

**THE STUDY ON ANALYSIS OF CAPITAL STRUCTURE AND ITS EFFECTS
ON DIVIDEND OF UNILEVER NEPAL LIMITED**

BY:

Sandhya Devi Sharma

Prithvi Narayan Campus

T.U. Registration Number:12965-95

A Thesis Submitted to:

Office of the dean

Faculty of Management

Tribhuvan University

In partial fulfillment of the requirements of the degree of

Master of Business Studies (M.B.S)

Pokhara

March, 2010

RECOMMENDATION

This is to certify that the thesis:

Submitted by

Sandhya Devi Sharma

Entitled

A Study on Analysis of Capital Structure and Its Effect on
Dividend of Unilever Nepal Ltd

has been prepared as approved by this Department in the
prescribed format of faculty of management.

This thesis is forwarded for examination.

Supervisor

Name: Puspa Raj Sharma, PhD.

Signature:

Date:

Head of Department

Signature:

Campus chief

Signature:

Viva-Voce

**We have conducted the viva – voce examination of the
thesis presented by**

Sandhya Devi Sharma

Entitled

**A Study on Analysis of Capital Structure and Its Effect on
Dividend of Unilever Nepal Ltd**

**and found the thesis to be original work of the student and
written according to the prescribed format. We recommend the thesis
to be accepted as partial fulfillment of the requirements for
Masters Degree in Business Studies (M. B. S.)**

Viva – Voce Committee

Chairperson, Research Committee:

Member (Thesis supervisor):

Member (External expert):

Member:

Date:

ACKNOWLEDGEMENTS

This research works on "Analysis of Capital Structure and its effect on Dividend of Unilever Nepal Ltd".

I wish to express my profound gratitude to my thesis supervisor, Head of the Research Department, Dr. Puspa Raj Sharma, Faculty of Management, Prithivi Narayan Campus, Pokhara, for his valuable guidance for making the research work. His constant inspiration and support has resulted in the completion of this work. Similarly, I owe equal gratitude to Mr. Krishna Chandra Bhattarai, Mr. Rajendra Upadhaya, who supported and motivated in preparing this thesis.

I am grateful to all my teacher and friends who gave freely of their time, advice and continuous support. I would like to express my sincere thanks to the staffs of Western regional Library, PNC, Central Library, TU, UNL, Library of Security Board of Nepal.

I would like to express my cordial appreciation to my brothers Dr. Suman Poudel, Mr. Suresh Poudel, Dr. Sovit Poudel, Mr. Ram Poudel, and Dr. Savin Pokhrel for their cooperation and help in preparing this thesis since initial phase.

Finally, I would like to express special thanks to Mr. Mahendra Raj Koirala for his co-operation in preparing final outlook of the thesis and enabling me to submit in time. I am solely responsible for any errors in this report. I am looking forward to comments and suggestions if any.

Date.....

Sandhya Devi Sharma

TABLE OF CONTENTS

Acknowledgements	Page
Chapter I : INTRODUCTION	1-5
Background	1
Focus of the Study	3
Statement of Problem	3
Objectives of the Study	4
Importance of the Study	4
Limitation of the Study	5
Organization of the study	5
Chapter II : REVIEW OF LITERATURE	6-37
Theoretical Review	6
Review of Related Studies	31
Chapter III : Research Methodology	38-45
Research Design	38
Study Unit	38
Nature and Source of Data	38
Data Collection and Processing Techniques	38
Analysis Tools	39
Chapter IV: Presentation and Analysis of Data	46-66
Data Presentation and Analysis	46
Major Finding of the Study	64
Chapter V: SUMMARY, CONCLUSION AND RECOMMENDATIONS	67-70
Summary	67
Conclusion	68
Recommendation	69
Bibliography & References	
Appendixes	

LIST OF TABLES

Table No.	Titles	Page No.
4.1	Degree of Operating Leverage	46
4.2	Degree of Financial Leverage	47
4.3	Degree of Combined Leverage	49
4.4	Shareholders' Equity to Total Assets Ratio	50
4.5	Financial Leverage Ratio	51
4.6	Debt to Equity Ratio	53
4.7	Interest Coverage Ratio	54
4.8	Return on Total Assets	55
4.9	Return on Shareholder's Equity	56
4.10	Earnings Per Share	57
4.11	Dividend Per Share	59
4.12	Dividend Payout Ratio	60
4.13	Coefficient correlation Matrix	62
4.14	Determinants of Capital structure- Regression Result	62
4.15	Correlation between financial leverage and dividend payout ratio	63

LIST OF FIGURES

Figure No. No.	Titles	Page
2.1	Leverage and cost of Capital NI Approach	13
2.2	Leverage and cost of Capital NOI Approach	14
2.3	Optimal Capital Structure and cost of Capital	16
2.4	Optimal Capital Structure and Value of firm	16
2.5	Leverage and Cost of Capital MM Approach	17
2.6	The cost capital under MM Proposition I.	19
4.1	Degree of Operating Leverage	47
4.2	Degree of Financial Leverage	48
4.3	Degree of Combined Leverage	49
4.4	Shareholders' Equity to Total Assets Ratio	51
4.5	Financial Leverage Ratio	52
4.6	Debt to Equity Ratio	53
4.7	Return on Total Assets	55
4.8	Return on Shareholder's Equity	57
4.9	Earnings Per Share	58
4.10	Dividend Per Share	60
4.11	Dividend Payout Ratio	61

ABBREVIATIONS

D/E	Debt to Equity Ratio
DC	Debt Service Capacity
DCL	Degree of Combined Leverage
DFL	Degree of Financial Leverage
DOL	Degree of operating leverage
DPR	Dividend Payout Ratio
DPS	Dividend Per Share
EBIT	Earnings Before Interest and Tax
EPS	Earning Per Share
EPS	Earnings Per Share
ER	Earning Rate
FLR	Financial Leverage Ratio
F Y	Fiscal Year
GDP	Gross Domestic Product
i.e.	That is
Ltd.	Limited
NI	Net Income
NOI	Net Operating Income
ROA	Return on Total Assets
ROSE	Return on Shareholder's Equity
TU	Tribhuvan University
UNL	Unilever Nepal Limited
et.al.	and other
NA	Not Applicable

CHAPTER I

INTRODUCTION

1.1 Background of the study

Country studies programme (1989) showed that Nepal ranks among the world's poorest countries, with a per capita income of around \$386 in 2007. Various factors contributed to the economic underdevelopment--including terrain, lack of resource endowment, landlocked position, lack of institutions for modernization, weak infrastructure, and a lack of policies conducive to development. But there has been good progress looking at some facts regarding past as Estimates of its per capita income for 1988 ranged from US\$158 to US\$180. During the 1950s and 1960s, Kathmandu received aid commitments from Moscow and Beijing. During the 1960s, Soviet and Chinese aid also supported development of a few government-owned industries. Most of the industries established used agricultural products such as jute, sugar, and tea as raw materials. Other industries were dependent on various inputs imported from other countries, mainly India. Among the modern industries were large manufacturing plants, including many public sector operations. The major manufacturing industries produced jute, sugar, cigarettes, beer, matches, shoes, chemicals, cement, and bricks. The garment and carpet industries, targeted at export production, have grown rapidly since the mid 1980s whereas jute production has declined. Industrial estates were located in Patan (also called Lalitpur, Balaju, Hetauda, Pokhara, Dharan, Butawal, and Nepalganj. The government provided the land and buildings for the industrial estates, but the industries themselves were mostly privately owned.

Incorporated firms play a great role in the economics of the country. The history of incorporated private firms in Nepal is short. The Nepal Companies Act of 1936 provided for the incorporation of industrial enterprises on joint stock principle with limited liability. The first such firm, Biratnagar Jute Mills, was a collaborative venture of Indian and Nepalese entrepreneurs. It was formed in 1936 with initial capital of 160,000 Indian rupees.

Economy is one of the major factors that effect in the development of a country. Business firms also play an important role in the development of the country.

But for the establishment of business firm we need adequate capital. This world where the capital has been regarded the greatest strength to one's existence, similarly for the existence of business firm capital is the most important. In finance the most debatable topic is capital structure. There should be a proper balance between debt and equity. Shareholders must also be fully convinced to get in return of their investment.

The main issue of debate revolves around the optimal capital structure. There are two thoughts regarding this. The first thought argues that judicious mixture of debt and equity capital can minimize the overall cost of capital and maximize the value of firm. So this thought considers capital structure decisions should be made. Whereas later contends that the financing decision does not affect the value of the firm. Equity is the main way to get share of a company by the interested person and the debt provider get fixed charge as interest periodically.

It has been not more than seven decades for the establishment of an industry in Nepal. Industrialization is still green in our country and on top of that industries are not getting much attention from the government. Therefore the contribution of manufacturing sector to GDP is not so high but some contributions have been made in the private level. With the inception of Biratnagar Jute Mill in 1936 industrialization bloomed in Nepal. Then several industries have make impact on the economy of the country. Till now 21 manufacturing companies has been listed in the security board of Nepal, and Unilever Nepal Ltd is one of these companies.

Unilever Nepal limited was established in 1994 with the name of Nepal lever limited as a joint venture company. Objective of establishing a factory is to manufacture soaps, detergent, cosmetics, toiletries and other chemicals products under the brand name of the products of Hindustan Lever Limited. The name of the company was changed from Nepal Lever Limited into Unilever Nepal Limited on 10th February 2005. The first joint venture of Hindustan Lever Limited outside India is Nepal Lever Limited. UNL is one of the biggest Indian joint ventures in Nepal whose factory is located at Basamadi VDC of Makwanpur district. Its corporate office is at heritage palace second floor, Kamaladi, Kathmandu.

Hindustan Unilever Limited with 80% ownership has invested Rs.73.65millions equity. The authorized capital of the company is Rs.300 millions

with 3000000 ordinary shares. Now paid up capital of the company is Rs 92070000 dividend into 920700 shares. Out of 920,700 shares of the company 736,560 share and held by Hindustan Lever Limited held by India, 46,035 shares are held by Sibkrim land and industrial co-Pvt. Ltd., the Nepalese collaborator, and 138,105 shares belong to general public shareholders. The company has provided a huge platform for direct employees and generating indirect employments for many people through the network of suppliers, distributors and ancillaries.

1. 2 Focus of the Study

'Industrialization brings development.' This statement clearly says the importance of the industry. This is one of the most important sources for the country economy. Among industry manufacturing company are playing vital role in the promotion of country's capital. Further they are giving occupation to several people either by encouraging them to produce the raw material for the company's product and in turn buying it from them or they are giving job in their company. Thus, these companies have to some extent tried to solve the problem of unemployment. Only the companies that have the products that meet international demand and are multinational like Unilever Nepal Ltd. are helping out many people from unemployment. These companies must also be financially sound. I was also in search of similar company whose financial structure is sound. This study aims to analysis the capital structure and its effect on dividend of Nepalese manufacturing companies of the country taking Unilever Nepal Ltd as the reference.

1.3 Statement of the Problem

As stated earlier, capital structure is considered the buttress of a company. If the capital structure is not maintained than a company might face several problems. Some company may use both debt and equity in good proportion so that they are likely to have a sound economic growth. There are several examples where companies have distorted due to lack of capital structure. Inconsistency in the capital structure results as a barrier in attaining the company's goal, also sustainability, profitability and growth of the company is at stake. This also results in an inability of a company to take tax advantage. So, a proper knowledge and maintenance of capital

structure is required for the proper growth of a company. Likewise, UNL also might have to face several problems while designing its capital structure.

This research has tried to answer the following questions.

1. What is the trend of total debt and equity capital employed by the UNL?
2. What is the proportion of total debt and equity in the UNL capital structure?
3. How will the UNL be able to service the debt?
4. What is the return on equity of the UNL?
5. What is the return on total asset of the UNL?
6. What are the determinants of capital structure of the UNL?

1.4 Objectives of the Study

The main objective of the research or the study is to analyze the capital structure and its effect on dividend of the UNL Nepal Ltd.

The specific objectives are as follows.

1. To analyze the trend of total debt and equity capital employed by the UNL.
2. To analyze the proportion of total debt and equity capital of the UNL.
3. To analyze the debt service capacity of the UNL.
4. To analyze the return on equity of the UNL.
5. To analyze the return on total assets of the UNL.
6. To determine the determinant of capital structure of the UNL.

1.5 Importance of the Study

The company UNL the interest of my research is probably the biggest manufacturing company with sound capital structure. In the developing country like Nepal there are only few companies that have reached this landmark. Many companies had to face the severe collapse. This study will assist me in understanding the thorough capital structure which will probably help me to find out why other companies have collapsed comparing the capital structure. Also as this company accommodates employees which is pretty high number the research will help me to know the infrastructure required for the employment of such high employees. Then

this might help to some extent to minimize the problem of unemployment. The acme the company has reached in such a short time clearly shows the balanced capital structure and to understand it and implement as mentioned above is the main importance of the study.

1.6 Limitation of the Study

The study has the following limitations.

This study focuses only on the capital structure of UNL not taking other aspects into consideration.

1. Only the data of eleven fiscal years is taken into consideration so several approximation has to be made.
2. In this study only one manufacturing company is taken into consideration to represent other manufacturing companies.

1.7 Organization of the Study

This study has been organized into five chapters –Introduction, Review of Literature, Research Methodology, Data Presentation and Analysis and Summary, Conclusions and Recommendations.

