e$$

Alternatively,

$$K_o = \frac{\text{Net Operating Earning}}{\text{Total Market Value of the firm}} = \frac{EBIT}{V}$$

Where,

K_o = weighted average cost of capital or overall cost of capital

Therefore,

$$\text{Market value of the firm (V)} = \frac{EBIT}{K_o}$$

2.2.2.1 Net Income Approach

Net income approach is a relevant theory of capital structure. According to this approach the capital structure decision is relevant to valuation of the firm and the overall cost of capital. In other words, a change in the financial leverage (proportion of debt in the capital structure) will lead to a corresponding change in the overall cost of capital as well as the total value of the firm. Therefore, if we increase the ratio of debt in the capital structure, the weighted average cost of capital will decline and the value of the firm as well as the market price of ordinary shares will increase. In contrast, a decrease in the debt ratio will cause an increase in the overall cost of capital and a decline both in the value of the firm as well as the market price of the equity shares.

Assumption of this approach

- There are no taxes.
- The cost of debt is less than the equity-capitalization rate or the cost of equity.
- Cost of debt and equity remain constant.
- The use of debt does not change the risk perception of investors.
- Net operating income remains constant.
- Overall cost of capital decreases as leverage increases.

From the above assumptions NI approach claims that as the firm increases its leverage ratio, overall cost of capital gradually decreases in result total value of the firm gradually increases.

Graphically, the effect of leverage on firm's cost of capital and the overall total market value of the firm is shown below.

Figure: Net Income Approach

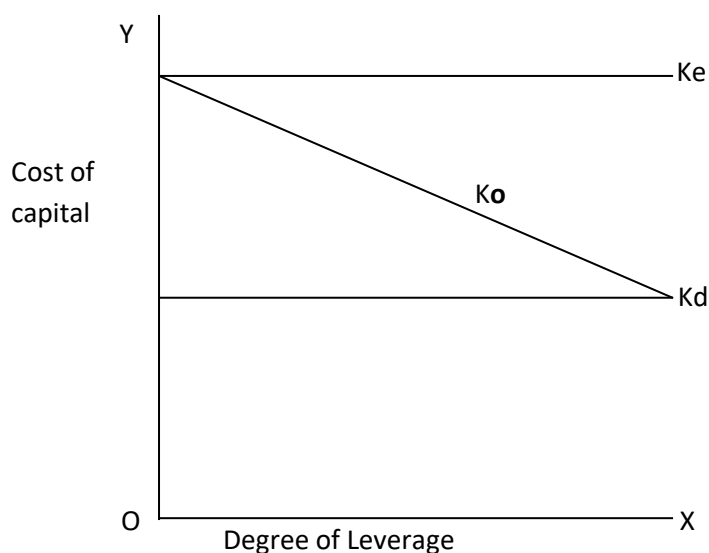


Figure 2.2: The Effect of Leverage on the Capital Structure

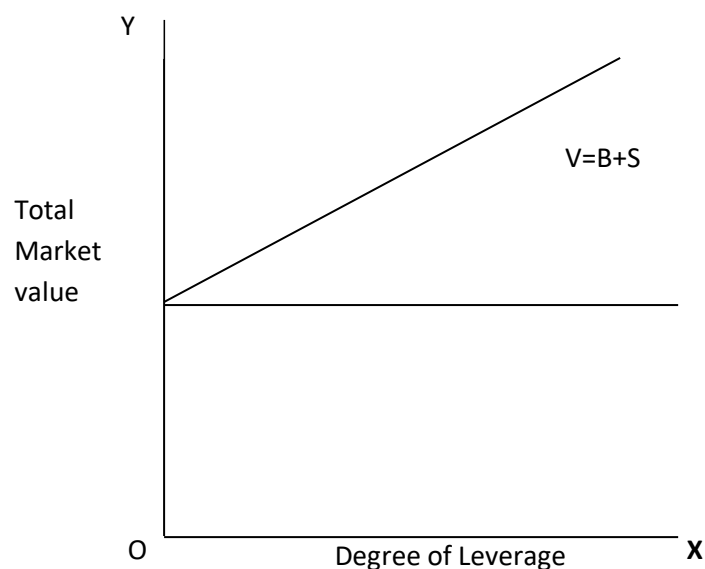


Figure 2.3: The Effect of Leverage on the Total Market Value

Continuous decrease in K_o with the increase in debt-equity ratio, since any decrease in K_o directly contributes to the value of the firm; it increase with the increase in the debt-equity ratio (Figure: 2.2.1). Thus the financial leverage, according to the NI approach is an important variable in the capital structure decision of a firm. Under NI approach, a firm can determine an optimal capital structure. If the firm is unleveled the overall cost of capital will be just equal to the equity capitalization rate.

In brief, the essence of the net income approach is that the firm can lower its cost of capital by using debt. The approach is based on the assumption that the use of debt does not change the risk perception of the investor. Consequently, the interest rate of debt and the equity capitalization rate remain constant to debt. Therefore, the increased use of debt results in higher market value of shares and a result, lower overall cost of capital (K)

2.2.2.2 Net Operating Income Approach (NOI)

NOI approach is another behavioral approach suggested by Duran David. This approach is opposite from the NI approach with respect to the assumption of the behavior of equity holders and debt holders. The essence of this approach is that the leverage/capital structure decision of the firm is irrelevant. The overall cost of capital is independent of the degree of leverage; any change in leverage will lead to change in the value of the firm and the market price of the shares. NOI approach is slightly different from NI approach, unlike the NI approach in NOI approach, the overall cost of capital and value of firm are independent of capital structure decision and change in degree of financing. Leverage does not bring about any change in the value of firm and cost of capital.

The main difference between NI and NOI approach is the base that investors use to value the firm. Under NOI, the Net operating income i.e. the earnings before interest and tax (EBIT), instead of net income is taken as the base. Like the NI approach, the NOI approach also assumes a constant rate of K_d , which means that the debt holders do not demand higher rate of interest for higher level of leverage risk. However, unlike the assumption of NI approach, NOI approach assumes that the equity holders do react to higher leverage risk and demand higher rate of return for higher debt-equity ratio. This approach says that the cost of equity increase with the debt level and higher debt-equity ratio. This approach says that the cost of equity increase with the debt level and the higher cost of equity offset the benefit of cheaper debt financing resulting no effect at all on overall cost of capital.

The NOI approach is based on following assumption:

- The market capitalizes the value of the firm as a whole. Thus, the split between debt and equity is not important.
- The market uses an overall capitalization rate, K_o to capitalize the net operating income. K_o depends on the business risk. If the business risk is assumed to remain unchanged, K is constant.
- The use of less costly debt funds increases the risk of shareholders. This causes the equity-capitalization rate to increase. Thus, the advantages of debt are offset exactly by the increase in the equity capitalization rate, K_s .
- The debt capitalization rate, K_o is constant.

The function of K_s under NOI approach can be expressed in equation as follows:

$$K_s = K + (K - K_d)B/S$$

The relationship between financial leverage and K_o , K_s and K_d has been graphically shown in the following figures.

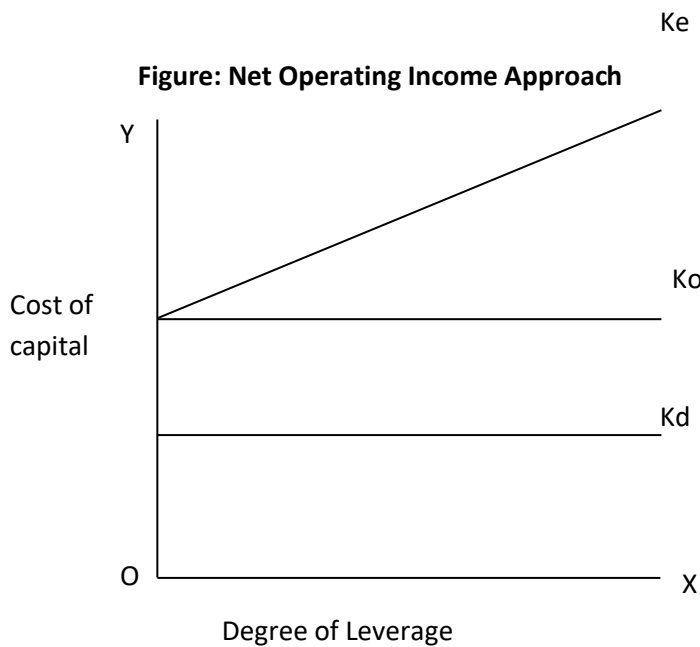


Figure 2.4: The Effect of Leverage on the Capital Structure

In the figure 2.3, it is shown that the Curve K_o and K_s are increasing continuously. This is because K_o and K_d remain constant under all circumstances but the K_s increase with the increase in the leverage. Thus, there is no single point or range where the capital structure is optimum. We came to know from the figure 2.3 that under the NOI approach, as low cost of debt is used, its advantage is exactly offset by increase in cost of equity in such a way that the cost of capital remains constant. By this, value of the firm also remains constant. At the extreme degree of financial leverage, hidden cost becomes very high hence the firm's cost of capital and its market value are not influenced by the use of additional cheap debt fund. (Gitman Lawrence, p791).

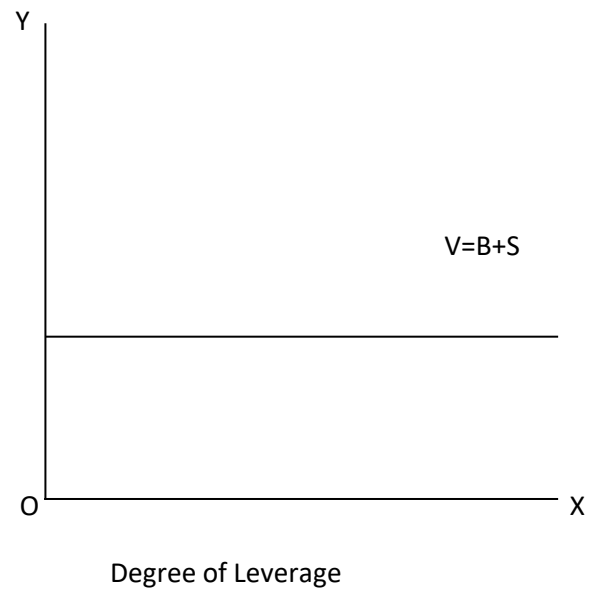


Figure 2.5: The Effect of Leverage on Total Market Value of the Firm

2.2.2.3 Traditional Approach

This approach assumes that the capital structure as relevant matters for the value and cost of capital of the firm. It takes some features of both NOI and NI approach. This approach strikes a balance between the two different approaches NOI and NI approach. Therefore it is also known as intermediate approach. It resembles the net income approach in arguing that cost of capital and total value of the firm are not independent of the capital structure. But it does not subscribe to the view on NI approach that the value of a firm will necessarily increase for all degree of leverage. In one respect it shares a feature with the NOI approach that beyond a certain degree of leverage, the overall cost increases leading to a decrease in the total value of the firm.

According to this approach, there is an optimal capital structure therefore the firm can increase the total value of the firm through the wise use of leverage. The firm initially can lower its overall cost of capital through the use of cheapest cost debt and raise its total value

through leverage. But the increase in leverage increase the risk to the debt holders and the debt holders demand high interest rate as a result the overall cost of capital also increases.

The figure of Traditional approach of Capital Structure is shown in the figure below.

Figure 2.6: Cost of capital Behavior on Traditional Approach

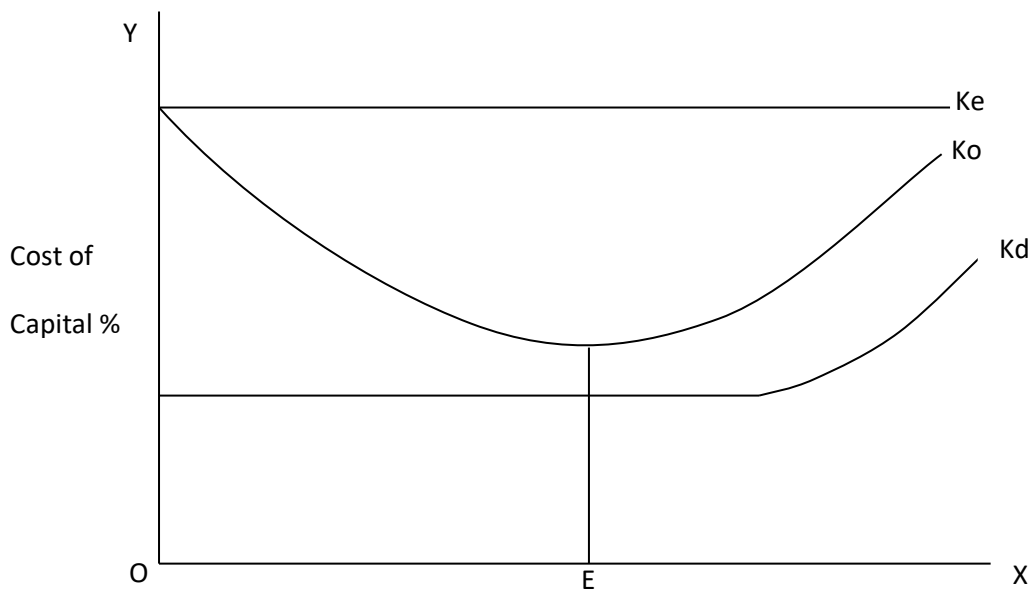


Figure 2.6: The Effect of Leverage on the Capital Structure

At first, the overall cost of capital declines with increase in debt ratio because the rise in K_e does not entirely offset the use of cheaper debt funds. As a result, the weighted average cost of capital, K_o , declines with moderate use of leverage. After a point, however, the increase in K_e more than offsets the use of cheaper debt funds in the capital structure, and K_o begins to rise. The rise in K_o is supported further on K_d begins to rise. The optimal capital structure is the point at which K_o bottoms out. In the figure, this optimal capital structure is point E. thus the traditional position implies that the cost of capital is not independent of the capital structure of the firm and that there is an optimal capital structure.

2.2.2.4 Modigliani and Miller Approach's (M-M Approach)

Modigliani and Miller (MM) in their original position advocate that the relationship between leverage and the cost of capital is explained by net operating income approach. They make a formidable attack on the traditional position by offering behavioral justification for having the cost of capital; K_o remains constant throughout all degree of leverage. (Van Horne, 2000, p255).

“The approach concludes that the total market, value of a firm and the cost of capital are independent (exclusive of tax consideration) of the capital structure. This model is identical with the net operating income approach.” (Jain; 1997, p53).

The crucial assumptions of M-M proposition as propounded are: (Pandey, 1985, p687)

- Capital markets are perfect. Information is costless and readily available to all investors. There are no transaction costs, and all securities are infinitely divisible. Investors are assumed to be rational to behave accordingly.
- The average expected future operating income of a firm are represented by subjective random variables. It is assumed that the expected values of the probability distribution of all investors are the same. The M-M illustration implies that the expected values of the probability distribution of expected operating earnings for all future periods are the same as present operating earnings.
- Firms can be categorized into “equivalent return” classes. All firms within a class have the same degree of business risk. As we shall see later this assumption is not essential for the proof.
- The absence of corporate income tax is assumed. M-M removes this assumption later.
- Firms distributed all net earnings to the shareholders i.e. 100% payout. M-M in 1958 proposed the theory without taxes and later they relaxed the theory with tax consideration

The definition of some technologies/notions, used in M-M theory is given below:

Terminology:

- ❖ Levered firm: a firm that uses some percentage of debt in its capital structure is called levered firm.
- ❖ Unlevered firm: all equity financed firms are known as unlevered firm.
- ❖ Risk premium: risk premium is that expected additional return by the equity holders for making a risky investment. In other words, it is the additional return demanded by the equity holders due to inclusion of debt capital in firm’s capital structure.

Notions

- i. K_eU = The equity capitalization rate of an unlevered firm.
- ii. K_eL = The equity capitalization rate of a levered firm.
- iii. K_d = The debt capitalization rate.
- iv. K_oU = The overall capitalization rate of an unlevered firm.
- v. K_oL = The overall capitalization rate of an levered firm.

- vi. V_u = Value of unlevered firm.
- vii. V_l = Value of levered firm.
- viii. T = The corporate tax-rate.

2.2.2.5M-M without Taxes

“M-M have restated and amplified the NOI approach. MM argue that, in the absence of tax, a firm’s market value and the cost of capital remain invariant to the capital structure change. In their 1958 article, they provide analytical sound and logical consistent behavior justification in favor of their hypothesis and reject any capital structure as incorrect.” (Modigliani and Miller; 1969, p261).

Proportion I

Given the above assumption, MM argues that for the same risk class, the total market value is independent of the debt –equity mix and is given by capitalizing the expected net operating income by the rate appropriate to the risk class (Ibid, p268). This is their proportion I. In equation this can be expressed as follows.

$$\begin{aligned} \text{Value of the firm} &= \text{Market value of Debt (B)} + \text{Market Value of Equity (S)} \\ &= \frac{\text{ExpectedNetOperatingEarning}}{\text{ExpectedOverallCapitalizationRate}} = \frac{EBIT}{EBT} \end{aligned}$$

For an unlevered firm,

$$V_u = \frac{EBIT}{K_s}$$

Where $K=K_s$ is case of unlevered firm.

Proportion I can be expressed in terms of the firm’s overall capitalization rate, K , which is the ratio of Net operating income to the market value of all its securities.

That is:

$$K = \frac{NOI}{S + B} = \frac{NOI}{V}$$

K can be expressed as

$$K = \frac{Ks(S)}{S + B} + \frac{Kd(B)}{S + B}$$

It means K is the weighted average of the expected rate of return of equity and debt capital of the firm since the cost of capital is defined as the expected net operating income divided by the total market value of the firm and since MM conclude that the total market value of the firm is unaffected by the financing mix and since MM conclude that the cost of capital is independent of the capital structure and is equal to the capitalization rate of a pure equity stream of its class. (Pandey I.M. 1981, p35)

The overall cost of capital function as hypothesis by MM is shown in figure below:

Figure 2.7: Cost of capital under MM Hypothesis

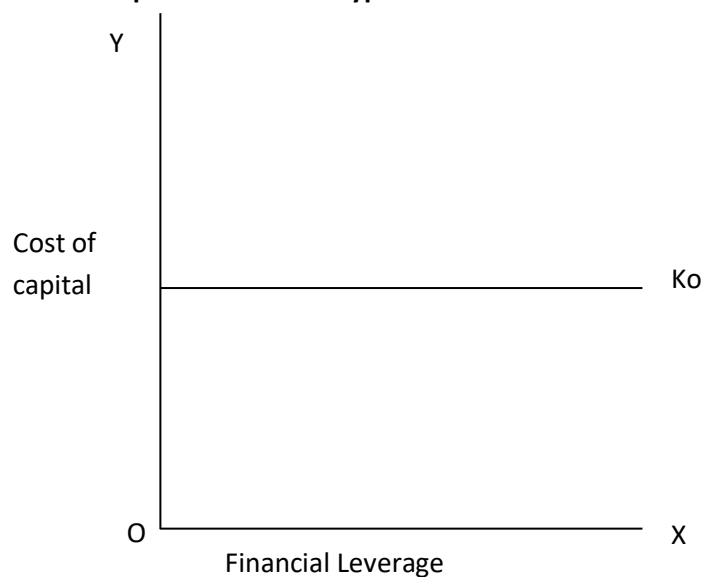


Figure 2.7: The cost of capital Under the MM Hypothesis

Thus two firms identical in all respect except for their capital structure cannot command different market values nor have different cost of capital. But if there is a discrepancy in the market values or the cost of capital, arbitrage will take place, which will enable investors to engage in personal leverage to restore equilibrium in the market. (I.M.Pandey, 1981, p37).

Proportion II

MM proportion II, which defines the cost of equity, follows from their proposition one and shows the implications of the net operating approach. The proportion II states that the cost of equity rise proportionately with the increase in the financial leverage in order to compensate in the form of premium for bearing additional risk arising from the increasing leverage. (Pradhan S, 1992,p362).

The equation for the cost of equity can be derived from the definition of the leverage cost of capital.

$$K = \frac{KS(S)}{S+B} + \frac{Kd(B)}{S+B}$$

$$Ks = \frac{K(B+S)}{S} - \frac{Kd(B)(B+S)}{(S+B)S}$$

$$Ks = K\left(1 + \frac{D}{S}\right) - \frac{Kd(D)}{S}$$

$$Ks = K + (K - Ks) \frac{B}{S}$$

The above equation states that for any firm in a given risk class the cost of equity, K_s , is equal to the constant average cost of capital, K , plus a premium for the financial risk, which is equal to debt-equity ratio times the spread between the constant average cost of capital and the interest rate. As their proportion of debt increase, the cost of equity increases continuously even though K and KD are constant, the crucial part of the MM hypothesis is that K will not rise even if very excessive use of leverage is made. This conclusion could be valid if Kd remains constant for any degree of leverage. But in practice K_s increases with leverage beyond a certain acceptable level of leverage. However, MM maintains that even if K_s are a function of leverage, K will remain constant as K_s will increase at a decreasing rate to compensate. This can be shown as:

Figure 2.8: Behavior of K_o , K_i and K_e under MM Hypothesis

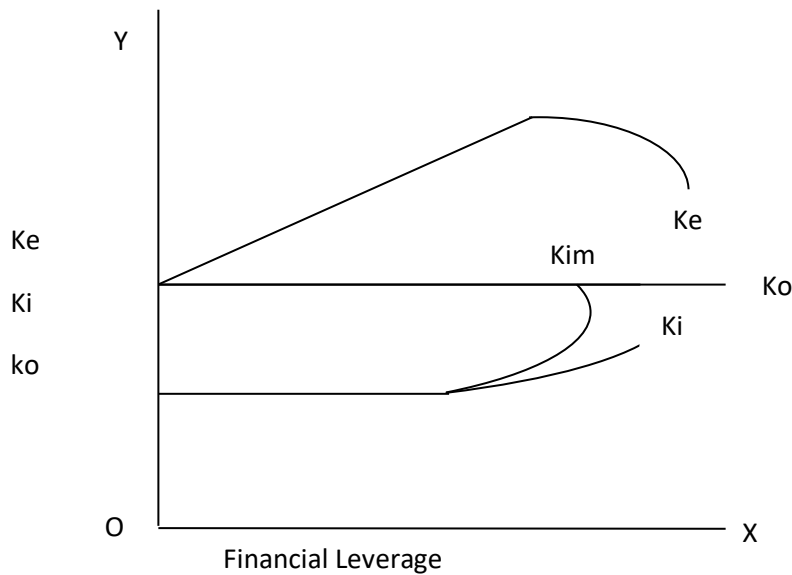


Figure 2.8: Behavior of K_o , K_i and K_e under MM Hypothesis

It is clear from the figure that K_s will increase till the marginal rate of interest (K_{im}) is below the cost of capital. As soon as the marginal rate of interest cuts the cost of capital, K_s will start falling.

2.3 Making Capital Structure Decisions

The financial manager plays an important role in determining the appropriate level of Capital structure of a firm. He may use various methods of analysis – none completely satisfactory in itself, but taken collectively, they give enough information to make a rational decision. So, financial manager should be able to identify the precise percentage of debt that will maximize share price, but we must try to determine an appropriate proportion of debt to employ for that objective.

2.3.1 Earning Per Share (EPS)

EPS is one of the widely used variables affecting the firm's price is its earnings, which represent the returns earned on the behalf of owners. The use of fixed cost of capital to finance, such as debt and preference share capital used to finance the assets of the company is known as financial leverage of trading of equity.

The leverage effect of EPS is more important consideration in any capital structure planning of the firm. Leverage is to increase shareholders equity.

EPS is calculated as follows:

$$\text{EPS} = \frac{\text{Net profit after tax} - \text{Preferred Dividend}}{\text{No. of shares outstanding}}$$

Earning per share is one of the most used measures of the firm's performance. It has positive and negative considerations. For example when a firm has to maximize EPS, the plant will choose the highest level of debt. In most cases, EPS criterion will favor debt. It may be that if the firm's cost after tax borrowing is less than its return of earning price ratio, then it's the content EBIT, EPS will always increase with an increased leverage. On the other hand, after tax borrowing is greater than earning price ratio.

2.3.2 Cost of Capital

A firm may raise capital from different sources of long-term financing such as common stock, preferred stock, bond etc. All these sources of capital that are employed in a business are not free of cost. For instance, firm has to pay periodic interest at stated rate to the bond holders and fixed rate of dividends to preferred stockholders. Similarly the common stockholders expect to receive dividend and/or capital gain which are received in form of increase in value. Thus, all of these obligations like interest on bond, dividend on preferred stock and dividend on common equity are collectively known as cost of capital.

Cost of capital is an important concept in financial management. A firm's cost of Capital serves as the linkage between two major financial decisions viz. investment decision and financing decision. Cost of capital is the rate that must be earned on the company's investment in order to satisfy the investors' required rate of return. It is the compensation for time and risk in the use of the capital by the project. It is the minimum required rate of return from an investment at which price of firm's common stock remains unchanged. If he firm earns a rate of return higher than the cost of capital, then the excess return will lead to an increase in the value of firm's common stock and consequently, an increase in shareholders' wealth. Similarly, if firm earns a rate of return lower than the cost of capital, the value of common stock decreases.

The term cost of capital is used interchangeably with the firm's required rate of return, "the hurdle rate" and "the discount rate". From project viewpoint, it is the minimum required rate or hurdle rate that must be earned from a project whereas from the firm's point of view; the cost of capital can be viewed as an opportunity cost and can be used as discount rate in the investment decision. The firm's overall cost of capital reflects the combined cost of all long-term sources of financing (debt, preferred stock, retained earnings and common stock) used by firm. This overall cost of capital is known as the firm's weighted average cost of capital (WACC). The WACC is the weighted average of the after-tax costs of each of the source of capital used by a firm to finance a project where the weights are the proportions of each sources in total financing.

Generally preferred share capital is cheaper source than equity but not than debt capital. So a firm should use debt capital as it is the cheapest source of financing but using only debt my

put firm in critical situation. So, up to some level debt capital should be used considering earning as well as risk factor.

2.3.3 Control

Control is another main determination of the capital structure for designing capital structure; something existing management control is taken over. When the debt having voting rights is increased in the firm then they have the power to change the existing management team. When a company uses large amount of debt, lot of restrictions are put by the debt holders on company to protect their interest. These restrictions control the freedom of the management to run the business. A very excessive amount of debt can also cause bankruptcy which means a complete loss of control,

2.3.4 Flexibility

It is another important consideration in setting up the capital structure. It means the firm's ability to adopt its capital structure to the needs of changing conditions. The capital structure of a firm is feasible if it has no difficulty in changing its capitalization or source of funds. The company should be able to raise funds without undue delay and cost whenever warranted by the future conditions. The financial plan of the company should be flexible enough to change the composition of the capital structure.

2.3.5 Cash Flow Ability

Conservation is a major feature of sound capital structure. It doesn't mean employing no debt or small amount of debt. It is related to the fixed charges created by the use of debt or preference capital in the capital structure and the firm's ability to generate cash to meet these fixed charges.

The fixed charges of a company include payment of interest, preferred dividends and principal. Thus the fixed charges depend on both the amount of securities and the terms of debt of preference capital with short term maturity. Whenever a company thinks of raising additional debt, it should analyze its expected future cash flows to meet the fixed charges.

If a company is not able to generate enough cash to meet its fixed obligation, it may have to face financial insolvency. The firms expecting large and stable cash, employ a large amount of debt in their capital structure, it is quite risky to employ fixed charged sources of financing those whose cash flows are not stable.

2.3.6 Flotation Cost

Flotation cost is not a major influence of the capital structure of a company. The cost are incurred only when the new shares are issued, which has certain cost of the underwriting commission or brokerage fees for the raised funds. Generally, cost of flotation of a debt is less than cost of flotation of equity. Flotation costs are not a significant consideration.

Flotation as a percentage of funds will decline. Therefore, it can be an important consideration in dealing the size of a security issue. The company will save in terms of

floatation cost if it raises funds through large issue of securities. But a large issue can curtail company's financial flexibility.

2.3.7 Marketability

It means the readiness of investors to purchase the share of particular type of securities in a given period of time. It is an important consideration for the time of security issue. General market consideration plays a vital role for any type of share issue like debt, equity etc. because, capital markets aren't constant at all.

2.3.8 Size of the Company

It greatly influences for the availability of funds from different sources. Generally large and renowned company can get the loan easily and the capital structure is flexible which can perform its operation smoothly. But, small companies cannot get loan easily at satisfied interest rate so their capital structure has more equity. The large company can easily make long term loan available and they can easily sell common shares, debentures etc. Therefore, size of the Company is an important consideration in making the appropriate capital structure which leads the long term service of the company.

2.4 Deposit Analysis

Deposit is one of the most important most liabilities of bank. They are collected and invested properly. Income from investment is the profit of the bank. Deposit has to be given interest but not for current account. Now-a-days some bank has started to give interest on current deposit.

2.4.1 Fixed Deposit Analysis

Fixed deposit is the long term debit collected from the customer which bank accepts for more than a year. The interest rate paid on long term deposit is higher than other deposit. Fixed deposit is long term source of Nepal Investment Bank Limited.

2.4.2 Analysis of Shareholder's Equity

The shareholder's equity of the bank includes paid up capital, reserve and surplus, other reserve and undistributed profit. This is also called net worth.

2.4.3 Analysis of Debt Equity Ratio

Debt to equity ratio shows the relationship between borrowed funds and owners capital. The ratio reflects the relative claims of creditors and shareholder's against the assets of the firm. It is widely popular measure of the long term financial structure of the firm. The higher the debt to equity ratio shows a large share of the financial by the creditors, relatively to the owners. Therefore, there is a large claim against claim against the assets of the firm. The higher debt to equity ratio shows a large share of financing by the creditors, relatively to the owners. Therefore, there is a large riskier to the creditors. A high production of debt in the financial structure would lead to inflexibility in the operations of the firm because firm is legally liable

to pay the interest even if the firm is having loss. Where, a smaller ratio shows smaller claim of creditors, relatively high stake of the owner implies sufficient safety margin and substantial protection against shrinkage in $(DER) = \text{Fixed Deposit/Net Worth}$.

2.4.4 Debt to Total Capital Ratio (DCR) Analysis

The relationship between creditor's funds and owners, capital can also be shown by debt to total capital ratio. These types of capital structure ratio are derived from the debt equity ratio. Here, it states that the outsider's liabilities are related to the total capitalization to the firm and not only to the shareholders equity.

Fixed Deposit to total employed ratio (DCR) $= \text{FD/CE}$

Where capital employed includes net worth and fixed deposits.

2.4.5 Analysis of Capital Adequacy

It is used in case of bank to assess the strength of the capital structure, the adequacy ratio of the capital. Appropriate capital adequacy ratio has always been a controversial issue for the commercial banks, however, extremely higher or lower capital adequacy ratio is considered to be unfavorable in terms of lowered return of lowered solvency respectively.

2.4.6 Analysis of Debt Capacity of Nepal Investment Bank Limited

The interest coverage ratio is calculated to analyze the debt capacity of the bank or to indicate firm's ability to meet interest obligations. Interest coverage ratio is one of the most conventional coverage ratios which measure the relationship between what is normally available from operation of the form and the claims of the outsiders; it is used to test firm's debt serving capacity. It is determined by dividing operating profit by the fixed interest charges on debt.

Interest Coverage Ratio (ICR) $= \text{EBIT/Interest}$

2.4.7 Capital Structure Position Analysis

When debt and equity are properly mixed, it helps to minimize the cost of capital and maximizes the value. In order to analyze the value of the bank fixed deposit and equity share capital are taken into consideration. Net income approach is considered to find out the overall capitalization and net operating income approach is considered to find out the equity capitalization rate of the bank.

2.4.8 Overall Capitalization Rate Analysis

The overall capitalization rate is calculated under net income approach which measures the degree of leverage of the firm. This approach assumes that the cost of debt is less than the cost of equity. So, the degree of financial leverage is increased the weighted average cost of

capital will decline as a result the value of the firm increases. The higher use of cheaper debt lowers the cost and consequently increases the value.

Overall Capitalization Rate (K_o) = $EBIT/Value\ of\ Firm$

2.4.9 Equity Capitalization Rate Analysis

The net operating income is considered to find out and analyze the equity capitalization rate of Nepal Investment Bank Limited. The net operating income approach implies that the total valuation of the bank is unaffected by its capital structure. In this approach the equity capitalization rate has to be analyzed.

Equity Capitalization rate (K_e) is calculated as below,

$$K_e = EPS/MVPS$$

Where,

EPS=Earning price per share

MVPS=Market price per share

2.4.10 Interest Margin Analysis

Interest margin show the percentage of bank earns as interest for each unit of investment made in loans and advanced and Nepal Government's security. This ratio is examined to measures the profitability of this earning assets. A high margin reflects the better efficiency in utilizing the resources in interest margin generating sector and vice-versa.

Interest margin can be calculated as below,

$$\text{Interest Margin} = (\text{Interest Income}-\text{Interest Expenses})/(\text{Loans \& Advances}+ \text{Gov's Securities})$$

2.4.11 Return Total Deposit Analysis

One of the major financial sources of a bank is deposit collections and deposit is mobilized for loans and advanced and in other investment to earn profit. This return ratio helps to find out the profit earned using total deposit. Its assists to identify the bank's overall performance as well as its success in generating profit. The ratio, here is calculated in order to diagnose whether the banks are well efficient or not in mobilizing its total deposit. So, corrective action could be forwarded to the bank.