The introduction chapter includes the general background, focus of the study, statement of the problems, objectives of the study, importance of the study, limitations of the study and organizations of the study. The second chapter deals with the review of available literature. It includes theoretical review and review of related studies. The third chapter deals with the research methodology. It is concerned with the methodology adopted in the research work. It consists of research work. It consists of research design, study unit, nature and sources of data, data collection and processing techniques, and financial and statistical tools to analyze the capital structure. In the same way, fourth chapter deals with presentation and analysis of data. Finally, summary, conclusions and recommendations of the study are given in chapter five.

CHAPTER II

REVIEW OF LITERATURE

The review of capital structure theories and its relevant studies are mentioned in this version of writing. This review is essential as it provides handful information on this prescribed topic. To make the study on this chapter more simple and scientific, this chapter is divided into two sections, 1st section containing relevant theories and the second one reflects the review of relevant unpublished studies and research articles published in different national and international journals.

2.1 Theoretical Review

This sub-topic consists of theoretical concept of capital structure, theories of capital structure, and determinants of capital structure. The review of net income approach, operating income approach, traditional approach and M-M approach are mentioned in the review of capital structure.

2.1.1 Concept of Capital Structure

Capital structure refers to mix of long-term sources of funds such as debenture, long-term debt preference share capital and equity share capital including reserves and surpluses (Bhattarai, 2005, p. 1). Capital structure is the proportions of debt instruments and preferred and common stock on a company's balance sheet (Van Horne, 2003, p. 619). A Firm's capital structure is defined as the proportion of debt and equity capital employed in the business. Equity is the ownership capital and the equity holders assume risk. Debt is financial leveraged capital and the equity holders assume less risk or no risk (Pardhan, 2004, p.473).

Financial structure refers to the way the firm's assets are financed. Financial structure is represented by entire right hand side of the balance sheet. It includes short-term debt and long-term debt as well as shareholder's equity. Capital structure or the capitalization 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 & Copland, 1992, p. 717).

The capital structure is mix or proportion of a firm's permanent or long-term financing represented by long-term debt, preferred stock, and common equity. Therefore, capital structure only consists of a part of financial structure. It does not include the short-term funds or current liabilities (Paudel, Baral, Gautam & Rana, 2006, p. 98).

The term financial structure is used to refer to the manner in which the assets of firm are financed. It represents the entire capital & liability side of balance sheet. On the other hand, the term capital structure is used in restrictive sense. It refers to the composition of long-term sources of finance such as preference capital, debentures, long-term debts and equity capital including reserves and surpluses exclude short-term debts. Thus used in sense, capital structures a part of financial structure. From practical point of view, the distinction is not very rigid. In practice short-term debt in many cases, are used as substitutes of long-term debt for financing the long-term activities. Those short-term debts also provide leverage benefits to the shareholders and involve cost and risk like the long-terms debts. Hence the terms financial structure and capital structure may be used inter changeably (Pandey, 1981, p. 11).

2.1.2 Capital Structure Decision

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 decisions can result in a high cost of capital, these by lowering the NPVS of project and making more of them unacceptable. Effecter 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 (Gitman, 2004, p. 521). The Capital structure decision of a firm is an essential aspect of corporate financing. Decision regarding the choice of capital components is known as capital structure decision. The components of capital may be debt or equity. It affects the shareholders return risk as a result the market value of the share may be influenced by the capital structure decision. Therefore an appropriate capital structure decision should be taken by financial managers to maximize the value of the firm and maximize the overall cost of capital. Capital structure decision involves making choices of sources of long-term funds needed for financing the assets of firm (Brigham & Ehrhardt, 2004, p. 619-621).

Capital structure decision is that essential aspect of firm which is determined by the various internal and external factors according the internal factors include the characteristic of an individual firm, which are also termed as micro factors where as external factors or the macro factors include the economy of a country like tax policy of government, inflation rate, capital market condition. The objective of a firm should be directed forwards the maximization of the firms value. The capital structure or financial leverage decision should be examined from the point of its impact on the value of the firm. If capital structure decision can affect a firm's value, then it would like to have a capital structure, which maximizes its market value (Pandey, 2005, p. 313).

2.1.3 Financial Leverage

The financial leverage refers to the use of debt capital. If a firm uses debt capital along with equity capital, it is called a levered firm. The firm with only equity capital is said to be an unlevered firm. The use of debt capital offers two advantages, first, interest on debt capital has fixed rate of interest so that the shareholders do not have to share their profit with bondholder's when the firms earns supernormal profit (Paudel et.al., 2006, p. 99).

The financial leverage is described as the ability of a firm to use fixed financial charges to magnify the effects of changes in EBIT on the firm's earning per share. In other words, financial leverage involves the use of funds obtained at a fixed cost in the hope of increasing the return to the shareholders (Khan & Jain, 2002, p. 10.7).

Financial Leverage measures financial risks and financial performance of the firm. It shows how much debt and preference share the firm employees in its capital structure. Financial leverage can be defined as the use of fixed charges (fixed interest, fixed dividend) bearing capital in the capital structure of the firm maximize the earning of equity shareholders it shows the relationship between EBIT and EPS (Shakya, Joshi, Goet, Khanal, Dhakal, Neupane, Shah, Shrestha, Shrestha, & Giri, 2005, p. 3.3).

Financial Leverage is defined as the potential use of fixed financial costs to magnify the effects of charges in comings before interest taxes on the firm's earning per share. The degree of financial leverage (DFL) is the numerical measure of the

firm's financial leverage. The following equation presents one approach for obtaining the DFL.

$$DFL = \frac{\text{Percentage Change in EBT}}{\text{Percentage Change in EBIT}}$$

Wherever the percentage change in EBT resulting from a given percentage change in EBIT is greater than the percentage change in EBT, financial leverage exists. This means that wherever DFL is greater than 1 there is financial leverage (Gitman, 2004, p. 515-516).

The Ratio of debt to total assets or debt to equity indicates the degree of financial leverage of the firm. In other words the amount of debt as compared to the amount of equity included in capital structure determines the firm's degree of financial leverage. An all equity financed firm is called unlevered firm and a firm that uses a certain percentage of debt is called levered firm (Pradhan, 2000, p. 447).

The use of the fixed charges sources of funds, such as debt and preference capital along with the owner's equity in the capital structure, is described as financial leverage or gearing or trading on equity (Pandey, 2005, p. 290).

2.1.4 Theories of Capital Structure

Different theories related on capital structure determine the relationship whether there exists a relationship or not between the debt equity ratio and the market value of the firm. 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). 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 (Bhattacharai 2005, p. 340).

Moreover, capital structure is the component of overall cost of capital and it affects the value of the firm by affecting either in expected earnings or in the cost of capital or in both. However, the use of debt in capital structure exists in practice. Optimal capital structure is mix of that capital structure component which leads maximum value and minimum overall cost of firm. There are various theories relating

the capital structure of the firm. Capital structure decision affects the total market value of the firm, earning per share and firm's cost of capital. So, the theory of capital structure is closely related to the firm's lost of capital.

2.1.4.1 Optimum Capital Structure

The optimum capital structure may be defined as the capital structure or combination of debt and equity that leads maximum value of the firm (Khan & Jain, 2002, p. 11.1). 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 (Bhattari, 2005, p. 3).

An optimum capital structure exists and occurs when the cost of capital is minimum or the value of the firm is maximum. The cost of capital declines with leverage because debt capital is cheaper than equity capital within reasonable or acceptable limit of debt (Pandey, 2005, p. 620).

The weighted average cost of capital is influenced by capital structure of a firm. A firm could change its weighted average cost of capital by changing the proportionate mix of debt and equity capital. Therefore we should look into the effect of different capital structure on firm's weighted average cost of capital, while setting the target capital structure. It could be noted that a particular debt equity ratio represents the optimal capital structure it results in the lowest possible weighted average cost of capital (Paudel, et.al., 2006, p. 99).

The optimal capital structures the one that maximizes the prices of the firm's stock and this generally calls for a debt ratio that is lower than the one that maximizes expected EPS. (Brigham & Ehrardt , 2004, p. 632)

Assumptions and Definitions

The assumptions of capital structure theories are as follows (Van Horne, 2003, P. 253-254).

1. There are no corporate or personal income and no bankruptcy costs.
2. The ratio of debt of equity for a firm is changed by issuing debt to repurchase stock or issuing stock to pay off debt. In other words a

change in capital structure is effected immediately. In this regard, we assume no transaction costs.

3. The firm has a policy of paying 100 percent of its earning in dividends thus we abstract from dividend decision.
4. The expected values of the subjective probability distributions of expected future operating earnings for each company are the same for all investor in the market.
5. The operating earnings of the firm are not expected to grow. The expected values of the probability distribution of expected operating earnings for all future periods are the same as present operating earnings.

Given these assumptions, we are concerned with the following three rates

$$K_i = \frac{F}{B} = \frac{\text{Annual Interest Charges}}{\text{Market value of debt outstanding}}$$

In this equation, K_i is the yield on the company's debt, assuming that debt to be perpetual.

$$k_e = \frac{E}{S} = \frac{\text{Earning available to common stockholders}}{\text{Market value of stock outstanding}}$$

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

Where,

K_i = The yield on company's debt, assuming debt to be perpetual.

k_e = Equity Capitalization rate.

K_o = Overall capitalization rate

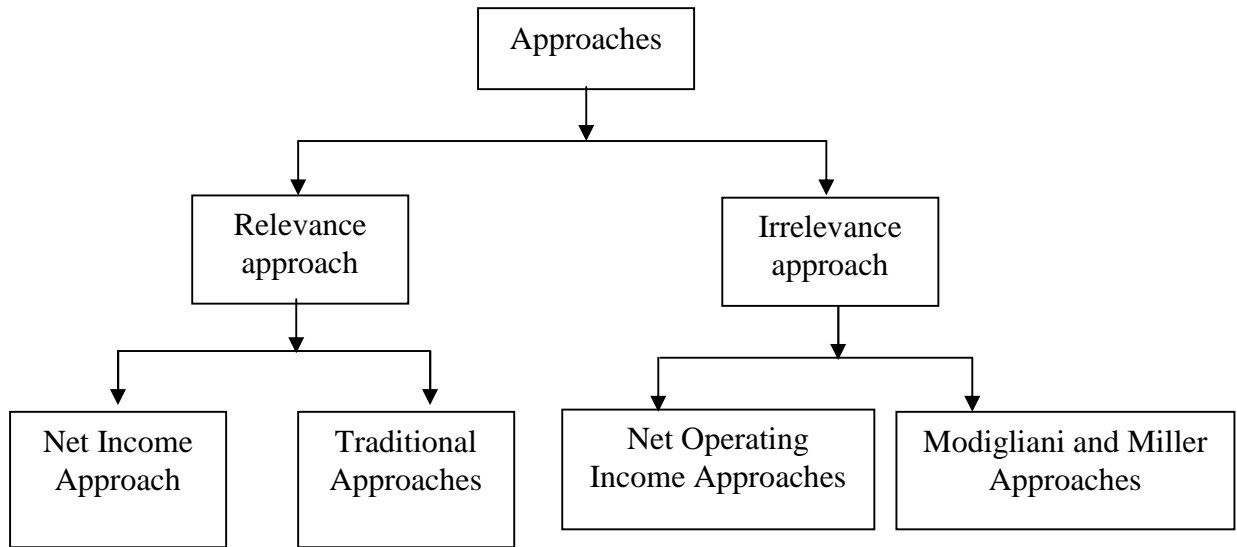
Where $V = B+S$, Here, K_o is an overall capitalization rate for the firm. It's defined as the weighted average cost of capital and may also be expressed as

$$K_o = k_i \left(\frac{B}{B+S} \right) + k_e \left(\frac{S}{B+S} \right)$$

Approaches to Capital Structure

Different approaches have been developed under the relevancy of capital structure to value of firm and cost of capital. Net income approach and traditional approach argued capital structure as relevant matter and net operating income

approach and MM approach argued capital structure as irrelevant matter. The approaches to capital structure can be shown as follows:



Adopted from : Bhattari, Capital Structure Management, p. 342

2.1.4.2 Net Income Approach

According to the Net Income (NI) Approach, suggested by the Durand, the capital structure decision is relevant to the valuation of the firm. In other words, a change in the financial leverage will lead to a corresponding change in the overall cost of capital as well as the total value of the firm. It, therefore, the degree of financial leverage as measured by the ratio of debt to equity is increased; the weighted average cost of capital will decline, while the value of the firms as well as the market price of ordinary shares will increase. Conversely, a decrease in the leverage will cause an increase in the overall cost of capital and a decline both in the value of firm as well as the market price of equity shares.

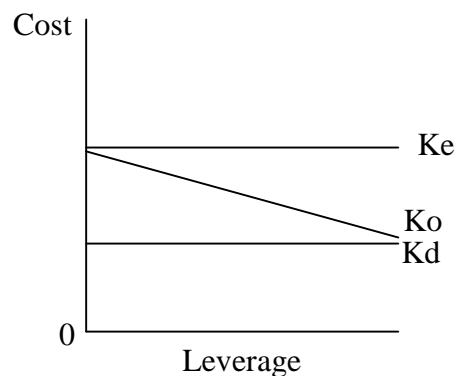
The NI Approach to valuation is based on three assumptions mentioned as:

1. There are no taxes
2. The cost of debt is less than the equity capitalization or the cost of equity.
3. The use of debt does not change the risk perception of investors that the financial risk perception of the investors does not change with the introduction of debt or the cost of equity.