Return on deposit ratio can be formulated as below.

$$ROD = \text{Net Income}/\text{Total Deposit}$$

Higher ratio signifies better mobilization and utilization of deposits and vice-versa.

2.4.12 Return on Total Assets (ROA) Analysis

Return on total assets ratio measures the profitability of bank that explains a firm to earn satisfactory return on all financial resources invested in the bank's assets otherwise its survivable is threatened. The ratio explains net income for each unit of assets.

Higher ratio indicates efficiency in utilizing its overall resources and vice-versa. From the point of view of judging operational efficiency, rate of return on total assets is more useful measure.

The return on total assets ratio is calculated using formula as below.

$$\text{ROA} = \text{Net Income} / \text{Total Asset}$$

2.4.13 Return on Capital Employed (ROCE) Analysis

Return on capital employment ratio is another ratio related to the profitability of long term funds. The ratio provides us a test of profitability related to the source of long term sufficient insight into efficiency the long term funds of owners and creditors are being used. It explains net income for each unit of long term funds. The higher the ratio the more efficient the use of capital employed. From the point of view judging operational efficiency, ROCE is more useful measures.

The ratio is formulated as below,

$$\text{ROCE} = \text{Net Income} / (\text{Fixed Deposit} - \text{Net Worth})$$

2.4.14 Return on Equity (ROE) Analysis

This ratio carries the relationship of return to the sources of funds. This shows whether the banks have earned a satisfactory return from its internal sources or not. ROCE had expressed, previously, the profitability of the banks in relation to the funds supplied by the creditors and owners together but this ratio is used to measure exclusively the return of the owner's fund. Hence, this ratio reveals how profitability the owner's fund have been utilized by the bank and indicates whether a bank complete for private sources of capital in the economy.

Higher the ratio, higher will be the investment which the shareholders will undertake.

Return on Equity can be formulated as below,

$$\text{ROE} = \text{Net Income} / \text{Net worth per share}$$

2.4.15 Earning Per Share (EPS) Analysis

The profitability of a bank from the point of view of the ordinary shareholders is earning per share. The ratio explains net income for each unit of share. Earning per share of an organization gives the strength of the share in the market. As EPS does neither reveal how

much dividend paid to the owners nor how much earning retained by the organization. Thus, it shows how much theoretically belongs to the ordinary shareholders.

2.4.16 Dividend per Share Analysis

Dividend per share is evaluated to know the share of dividend that the shareholders receive in relation to the paid up value of the share. A large number of present and potential investors may be interested in the dividend per share rather than the earning per share. Therefore, an institution offering a higher dividend per share is regarded as an efficient in fulfilling shareholders expectation which will also enable to increase the value of an institution.

Dividend per share is the earning distributed to ordinary shareholders dividend by the number of ordinary shares outstanding i.e

$DPS = \text{Earning paid to Shareholders as dividend} / \text{No of Ordinary Shares}$

2.4.17 Dividend Payout Ratio Analysis

The ratio represents the percentage of the profit distributed as dividend and the percentage retained as a revenue and surplus for the growth of the bank. Usually higher ratio is preferred by the shareholder of dividend and retained earnings. Importance of DPR lies in its ability to state the dividend policy of the concerned banks more obviously which influences the market of the share.

DPR of Nepal Investment Limited is formulated as below,

$DPR = \text{Dividend per share} / \text{Earning per share}$

2.4.18 Market Value per Share (MVPS) Analysis

Market value per share is the average market value of the Nepal Investment Bank Limited.

2.4.19 Price Earning (P/E) Rate Analysis

Price earnings ratio reflects the price currently being paid by the market for each rupee currently reported by EPS. In other words, it measure investors, expectations and market appraisal of the performance of a firm. It is an indicator of the way investor thinks that the banks would perform better in the future.

Higher market price suggested that investors expect earnings to grow and this give a high P/E but low P/E implies that investors feel that earning are not likely to raise.

Price Earnings Ratio is calculated as below. $P/E \text{ Ratio} = \text{Market Price of Share} / \text{Earning per Share}$

2.5 Review of Journals and Articles

This section is devoted to review of important empirical works, concerning capital structure and cost of capital till 2011. There are numerous studies in capital structure. So the scope of this study is to survey and review all the empirical work extensively and given in detail. Therefore, some important studies and their findings are presented.

Modigliani and Miller, (1958) wrote an article on debt equity composition “The lost of Capital Corporation Finance and theory of investment”. They argued that ‘the impact of additional debt is a tax and economically perfect world, the total market value of a company debt plus equity should not change as debt is substitution for equity. Although expected earning per share will increase as debt is substituted for equity (or additional financing is done with debt rather than equity), this effect is exactly offset by markdown in the company’s price/earnings ratio. The markdown occurs because the additional debt exposes the common stockholders to an extra financial risk.

Weston (1963) in his article, ‘A test of cost of capital proportion’. Explained that some important improvement in the cost of capital model. He included firm size and growth as additional explanatory variables in his model.

He found the regression co-efficient of leverage to be positive and significant, when used MM model. However, when the multiple regressions were run, he found that the correlation coefficient is significant and the regression coefficient is negative and significant. When the influence of growth is isolated, leverage is found to be negatively correlated with the cost of capital. He concluded that the apparent lack of influence of leverage on the overall cost of capital observed by MM was due to the negative correlation of leverage with earning growth. Weston also tested MM proposition II. When he used the MM model, his result was found to be consistent with their results i.e. cost of equity is the linear function of debt equity ratio.

Wiper (1966) tested the empirical relationship between ‘financial structure and value of the firm’. He tried to eliminate the principle problem of empirical study on the leverage and attempt to offer what were hoped to be more fruitful alternatives in determining the relationship between leverage and cost of capital. He found that shareholder’s wealth can be enhanced by judicious use of debt financing.

Poudal (2002) in his article, “Capital structure, it’s impact on value of firm” concentrated his study to examine the interrelationship between the objective of achieving an optimal capital structure and to provide conceptual framework for the determination of the optimal capital structure. For this a hypothetical firm is constructed and different assumptions are laid down to analyze the effect of capital structure. Various statistical and financial tools like ratio analysis are used to exact reasonable figures for the hypothetical firm. It is observed that the minimum weighted cost of capital, maximum value of the firm and price per share are attained at debt ratio of 30%.

For more, if there is flexibility of select capital structure in any proportion, optimal capital structure ranges from 30% to 40%. An optimal capital structure would fulfill the intent of shareholder and financing requirement of a company as well as other groups concerned.

2.6 Review of Related Thesis:-

Under this section various thesis related to this study have been reviewed. There are as follows:

SusilDevSubedi (2005): described in his MBA thesis, “A study on Capital Structure of Nabil Bank Ltd.” In this studies specific objective were analyze to show financial position, examine the different profitability ratio and show overall trend analysis. Under this study various tools such as graph, percentage, diagram, mean, standard deviation and co-variance are used to analyze the study. He found and concluded that total liabilities and capital item, show the overall situation of bank is falling down. Deposit is bigger than amount in the balance sheet. Fixed deposit is taken as long term debt in banking business. It is key determent factor to capital structure. Debt and equity are properly mixed good capital structure is formed. Price earnings ratio reflects the price currently reported by EPS. It measures investor’s expectations and the market apprised of the performance of a firm. This study suggests, deposit is the major concern to the capital structure. It effects on investment policy. The more the fixed deposit increase, the more the long term investment becomes possible. Bank becomes more successful and competent as per its capacity to collect the fixed deposit. So fixed deposit should be collected more as much as possible.

Giri, (2006):Conducted a study on “Capital Structure Management of listed joint venture Commercial Banks” in which he has analyzed the capital structure of Standard Chartered Bank and Nepal Bangladesh Bank. The study shows that the private sector banks have been successful in increasing their deposit and credit portfolio remarkably over the past few years and have been caution about loan and advances. The operating profit of all private sector commercial banks have gone up so the banks suffered from loss. However he suggested joint venture banks to open their doors to small depositors and entrepreneurs. They have lack of theoretical and practical knowledge with regard to capital structure. JVB are suggested to play merchant banking role like under writing securities, brokers, development of capital market and supportive role to the security exchange center to uplift the nation. However the sample size of the study was quite small.

UrmilaKandel (2008):wrote in her thesis “A Comparative Analysis of capital structure of Commercial Banks (with reference to Himalayan Bank and Bank of Kathmandu) the specific objectives were to analyze the financial position and the value of firm with capital structure. The optimal capital structure differs in individual firms, banks and industries. These studies also find out the use of debt and equity, capital structure effect the various factors etc. sample banks as mentioned above are taken for the study. Various financial and statistical tools will be used to achieve the objective of the study. Different tools had been selected according to the nature of data as well as subject matter. The major tool employed for the analysis of the data is ratio analysis. Ratio analysis, leverage analysis, capital Structure analysis which

established the numerical relationship between two variables of the financial statement. Besides financial tools, the statistical tools are used such as mean, standard deviation, correlation coefficient, probable error etc. Graphical presentation had made the study more attractive and easy to compare. The analysis of two companies reveals the fluctuating trend of long term debt to total debt ratio. Among the two, BOK has used maximum long term in comparison to HBL. She had further recommended capital structure is a serious matter. It affects EPS, Value of firm, Cost of capital etc. so it is recommended that these companies should follow the theoretical aspects of the capital structure management or give bit more attention in this matter and try to manage their activities accordingly.

BijayaBista (2009): In his MBS thesis “Capital Structure Management of Selected Manufacturing Companies listed in NEPSE the specific objective were to examine the capital structure of selected companies, to assess the debt servicing capacity of the selected companies, to analyze cost of capital and return on capital in relation to the capital employed and to analyze the relationship between capital structure and cost of capital is selected Nepalese manufacturing companies. Researcher has used financial as well as statistical tools like: ratio analysis, leverage ratio, interest coverage ratio, profitability ratio, mean regression, correlation analysis. Almost all the ratio has been applied to cover analytical part and fulfill the objectives of this study. It involves more recent date of listed companies for five year (2003-2007). Among all 38 listed manufacturing companies in NEPSE as total population, sample drawn from target population in two manufacturing companies-Nepal lube oil limited (NLOL) and Bottlers Nepal Limited (BNL). The study is based on secondary data. The raw secondary data are modified to some extent for the study purpose mostly; data are collected from the balance sheet, income statement and profit and loss account, auditor general report and various related journals in a management and other publications. The major findings of the study with respect to capital structure of the manufacturing companies were the manufacturing companies have low debt equity ratio, it implies greater claims of owner than creditors. A high portion of equity provides a large margin of safety for them. The researcher had concluded that the mix of capital structure. A high portion of equity provides a large margin of safety for them. The company should make such policy to earn high amount of profit from the sales revenue by increasing operation efficiency. Selection of appropriate research design is necessary to meet the study objectives of any research. It helps in logical planning and directing a research. It is the conceptual structure in which research is conducted.

2.7 Research Gap

This study revolves around the banking which is one of the leading commercial bank Nepal Investment Bank Limited. This study covers six year period of data (2005/06-2010/11). This study tried to analyze and evaluate the relationship of capital structure with various variables like leverage ratio, cost of capital, cost of equity and so on. After studying above thesis, I found that the researcher are highly focused only on the relationship between deposit and investment but in capital structure total liabilities should be analyzed not deposit. And the above researchers are studied in the past years, which are why in the present scenario that much study is not sufficient as Nepal Investment Bank Limited is one of the leading banks in Nepalese economy its capital structure must be different from other manufacturing industries, trading industries and other banks.

CHAPETER – III

RESEARCH METHODOLOGY

Research in common parlance refers to a search for knowledge or in another words it is a scientific and systematic search for pertinent information on a specific topic. The advance learner's dictionary defines research as a careful investigation or inquiry especially through search for new facts in any branch of knowledge.

“Research Methodology is a way to systematically solve the research problem. It may understand as science of studying how research is done scientifically. In it we study the various steps that are generally adopted by researcher problem along with logic behind them” (Kothari; 1990, p10).

Research needs sequential steps to adopt realistic study or studying a problem with certain objects in view. Therefore, through research methodology researcher can get appropriate guidelines and knowledge about the various sequential steps to adopt a systematic analysis. Research methodology is the investigation tools of any certain area and it means clearly observation of certain object.

“The research for gaining the knowledge about method of goal methodology.”(Joshi 2001; 12.13).

This chapter includes research design. Nature and source of data. Population and sample, Data Collection and procedure and method of analyze. To accomplish the goal, this study is follows the research methodology described in this chapter.

Flow chart given below shows the entire methodology of this study.

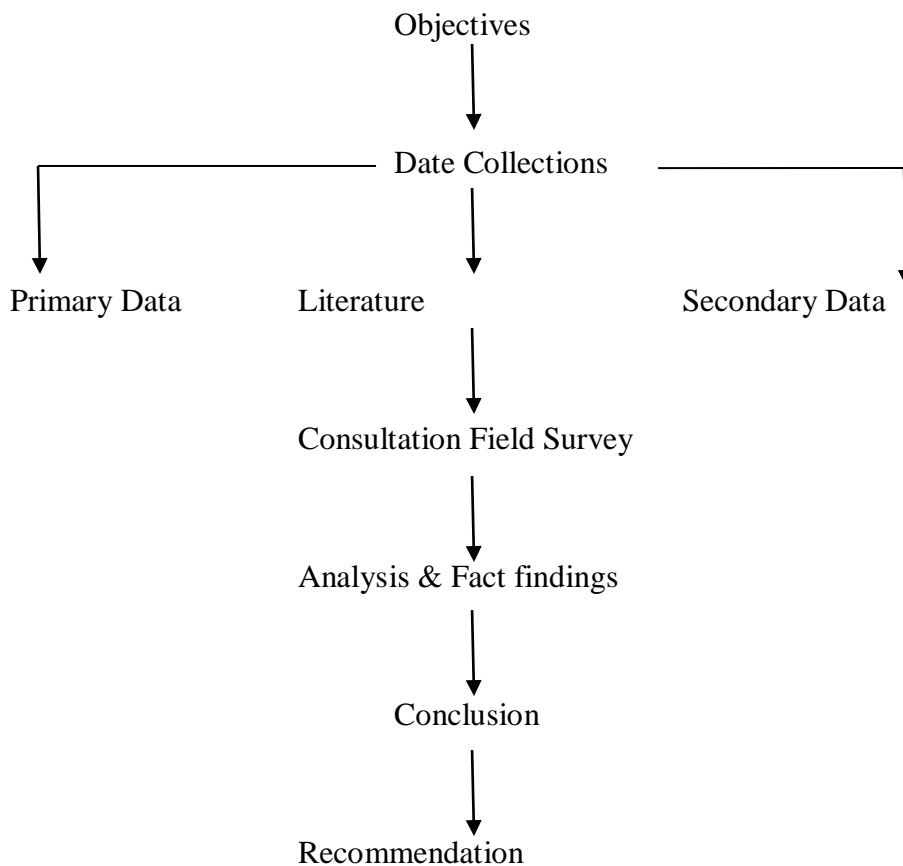


Figure: 3.1: Flowchart of Entire Methodology

3.1 Research Design

Research design is the plan structure and strategy of investigations conceived so as to obtain answer to research equations and to control variance. “A research design is purely and simply the framework or plan for a study that guides the collection and analysis of the data.” (Goes; 1989, p51). Research design expresses both the structure of the research problem

The framework, organization or configuration of the relationship among variables of a study and the plan of investigation used to obtain empirical evidence on those relationships.

So the selection of appropriate research design is necessary to meet the study objectives of any research. The study aims to portraying accurately on the capital structure and its impact on overall financial position of Nepal Investment Bank Limited. It is based on recent six

years data from F/Y 2005/06 to F/Y 2010/11. The main objective of the research is to evaluate the capital structure of capital structure of NIBL, to complete this study following design and format will be adopted

First of all, information and data will be collected and the important information and data are selected. Then the data will be arranged in useful manner and after that data will be analyzed by using appropriate financial and statistical tools. In analysis part, interpretation and comment will also be made wherever necessary.

Result and conclusion will be drawn after analysis of data, recommendation and suggestion will also be given. Previous thesis styles and formats will be followed along with my full knowledge and ideas.

3.2 Population and sample

Currently there are 33 commercial banks operating in Nepal among the commercial banks of Nepal one of the commercial bank; NIBL which is currently in operation will be studied.

3.3 Nature and Sources of Data

This study conducted on the basis of the secondary data for the characteristic study of annual report of NIBL. Supporting data and information are obtained from the office of NIBL. Booklets, documents other published and unpublished materials, thesis, newspaper are important source of data. The study is based on secondary data provided by NIBL. Data and information have been extracted from annual reports of the bank and downloaded from official websites of the bank.

3.4 Data Processing Procedure

There are two types of data primary data and secondary data among these two our study is based on secondary data. Methods of analysis are applied as simple as possible. The obtained data are presented in various tables, diagrams and charts with supporting interpretations. Among various tools of data analysis, financial tools and statistical tools are used for research under study.

3.4.1 Financial Tools

Financial tools are used to examine the financial performance i.e strength and weakness of the bank. Financial tools are used for expressing the mutual relation of different accounts

consisting in the financial statement. To make the data of financial statement more clear, it is to be expressed in referring to other figures. With the help of various financial tools, it can be made short, simple and understandable. Following are some important financial tools used for research work of capital structure of Nepal Investment Bank Limited.

❖ Shareholder's Equity

Shareholder's fund include equity share capital, preference share capital, reserve and surplus, reserve fund, general reserve, other reserves, undistributed profit. It is calculate as:

$$= \text{Paid up Capital} + \text{R\&S} + \text{Other reserves} + \text{Undistributed Profit} = \text{Net Worth}$$

❖ Debt to Equity Ratio

This ratio is a measure of relative amount provided by lenders and owners. It is also known as "External internal Equity Ratio." It is calculated according to the following formula.

$$\text{Debt Equity Ratio} = \frac{\text{Fixed Deposit}}{\text{Net Worth}}$$

This ratio 1:1 is acceptable.

❖ Debt to Total Capital (DCR) Ratio

Total capital includes shareholders equity as well as long term debt. It shows the relationship between the long term debt and total capital. It is calculated as follows,

$$\text{Debt to Total Capital Ratio} = \frac{\text{Fixed Deposit}}{\text{Capital Employed}}$$

Where,

$$\text{Capital Employed} = \text{Fixed deposit} + \text{Net Worth}$$

❖ Debt Capacity Ratio

How much a firm is capable to pay interest charges on its borrowed capital is calculated by using debt capacity ratio. This is calculated as follows:

$$\text{Debt Capacity Ratio} = \frac{\text{NPBIT}}{\text{Interest}}$$

The higher the coverage, the greater the ability of the firm to make the payment of interest.

❖ Overall Capitalization Rate (Ko)

It measures the degree of leverage of the firm. It can be calculated as below,

$$\text{Overall Capitalization rate} = \frac{\text{NPBIT}}{\text{Value of the firm}}$$

Where,

Value of the firm = Fixed Deposit + Equity Share

❖ Equity Capitalization Rate (Ke)

Net operating income is considered to find out and analyze the equity capitalization rate of Nepal Investment Bank Limited. It is calculated as follows,

$$\text{Equity Capitalization Rate} = \frac{\text{EPS}}{\text{MVPS}}$$

❖ Interest Margin

What Percentage a bank earns as interest for each unit of investment made in loans and advances is shown by interest margin which is calculated as follows,

$$\text{Interest Margin} = \frac{\text{Interest Income}}{\text{Loans and Advances}}$$

❖ Return on Total Deposits

Whether banks are well efficient or not in mobilizing its total deposit is calculated by using following ratio,

$$\text{Return on total deposit} = \frac{\text{Net Profit}}{\text{Total Deposit}}$$

❖ Return on Total Assets (ROA) Analysis

This ratio measures the probability of all financial resources invested in the firm's assets. Hence, the higher ratio implies that the available source and tools are employed efficiently. It is calculated as follows.

$$\text{Return on Total Assets} = \frac{\text{Net Profit}}{\text{Total Assets}}$$

❖ Return on Capital Employed (ROCE)

Whether total capital of the firm is efficiently utilized or not is calculated by using following ratio,

$$\text{Return on Capital Employed} = \frac{\text{Net Profit}}{\text{Fixed Deposit} + \text{Net Worth}}$$

Where,

$$\text{Fixed Deposit} + \text{Net Worth} = \text{Capital Employed}$$

❖ **Return on Equity (ROE)**

The return on equity measures the return on the owner's investment in the firm. Higher ratio of return on equity is better for owner. It is calculated as follows:

$$\text{Return on Equity} = \frac{\text{Net profit}}{\text{Shareholders Equity}}$$

❖ **Earnings Per Share (EPS)**

Earnings per share of an organization give the strength of the share in the market. The profitability of a bank is earning per share which is calculated as follows,

$$\text{Earning per Share} = \frac{\text{Net Profit}}{\text{No of Shares}}$$

❖ **Dividend Per Share(DPS)**

It is calculated to know the share of dividend that the shareholders receive in relation to the paid up value of share. DPS is the earning distributed to ordinary shareholders dividend by the numbers of ordinary shares outstanding.

$$\text{Dividend per Share} = \frac{\text{Earnings Paid to Equity Shareholders}}{\text{No of Shares}}$$

❖ **Dividend Payout Ratio (DPR)**

What percentage of profit is distributed as dividend and the percentage retained as revenue and surplus for the growth of the bank is calculated by DPR and it is calculated as follows

$$\text{Dividend payout Ratio} = \frac{\text{DPS}}{\text{EPS}}$$

❖ **Market Value Per Share (MVPS)**

Earnings per share expressed in terms of average market value are market value per share. It is calculated as,

$$\text{Market Value Per Share} = \text{P/E Ratio} \times \text{EPS}$$

❖ Price Earning Ratio (P/E)

Price earning ratio reflects the price currently being paid by the market for each rupee of currently reported earning price per share. It is calculate as

$$\text{Price Earning Ratio} = \frac{\text{MVPS}}{\text{EPS}}$$

3.4.2 Statistical Tools

Statistical and Research cannot be separated whenever research work is carried on statistics in most to have output of research. To achieve the objective of the study, some important statistical tools such as men, standard deviation, coefficient of variance, correlation, regression analysis of important variables has been used which are as follows:

❖ Standard Deviation

The standard deviation measures the absolute dispersion or variability of a distribution the greater the amount of dispersion or variability the greater the standard deviation the greater will be magnitude of the deviation of the values form their mean and vice versa.

$$\text{S.D} = \sqrt{\frac{1}{N} \sum (X - \bar{X})^2}$$

Where,

N = No. of Observation

X = Observations

\bar{X} = Mean of the given observation

❖ Coefficient of Variation

Coefficient of variation is defined by 100 times the coefficient of standard deviation. CV is independent of unit; hence two units can be compared for their variability.

$$\text{C.V} = \frac{\text{SD}}{\text{Mean}} \times 100$$

Where,

SD= Standard Deviation

3.5 Method of Data Analysis

Data collected from different sources are in raw form and in the initial stage as judging independently does not help much thus the data analysis should be done in the following ways:

- Data and information are collected and gathered to fulfill the research problem and objectives of the study.
- The collected data and information are identified, classified and arranged properly.
- Then the data and information are processed and analyzed.
- Interpretation, recommendation and suggestion are made after analysis.

CHAPTER –IV

DATA PRESENTATION AND ANALYSIS

A firm should maintain a sound capital structure to run its business operation in this competitive world. Both excessive as well as inadequate capital positions are dangerous from the firm's point of view. So, an enlightened management should, therefore, maintain right capital structure to meet its objectives.

This chapter deals with the presentation, analysis and interpretation of relevant data of Nepal Investment Bank Limited. In order to fulfill the objectives of this study and to obtain best result, the data have been analyzed according to the research methodology as mentioned in third chapter. The purpose of this chapter is to introduce the mechanism of data analysis and interpretation. With the help of this analysis, efforts have been made to highlight the comparative financial strength of the Nepal Investment Bank Limited. For analysis, different types of analytical methods and tools such as financial ratios as well as statistical analysis are used.

Capital and Liabilities Analysis

The first objective of this study is to examine the financial position regarding capital structure of Nepal Investment Bank Limited. The way to show off the success of the company is a Balance Sheet. By analyzing the balance sheet, investors, creditors and others can assess the ability to meet short term obligation and solvency as well as its liability to pay all current and long term debts as they come due. The balance sheet also shows the composition of assets and liabilities, the relative proposition of debt and equity financing and the amount of earnings that it has to retain. Total capital and liabilities are included in liabilities side of balance sheet. Balance sheet presents a clear picture of financial position of any business firm. The following table shows the position of share capital of Nepal Investment Bank Limited.

4.1 Share Capital

The part of the capital of a company received from its owners i.e. its members or shareholders in return for shares. Every company must commence with some share capital (a minimum of two shares).

Table 4.1

Share Capital

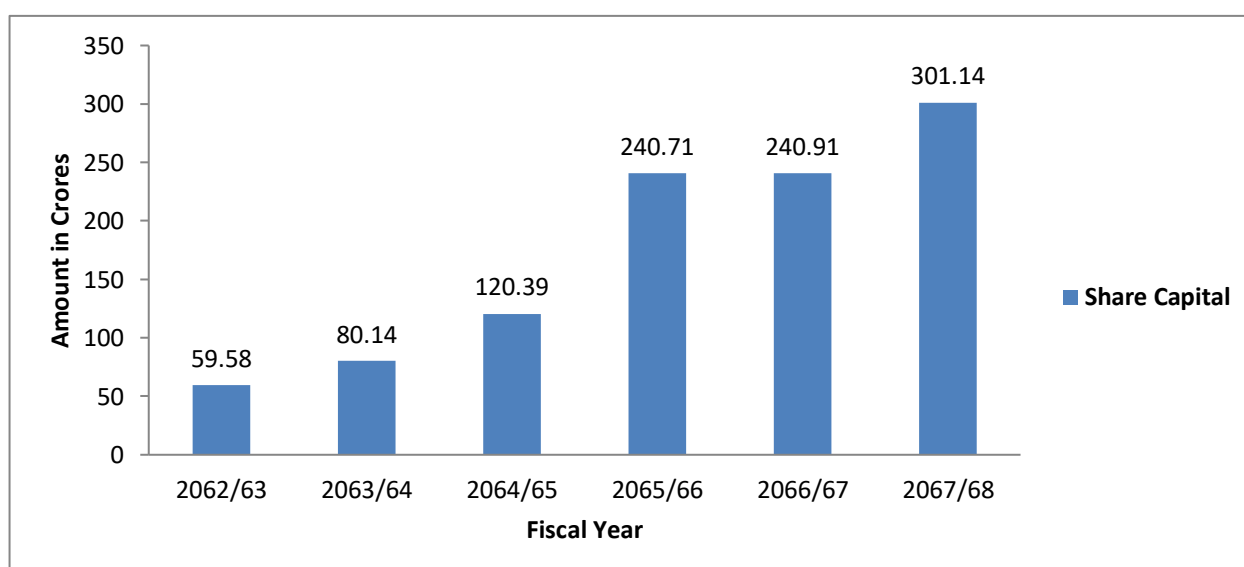
(Amounts in Rs. Crores)

Fiscal Year	Amount	Change Rate (%)	Proportion of TL (%)
2062/63	59.58	-	2.72
2063/64	80.14	35.67	2.85
2064/65	120.39	50.34	6.11
2065/66	240.71	99.94	4.49
2066/67	240.91	.08	4.16
2067/68	301.14	25	5.09
Average	173.81	42.21	4.24

Source:- Annual Report of Nepal Investment Bank Limited

Figure 4.1

Share Capital



The value of share capital is Rs. 59.67 crores in F/Y 2062/63, it increased to Rs. 80.14crores in F/Y 2063/64 which is increased by 35.67%, again it increased to Rs. 120.39 crores in F/Y 2064/65 which is increased by 50.34%, again it increased to Rs. 240.71crores in F/Y 2065/66 crores, again it increased by 99.94%, again it slightly increased to 240.91 crores in F/Y 2066/67 which is increased by 0.08% and it reached to Rs. 301.14crores in F/Y 2067/68 which is increased by 25% respectively. The average amount of share capital is Rs 173.81 crores. The trend of proportion of change in share capital to total liabilities and share capital is in increasing except in fiscal year 2066/67 which is favorable for the organization.

4.2 Borrowings (Including Debentures)

A firm may borrow certain amount promising to pay interest and principal amount making specific contract or agreement. A debenture is an unsecured debt issued by a company without providing a specific assets as collateral where as a bond is a secured debt where collateral is required. The borrowings of Nepal Investment Bank Limited are shown in the following table.

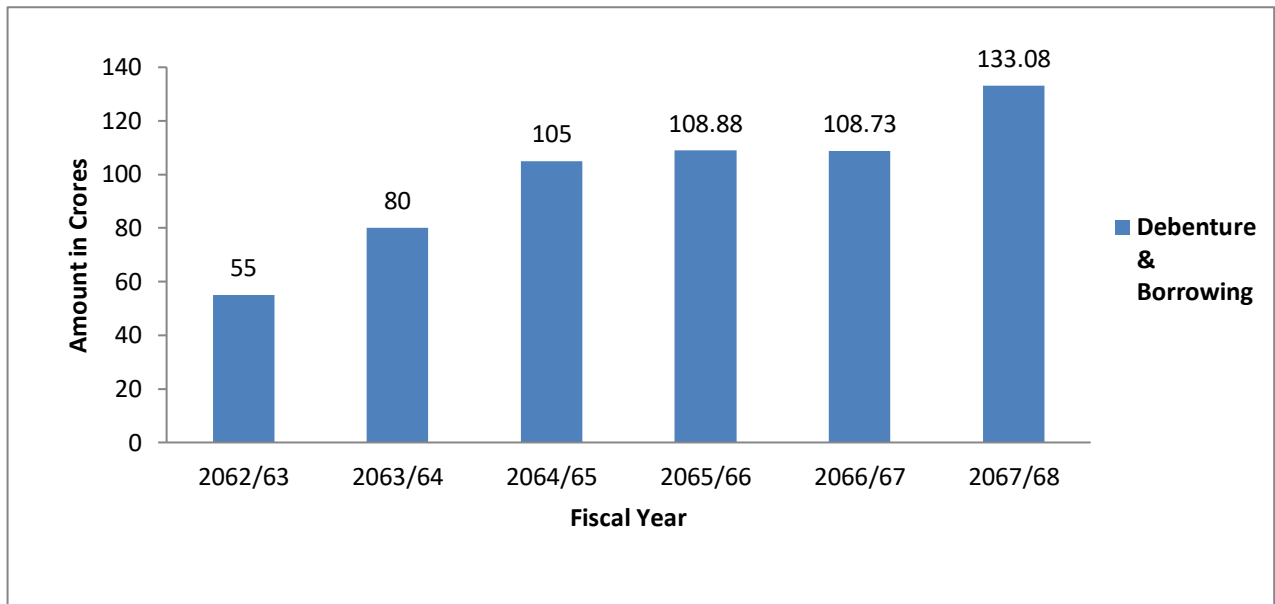
Table 4.2
Borrowing and Debenture

(Amount in Rs. Crores)

Fiscal Year	Borrowing (Including Debenture)	Change Rate (%)	Proportion of Total Liabilities (%)
2062/63	55	-	2.53
2063/64	80	45.45	2.85
2064/65	105	31.25	2.66
2065/66	108.88	3.70	2.03
2066/67	108.73	- 0.14	1.88
2067/68	133.08	23.31	2.25
Average	98.45	20.71	2.37

Source:- Annual Report of Nepal Investment Bank Ltd.

Figure 4.2
Borrowing & Debenture



From the above figure and table the amount of borrowing and debenture is increasing every year except slightly decreased in the F/Y 66/67. The change rate in borrowing and debenture is decreasing until F/Y 66/67 where the changing rate reached to -0.14% after then it increased to 23.31% in F/Y 67/68. The proportion to total liabilities is in fluctuation mode. The highest proportion to total liabilities is 3.11% in F/Y 64/65. The average amount of Borrowing and Debenture is Rs98.45crores. The amount of borrowing and debenture are increasing and the proportion to total liabilities is also acceptable this shows the Debenture and Borrowing of Nepal Investment Bank Ltd is in good position.

4.3 Loans and Advances

Loan is the money lend on condition that is repaid either in installment or at all at once on agreed date and usually that the borrower pays the lenders an agreed rate of interest where as advance is a money paid on account or a loan before the transaction starts. It is taken in assets side of balance sheet on Nepal Investment Bank limited.