The implication of the three assumptions underlying the NI approach is that as the degree of leverage increases, the proportion of a cheaper source of funds that

is debt in the capital increase. As a result, the weighted leverage cost of capital tends to decline, leading to an increase in the total value of the firm. Thus, with the cost of debt and cost of equity being constant, the increased use of debt (increase in leverage), will magnify the shareholder's earnings and thereby, the market value of the ordinary shares (Khan and Jain, 2002, p.11.4).

Fig . 2.1 Leverage and cost of Capital NI Approach



Adopted from : Bhattari, Capital Structure Management, p. 343

The value of firm under NI Approach is determined as follows:

$$\text{Value of Firm (V)} = \text{Value of Debt (B)} + \text{Value of Equity (S)}$$

2.1.4.3 Net Operating Income (NOI) Approach

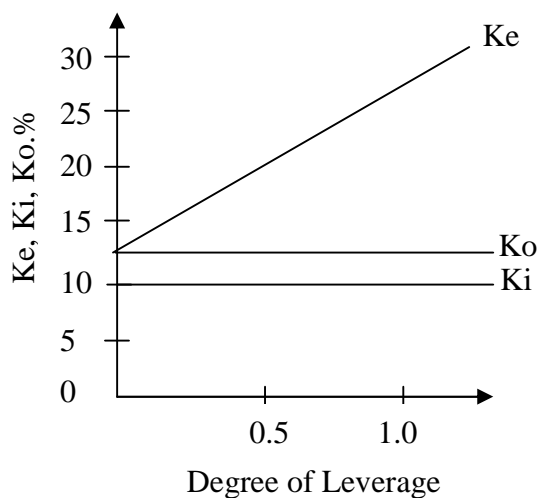
Another theory of capital structure, suggested by Durand is the Net Operating Income (NOI) Approach. This approach is diametrically opposite to NI approach. The essence change in leverage will not lead to any change in the total value of the firm and the market price of shares as well as the overall cost of capital is independent of the degree of leverage (Khan & Jain, 2002, p. 11.7). Net operating income approach is an irrelevant theory of capital structure; this theory assumes that the capital structure (proportion of debt and equity) is irrelevant to the value of firm and the overall cost of capital. Under this approach, net operating income is capitalized at overall capitalization rate to obtain the total market value of firm. The market value of the debt, then, is deducted from the total market value to obtain the market value of the stock.

Assumption of Net Operating Income Approach

The following are the basic consumption of net operating approach (Bhattarai, 2005, p. 334-335).

- The overall cost of capital remains constant.
- The cost of debt remains constant.
- Cost of debt is less than cost of equity.
- The required return on equity increases linearly with an increase in debt ratio.
- Total operating profit remains constant.

Fig. 2.2 Leverage and cost of Capital NOI Approach



Adopted from : Khan & Jain , Financial Management, p.11.11

The value of the firm for the given level of EBIT is determined as:

$$V = \frac{EBIT}{K_o}$$

Where, V = Value of the firm

EBIT = Earnings Before interest tax

Ko = Overall capitalization rate.

According to Net Operating Income approach, the market value of firms is irrelevant with capital structure decision or it remains unchanged with change in leverage ratio. But the market value of equity and equity capitalization rate changes with leverage ratio. In other words a change in amount of debt in capital structure does not affect the value of firm and overall cost of capital.

2.1.4.4 Traditional Approach

This approach assumes the capital structure as relevant matter for the value and cost of capital of the firm. It takes some features of both net income and net operating income approach. This approach strikes a balance between the two different approaches net income and net operating income. Therefore, it is also known as the intermediate approach. It resembles the net income approach that value of a firm will necessarily increase for all degree of leverage. In one aspect it shares a feature with NOI approach that beyond a certain degree of leverage, the overall cost increases leading to 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 increases the risk of the debt holders' and the debt holders demand high interest rate as result the overall cost of capital also increases (Bhattarai, 2005, p. 346).

The Assumption of the Traditional Approach is as Follows (Pradhan, 2000, p. 453).

1. Equity holders adjust their required rate of return proportionately for every unit of debt inclusion. They do it more than proportionately. When they feel that risk is increasing at a higher rate especially when debt holders' begin to feel their exposure to the firm's leverage risk and raise the interest rate.
2. It assumes that debt holders do not really care for the level of debt inclusion and do not demand any premium for the leverage risk at least in the beginning. In other words, a moderate level of debt inclusion in the capital structure does not increase the cost of debt. However after reaching a certain limit, as they notice the indirection of unfavorable leverage ratio, they feel somewhat less protected for their investment and react for higher interest rate.
3. The expected outcome of the behaviour of equity holders and debt holders' is that the benefit of cheaper debt financing decreases as the cost of equity and debt increases. The K_e gradually rises first and later at a faster rate, and the K_i remains constant up to a certain limit of debt equity ratio and then, slowly rises.

Fig. 2.3 Optimal Capital Structure and Cost of Capital

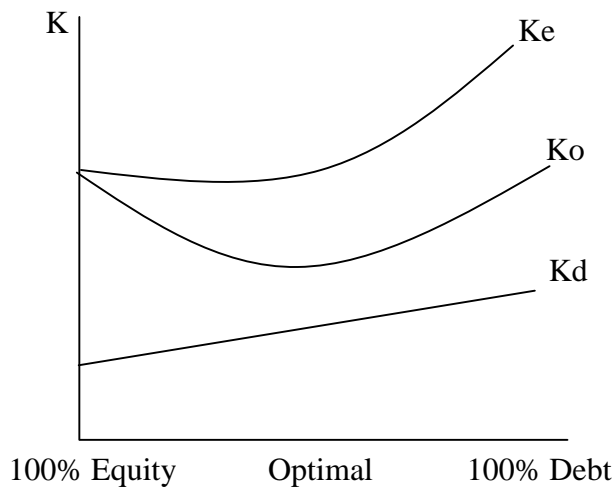
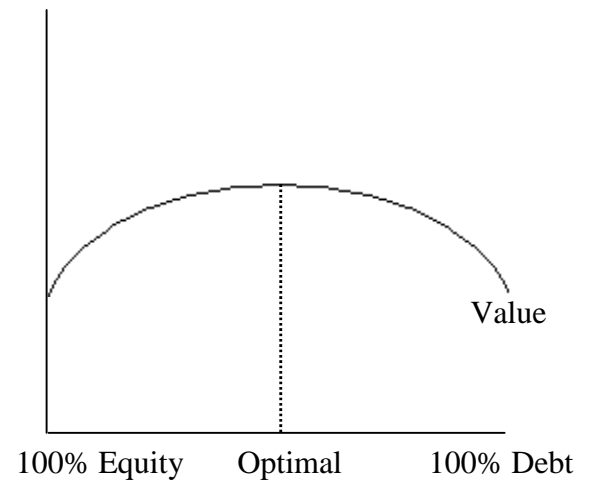


Fig. 2.4 Optimal Capital Structure and Value of firm



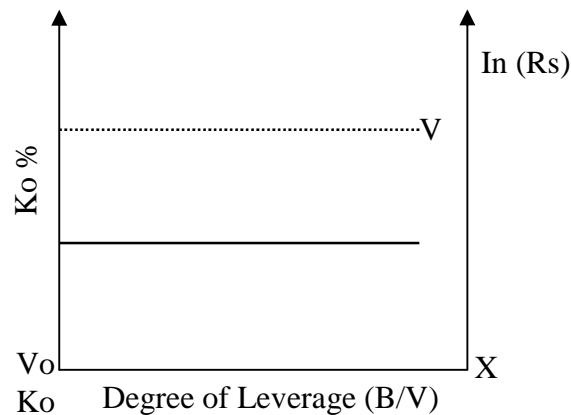
Adopted from : Pradhan, Basic of Financial Management, p. 454

The traditional approach to valuation and leverage assumes that there is an optimal capital structure and that the firm can increase the total value of the firm through the judicious use of leverage. This approach suggests that the firm initially can lower its cost of capital and raise its total value through leverage after a certain point, the increase in the required equity return K_e , more than offsets the use of cheaper debt funds in the capital structure and the cost of capital, K_o , begins to rise. Thus the traditional approach concludes that the cost of capital is not independent of capital structure of the firm and there is an optimal capital structure (Van Horne, 2003, p. 256-257).

2.1.4.5 Modigliani- Miller (MM) Approach

The modigliani- miller thesis relating to the relationship between the capital structures, cost of capital and valuation is akin to the NOI approach. The NOI approach, as explained above, is definitional or conceptual and lacks behavioural significance. The NOI approach, in other words, does not provide operational justification for the irrelevance of the capital structure the MM proposition supports the NOI approach relating to the independence of the cost of capital of the degree of leverage at any level of debt-equity ratio. The significance of their hypothesis lies in the fact that it provides behavioural justification for constant overall cost of capital and therefore, total value of the firm. (Khan & Jain, 2002, p. 11.11).

Fig. 2.5 Leverage and Cost of Capital MM Approach.



Adopted from : Khan & Jain, Financial Management, p. 11.11

The proportion of debt to equity in the capital structure (or degree of leverage) they offer operational justification for this and are not content with merely stating the proposition.

Basic Proportions

There are three basic proportions of MM approach (Khan & Jain, 2002, p. 11.12).

1. The overall cost of capital (K_o) and the value of the firm (V) are independent of its capital structure. The K_o and V are constant for all degree of leverage. The total value is given by capitalizing the expedited stream of operating earnings at a discount rate appropriate for its risk class.
2. The second propositions of the MM approach is that K_e is equal to the capitalization rate of pure equity stream plus a premium for financial rate (K_e) and (K_i) times the ratio of the debt to equity. In other words, K_e increases in a manner to offset exactly the use of a less expensive source of funds represented by debt.
3. The cut-off rate investment purposes are completely independent of the way in which on investment is financed

The M.M Approach without Tax

Modigliani and Miller argue that, in perfect capital markets without taxes and transaction costs, a firm's market value and the cost of capital remain invariant to the

capital structure change. The value of the firm depends on the earnings and risk of its assets (business risk) rather than the way in which assets have been financed. The MM hypotheses can be best explained in terms of their two Propositions (Panday, 2005, p. 318).

The basic propositions of the modigliani- moller (M.M.) theory are that under perfect market condition in the absence of taxes and transaction costs, capital structure decision is not important. As per this theory as one capital structure is as good as any other. Basically MM forwarded two propositions based on the assumptions of perfect capital market risk free interest rate on debt and investors' homogenous expectation. The original M.M. propositions are based on the tax free world. The author later revised their assumptions by introducing the corporate taxes in the model. First we present the two propositions assuming no tax and then later we will examine them with tax consideration. (Pradhan, 2000, p. 455).

Proposition I :

MM's Proposition I is that, for firms in 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 capitalization rate appropriate to that risk class. Since the value of the levered and unlevered firm's and the expected net operating income (NOI) do not change with financial leverage, the weighted average cost of capital would also not change with financial leverage. Hence, MM's Proposition I also implies that weighted average cost of capital for two identical firms, one levered and another unlevered, will be equal to the opportunity cost of capital (Panday, 2005, p. 318). The MM proposition I states that the market value of a firm is independent of its capital structure. The reason is that the value of the firm is determined by capitalizing the net operating income (NOI or EBIT) at a rate appropriate for the firm's risk class. According the value of the firm, (V) is simply the NOI divided by the appropriate risk-adjusted capitalization rate, K. As such.

$$V = \frac{NOI}{K_o} = \frac{EBIT}{K_o}$$

For an unleveled firm $K_o = K_e$ as such

$$V_u = \frac{EBIT}{K_{ou}} = \frac{EBIT}{K_{eu}}$$

and for levered firm

$$V_L = \frac{EBIT}{K_0}$$

Where,

V = Market value of firm

NOI = Net operating income

K₀ = the capitalization rate appropriate to the risk class of firm.

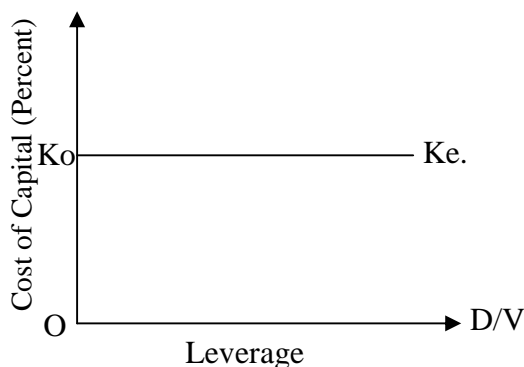
EBIT = Earnings before interest tax

V_u = Value of unleveled firm.

V_L = Value of Required firm.

According to this proposition there is no interrelation ship between the value of a firm and the any its capital structure is made up, nor there is any relationship between the average cost of capital and the capital structure. This suggests that $V_L = V_u$ in the absence of tax.

Fig.2.6 The cost capital under MM proposition I.



Adopted from: Pandey, Financial Management, p. 319

Arbitrage Process

The operational Justification for the MM hypothesis is the arbitrage Process. The term 'arbitrage' refers to an act of buying an assets/ security in one market (at lower prices) and selling it in another (at higher price). As a result, equilibrium is restored in the market price of a security in different Markets. The essence of the arbitrage process is the purchase of security/ assets whose prices are lower (Undervalued securities) and, sale of whose price are higher, in related markets which are temporarily out of equilibrium. The arbitrage process is essentially a balancing operation. The MM approach illustrates the arbitrage Process with reference to valuation in terms of two firms which are exactly similar in all respects except leverage so that one of them has debt in its capital structure other does not. Such

homogeneous firms are , according to Modigliani and Miller, perfect substitutes .The total value of homogeneous firms which differ only in respect of leverage cannot be different because of the operation of arbitrage(Khan & Jain, 2002, p. 11.12-11.13). On the basis of the arbitrage process, MM conclude that the market value of the firm is not affected by leverage. Thus, the financing (or capital structure) decision is irrelevant. It does not help in creating any wealth for shareholders. Hence one capital structure is as much desirable (or undesirable!) as the other (Panday, 2005, p. 320).

Proposition II

Financial leverage does not affect a firm's net operating income, but it does affect shareholder's return (EPS and ROE) . EPS and ROE increase with leverage when the interest rate is less than the firm's return on assets. Financial Leverage also increases shareholder's financial risk by amplifying the variability of EPS and ROE. Thus, financial leverage cause two opposing effect: it increases the shareholder's return but it also increases their financial risk. Shareholders will increase the required rate of return (i.e., the cost of equity) on their investment to compensate for the financial risk, the higher the financial risk, the higher the shareholder's required rate of return or the cost of equity (Panday, 2005, p. 321)

The proposition 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 increased, leverage. In other words, it says that the cost of equity of a levered firm (K_{eL}) is equal to the cost of equity of an unlevered firm (K_{eU}) plus a risk premium based on the different between k_{eU} and K_i Multiplied by ratio of debt equity (Pradhan, 2000, p. 455-456).

It is as follows:

$$\begin{aligned} K_{eL} &= k_{eU} + \text{risk premium} \\ &= K_{eU} + (K_{eU} - K_d) D/S \end{aligned}$$

Where,

K_{eU} = Cost of equity of the unlevered firm

K_{eL} = Cost of equity of the levered firm

K_d = Cost of debt

D = Market value of firm's debt

S = Market Value of firms stock.

The equation indicates that the higher the D/E ratio, higher is the cost of equity. Hence this proposition shows the impact of financial leverage on the cost of equity. As the leverage of the firm increases it gets benefited but the benefit is exactly offset by an increase in the cost of equity in the form of risk premium expected by the shareholders against an increase in financial risk.

The parallel study of two MM proposition implies that the inclusion of more debt in the capital structure will not increase the value of the firm because the advantage of cheaper debt will be exactly offset by an increase in the riskness, hence in the cost of its equity. Thus MM argue that in the world without taxes both the value of firm and its WACC would be unaffected by its capital structure.

The MM approach with taxes

MM's hypothesis that the value of the firm is independent of its debt policy is based on the critical assumption that corporate income taxes do not exist. In reality, corporate income taxes exist and interest paid to debt holder's is treated as a deductible expenses. Thus, interest payable by firms saves taxes. This makes debt financing advantageous. In their 1963 article, MM show that the value of firm will increase with debt due to the deductibility of interest charges for tax computation and the value of the levered firm will be higher than of the un levered firm (Pandey, 2005, p. 322)

Valuation of an unlevered firm

$$V(u) = \frac{EBIT(1-T)}{Ke(u)}$$

Where, Vu = Value of unlevered firm

Ke (u) = Cost of equity of Unlevered firm

T = Corporate tax rate.

Valuation of levered firm

Market value of levered firm= Market Value of Un leverd firm + Present Valueof debt tax shield

$$V(L) = V(U) + B \times T$$

Where, V(U) = Value of Un levered firm

V (L) = Value an levered firm

B = Value of debt

T = Co-operate tax rate.

In this case MM analysis implicates that the value of firm is maximizes when capital structure contains only debt. Meaning is that a firm can lower its cost of capital continuously with increasing leverage. They also rectify that excessive leverage increases financial risk as also that cost of capital. They suggest that firms should adopt target debt ratio so as not to violate limits of leverage imposed by creditors. This suggestion implies that there is a safe limit for the use of debt and firms should not use debt beyond that limit. There is, therefore, an optimal capital structure.

Pecking Order of Financing

Pecking order is also known as a ladder or class structure of financing. It was first suggested by Myers and Majluf in 1984. It is known as pecking order theory of capital structure. This theory is a preference theory because the fund sources are selected in preference. The first preference is given to the internal financing that is retained earnings. It is because if awards that outside scrutiny of suppliers of capital and there are no flotation costs associated with the use of retained earnings.

The next preference is given to the straight debt. As explained in the precious selection. It is a good signal to the investors and helps to raise the market price, moreover debt results. In the less instruction into management by suppliers of capital and flotation costs are also less than those with others types of external financing.

Next in order of financing preference is preferred stock which has some of the features of debt. This followed by the various by hybrid securities, like convertible bonds. Finally, least desirable security to issue is straight equity. It is not only a method of financing but it is also likely to have an adverse signaling effect.

This story is mainly a behavioral explanation of why certain companies finance the way they do. It is consistent with some rational arguments such as symmetric information and signaling, as well as flotation costs (Bhattacharai, 2005, P. 353). According to this theory, the attraction of interest tax shields assumed to the second order effect. Debt ratio changes when there is an imbalance of internal cash flow, net of dividend, and real investment opportunities.

2.1.5 Factors Affecting Capital Structure Decision

Capital structure of a firm is determined by various internal and external factor the macro-variables of the economy of a country like tax policy of government, initiation rate, capital market condition, are the major external factors that affect the capital structure of a firm. The characteristics of an individual firm, which are termed here as micro factors (Internal), also affect the capital structure of enterprises (Paudel et.al., 2006, p. 115-116).

Size of a Firm

There is a positive relation between the capital structure and size of a firm. The large firm are more diversified have easy access to capital market, receive higher credit ratings for debt issue, and pay lower interest rate on debt capital. Further large firms are less prone to bankruptcy and this implies the less probability of bankruptcy and lower bankruptcy costs. Therefore, large firms trend to use more debt capital than smaller firms.

Growth in sales:

Anticipated growth rate in sales provides a measure of the extent to which the EPS of a firm are likely to be magnified by leverage the firm is likely to use debt financing with limited fixed charge only when the return on equity is likely to be magnified. However, the firms with significant growth in sales would have high market price per share as a result of which they might prefer equity financing. The firm should make a relative cost benefit analysis against debt and equity financing in anticipation to growth in sales to determine appropriate capital structure.

Business Risk

There is negative relation between the capital structure and business risk. The chance of business failure is greater if the firm has less stable earnings. Similarly as the probability of bankruptcy increases, the agency problems related to debt become more aggravating. Thus, as business risk increases the debt level in capital structure of the enterprises should decrease.

Debt Service Capacity

The higher debt level in capital structure increases the probability of bankruptcy and bankruptcy costs of the enterprises probability of bankruptcy refers to the chances of cash flows to be less than the amount required for servicing the debt. The debt service ratio measured by the firm's ability to meet its interest payment out of its annual operating earnings. Therefore the higher debt service ratio shows the higher debt capacity of the enterprises. Hence there is the positive relation between the debt service capacity and capital structure of the enterprises.

Operating Leverage

The use of fixed cost introduction process also affects the capital structure. The high operating leverage-use of higher proportion of fixed cost in the total costs over a period of time can magnify the variability in future earnings. There is negative relation between operating leverage and debt level in capital structure. Higher the operating leverage, the greater the chance of business failure and the greater will be the weight of bankruptcy costs on enterprise financing decisions.

Stability in Cash Flow

The firm's cash flow stability also influence its capital structure if firms cash flows are relatively stable then it may find no difficulties in meeting its fixed charge obligation. As a result, the firm may attempt to take the benefit by using leverage to some extent.

Nature of Industry

Capital Structure of firm also depends on the nature of industry under which it operates. If there were no barriers in industry for the entry of new competing firms, the profit margin of existing firms in the industry would be adversely affected. As a result, the firm may find more risky to use fixed charge bearing securities.

Assets Structure

The sources of financing to be used are affected in several ways by the maturity structure of assets to be used by the firm. If a firm has relatively longer-term assets with assured demand of their products, the firm attempts to use more long-term

debt. In contrast to this, the firms with relatively greater investment in receivables and inventory rather than fixed assets rely heavily on short-term financing.

Control and Risk

Capital structure of a firm is greatly influenced by management attitude towards control and risk. If management wants to avoid dilution in management control in the firm, they prefer debt financing. However, for a larger corporation whose stock is widely owned may choose additional sales of common stock because this will have very little effect on the control of the firm. On the other hand, if the management of the firm is more risk seeker, they attempt to use more debt because they can see the large potential gains to themselves resulting from leverage.

Lenders' Attitude

Lender of any firm permits the use of debt financing only to a limited range. If management seeks to use leverage beyond that permitted by industry norms, this may reduce the credit standing and credit rating of the firm. As a result lenders do not permit for additional debt financing

2.1.6 Dividend Policy

Dividends refer to that portion of firm's net earnings which are paid out to the share holders. Dividends are distributed out of the profit, that alternative to the payment of dividends is the retention of earnings. The retained earnings constitute an easily accessible important source of financing the investment requirement of firms. There is inverse relationship between retained earnings and cash dividends; larger retentions, lesser dividends and vice versa (Khan & Jain; 2002, p 13.1).

Companies' total net income can be divided into two parts; earnings to be distributed to the equity shareholders and earnings to be kept in the organizations. Earnings that are distributed to the shareholders are known as dividends and earnings that are kept in organizations are known as retained earnings. Dividends policy determines the division of earnings between payments to stockholders and reinvestments in the firms (Bhattarai 2005, p 376).

The important aspect of dividend policy is to determine the amount of earning to be distributed to shareholders and amount to be retained in the firm. Retained earnings are the most significant internal sources of financing the growth of firm. On other hand, dividends may be considered desirable from shareholders point of view as they tend to increase their current returns. Dividends however constitute the use of firm's fund .On the relationship between dividend policy and the value of the firm, different theories have been advanced. These theories can be grouped into two groups: a) theories that consider dividend decision to be irrelevant and b) theories that consider dividend decision to be an active variable influencing the value of firm (Pandey, 2005, p.380-381).

2.1.6.1 Dividend Payout Irrelevance

In the perfect capital market assumption, the dividend payout is the irrelevance to the value of the firm and the value of the investors. Investors are indifference about the payout of dividend and retaining them in organization. In this mattering of indifference the corporation will treat retained earnings simply as the means of financing (Bhattarai, 2005, p. 384).

Residual Theory of dividend Policy

Retained earnings are the most important source for financing for most companies. A residual approach to the dividend policy, as the first claim on retained earnings will be the financing of the investment projects. With the residual dividend policy, the primary focus of the firm's management is indeed on investment, not dividends. Dividend policy becomes irrelevant, it is treated as a passive rather than an active, decision variables (Srinivasan, 2010, p. NA).

If the firm has retained earnings left over financing all acceptable investment opportunities, these earnings then will be distributed to stockholders in form of cash dividend. If not, there will be no dividends. The dividend policy as strictly a financing decision, the payment of cash dividends is a passive residual. The amount of dividend payout will fluctuate from period to period in keeping with fluctuations in the amount of acceptable investment opportunities available to the firm (Van Horne, 2003, p. 328).

Modigliani and Miller position

Dividend irrelevancy theory asserts that a firm's dividend policy has no effect on its market value or its cost of capital. MM asserts that, given investment decision of the firm, the dividend payout is a mere detail. It does not affect the wealth of shareholders. MM argue that the value of firm is determined by the earning of the firm assets or its investment policy and that the manner in which the earning stream is split between dividends and retained earnings does not affect this value (Van Horne, 2003, p. 329).

According to M&M's irrelevancy theory, if therefore does not matter how a firm divides its earnings between dividend payments to shareholders and internal retentions. In the M&M view the dividend decision is one over which managers need not agonies, trying to find the optimal dividend policy, because an optimal dividend policy does not exist. M&M built their dividend irrelevancy theory on a range of key assumptions, similar to those on which they based their theory of capital structure irrelevancy (Srinivasan, 2010, p. NA).

- 1) Perfect capital markets in which all investors are rational. information available to all at no cost, instantaneous transactions without cost, infinitely divisible securities and no investors large enough to affect the market price of security.
- 2) An absence of flotation cost on securities issued by firms.
- 3) A world of no taxes.
- 4) A given investment policy for the firms, not subject to change.
- 5) A perfect certainty by ever investor as to future investments and profits of the firms. (MM drop this assumption later.)

Dividend verses terminal value

The crux of the MM position on the irrelevance of dividend is the arbitrage argument. The arbitrage process, dealing with leverage and valuation, involves a switching and balancing operation. In other words, arbitrage refers to entering simultaneously into two transactions which exactly balance or completely offset each other. The two transactions here are the acts of paying out dividend and rising external funds- either through the sale of new shares or rising additional loans to finance investment programs (Khan & Jain, 2002, p 13.5).

The Bird-In-The-Hand Theory

According to Gordon's model, Dividend policy is irrelevant where $r = k$. The essence of the bird-in-the-hand theory of dividend policy (advanced by John Litner in 1962 and Myron Gordon in 1963) is that shareholders are risk-averse and prefer to receive dividend payments rather than future capital gains. Shareholders consider dividend payments to be more certain than future capital gains – thus a “bird in the hand is worth more than two in the bush” (Srinivasan, 2010, p. NA).

2.1.6.2 Dividend Payout relevance

Relevance of dividend are based on two popular theories which are stated as walters model and garden's model. These theories are based on principle that the dividend decision of a firm affects its value.

Walter's model

Professor James E. Walter argues that the choice of dividend policies almost always affect the value of the firm. His model, one of the earlier theoretical works, shows the importance of relationship between the firm's rate of return (r) and its cost of capital (k) in determining the dividend policy that will maximize the wealth of shareholders. Walter's model is based on the following assumption (Pandey, 2005, p 381).