Table 4.3

Loans and Advances of Nepal Investment Bank Limited

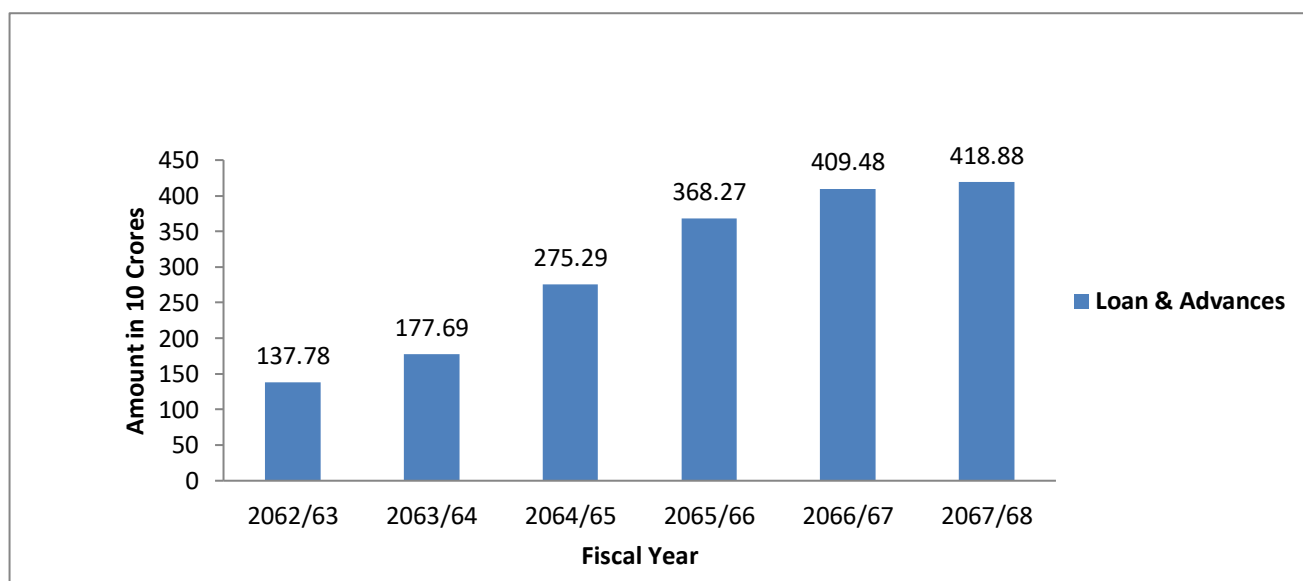
(Amount in Rs. 10 Crores)

Fiscal Year	Amount	Change Rate (%)	Proportion of TL (%)
2062/63	137.78	-	60.64
2063/64	177.69	28.97	63.30
2064/65	275.29	44.80	69.17
2065/66	368.27	33.78	68.75
2066/67	409.48	11.19	70.68
2067/68	418.88	2.30	70.77
Average	297.90	24.21	67.21

Source:- Annual Report of Nepal Investment Bank Ltd.

Figure 4.3

Loans & Advances



From the above figure and table, the amount of loans and advances are in increasing trend so we may say that the lending has been well managed through proper risk management and appraisal process. The annual percentage change rate is increasing until F/Y 65/66 and then it

decreased to 11.19% in F/Y 66/67 and to 2.30% in F/Y 67/68 but the proportionate to total liabilities is in increasing trend which is increased from 60.64% in F/Y 62/63 to 70.77% in F/Y 67/68 except slight decrease in F/Y 65/66 and the average amount of Loans and Advance is Rs2979crores.

4.4 Cash and Bank Balance

Cash and Bank balance is short term assets which companies keep to meet short-term obligations. Generally cash and bank balance are maintained to grab the short term opportunities. Nepal Investment Bank Ltd has also certain amount as cash and bank balance.

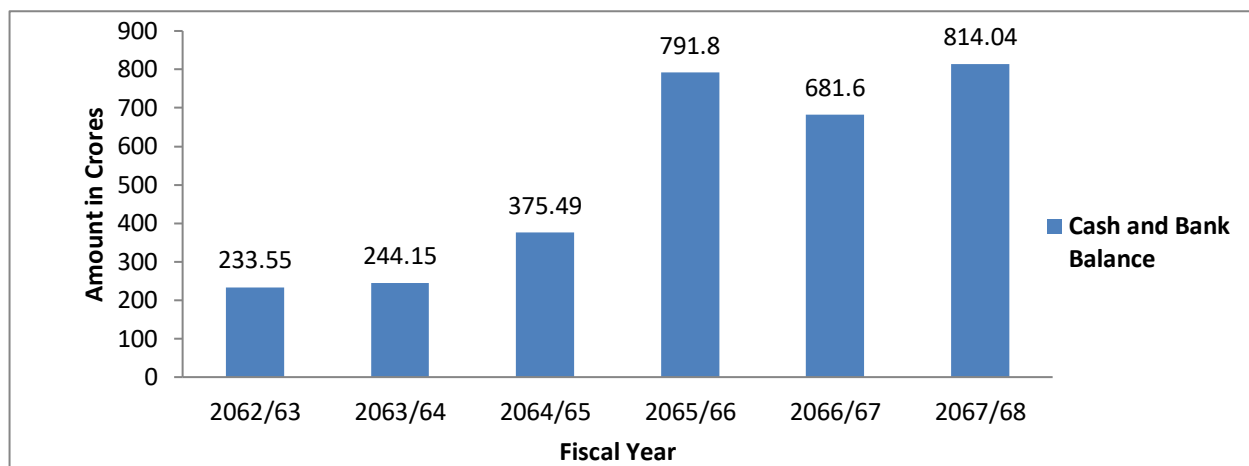
Table 4.4
Cash and Bank Balance

Amount in Crores

Fiscal Year	Cash and Bank Balance	Change Rate (%)	Proportion of Total Liabilities (%)
2062/63	233.55	-	10.74
2063/64	244.15	4.54	8.70
2064/65	375.49	53.79	9.53
2065/66	791.80	110.87	14.77
2066/67	681.60	-13.92	11.76
2067/68	814.04	19.43	13.76
Average	523.44	34.94	11.54

Source:- Annual Report of Nepal Investment Bank Ltd.

Figure 4.4
Cash and Bank Balance



From the above table and diagram, it is seen that Nepal Investment Bank Ltd has maintained certain amount in Cash and Bank Balance. The amount of Cash and Bank Balance is in increasing trend except in F/Y 66/67. The amount are 233.55 Crores in F/Y 62/63, 244.15 Crores in F/Y 63/64, 375.49 in F/Y 64/65, 791.80 in F/Y 65/66, 681.66 in F/Y 66/67 and 814.04 in F/Y 67/68. The proportionate of change rate is fluctuating, the highest change rate is 110.87% in the F/Y 65/66 and the lowest change rate is -13.92% in the F/Y 66/67 and the proportionate to total liabilities is also fluctuating. The average amount of cash and bank balance is Rs523.44crores.

4.5 Reserves and Surplus:-

Reserve and Surplus are the part of total liabilities and equity. Reserve and surplus is the part of capital of a firm other than share capital largely arising from retained profit or from the issue of share capital at more than its normal value.

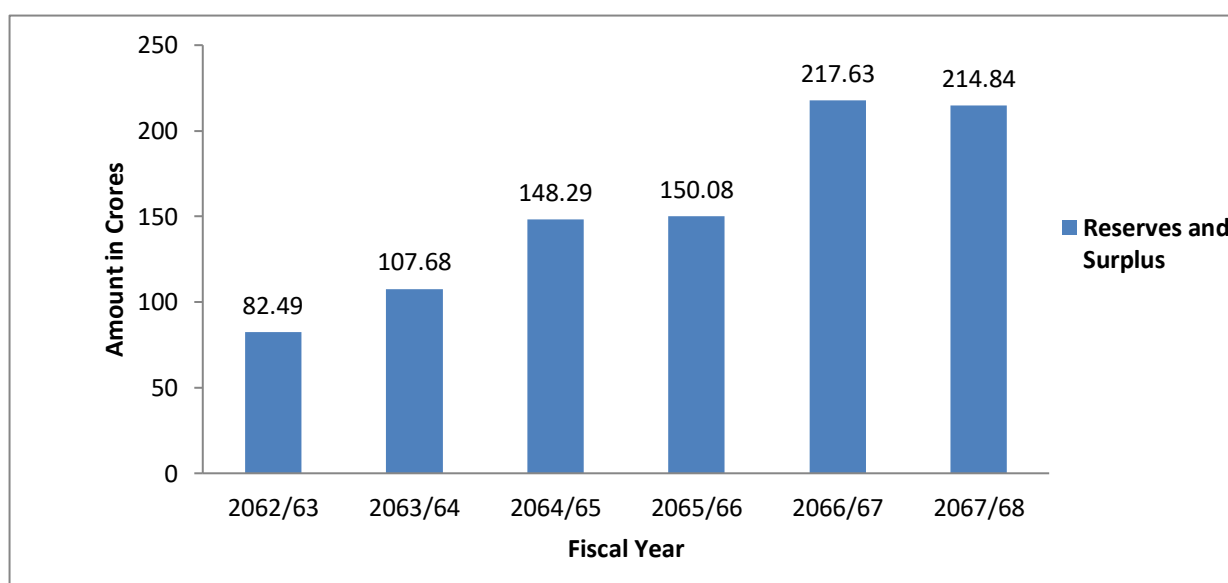
Table 4.5
Reserves and Surplus

Amount in Crores

Fiscal Year	Reserves and Surplus	Change Rate (%)	Proportion of Total Liabilities (%)
2062/63	82.49	-	3.80
2063/64	107.68	30.54	3.84
2064/65	148.29	37.71	3.76
2065/66	150.08	1.21	2.80
2066/67	217.63	45.00	3.76
2067/68	214.84	-1.28	3.63
Average	153.50	22.64	3.60

Source:- Annual Report of Nepal Investment Bank Ltd.

Figure 4.5
Reserves and Surplus



The amount of Reserve and Surplus is 82.49 Crores in F/Y 62/63, 107.68 Crores in F/Y 63/64, 148.68 Crores in F/Y 64/65, 15.08 Crores in F/Y 65/66, 217.63 Crores in F/Y 66/67 and 214.84 in F/Y 67/68. The amount is increasing from F/Y 62/3 to F/Y 66/67 and it

decreased slightly in F/Y 67/68. The annual change rate is fluctuating and it is negative in F/Y 67/68 by -1.28%. The proportionate to total capital is also fluctuating and the average amount of reserves and surplus is Rs153.50 crores.

4.6 Total Capital and Liabilities:-

Table 4.6

Total Capital and Liabilities Position

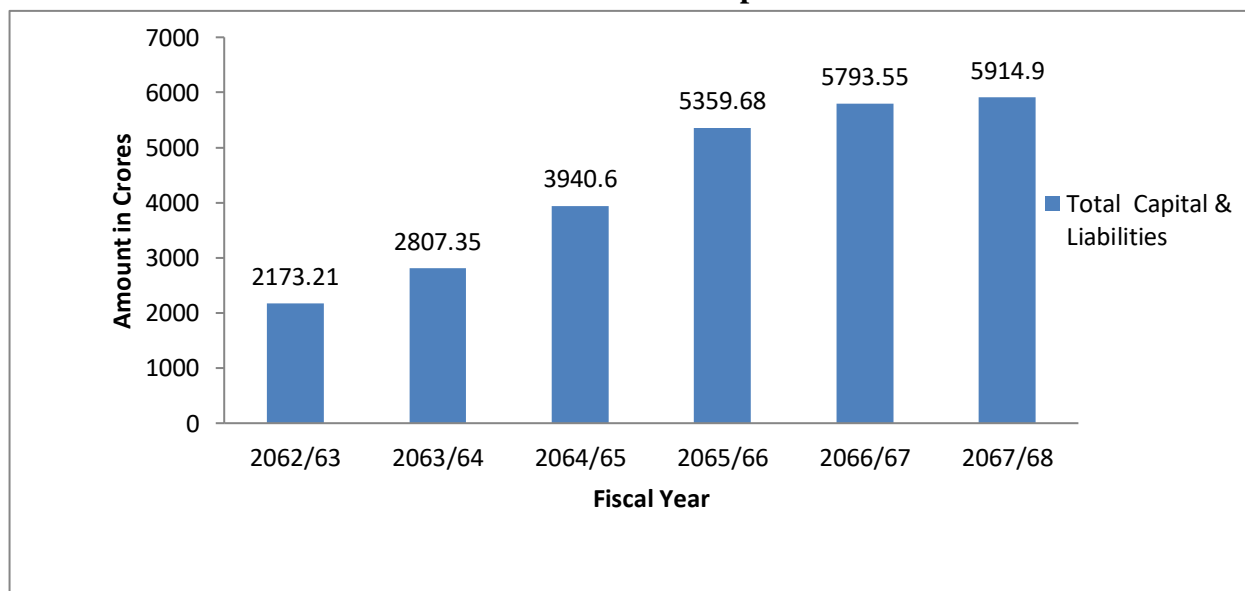
Amount in Crores

Fiscal Year	Total Amount	Change Rate (%)	Proportion of Total Liabilities (%)
2062/63	2173.21	-	100
2063/64	2807.35	29.18	100
2064/65	3940.60	40.37	100
2065/66	5359.68	36.01	100
2066/67	5793.55	8.10	100
2067/68	5914.90	2.09	100
Average	4331.55	23.15	

Source:- Annual Report of Nepal Investment Bank Ltd.

Figure 4.6

Total Liabilities and Capital



The capital and liabilities is all the items on the left hand side of balance sheet. The total amount of the capital and liabilities of Nepal Investment Bank Limited is continuously increasing with inconsistent changing rate. It is Rs 2173.21 Crores in F/Y 62/63, Rs 2807.35 Crores in F/Y 63/64, Rs 3940.60 Crores in F/Y 64/65, Rs 5359.68 Crores in F/Y 65/66, Rs 5793.55 Crores in F/Y 66/68 and Rs 5914.90 Crores in F/Y 67/68. The whole liabilities depend on deposit so if there is high deposit the liabilities is also high. We came to know that the deposit is also increasing every year. The annual change rate is 29.18% in F/Y 63/64, 40.37% in F/Y 64/65, 36.01% in F/Y 65/66, 8.10% in F/Y 66/67 and 2.09% in F/Y 67/68. The annual change rate of total capital and liabilities is in fluctuating rate. The average total amount of capital and liabilities is Rs 4331.55 crores and the average change rate is 23.15%. The capital and liabilities position depend on numerous internal and external factors.

The second objective of this research under study is to analyze the composition of the Mixture of debt and equity capital of Nepal Investment Bank Limited. A strong balance sheet is an important consideration for investing in a company's stock. The strength of company's balance sheet can be evaluated by three broad categories of investment quality measurements, working capital adequacy, assets performance and capital structure. In this research under study we are looking at evaluating balance sheet strength based on the composition of a company's capital structure.

A company's capitalization describes the composition of a company's permanent or long term capital which consists of a combination of debt and equity. A healthy proportion of equity capital is an indication of financial fitness. A company considered too highly levered may find its freedom of action restricted by its creditors and or may have its profitability hurt as a result of paying high interest costs. There is no magic proportion of debt that a company can take on. The debt equity relationship varies according to industries involved, a company line of business and its stage of development. However, business investors are better off putting their money into companies with strong balance sheet. In brief we can say that companies should have lower debt and higher equity levels.

In this context, we have calculated various capital ratios and indicators to evaluate the composition and mixture of debt and equity of Nepal Investment Bank Limited. In general we have used following ratios to assert the financial strength of the bank's capitalization structure. They are shareholder's equity, debt to equity ratio, debt to total capital ratio, equity capitalization of NIBL, debt capacity of NIBL, return on capital employed and return on equity. In order to analyze the capital structure management of the banks the following components has been discussed and presented in that table and figure.

4.7 Composition of Shareholder's Equity:-

Table 4.7

Composition of Shareholder's Equity

Amount in Crores

Particular	2062/63	2063/64	2064/65	2065/66	2066/67	2067/68
Paid-Up Capital	59.06	80.14	120.40	240.71	240.91	301.13
Reserve Fund	82.49	107.68	148.28	150.08	217.63	214.84
Total Shareholder's Equity	141.55	187.82	268.68	390.79	458.54	515.97
No. of Shares	5906000	8014000	12040000	24071000	24091000	30113000
Net Worth per Share	239.6715	234.3649	223.1561	162.3489	190.3366	171.3446

Source:- Annual Report of Nepal Investment Bank Ltd.

The paid up capital of Nepal Investment Bank Limited is Rs 59.06 Crores, Rs 80.14 Crores, Rs 120.40 Crores, Rs 240.71 Crores, Rs 240.91 Crores and Rs 301.13 Crores in the F/Y 62/63, F/Y 63/64, F/Y 64/65, F/Y 65/66, F/Y 66/67 and F/Y 67/68 respectively. Similarly reserve and surplus are Rs 82.49 Crores, Rs 107.68 Crores, Rs 148.28 Crores, Rs 150.08 Crores, Rs 217.63 Crores and Rs 214.84 Crores in the F/Y 62/63, F/Y 63/64, F/Y 64/65, F/Y 65/66, F/Y 66/67 and F/Y 67/68 respectively. The total sum of paid up capital and reserve and surplus is considered as shareholder's equity which is also the net worth of the bank. Net worth per share is calculated by dividing total shareholder's equity by no of share outstanding.

The net worth per share of Nepal investment Bank Limited is Rs 239.67, Rs 234.36, Rs 223.16, Rs 162.35, Rs 190.34 and Rs 171.35 in the F/Y 62/63, F/Y 63/64, F/Y 64/65, F/Y 65/66, F/Y 66/67 and F/Y 67/68 respectively. It shows that it has increasing and decreasing trend. So the net worth per share is not consistent in all fiscal years. We can see that Reserve and Surplus are more than paid up capital in every fiscal year. Hence we conclude that net worth per share highly depends on reserve and surplus. The net worth position of Nepal Investment Bank Limited is shown in following diagram.