- 1) **Internal financing:** The firm finances all investment through retained earnings.
- 2) **Constant return and cost of capital:** The firm's rate of return (r) and its cost of capital (k) are constant.
- 3) **100% payout or retention:** All earnings are either distributed as dividend or reinvested internally immediately.
- 4) **Constant EPS and DIV:** Beginning earnings and dividends never change. The value of EPS and DIV may be changed in the model to determined results, but any given values of EPS or DIV are assumed to remain constant forever in determining the given value.
- 5) **Infinite time:** The firm has very long or infinite life.

Gordon's model

Myron Gordon develops one very popular model explicitly relating the market value of the firm to dividend policy. Gordon's model is based on the following assumption (Pandey, 2005, p 383).

- 1) All equity firm: The firm is an all equity firm, and it has no debt.
- 2) No external financing: No external financing is available.
- 3) Constant return: The internal rate of return (r) of the firm is constant.
- 4) The firm has perpetual life.
- 5) Retention ratio and growth rate are constant.
- 6) Equity capitalization (K_e) > growth rate ($b \times r$ or g).
- 7) Tax doesn't exist.

Dividend Signaling Theory

Cash dividends may be viewed as a signal to the investor. When a firm has a target –payout ratio that is stable over time and it changes this ratio, Investor may believe that management is announcing a change in expected future probability of the firm (Bhattacharai, 2005, p. 392) . The change in a firm's dividend policy can be observed to have an effect on its share price. The change in dividend payment is to be interpreted as a signal to shareholders and investors about the future earnings prospects of the firm. Generally a rise in dividend payment is viewed as a positive signal, conveying positive information about a firm's future earnings prospects resulting in an increase in share price. Conversely a reduction in dividend payment is viewed as negative signal about future earnings prospects, resulting in a decrease in share price (Srinivasan, 2010, p. NA).

2.1.6.3 Different Dividend Payout Schemes

Payment system followed by the different companies is known as dividend payout schemes.

Stability of dividend is considered a desirable policy by the management of most companies in practice. Stability of dividend also means regularity in paying some dividend annually, even though the amount of dividend may fluctuate over years and may not be related with earnings. The three forms of such stability may be distinguished (Pandey, 2005, p. 400).

- a) Constant dividend per share or dividend rate.
- b) Constant pay out.
- c) Constant dividend per share plus extra dividend.

Constant Dividend Per Share or Dividend Rate

The policy of paying a fixed amount per share or a fixed rate on a paid up capital as dividend every year, irrespective of the fluctuations in the earnings is known as constant dividend per share or dividend rate policy. Under this policy companies pay fixed and equal dividend per share every year and dividend per share or dividend rate will not be increased.

Constant Payout

The ratio of dividend to earning is known as payout ratio. Under this policy companies pay dividend at constant rate of earning each year and the amount of dividend will fluctuate in direct proportional to earnings. This policy is related to company's ability to pay dividend.

Constant Dividend Per Share Plus Extra Dividend.

The policy to pay a minimum dividend per share with a step up feature is desirable. The small amount of dividend per share is fixed to reduce the possibility of ever missing a dividend payment. This type of policy enables a company to pay constant amount of dividend regularly without default and allows a great deal of flexibility for supplementing the income of shareholders only when the companies are higher than the usual, without committing itself to make larger payments as a part of future fixed dividend (Pandey, 2005, p.401). Under this policy low dividend is constant per share and extra dividend is an additional to be paid to maintain certain payout ratio.

Residual Dividend Decision

Residual dividend decision is a kind of cash dividend payment and the word residual implies “left over.” Under this policy dividends are paid out from the left over earnings (Bhattarai, 2005, p. 381). A stable payout ratio results in fluctuating dividend per share pattern, which may be a case of uncertainty for investors. In practice dividend policy is expressed either in terms of dividend per share or dividend rate (Pandey 2005, p. 402).

Dividend = Net income – (total capital budget x target equity ratio)

2.2 Review of Related Study

In this section the relevant studies done by other researchers previously has been reviewed. This includes review of journals, report, dissertations and other studies.

2.2.1 Review of Article

The review of relevant studies and articles publish in different journals are available on websites has been reviewed and presented.

Oii (1999) conducted study on determinant of capital structure evidence on UK property companies in 1999. He examines the capital structure determinants of 83 property companies quoted in the UK. He has used panel data methodology to analyze the data. The text reveals that asset structure, business orientation, and level of investment in property development are significant determinants of the corporate debt policy. However, corporate performance & tax burden have no any significant affect on the capital structure decision of property companies.

Lorente (2001) developed on analytical frame work through specifically & as resource based determinants of capital structure: Evidence for Spanish manufacturing companies. The analytical study showed that highly specific & opaque resources limit the borrowing capacity of the firm, while the transparent strategic assess affect financial leverage positively. The finding suggests two main implications for strategy & implementation:

1. There are unobservable financial costs that must be considered for a correct evaluation of sustainable competitive advantage based on strategic resources.
2. The financial policy of a resource driven firm is partially determined by the features of its strategic resource bundle.

Boateng (2004) conducted study on Determinants of capital structure. The study has analyzed the determinant of capital structure of international joint venture in Ghana in 2004. The study was based on a sample of all firms in Ghana with partners from western Europe, North America & Asia. The data were gathered via a cross sectional survey using questionnaire. The analysis was conducted by using two different sets of statistical tests. The results indicate that the size of joint venture, type of joint venture, industry and ownership level of the joint venture partner have positive bearing on the capital structure of joint venture in Ghana. The result, also indicate that firms in textile, building and construction, mining exploration have a higher leverage then firms in food processing, agriculture, financial services, automobile and transport .

Baral (2004) conducted study on determinants of capital structure. The objective of the study was to examine the determinants of capital structure of the companies listed to Nepal stock exchange ltd. As of July 16, 2003. The study was based on secondary data. Eight variables multiple regression model was used to assess the influence of defined explanatory variables on capital structure. On the basis of calculation research has concluded that growth size, and craning rate are statistically significant determination of financial leverage. Researcher has also concluded that corporate size growth rate & profitability pay a major role in determination of financial leverage in financial instruction and burin on risk, dividend payout ratio, debt source capacity and degree of operating leverage do a dismal role. Author researcher has concluded that financial institutions do not care of their debt resource capacity but do case of the expenses of their business.

Lowe, Naughton & Taylor (2006) jointly carried out study on the impact of corporate strategy on the capital structure of Australian companies. This study seeks to extend the debate by examining the endogenous influence of corporate strategy on financing decision made by firm. The analysis suggests that corporate strategy influences capital structure, particularly for the most diversified forms, structure, particularly for the most diversified forms, and that the emerging relationship is complex. The additional internal influences of capital structure, particularly for the most diversified forms, and that the emerging relationships is complex. The additional internal influence of capital structure is profit, cash flow, growth rate and the level of

earning risks. And this has considerable potential for further resolution of capital structure.

Kim, Heshmate & Aoun (2006) developed model of dynamic capital structure based on sample of Korean listed Manufacturing companies & estimate the unobservable optimal capital structure. The model reveals that the optimal capital structure has been affected by the financial crisis. The results also suggest that the model was affected by size, profitability & growth opportunity of firm.

Eriotis, Vasilious & Neokosmidi (2007) did an emperical study on how firm characteristics affect capital structure. The purpose of the study was to isolate the firm characteristics that affect capital structure. The methodology of study was panal data procedure for 129 Greek companies' sample. The findings of the study justify that there is a negative relation between the debt ratio of the firms and their growth, quick ratio & interest coverage ratio. Size appears to maintain a positive relation & according to the dummy variable there is differentiation in the capital structure amount the firms with a debt ratio greater that 50 percent & those with a debt ratio lower than 50 percent.

Seppa (2008) conducted study on Capital structure decisions: Research in Estonian non-financial companies. The purpose of the study was to investigate the relations between company specific financial factor & capital structure decision of Estonian- non-financial companies. 260 Estonion non-financial companies were divided into small, medium & large companies & analyzed by correlation- regression method. The findings of study was capital structure decision among Estonian non-financial companies are driven by the pecking order theory. The evidences supporting optional capital structure choices in long run remains weak, there was significant different between smaller & biggest companies.

Serrasqueiro & Rogao (2009) did study on capital structure of listed Portuguese companies: Determinants of debts adjustment. The purpose of study was to evaluate the impact of listed Portuguese companies' specific determinants on adjustment of actual debt towards target debt ratio. The methodology used was Dynamic panel estimators & OLS regression. The study suggests that transaction

costs are relevant to access to debt. It also suggest that capital structure decision can be explained in the light of trade off & pecking order theories & not according to what is forecast by market timing theory in listed Portuguese companies.

Tebogo, (2008) conducted study on capital structure and dividend policy. The main objective of the study is to determine the capital structure and dividend policy of Standard Chartered Botswana. The study was based on secondary data and quantitative analysis. The author used statistical analysis tools to investigate any possibility of a relationship between the two variables- that is, capital structure and dividend payout. The result of the empirical study shows positive correlation between capital structure and dividend payment; and an even stronger correlation is evident between earnings per share and dividend payment.

2.2.2 Review of Master Dissertation

In this section of writing, master dissertation on the capital structure and dividend policy available at central library, T.U. and Western Regional Library, Prithvi Narayan Campus has been reviewed.

Pandey (2001) carried out a comparative analysis of capital structure between Lumbini Sugar Factory Ltd. and Birgunj Sugar Factory Ltd. The main objective of the study was to calculate the capital structure of the companies descriptive and analytical research design was used in this study. The study was based on secondary data. On the basis of finding and conclusion as per the study the researcher concluded that unlevered companies are not good for the company that is the interest is that element of expenses which can deduct the tax. Further, he found that the D/E ratio symbolizes the more financial risk. Too low TD/TA indicates the owner's monopoly. Both companies have not justifiable D/E ratio. The interest coverage ratios of both companies have not debt serving capacity. The companies are exploring the debt beyond the limit and inefficient operation of the company. Both companies are unable to earn profit till the date. Both the companies have negative return on capital employed. Both companies overall capitalization rate not satisfactory. In short, the companies are not being operated efficiently.

Devkota (2002) has conducted her study on "An Analysis of capital structure of Necon Air Ltd." Under which she has proved various relations, correlation coefficient and capital structure approaches related to the leverage. Main foundation of her study is to determine the debt serving capacity, growth rate and capital structure approach. On her conclusion of study she found that debt-serving capacity of company is highly positive which means that most of the assets of company has been financed by debt capital. Moreover she concluded that the relationship between debt ratio and NOI is for more significant and there is no significant relationship between EBIT and interest payment. This shows that company is operating in the risky condition, as EPS is in fluctuating trend and revenue generation is normal. So, she recommends the company to well plan its capital structure. So, she recommends the company to well plan its capital structure, improve in debt serving capacity, control over expenditure, expand operation and rearrange the capitalization rate.

Gurung (2003) has conducted an analytical study under Capital Structure Management in selected joint venture banks of Nepal, with the main objective to analyze the Capital structure of joint venture bank of Nepal. Under descriptive and analytical research design. Gurung concluded that all the JVB's are excessively levered, following that bank are able in paying interest and have been able to achieve satisfactory return on their investment. Father, Gurung also concluded that banking sectors are performing their level best than compare to other sectors.

Sharma (2005) has conducted a research on "Capital structure of selected commercial banks in Nepal. The main theme of the study was to analyze the capital structure of commercial banks in Nepal. The study of Sharma was able to conclude the paid up capital of Nepalese commercial banks is increasing, total equity capital is growing rapidly as compare to total debt. The Nepalese commercial banks are not following stable debt policy. The Nepalese commercial banks are trying to decrease the proportion of total debt in their total financing by increasing the proportion of total capital. The bank are using the higher proportion of total debt in their total financing and the outsider have invest more in total assets of the bank as compare owner. The fluctuating interest coverage ratio of Nepalese commercial banks indicates the earning stream and interest expenses of these institutions are inconsistent. Father he concluded that instable and higher total debt to equity capital ratio in individual and aggregate

term. The interest coverage ratio is fluctuating and the capital adequacy ratio of the banks in aggregate term is above NRB standard.

Suhang (2006) wrote his thesis on "Capital structure of Unilever Nepal Ltd." His main objective was to analyze the capital structure of UNL. The base for the study is the secondary data of UNL. The study of Suhang concluded that the DOL of the company is highly fluctuated. Hence, the company has a high business risk. Further he found that the company does not have judicious mix of debt and equity in its capital structure. The ROTA shows that company has been able to utilize the owner resources efficiently. The EPS of company is growing with a remarkable rate annually. The company has been able to pay the dividend regularly to its shareholders. The DPS of company is growing per year with a high growth rate the company has high dividend payout ratio. The company does not care its size, earning rate dividend payout, debt service capacity while designing its capital structure. The company doesn't have any fixed policy regarding capital structure. The practice of maintaining optimal capital structure is lacking in the company.

Basnet (2007) conduct a study on capital structure, capital Adequacy and profitability management of domestic private banks in Nepal (A comparative case study between BOKL and MBL). The main focus of study is to test the comparative analysis of capital structure, capital adequacy, profitability management of DPBS in Nepal between two well-known Nepalese competitive bank, such that BOKL and MBL. The study was based on secondary data. In this study Basnet found that the paid-up-capital of MBL has been increased an average of 51.374. Per annum but that of BOKL is constant during the period of study. The D/E ratio of both bank are fluctuating but ICR of them are in increasing trend. The core capital adequacy ratio and total capital adequacy ratio of both banks are above the NRB standard. The supplementary capital adequacy ratio of both banks is with the limit as per NRB standard over the studying period. The total expenses to income ratio of both banks are in decreasing trend, the ROT of both banks is in increasing trend expected in fiscal year 2004-2005 of BOKL. Similarly, the ROA of both banks are in increasing trend expecting in FY 2004-2005 of MBL. The average ROE and ROA of BOKL is higher than MBL. NIM of both banks is in fluctuating trend but which shows better management of Assets and liabilities during the study period. The price earnings ratio

of both banks are fluctuating the profit position BOKL is better than MBL on the basis of tested profitability ratio.

Kadel (2008) conducted a comparative analysis of Dividend practice of some leading Commercial banks and finance companies. The main objective of the study was to assess the corporate Dividend practices of bank and finance companies listed in NEPSE. The study was based on descriptive and analytical research design. On the basis of findings kadel concluded that the dividend policy of commercial banks and finance company no specific policy is found. The dividend per share of both is highly dependent on current earnings. There is no fixed dividend payout ratio. There is no significant relation EPS, MPS, DPA and BY between banks and finance companies. The retention ratio of finance companies is very higher then commercial Bank.

K.C. (2007) conducted a comparative analysis of Dividend Practices of Nepalese Commercial Banks. The main objective of the study is to evaluate the present dividend practice and to suggest the future Practice for the growth of share market of Nepal. The study was based on descriptive and analytical research design. On the basis of findings K.C. concluded that there are no uniform practices of dividend followed by Nepalese commercial banks. There are different factors that affect differently in different commercial banks. A change is DPS affect s of market price per share in stock market and net worth differently in different commercial banks of Nepal. EPS and NI affect the dividend behavior differently in different commercial banks. There is vast different between market price per share and net worth per share in commercial banks and great fluctuation on EPS and DPS. The regulations issued by NRB to banks and financial institution influences in dividend practices.

The research history so far shows considerable number of studies focusing on the comparative study on capital structure of various states – owned and Public limited companies of Nepal. In addition, a few studies have also attempted on the study of capital structure of a single company. However, the previous studies have failed to cover the area study on the “effect of capital structure on dividend payout ratio” which this study endeavors. Therefore, this research has been carried out with

the positive belief that it can be a stepping stone for the further studies as it attempts to cover the gap that remains unaccomplished so far.

CHAPTER III

RESEARCH METHODOLOGY

Methodology adopted in the research work is presented in this chapter. Research design, study unit, nature and sources of data, data collection and processing techniques, and analysis tools which are used for analyzing the data are method in this chapter. The main measures of analysis tools are financial tools and statistical tools. Financial tools include financial ratio analysis whereas statistical tools assign with regression analysis.

3.1 Research Design

Research Design is an outline or strategy for the collection and analysis of data. It acts as a topmost frame work for the study, guiding the collection and analysis of data, as it is cheaper and effective too. Guidelines for planning and executing research work are thoroughly provided by Research Design. Descriptive and analytical research design on the proposed topic has been used as per the necessity of the study.

3.2 Study Unit

Currently, the total number manufacturing companies listed in security board of Nepal is 21. It may not be possible for all manufacturing companies to provide scope for study as most of their data may not be reliable. In absence of valid and reliable data the objective of study cannot be fulfilled. Hence, for the study Unilever Nepal Ltd. has been chosen as the data necessary are available easily.

3.3 Nature and Source of Data

Basically secondary data is used for this study. Annual reports of Unilever Nepal Ltd. are the main source of data.

3.4 Data Collection and Processing Techniques

Data that were required for the research have been collected from secondary sources. Annual reports, balance sheet, P&L A/C and other relevant data of essentials for this study were collected from Unilever Nepal Ltd. In addition to this the office of

securities Board, Nepal was also visited for the supportive information. Initially all the necessary data were extracted from the published document and legalized or audited financial statement then after that so obtained data were entered into the master sheet manually. Further, data were passed into spreadsheet for the ejection of financial ratio and essential figures. At the end the different ratios were worked out with the help of computer programmers like M/S-excel, Ms-word, SPSS.

3.5 Analysis Tools

According to the pattern of data available and objective of the study both the financial and statistical tools have been used for analyzing the data. The so, available data have been entered in to computer and presented systematically in formats of tables and charts. Finally the processing of data is concluded by Ms-Excel and SPSS.

3.5.1 Financial Tools

Various ratio analysis related with the capital structure have been adopted to achieve the final way out of research. The high prolific ratio used in this course of study is discussed below:

Degree of Operating Leverage (DOL)

Operating Leverage is the main tools for measuring the business risk of company. Operating leverage in the company exists due to fixed operating cost in firm's income statement. Normally firm have two options. a) To operate with high fixed costs or b) to operate with high variable cost. In the first option there is high risk and have high rate of return. However in second option there is minimum degree of risk followed by low return too. Operating leverage can be determined by following formula:

$$DOL = \frac{\% \text{ change in } EBIT}{\% \text{ change in Sales}} \text{ or } \frac{CM}{EBIT}$$

Higher the degree of operating leverage, the more profits will flue tauter both in an upward and downward direction, in response to change in volume.

Degree of Financial Leverage (DFL)

Financial Leverage measures financial risk and financial performance of the firm. It shows how much debt and preference share the firm employees. In its capital structure. The degree of financial leverage is defined as the ratio of the percentage change in net income divided by the percentage change in earnings before interest and taxes (EBIT). In other words financial leverage can be defined as the use of fixed charge bearing capital in the capital structure of the firm maximize the earning of equity shareholders. It establishes the relationship between EBIT and EPS or EBT. Financial leverage can be determined as follows:

$$DFL = \frac{\% \text{ change in } EBT / EPS}{\% \text{ change in } EBT} \text{ OR } \frac{EBIT}{EBT}$$

Degree of Combine Leverage (DCL)

The degree of combine leverage is defined as the ratio of percentage change in NI to percentage change in sales. The total leverage results from the use of fixed costs, both operating and financial in the firm's income stream. It measures the firm's total leverage. It is also a combination of DOL and DFL that shows how given change in sales will affects EPS. Degree of Combine Leverage (DCL) can be determined as follows

$$DCL = DOL \times DFL$$

OR

$$DCL = \frac{CM}{EBT}$$

If the DCL is greater than 1 there is total leverage. Total leverage results from the use of operational fixed cost and financial fixed cost in the firm's income statement.

Shareholders' Equity to Total Assets Ratio

The shareholder's equity to total assets ratio shows the proportion of total assets of the company financed by the ownership capital. If a firm financed it all assets by equity capital then the company is called unlevered. This ratio is obtained by dividing shareholders equity by total assets of this company.

Symbolically

$$\text{Shareholder's Equity to Total Assets Ratio} = \frac{SHE}{TA}$$

Financial Leverage Ratio (FLR)

Financial Leverage ratio shows the proportion of debt portion in total financing of company. High financial ratio of company indicates that the firm is highly levered. It is measured in terms of ratio of total debt and total assets of the company. Here total debt is calculated as total assets minus shareholders' equity of the Company. i.e.

$$FLR = 1 - \frac{SHE}{TA}$$

Debt Equity Ratio

The debt to equity Ratio is calculated to ascertain the soundness of company's long-term financial position. It indicates the extent to which. It depends upon borrowed funds for its existence. It portrays the proportion of its total fund acquired by way of external financing. This ratio is ascertained by following formula:

$$\text{Debt equity ratio} = \frac{\text{Long term debt}}{\text{Shareholders' fund}}$$

As per calculation, if the debt to equity ratio so obtained high then it implies that the company has financed its assets with a large portion of debt. A high debt-equity ratio is not preferable for the creditors.

Interest Coverage Ratio (ICR)

Interest coverage ratio is that conventional type of ratio which analyses the debt service capacity of the firm. It helps management by providing clear cut idea of the company's earning to overcome its annual interest costs. However calculated ratio is very much unfavorable to the company if it is either too high or too low. A too high ratio indicates the unused debt capacity on the firm as it is unable to take the advantage of provided financial leverage. Similarly, a too low ratio is an alert signal that the firm is praising excessive debt and does not have the capacity to service the debt properly and it reflects higher probability of default. Interest coverage ratio (ICR) is determined as under:

$$ICR = \frac{EBIT}{\text{Interest charges}}$$

Return on Total Assets (ROA)

This ratio measures the relationship between the total assets and net profit after tax plus interest. It measures the productivity of the assets and determines how effectively the total assets have been used by the company.

Mathematically:

$$\text{ROA} = \frac{\text{Net profit after tax + interest}}{\text{Total assets}}$$

Hence if the so obtained ratio is too low, its survivability is threatened & if the ratio is higher it indicates efficiency in utilizing its overall resource and vice-versa. It is considered to be major tools for evaluating the operational efficiency of company.

Return on Shareholders' Equity (ROSE)

This ratio expresses the profitability of a business in relation to the owner's fund. It is also expressed in percentage. It helps in measuring the profitability of owner's investment. It symbolizes how soundly the company has been using the resources of owner's. The main theme of management is to generate the maximum return on shareholders' investment in the company ROSE is this for the superlative means for management of the company's success in attaining its goal. Hence this ratio is calculated as,

$$\text{ROSE} = \frac{\text{Net profit after tax}}{\text{Total shareholders' equity}} \times 100$$

Earnings per Share (EPS)

EPS measures the profit available to equity shareholders on per share basis this ratio expresses the earning power of the company in terms of a share held by the equity shareholders. This ratio is computed by dividing the net profit after preference dividend by the number of equity share outstanding. It is expressed in an absolute rupees figure:

$$\text{Earnings per Share (EPS)} = \frac{\text{Net profit after tax} - \text{Preference dividend}}{\text{No. of equity share outstanding}}$$

Dividend per Share (DPS)

The profit earned by the company finally belongs to the equity shareholders. Therefore, all or some of them are distributed to them which are known as dividends. Thus, this ratio shows the relationship between dividends paid to shareholders and the number of share outstanding. The amount of earning distributed and paid as cash dividend is considered for calculating the dividends per shares.

This ratio is calculated by the amount of dividend distributed to shareholders by the number of common share outstanding.

$$\text{Dividend per Share (DPS)} = \frac{\text{Dividend available to shareholders}}{\text{No. of equity share outstanding}}$$

Dividend Pay Out Ratio (DPR)

Dividend payout ratio indicates the percentage of the profit on share that is distributed as dividend. This ratio measures that how much earning is distributed to shareholders and how much is retained by the company. DPR is calculated by dividing total dividend by net income i.e.

$$\text{DPR} = \frac{\text{Dividend}}{\text{Net Income}}$$

3.5.2 Model Specification

3.5.2.1 Multiple Regression Model

Specification of multiple regression models is given by.

$$Y = a + b_1x_1 + b_2x_2 + b_3x_3 + \dots + b_n x_n \dots \dots \dots (1)$$

Where,

x_1 = size of the firm

x_2 = earning rate

x_3 = dividend rate

x_4 = debt service capacity

a = constant term of the model.

b 's = coefficient of model

Y = financial leverage.

3.5.2.2 Simple correlation and linear regression

1. The linear regression equation

$$X = a + bY$$

Where,

Y = Financial Leverage

X = Dividend payout ratio

$$b = \frac{\text{Covariance}(xy)}{\text{Variance}(y)} = \frac{n\sum xy - (\sum x)(\sum y)}{n\sum y^2 - (\sum Y)^2}$$

$$a = \bar{X} - b\bar{Y}$$

2. Correlation coefficient (r)

$$r = \frac{\text{Covariance}(xy)}{\sqrt{\text{Var}(x)\text{Var}(y)}} = \frac{n\sum xy - (\sum x)(\sum y)}{\sqrt{[n\sum x^2 - (\sum x)^2][n\sum y^2 - (\sum y)^2]}}$$

3.5.4 Definition of Variables

3.5.4.1 Dependent Variable (Y)

The ratio of total debt to total assets is termed as the dependent variable. In this variable; the total debt includes both short term and long term interest bearing debt, it is given by.

$$\begin{aligned} \text{FLR} &= \frac{TD}{TA} \\ &= 1 - \frac{SHE}{TA} \dots\dots\dots (4) \end{aligned}$$

Where,

FLR = Financial Leverage Ratio

TD = Total Debt

TA = Total Assets

SHE = Shareholders' Equity

3.5.4.2 Independent Variables

- 1) **Size of the Firm (X₁)**

It is defined as the logarithm of scale of the firms. It is given by:

$$X_1 = \text{Log}(S) \dots\dots\dots (5)$$

Where, S = Sale of the end of fiscal year.

2) Earning Rate (X₂)

Return on total assets is defined as earning rate, which is given by

$$X_2 = \frac{EBIT}{TA} \dots\dots\dots (6)$$

Where, EBIT = Earnings before income and tax at the end of fiscal year.

TA = Total assets at the end of Fiscal Year.

3) Dividend Payout (X₃)

It is defined as the ratio of dividend to total income available to shareholders. Here dividend includes only cash dividend not stock dividend and other forms of dividend. It is given by:

$$X_3 = \frac{D}{NI} \dots\dots\dots (7)$$

Where, D = Total dividend distributed in the fiscal years.

NI = Income available to shareholders in fiscal year.

4) Debt service Capital (X₄)

It is defined in terms of interest coverage ratio. It is given by.

$$X_4 = \frac{EBIT}{I} \dots\dots\dots (8)$$

Where, EBIT = Earnings before interest tax for the fiscal years.

I = Total Interest Change for the fiscal year.