Figure 4.7
Shareholder's Equity

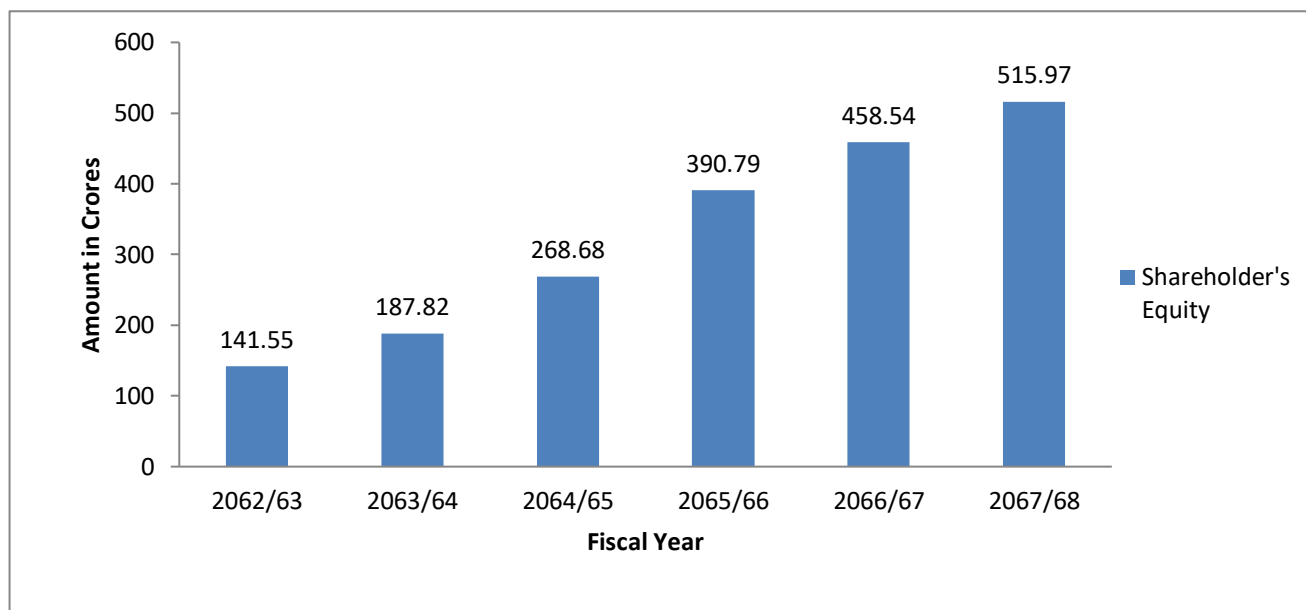


Table 4.8
The Net Worth Position and Index Table

Amount in Crores

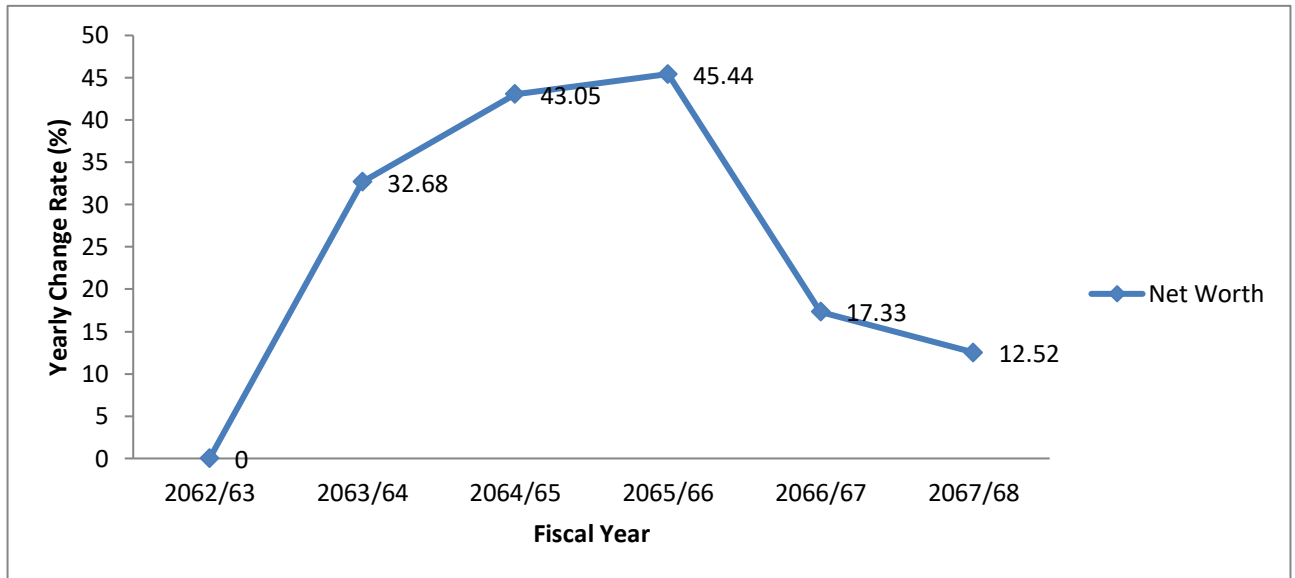
Fiscal Year	Net Worth	Index	Yearly Change Rate (%)	Proportion of Total Liabilities (%)
2062/63	141.55	100	-	6.51
2063/64	187.83	132.69	32.68	6.69
2064/65	268.68	143.05	43.05	6.82
2065/66	390.79	145.45	45.44	7.29
2066/67	458.54	117.34	17.33	7.91
2067/68	515.97	112.52	12.52	8.72
Average	327.23		30.20	7.32
S.D.			17.29	0.30
C.V.			57.25%	4.10%

Source:- Annual Report of Nepal Investment Bank Ltd.

The yearly change rate is increasing and decreasing mode. Until F/Y 65/66 it is in increasing mode and after that is in decreasing mode which is 12.52% in the F/Y 67/68. The change rate is 32.68% in F/Y 63/61, 43.05 in F/Y 64/65, in F/Y 65/66, in F/Y 66/67 and 12.52% in F/Y 67/68 and the average net worth amount is Rs327.23 crores.

Figure 4.8

The line diagram of annual change rate of shareholder’s equity



The Standard Deviation (S.D) and Coefficient of Variation (C.V) of Annual percentage change rate of shareholder’s equity are 17.29 and 57.25 respectively and the annual average change rate is 30.20. Similarly Standard Deviation (S.D) and Coefficient of Variation (C.V) of proportion of Shareholder’s equity on total capital and liabilities are 0.30 and 4.10 respectively and average proportion to Shareholder’s equity on total capital and liabilities is 7.31.

4.8 Analysis of Debt Equity Ratio:-

Debt-equity ratio is the most widely used leverage ratio to evaluate the long-term solvency of a firm. This ratio expresses the relationship between debt capacity and equity capital, and reflects their relative claim on the assets of a firm. It is calculated by dividing total equity. The ratio is more significant to determine whether fixed deposit financing is adequate to strengthen the profitability of bank. It shows the relationship between borrowed fund and owner’s capital. The higher debt equity ratio shows a large share of financing by the creditors relatively to the owner.

Table 4.9**Debt Equity Ratio Position**

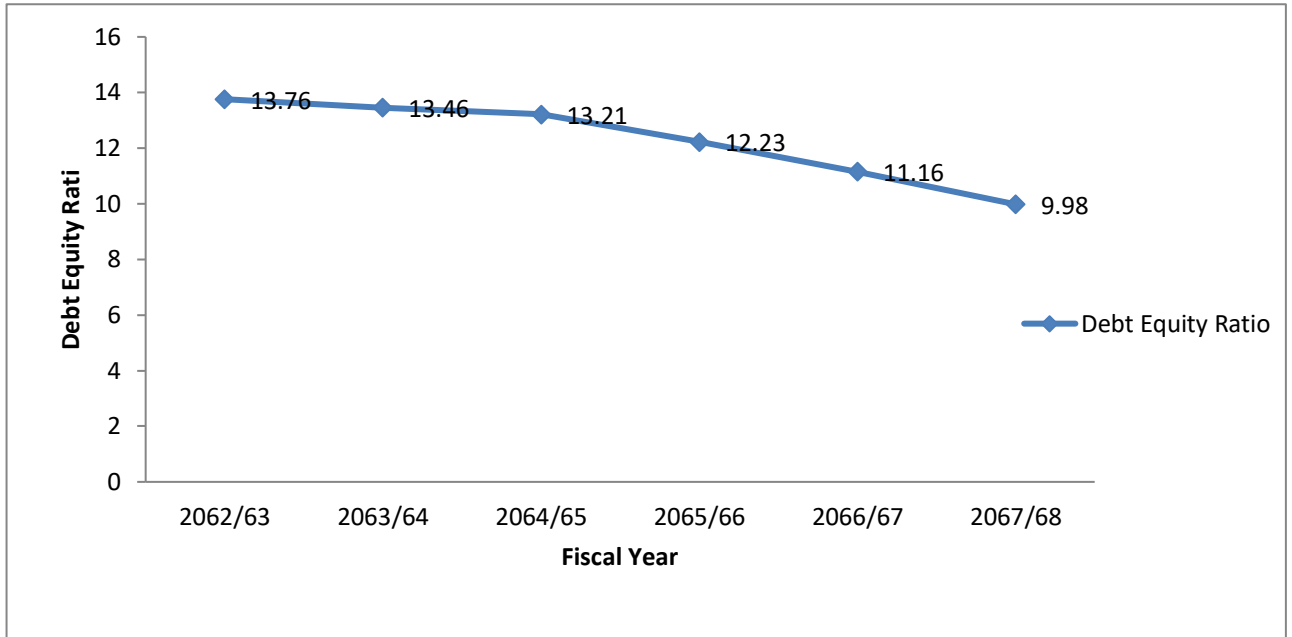
Fiscal Year	Debt Equity Ratio	Change Rate (%)
2062/63	13.76	-
2063/64	13.46	-2.18
2064/65	13.21	-1.86
2065/66	12.23	-7.42
2066/67	11.16	-8.75
2067/68	9.98	-10.57
Average	12.30	-6.16
S.D.	1.35	4.08
C.V.	10.98%	66.23%

Source:- Annual Report of Nepal Investment Bank Ltd.

From the above table it is seen that Debt equity ratio is in decreasing trend. The debt ratios are 13.76, 13.46, 13.21, 12.23, 11.16 and 9.98 in F/Y 62/63, F/Y 63/64, F/Y 64/65, F/Y 65/66, F/Y 66/67 and F/Y 67/68 respectively. The Standard Deviation and Coefficient of Variation is 1.35 and 10.98% respectively and the average debt ratio is 12.30. Since the debt equity ratio is in decreasing trend the change rates are all in negative value the change rate is -2.18%, -1.86%, -7.42, -8.75 and -10.57 in F/Y 62/63, F/Y 63/64, F/Y 64/65, F/Y 65/66, F/Y 66/67 and F/Y 67/68 respectively. The average annual change rate is -6.16% and the Standard Deviation and Coefficient of Variation of the annual change rate is 4.08 and 66.23% respectively.

Figure 4.9

The line diagram of Debt Equity Ratio



4.9 Debt to Total Capital Ratio (DCR) Analysis:

Table 4.10

Debt to Total Capital Ratio (DCR) Position

Fiscal Year	Debt to Total Capital Ratio	Change Rate (%)
2062/63	0.58	-
2063/64	0.95	63.79
2064/65	0.81	-14.74
2065/66	0.44	-45.68
2066/67	0.47	6.82
2067/68	0.37	-21.28
Average	0.60	-2.22

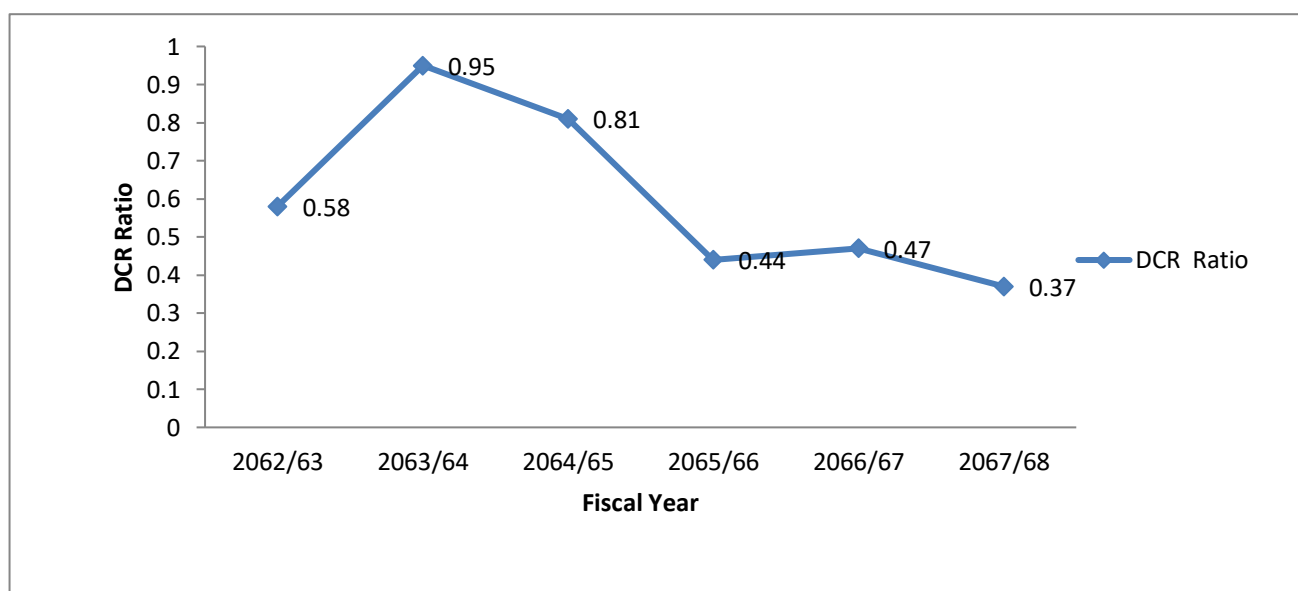
S.D.	0.24	32.89
C.V.	40%	1481.53%

Source:- Annual Report of Nepal Investment Bank Ltd.

Debt to Total Capital ratio is 0.58, 0.95, 0.81, 0.44, 0.47 and 0.37 in F/Y 62/63, F/Y 63/64, F/Y 64/65, F/Y 65/66, F/Y 66/67 and F/Y 67/68 respectively. The average DCR ratio is 0.60 and the Standard Deviation and Coefficient of Variation is 0.24 and 40 respectively. The ratio is fluctuating. The annual change rate is also fluctuating it is 63.79%, -14.74, -45.68, 6.82 and -21.28 in F/Y 62/63, F/Y 63/64, F/Y 64/65, F/Y 65/66, F/Y 66/67 and F/Y 67/68 respectively. The average annual change rate is- 2.22% and the Standard Deviation and Coefficient of Variation is 32.89 and 1481.53 respectively.

Figure 4.10

The line diagram of Debt Total Capital Ratio



4.10 Analysis of Debt Capacity of Nepal Investment Bank Limited

Interest Coverage ratio reflects the firm's ability to pay interest out of earnings. This ratio shows the number of times the interest charges are covered by funds that are ordinarily available for their payment. Too high or too low ratio is unfavorable to the banks. Too high ratio implies unused debt capacity or a firm's conservativeness in using debt to its best

advantage. Whereas, low ratio imply a danger signal that the firm is using excessive debt and does not have the ability to offer assured payment of interest to the creditors.