3.5.3 Statement of Hypothesis

This study has tested the following null hypothesis on relation between the defined variables and capital structure of Unilever Nepal Ltd.

- H₀₁ : There is no significant relation between the size and financial leverage.
- H_{A1} : There is significant relation between the size and financial leverage.
- H₀₂ : There is no significant relation between earning rate and financial leverage.
- H_{A2} : There is significant relation between earning rate and financial leverage.
- H₀₃ : There is no significant relation between the dividend payout financial leverage.
- H_{A3} : There is significant relation between the dividend payout and financial leverage.
- H₀₄ : There is no significant relation between the debt service capacity and financial leverage.
- H_{A4} : There is significant relation between the debt service capacity and financial leverage.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

Different modes and techniques that are mentioned in research methodology section have been practically implied to analyze the collected data, in this section of unit. Financial and statistical tools which are considered to be backbone for this study are taken in consideration. Mainly ratios of different types are evaluated in the financial tools whereas SPSS programme is ran to carry out the regression analysis under statistical tools.

4.1 Degree of Operating Leverage

The operating leverage of the Unilever Nepal Ltd. has been presented table 4.1.

Table 4.1
Degree of Operating Leverage
(Rs. In' 000,000)

Year	CM	EBIT	DOL
2055/056	229.15	147.40	1.55
2056/057	326.75	161.10	2.03
2057/058	320.16	115.59	2.77
2058/059	298.32	73.75	4.05
2059/060	401.58	133.55	3.01
2060/061	555.79	190.32	2.92
2061/062	543.74	246.46	2.21
2062/063	494.71	260.73	1.90
2063/064	536.91	298.34	1.80
2064/065	782.32	422.17	1.85
2065/066	929.27	532.67	1.74
Average			2.35

Source: Annual Report of UNL

The table 4.1 shows that the degree of operating leverage of UNL for the study period ranges from 1.55 times to 4.05 times. The average DOL of the company is 2.35 times. Over the study period the average DOL 2.35 times of UNL indicates that each 1% change in sales resulted to increase 2.35 % in EBIT.

The trend of DOL of the company over the study period has been presented in fig. no. 4.1.

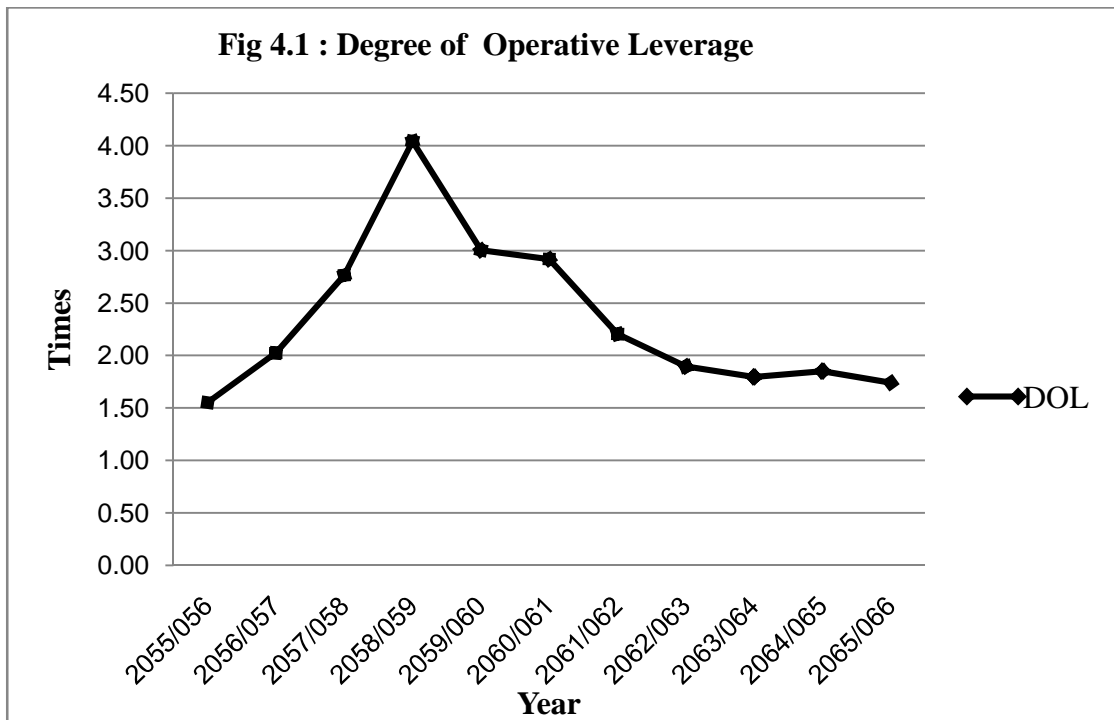


Figure 4.1 shows the trend of DOL of the company from F.Y. 2055/056 to 2065/066. DOL is in increasing trend from F.Y. 2055/056 to 2058/059 and after that it is in decreasing trend.

4.2 Degree of Financial Leverage

The degree of financial leverage of UNL over the study period has been presented in table 4.2.

Table 4.2
Degree of Financial Leverage
(Rs. In '000000')

Year	EBIT	EBT	DFL
2055/056	147.40	126.23	1.17
2056/057	161.10	144.78	1.11
2057/058	115.59	93.54	1.24
2058/059	73.75	56.61	1.30
2059/060	133.55	124.04	1.08
2060/061	190.32	193.78	0.98
2061/062	246.46	255.70	0.96
2062/063	260.73	304.66	0.86
2063/064	298.34	345.56	0.86
2064/065	422.17	433.13	0.97
2065/066	532.67	563.64	0.95
Average			1.04

Source: Annual Report of UNL

The table 4.2 shows that the DFL of UNL range from minimum 0.86 times to Maximum 1.24 times over the cause of study period. The average DFL 1.04 times indicates that in UNL 1% change in EBIT resulted 1.04 % change in EBT.

The trend of DFL of the company over the study period has been presented in fig. no. 4.2.

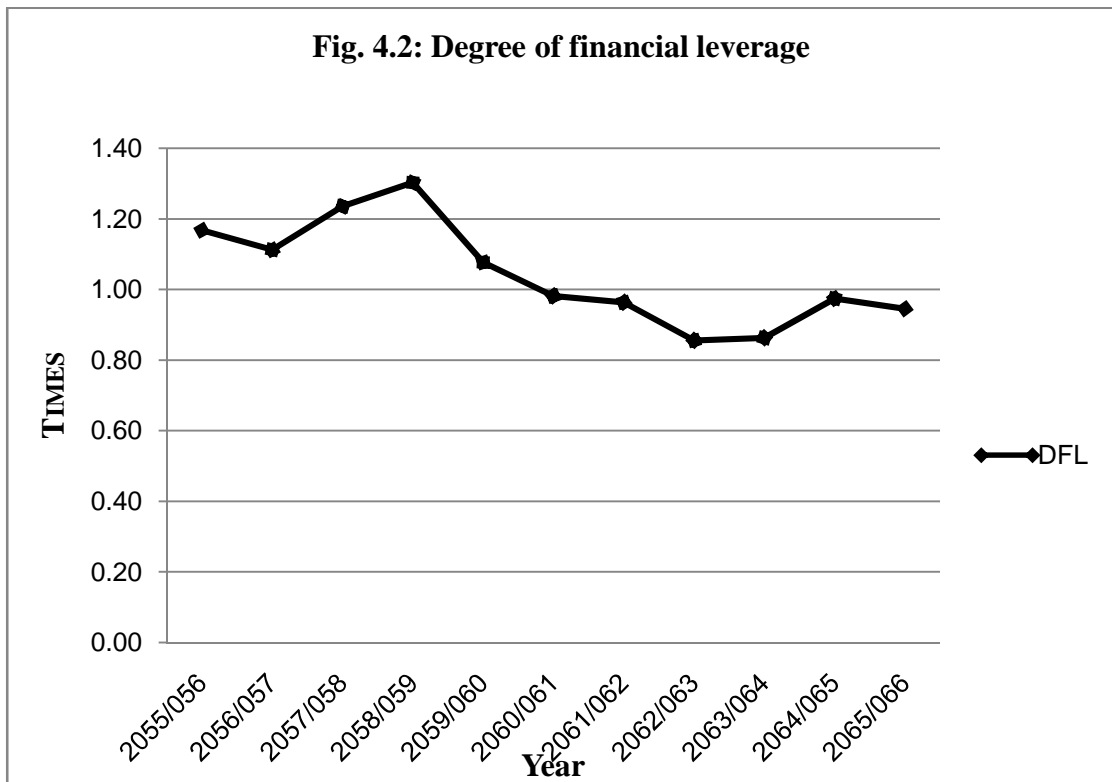


Figure 4.2 shows the trend of DFL of the company from F.Y. 2055/056 to 2065/066. Over the study year maximum DFL is seen in F.Y. 2058/059 and minimum is seen in F.Y. 2062/063.

4.3 Degree of Combined Leverage

The degree of combined leverage of UNL over the study period has been presented in table 4.3

Table 4.3
Degree of Combined Leverage
(Rs. In '000000')

Year	CM	EBT	DCL
2055/056	229.15	126.23	1.8
2056/057	326.75	144.78	2.3
2057/058	320.16	93.54	3.4
2058/059	298.32	56.61	5.3
2059/060	401.58	124.04	3.2
2060/061	555.79	193.78	2.9
2061/062	543.74	255.70	2.1
2062/063	494.71	304.66	1.6
2063/064	536.91	345.56	1.6
2064/065	782.32	433.13	1.8
2065/066	929.27	563.64	1.6
Average			2.5

Source: Annual Report of UNL

The table 4.3 shows that the DCL of UNL range from minimum 1.6 times to Maximum 5.3 times over the study period. The average DCL 2.5 times indicates that in UNL 1% change in sales resulted 2.5 % change in EBT. The trend of DCL of the company over the study period has been presented in fig. no. 4.3.

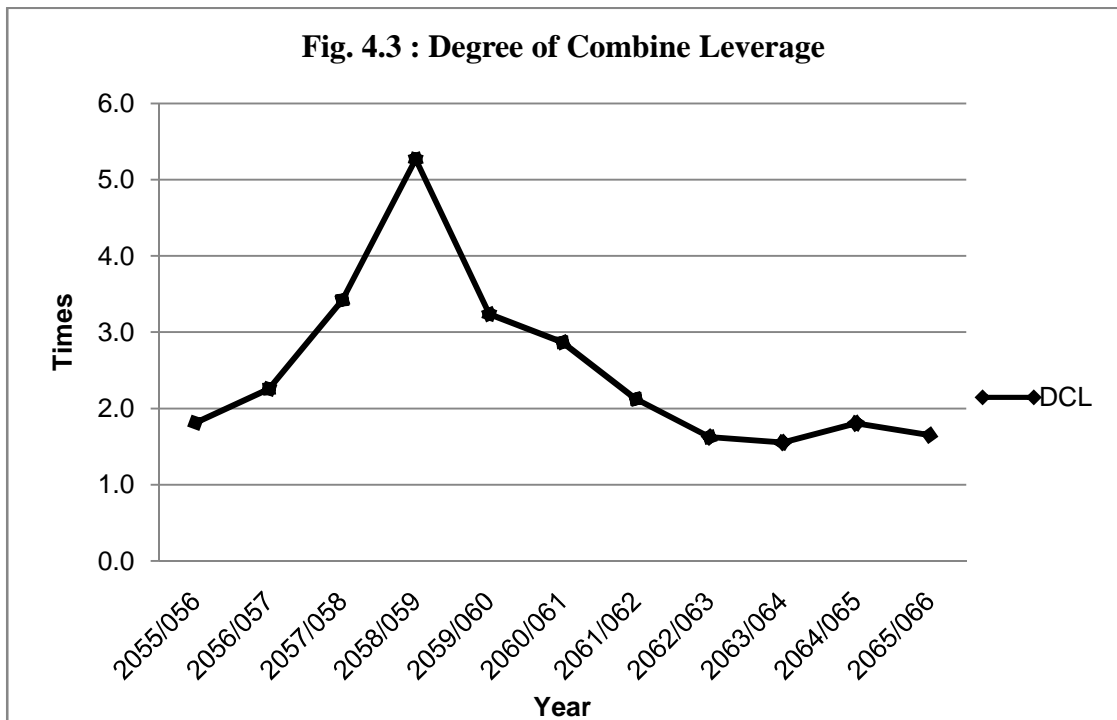


Figure 4.3 shows the trend of DCL of the company from F.Y. 2055/056 to 2065/066. DCL is in increasing trend from F.Y. 2055/056 to 2058/059 and after that it is in decreasing trend.

4.4 Shareholders' Equity to Total Assets Ratio

The shareholders' equity to total assets ratio of UNL for the period of F.Y. 2055/056 to 2065/066 has been presented in table 4.4.

Table 4.4
The Shareholders' Equity to Total Assets Ratio
(Rs. In '000000')

Year	SHE	TA	SHE/TA %
2055/056	250.4	544.83	45.96
2056/057	324.94	629.75	51.60
2057/058	342.35	760.42	45.02
2058/059	348.13	571.34	60.93
2059/060	358.43	784.88	45.67
2060/061	396.01	939.72	42.14
2061/062	216.93	1098.95	19.74
2062/063	224.91	967.15	23.25
2063/064	234.79	985.24	23.83
2064/065	280.48	1095.05	25.61
2065/066	687.87	1196.66	57.48
Average			40.11

Source: Annual Report of UNL

The table 4.4 shows the shareholder's Equity to total assets of UNL for the study period lies between 19.74 % and 60.93%. It indicates that the ratio is highly fluctuated over the study period. The average ratio of shareholder's equity to total assets of company is 40.11% over the 11 year of study period. The compound annual growth rate of equity is 17.78 percent for the period 2055/056 to 2065/066. It was growing at the constant absolute amount of Rs 59.249 million a year for the study period. The trend of shareholder's Equity to total assets of the company over the study period has been presented in fig. no. 4.4.