Table 4.11

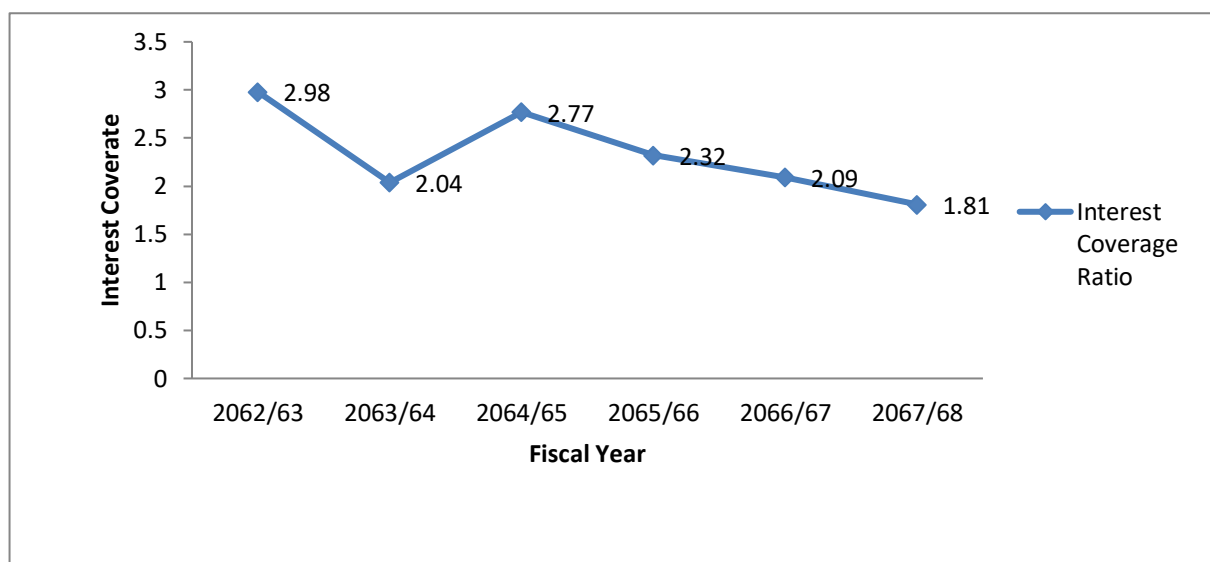
Interest Coverage Ratio (ICE) Position

Fiscal Year	Interest Coverage Ratio	Change Rate (%)
2062/63	2.98	-
2063/64	2.04	63.79
2064/65	2.77	-14.74
2065/66	2.32	-45.68
2066/67	2.09	6.82
2067/68	1.81	-21.28
Average	2.34	-7.06
S.D.	0.41	20.89
C.V.	17.52%	295.89%

Source:- Annual Report of Nepal Investment Bank Ltd.

Figure 4.11

The line diagram of Interest Coverage Ratio



From the above table it is seen that the Interest Coverage ratio is fluctuating. Interest Coverage ratio is 2.89, 2.04, 2.77, 2.32, 2.09 and 1.81 in F/Y 62/63, F/Y 63/64, F/Y 64/65, F/Y 65/66, F/Y 66/67 and F/Y 67/68 respectively. The average ratio is 2.34 and the Standard Deviation and Coefficient Variation is 0.41 and 17.52 respectively. The annual change rate is also fluctuating which is 63.49%, -14.74%, -45.68%, 6.28% and 21.28% for the F/Y 64/65, F/Y 65/66, F/Y 66/67 and F/Y 67/68 respectively. The average annual change rate is -7.06% and the Standard Deviation and Coefficient of Variation is 20.89 and 295.89% respectively.

4.11 Price Earning Ratio Analysis

Price EarningRatio is simply ratio between market price per share and earnings per share. In other words, this represents the amount which investors are willing to pay for each rupee of the firm's earnings. The higher ratio indicates the greater confidence of investor in the firm's future.

Table 4.12

Price Earning (P/E) Ratio

Fiscal Year	Price Earnings Ratio	Change Rate (%)
2062/63	21.23	-
2063/64	27.63	30.15
2064/65	42.34	53.24
2065/66	37.09	-12.40

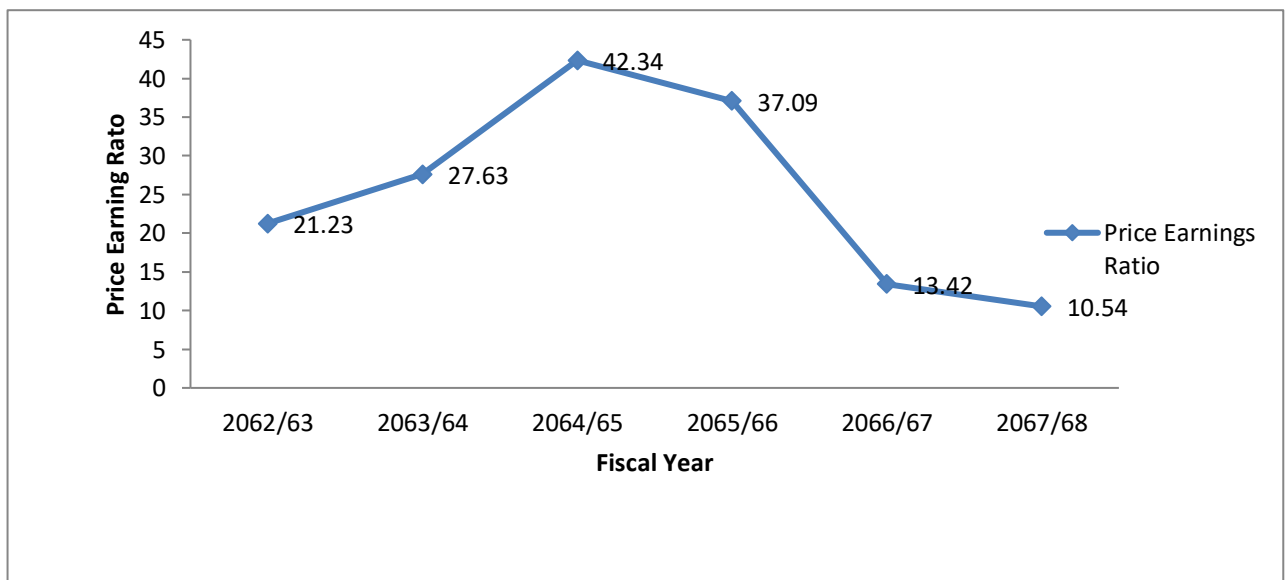
2066/67	13.42	-63.82
2067/68	10.54	-21.46
Average	25.38	-2.86
S.D.	11.62	0.69
C.V.	45.78%	-24.13%

Source:- Annual Report of Nepal Investment Bank Ltd.

From the above table the Price Earning Ratio is fluctuating, it is 21.23, 27.63, 42.34, 37.09, 13.42 and 10.54 in F/Y 62/63, F/Y 63/64, F/Y 64/65, F/Y 65/66, F/Y 66/67 and F/Y 67/68 respectively. The Average P/E ratio is 25.38 and the Standard Deviation and Coefficient of Variation is 11.62 and 45.78% respectively. The annual change rate is also fluctuating sometime it is seen in positive value and sometime in negative value. The Average change rate is -2.86 and the Standard Deviation and Coefficient of Variation is 0.69 and -24.13% respectively.

Figure 4.12

The line diagram of Price Earning Ratio



4.12 Return on Assets (ROA) Analysis

It is firm's return on total assets which measures overall effectiveness of management in generating profit with its available assets. The higher the firm's return on assets the better it is doing and vice versa.

Table 4.13

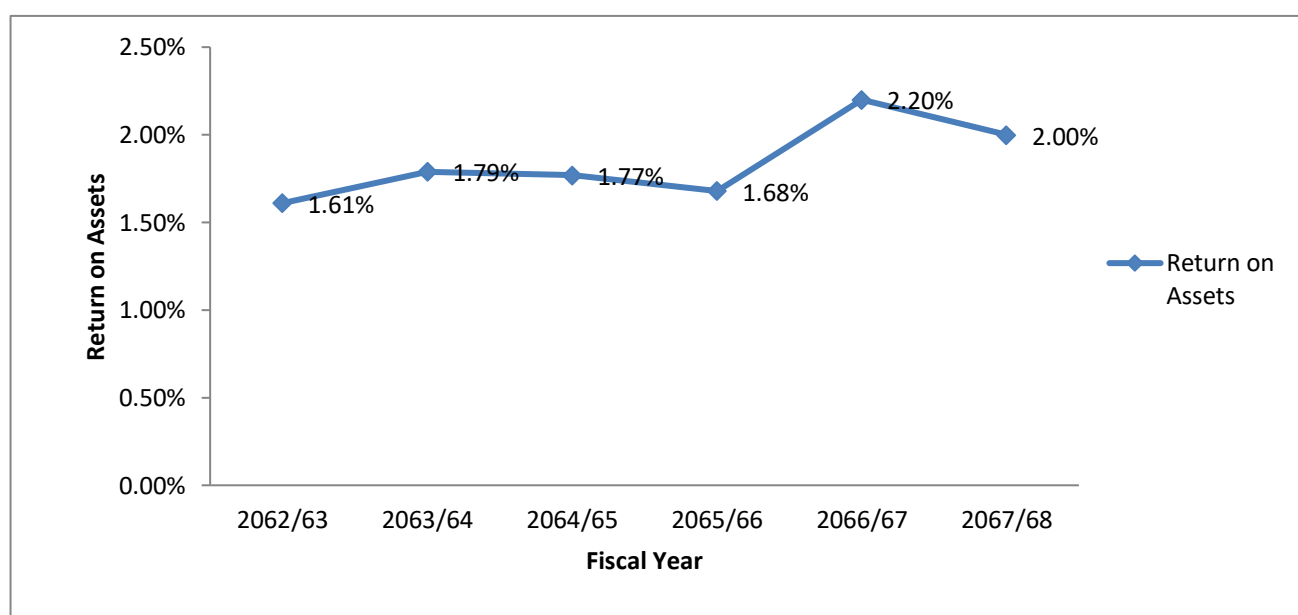
Return on Assets (ROA)

Fiscal Year	Return on Assets	Change Rate (%)
2062/63	1.61%	-
2063/64	1.79%	0.18
2064/65	1.77%	-0.02
2065/66	1.68%	-0.09
2066/67	2.20%	0.52
2067/68	2.00%	-0.20
Average	1.84	7.80
S.D.	0.20	23.34
C.V.	10.87%	299.23%

Source:- Annual Report of Nepal Investment Bank Ltd.

Figure 4.13

The line diagram of Return on Asset



The ROA is fluctuating also the annual change rate. The average ROA is 1.84 and the Standard Deviation and Coefficient of Variation are 0.20 and 10.87 respectively. The average

annual change of ROA is 7.8 and the Standard Deviation and Coefficient of Variation is 23.34 and 299.23 respectively.

4.13 Return on Equity (ROE) Analysis

It measures the return on the owner's investment in the firm. Higher ratio of return on equity is better for owner.

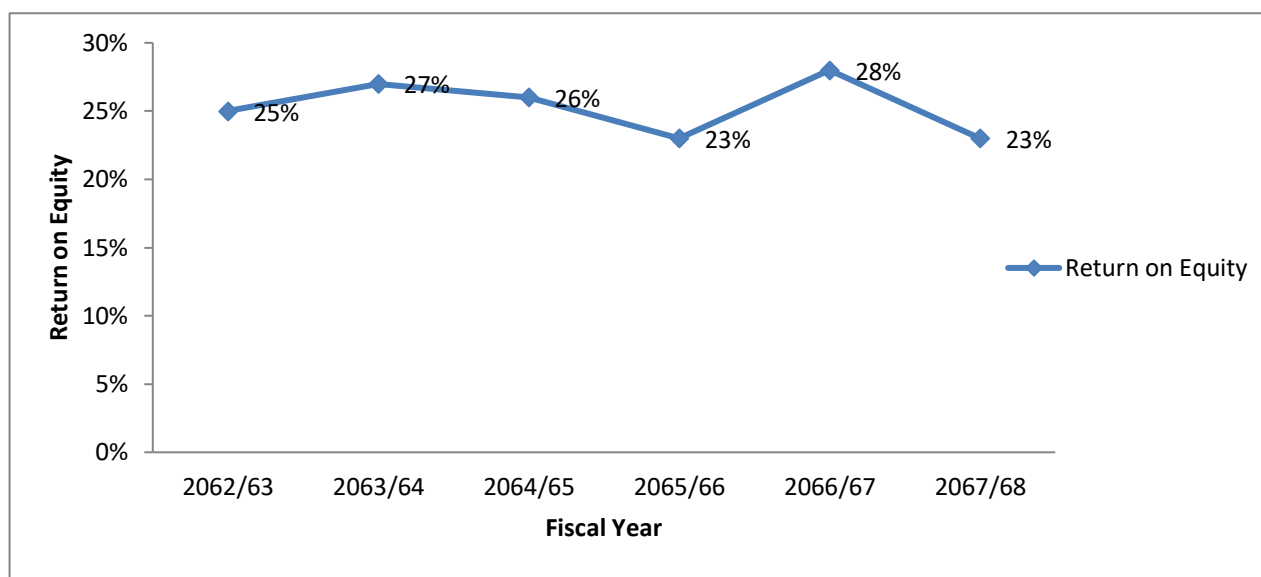
Table 4.14
Return on Equity(ROE)

Fiscal Year	Return on Equity	Change Rate (%)
2062/63	25%	-
2063/64	27%	0.18
2064/65	26%	-0.02
2065/66	23%	-0.09
2066/67	28%	0.52
2067/68	23%	-0.20
Average	25.33	-0.67
S.D.	1.89	12.91
C.V.	7.46%	1926.87%

Source:- Annual Report of Nepal Investment Bank Ltd.

Figure 4.14

The line diagram of Return on Equity



The ROE is fluctuating also the annual change rate. The ROE of the bank is 25%, 27%, 26%, 23%, 28% and 23% in F/Y 62/63, F/Y 63/64, F/Y 64/65, F/Y 65/66, F/Y 66/67 and F/Y 67/68 respectively. The average ROE is 25.33 and the Standard Deviation and Coefficient of Variation are 1.89 and 7.46 respectively. The average annual change of ROE is -0.67 and the Standard Deviation and Coefficient of Variation is 12.91 and 1926.87 respectively.

4.14 Profitability Analysis

Profitability measures efficiency of any firm. It provides an incentive to achieve the goal of a firm. Profitability ratios are those ratios which indicate degree of success in achieving desired profit level. Profit is an important factor that determines the firm's expansion and diversification. A required level of profit is necessary for the firm's growth and survival in the competitive environment. The third main objective of this study is to examine the different profitability ratio of Nepal Investment Bank Limited. In which we have included Earnings per Share, Dividend per Share, Dividend payout Ratio and Market Value per Share of the bank as well as the operating and net profit of the bank.

Table 4.15

Profitability Analysis

Fiscal Year	EPS	DPS	DPR (%)	ROA	ROE
2062/63	59.35	32.90	55.46	1.61%	25%
2063/64	62.57	18.77	30.00	1.79%	27%
2064/65	57.87	23.37	40.38	1.77%	26%

2065/66	37.42	7.48	20.00	1.68%	23%
2066/67	52.55	13.14	25.00	2.20%	28%
2067/68	48.84	24.42	50.00	2.00%	23%
Average	53.10	20.01	36.81	1.84	25.33
S.D.	8.32	8.19	12.93	0.20	1.89
C.V.	15.67	40.93	35.13	10.87	7.46

Source:- Annual Report of Nepal Investment Bank Ltd.

Earning per Share is one of the Market related ratio. It is calculated to see market performance of the bank. The EPS of Nepal Investment Bank Limited is fluctuating. The highest EPS is 62.57 in F/Y 63/64 and the lowest EPS is 37.42 in the year F/Y 65/66.

Dividend refers to the portion of net income paid out to shareholders. It is paid in cash or stock. The dividend payout ratio depends upon the policy of the company. The Return on Assets (ROA) measures the relationship between Net Income and Total Assets. The ROA is fluctuating. Similarly Return on Equity is the relation between earning available to equity shareholders and equity shareholder's fund. The objective of computing this ratio is to find how efficiently the funds supplied by the equity shareholders have been used. The ROE 25%, 27%, 26%, 23%, 28% and 23% in F/Y 62/63, F/Y 63/64, F/Y 64/65, F/Y 65/66, F/Y 66/67 and F/Y 67/68 respectively. The Average ROE is 25.33 and the Standard Deviation and Coefficient of Variation is 1.89 and 7.46 respectively.

4.15 Net Profit and Operating Profit:-

Operating profit is a profit made by firm as a result of its principal trading activity. This is arrived at by deducting its operating expenses from its trading profit or adding its operating expenses to its trading loss where as Net profit is the gross profit less all the other cost of a firm in addition to those include in the cost of sales. It is shown before and after taxation in the profit and loss account.

Table 4.16

Profit Position

Amount in Crores

Fiscal Year	Net profit	Operating Profit
2062/63	3.51	6.09
2063/64	5.02	8.53
2064/65	6.97	11.56

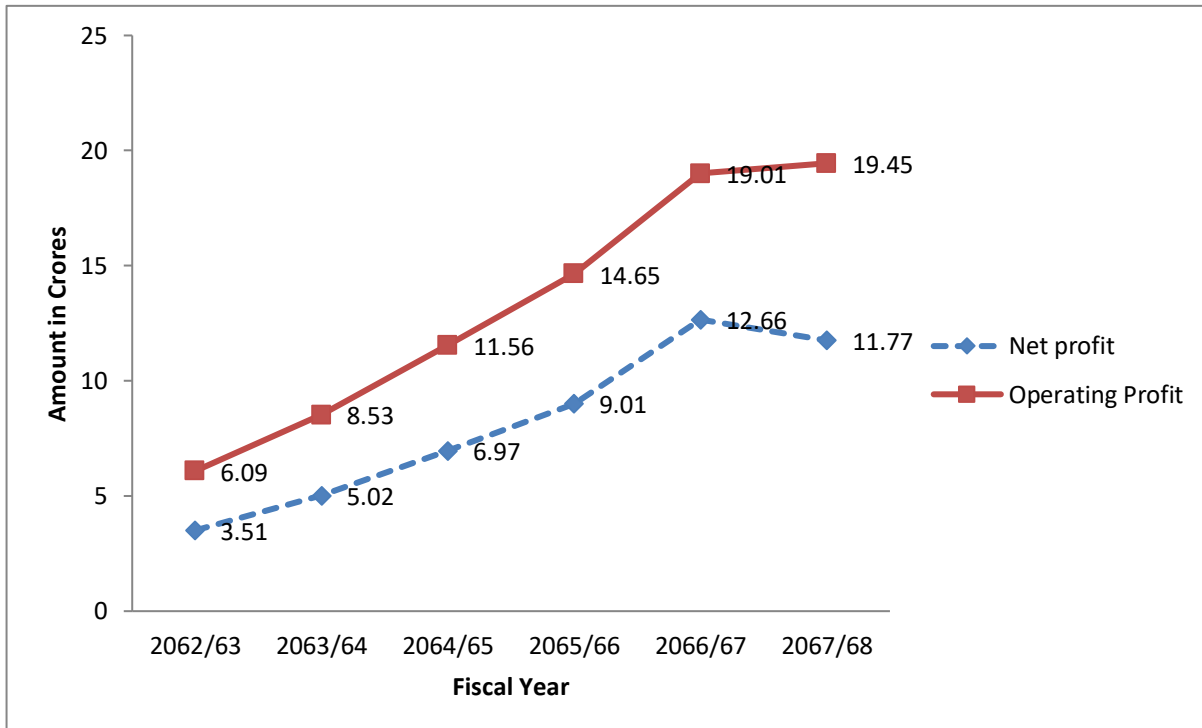
2065/66	9.01	14.65
2066/67	12.66	19.01
2067/68	11.77	19.45

Source:- Annual Report of Nepal Investment Bank Ltd.

The net profit are Rs 3.51 Crores, Rs 5.02 Crores, Rs 6.97 Crores, Rs 9.01 Crores, Rs 12.66 Crores and Rs 11.77 Crores in F/Y 62/63, F/Y 63/64, F/Y 64/65, F/Y 65/66, F/Y 66/67 and F/Y 67/68 respectively. The Net Income is increasing except in F/Y 67/68. Similarly the amount of Operating Profit is in increasing trend it is Rs 6.09 Crores, Rs 8.53 Crores, Rs 11.56 Crores, Rs 14.65 Crores, Rs 19.01 Crores and Rs 19.45 Crores in F/Y 62/63, F/Y 63/64, F/Y 64/65, F/Y 65/66, F/Y 66/67 and F/Y 67/68 respectively. The trend of Operating Profit is in increasing trend. Thus, it has been successfully managing the business profitability.

Figure 4.15

Line Diagram of Profit Position



4.16 Major Findings

- The position of Share Capital as shown in the table is lesser than the liabilities. In every fiscal year the share capital is increasing. The highest increased rate is 99.94% in F/Y 2065/66 and the lowest increased rate is 0.08% in F/Y 2066/67 and the proportion to total liabilities is greater in F/Y 2064/65 which is 6.11%.
- Debenture and Borrowings are increasing in all fiscal year except in the F/Y 2066/67 which is slightly decreased by -0.14% and the proportion to total liabilities is fluctuating.
- Loan and Advances is growing in every fiscal year. The growth in lending has been well managed through proper risk management and appraisal process. The bank has a major focus on wholesalers and retailer n commercial segment and in the housing loan in terms of retail segment where majority of the growth took place. NIBL has been pioneers of retail lending products. The position of advances as shown in figure has a continuous increasing trend.
- With the changing fiscal years Reserve & Surplus are also changing. It has a increasing and decreasing trend of changing. It is increased in the last five fiscal years but decreased to -1.28% in the F/Y 2067/68.
- The amount of Cash and Bank Balance is fluctuating. Except in F/Y 2066/67 the amount is increasing in all the fiscal years. The amount is decreased by -13.92% in F/Y 2066/67.
- The total sum of paid up capital and reserve & Surplus is considered as shareholder's equity which is also the net worth of the bank. The shareholder equity increases due to several causes like decreasing capitalization rate, bigger reserve fund etc. Reserve & Surplus are more than paid up capital up to F/Y 2064/65 after then paid up capital is greater than Reserve & Surplus. Hence, we conclude that shareholder's equity highly depend upon both paid up capital and Reserve & Surplus.
- The debt equity ratio is more significant to determine whether fixed deposit financing is adequate to strength the profitability of the bank or not?. It shows the relationship between borrowed fund and owner's capital. The higher debt to equity ratio shows a large share of financing by the creditors relatively to the owners. A healthy capital structure that reflects low level of debt and a corresponding high level of equity is a very positive sign of investment policy. It has increasing and decreasing trend. It deals a lot about the total capitalization of the firm.
- The debt capacity of Nepal Investment Bank Limited is more fluctuating. The change rate is both, negative and positive. It shows the bank's capacity to earn sufficient profit to cover the interest of debt.
- The price earning ratio is fluctuating, it has both, positive and negative change rate. The highest P/E ratio is 42.34 in F/Y 2064/65 and the lowest is 10.54 in the F/Y 2067/68.
- Return on Assets (ROA) ratio is fluctuating. It measures overall effectiveness of management in generating profit with its available assets. The highest ROA is 2.20in F/Y 2066/67 and lowest is 1.61 in F/Y 2062/63.

- Return on Equity (ROE) ratio is fluctuating. The change rate is both positive and negative. It measures owner's investment in the firm.
- The profitability of common shareholder's investment can be measured through EPS, as EPS is related with market performance. The market performance of NIBL is quite satisfactory.
- Dividend per share is considered as an excellent when it is higher. Shareholders always prefer higher dividend per share. DPS of NIBL is fluctuating. The highest DPS is Rs 32.90 per share in F/Y 62/63 and the lowest DPS is Rs 7.48 per share in the F/Y 2065/66.
- The dividend payout ratio (DPR) shows how shareholder's earnings are distributed as dividend. The DPR is fluctuating; it is 55.46% in the F/Y 2062/63 and 20% in F/Y 2065/66.
- The ROA measures how well the total assets have been used by the management. The average ROA is 1.84. The ROA is fluctuating in all fiscal year. Similarly ROE is in satisfactory level which measures the relation between Net Income after distributing dividends to the preference shareholder and equity shareholders.
- The operating profit and net profit both are regularly increasing except net profit slightly decreased in the F/Y 2067/68. The highest net profit is in F/Y2066/67 Rs 12.66 Crores and the lowest net profit is in F/Y2062/63 Rs 3.51 Crores and the operating profit increased from RS 6.09 Crores to Rs 19.45 Crores form F/Y 2062/63 to F/Y 2067/68.

CHAPTER- V

SUMMARY, CONCLUSION AND RECOMMENDATION

Commercial Banks in Nepal have come across a long way to reach at the present status they hold in the national economy. Since from the beginning of the establishment of Nepal Bank Limited (NBL) in 1937 A.D. to present scenario with the emerging of new and growing bank have brought tremendous change in terms of services, capacity development and the way they serve customers.

Every business need capital to operate smoothly and capital structure is said to be the blood of the business. So, sound capital structure is crucial for the smooth operation of business. The main objective of this study is to find out the capital structure of the Nepal Investment Bank Ltd. The study is divided into five chapters. In order to fulfill this objective chapters are arranged in systematic way. This is the final chapter of the study. In the first chapter introduction about the corporation are presented. In the second chapter review of various related books, journals and other publications as well as unpublished master level dissertation have been presented. In the third chapter research methodology is presented. In the fourth chapter data are presented systematically and analyzed properly with financial and statistical tools.

In this final chapter, Summary, Conclusion and Recommendation to the Nepal Investment Bank Limited are presented.

5.1 Summary :-

Capital Structure refers the combination of long term sources of capital. In other word capital structure refers to the mix of long-term sources of funds such as debentures, long-term debt, preference share capital and equity share capital including reserves and surpluses. Theoretically, a financial manager should plan to optimum capital structure for his or her company. The optimum capital structure is obtained when the market value per share is the maximum. Financial analysis is the process of identifying the financial strength and weakness of firm by properly establishing relationship between the items of balance sheet and profit and loss account. Ratio Analysis is used by financial analysis for decision making. It will compare the bank's ratios to its past performance.

Capital structure and performance of Nepal Investment Bank Limited is done in this chapter. NIBL is one the commercial banks of Nepal have a large number of customer. It also a bank with high paid up capital. NIBL is the four times winner of the award named Bank of the Year in 2003, 2005, 2008 and 2010. NIBL has strived to establish itself as strong brand that creates an image of a local bank. The main concept of the study is to show the banking industry in Nepal and the role of Nepal Investment Bank Limited. The corporate vision and mission of NIBL is to evolve customer friendly institution by providing excellent professional services and financial related service. It is becoming the leader in field of financial sector.

Thus, main objective of the study under research are:

- i. To examine the existing financial position regarding capital structure.
- ii. To analyze the composition as well as of the mixture of debt and equity.
- iii. To examine the different profitability ratio
- iv. To suggest and recommend the financial position of Nepal investment Bank Limited.

The main significant of the study is to accomplish according to approved general format of the thesis of Tribhuvan University. It may be used for future research and future business plan or projects. This study is based on secondary data collected from annual report, financial statement etc. This study is concerned only about capital structure and analysis of Nepal Investment Bank Limited.

Capital Structure may be influenced by various factors but his study excludes those factors. For our convenience annual data has been taken which becomes easy for us to perform the study. Information and data are identified and collected. The collected data are properly processed and arranged in the required form for simplicity. Financial and statistical tools are used to analyze those data. Interpretation is made after doing analysis. In the last step, conclusion is drawn. Suggestions and Recommendations are made for the bank. The scheme of the study is divided into five chapters. Second and third chapter include review of literature and research methodology. Available data has been presented and analyzed in the fourth chapter. And his is the last chapter of the study which incorporates summary of the study, conclusion of the study and analysis and recommendation.

5.2 Conclusion :-

As per objective, analysis and interpretation made under study, Total liabilities and capital for all fiscal years are continuously increasing. It shows that overall situation of bank is growing up. The annual change rate is fluctuating. The share capital rates are not consistence in all fiscal years. In conclusion, we come to know that the bank is expanding its operation. Borrowing and Debenture are increasing in each fiscal year except in F/Y 2066/67 which is slightly decreased by -0.14%. The bank has to use certain level of debt if it cross its limitation it may be harmful for the bank.

The Reserve and Surplus is increasing every year except in F/Y 2067/68 which maximizes the shareholder's equity. Net worth per share is in increasing trend in all fiscal years. The amount in cash and bank balance is fluctuation. The profitability measures the success of the business. The profitability ratios are the financial tools. The different calculated profitability of NIB gives following conclusions.

Earning per share (EPS) of Bank is calculated to see the strength of the share in the market. It measures the profitability of the banks on per equity share basis. EPS of NIBL is fluctuating, the highest EPS is Rs 62.57 per share in the F/Y 2063/64 and the lowest EPS is in the F/Y Rs

37.42 per share in the F/Y 2065/66. The average EPS is Rs 53.10 per share. EPS has good market position and satisfactory to the shareholder. It has significant strength in the market.

Dividend per share shows the relationship between total amount of equity shareholder's earning to dividend paid to equity shareholders. It is computed to know how much per share the dividend is distributed to common stockholders. The DPS is inconsistent. The average DPS is Rs 36.81 Per share.

Return on Assets (ROA) is also known as firm's return on total assets, measure the overall effectiveness of management in generating profit with its available assets. The ROA of NIBL is fluctuating, the average ROA is 1.81% which is at satisfactory level. Return on Equity (ROE) measures the relation between net profit and total equity. It tells us that how much return the owner got from his investment. The Average ROE is 25.35 which is at satisfactory level. The operating profit and net profit both are regularly increasing except net profit slightly decreased in the F/Y 2067/68. It shows that NIBL is getting its business success due to its efficiency and effectiveness, different managerial practice and so on.

5.3 Recommendation :-

The bank's performance can be seen by various ways. Different analysis gives different recommendations and suggestions to the bank. On the basis of above analysis and descriptions. Following recommendations have been made for this organization. It is expected that the provided suggestions would help in taking decisions in relation to capital structure management and profitability for mitigating the constraints.

The recommendations are as below:-

- The capital and liabilities analysis says that the overall condition and position of capital and liabilities is very good. It is recommended to have its capital into high geared because at this point they can meet their fixed interest expenses. As the total amount of total capital and liabilities is increasing each year the bank is expanding its business too which is good for the bank.
- It is recommended to keep some debt policy and to provide various schemes to attract more depositors to the bank. As debenture and borrowing is increasing every, it is known that the bank has adopted certain policies to attract customers but the bank should also know that debt beyond certain level is harmful to the bank. Too much debt may make bank unable to pay interest rate to the depositors so the bank has to maintain the level of debt.
- The fluctuating level of cash and bank balance shows that the bank has maintained inconsistency amount on cash and bank balance. Cash and bank balance is maintained to grab the short-term opportunities so the bank has to maintain consistency level of cash and bank balance as too much amount increased unnecessary burden of paying interest and too low amount is unable to grab the short-term opportunities.
- The capital structure of the bank is highly levered. The proportion of debt and equity capital should be decided keeping in mind the effects of tax advantage and financial distress. Since the debt equity ratio of the bank is higher, the capital structure position

is not so good. Keeping this fact in mind, the bank is required to maintain improved capital structure by increasing equity base i.e. issuing more capital, expanding general reserve and retaining more earning. With this improved capital structure of the bank, it will compromise among the conflicting factor of cost and risk.

- Interest coverage ratio of NIBL in average is 2.34. Interest generally cannot be changed and interest is not right solution. Interest decreasing tool is generally out of control because market determines the interest rate. Therefore, increasing the interest rate is necessary to increase profit.
- The bank has been able to show a satisfactory level of returns ratio. ROA & ROE have a better position. Average EPS is Rs 53.10 per share which is at satisfactory level but DPS is fluctuating is highly from its average level. The average level of DPS is Rs 20.01 per share and the highest and lowest Rs 7.48 per share and Rs 32.90 per share in the F/Y 2065/66 and F/Y 2062/63 respectively. DPR is not satisfactory it is 20% in F/Y 2065/66 and 55% in F/Y 2062/63 which is highly fluctuating from its average level. Hence it is suggested to provide bonus share and cash dividend both at same time to increase and retain goodwill of the bank.
- Majority of commercial banks including Nepal Investment Bank Limited is found to be profit oriented ignoring their social responsibility, which is not a proper strategy to sustain in long term. Commercial banks have to open its branch in the remote areas since they are deprived from banking services. So it is suggested that the NIBL should give focus on social responsibility and open branch in different remote places of Nepal to serve society adequately which will definitely lead to profitability.
- The economic liberalization policy adopted by government has created an environment of strict competition even in the banking sectors. In this context we can conclude that the bank is performing well. The whole economy is in slack and there is liquidity crunchy. So, to get off this crisis, effort of single bank is not sufficient. Nevertheless NIBL should open all the doors to make it more competent. Especially it should invest, formulate and implement some sound and efficient financial strategies to meet required level of profitability as well as the social responsibility.

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Appendix I

Total Capital and Liabilities

(Amount in Crores)

Fiscal Year	Total Amount (X)
2062/63	2173.21
2063/64	2807.35
2064/65	3940.6
2065/66	5359.68
2066/67	5793.55
2067/68	5914.9
N=6	ΣX=25989.29

Calculation of Mean

$$\text{Mean } (\bar{X}) = \frac{\sum X}{N} = \frac{25989.29}{6} = 4331.55$$

Appendix II
Debt Equity Ratio

Fiscal Year	Debt Equity Ratio (X)	$x - \bar{X}$	$(x - \bar{X})^2$
2062/63	13.76	1.46	2.13
2063/64	13.46	1.16	1.35
2064/65	13.21	0.91	0.83
2065/66	12.23	-0.07	0.00
2066/67	11.16	-1.14	1.30
2067/68	9.98	-2.32	5.38
N= 6	$\Sigma X=73.80$		$\Sigma (x - \bar{X})^2= 10.99$

Calculation of mean, standard deviation, coefficient of variation

$$\text{Mean } (\bar{X}) = \frac{\sum X}{N} = \frac{73.80}{6} = 12.30$$

$$\text{Standard Deviation (S.D)} = \sqrt{\frac{1}{N} \sum (X - \bar{X})^2} = \sqrt{\frac{10.99}{6}} = 1.35$$

$$\text{Coefficient of Variation (CV)} = \frac{S.D}{\bar{X}} \times 100\% = \frac{1.35}{12.30} \times 100\% = 10.98\%$$