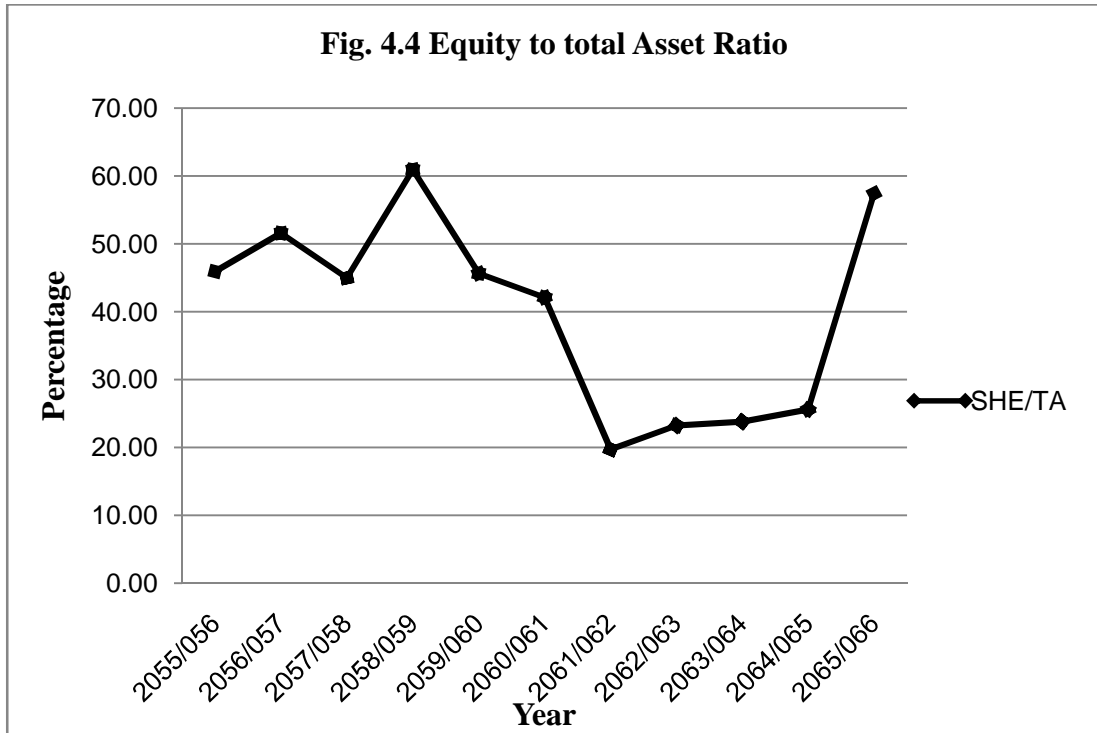


Figure 4.4 shows the trend of equity to total asset ratio of the company from F.Y. 2055/056 to 2065/066. Equity to total asset ratio sharply increases in the year 2058/059 and 2065/066 and has sharply decreases in the year 2061/062.

4.5 Financial Leverage Ratio

The financial leverage ratio of the UNL over the study period has been presented in table 4.5.

Table 4.5
Financial Leverage Ratio
(Rs. In '000000')

Year	SHE	TA	(in %) $1 - \frac{SHE}{TA}$
2055/056	250.4	544.83	54.04
2056/057	324.94	629.75	48.40
2057/058	342.35	760.42	54.98
2058/059	348.13	571.34	39.07
2059/060	358.43	784.88	54.33
2060/061	396.01	939.72	57.86
2061/062	216.93	1098.95	80.26
2062/063	224.91	967.15	76.75
2063/064	234.79	985.24	76.17
2064/065	280.48	1095.05	74.39
2065/066	687.87	1196.66	42.52
Average			59.89

Source: Annual Report of UNL

Table 4.4 shows that UNL's proportion of debt is in the fluctuating trend over the study period. The ratio of UNL debt proportion ranges from. 39.07% to 80.26%. The table detects that the company has used excess debt capital of 50% expect for the year 2056/057, 058/059 & 065/066. It indicates that the company prefers debt financing as compared to equity financing. The FLR is very high in F.Y. 2061/062 that is 80.26%. The average FLR of the company is 59.89% over the study period. The compound annual growth rate of debt is 13.11 % for the period 058/059 to 065/066. It was growing at the constant absolute amount of Rs 70.428 million a year for the study period.

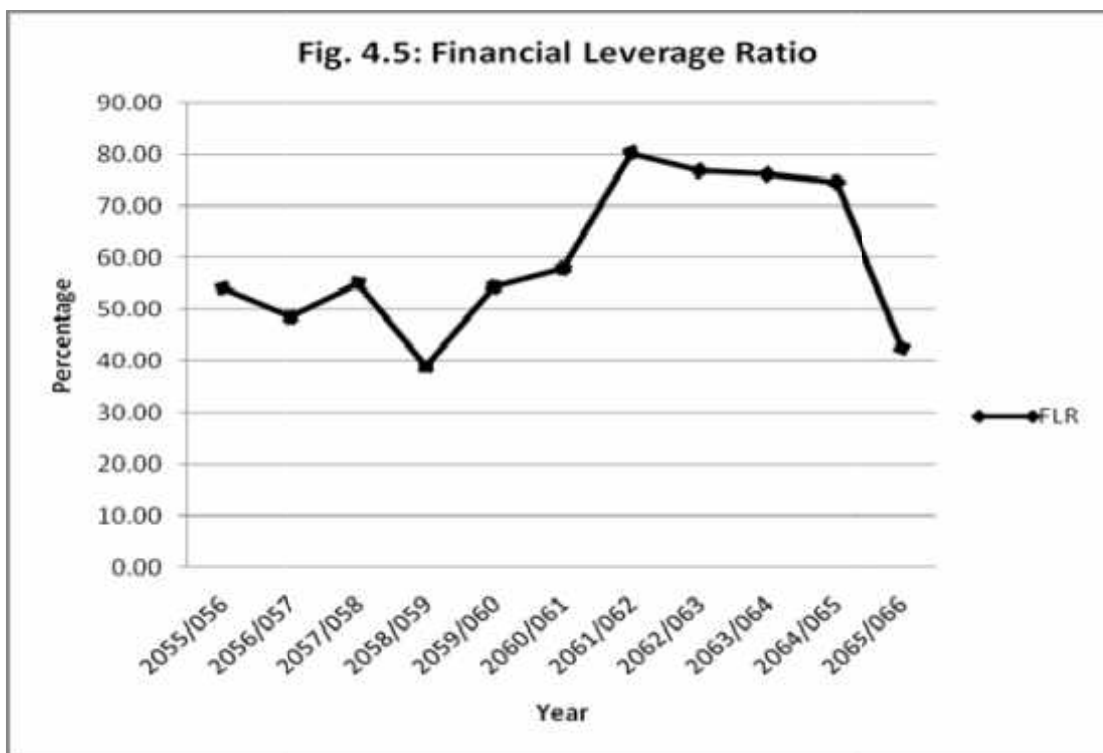


Figure 4.5 shows the trend of FLR of the company from FY 2055/56 to 2065/66. FLR is rapidly decreasing trend in the year 2058/59 and rapidly increasing upto FY 2061/62. After that it is slowly decreasing.

4.6 Debt to Equity Ratio

The debt equity ratio of UNL over study period has been presented in table 4.6

Table 4.6
Debt to Equity Ratio
(Rs. In '000000')

Year	Debt	Equity	Debt/Equity (in %)
2055/056	294.43	250.40	117.58
2056/057	304.81	324.94	93.81
2057/058	418.07	342.35	122.12
2058/059	223.21	348.13	64.12
2059/060	426.45	358.43	118.98
2060/061	543.71	396.01	137.30
2061/062	882.02	216.93	406.60
2062/063	742.23	224.91	330.01
2063/064	750.47	234.79	319.63
2064/065	814.57	280.48	300.93
2065/066	508.80	687.87	300.93
Average			210.18

Source: Annual Report of UNL

The table 4.6 shows that D/E ratio of the UNL for the study period ranges from 64.12% of minimum to 406.06 % of maximum. The ratio is highly fluctuated over the study period of F.Y. 2055/056 to 2065/066. The company is not following certain pattern of D/E ratio. The average D/E ratio of UNL for the period is 210.18% over the study period. The trend of D/E ratio of the company in its financing over the observed period has been depicted in fig no. 4.6

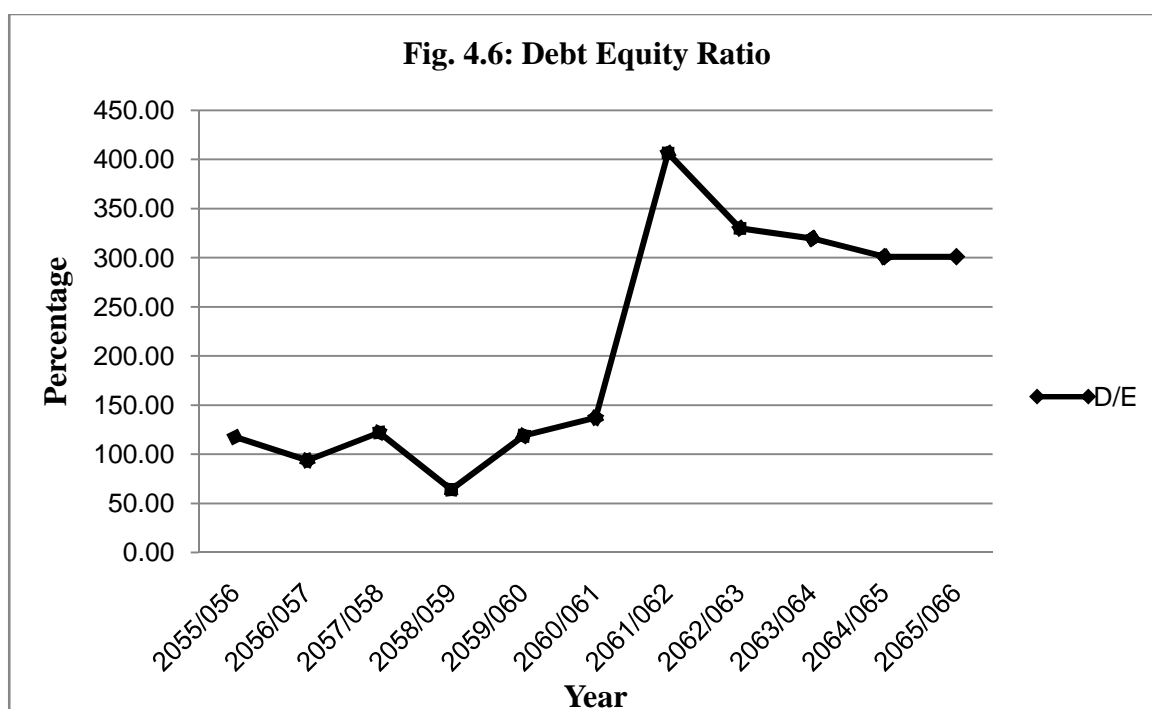


Figure 4.6 shows the trend of DE ratio of the company from F.Y. 2055/056 to 2065/066. DE ratio is slowly decreasing trend in the year 2058/059 and rapidly increasing up to F.Y. 2061/062. After that it is slowly decreasing.

4.7 Interest Coverage Ratio

The interest coverage ratio of UNL over the study period has been presented in table 4.7.

Table 4.7
Interest Coverage Ratio
(Rs. In '000000')

Year	EBIT	I	EBIT/I (in Times)
2055/056	147.40	10.12	14.57
2056/057	161.10	3.84	41.95
2057/058	115.59	14.21	8.13
2058/059	73.75	12.61	5.85
2059/060	133.55	2.6	51.37
2060/061	190.32	1.79	106.32
2061/062	246.46	1.77	139.24
2062/063	260.73	1.79	145.66
2063/064	298.34	1.06	281.45
2064/065	422.17	0.13	3247.49
2065/066	532.67	0.03	19921.74
Average			2178.52

Source: Annual Report of UNL

The table 4.6 shows that interest coverage ratio of UNL ranges from a minimum of 5.85 times to maximum of 19921.74 times. The ratio is highly fluctuated over the study period of F.Y. 2055/056 to 2065/066. The average ICR of the company is 2178.52 times over the study period. The company has sufficient earning available except the Fiscal year 2058/059.

4.8 Return on Total Assets (ROA)

The return on assets ratio of UNL over the study period has been presented in table 4.8.

Table 4.8
Return on Total Assets.
(Rs . in' 000000)

Year	NI	TA	NI/TA(in%)
2055/056	119.03	544.83	21.85
2056/057	120.58	629.75	19.15
2057/058	68.04	760.42	8.95
2058/059	42.61	571.34	7.46
2059/060	93.17	784.88	11.87
2060/061	140.78	939.72	14.98
2061/062	189.20	1098.95	17.22
2062/063	238.16	967.15	24.62
2063/064	263.06	985.24	26.70
2064/065	335.12	1095.05	30.60
2065/066	442.17	1196.66	36.95
Average			20.03

Source: Annual Report of UNL

The table 4.8 shows the UNL's decreasing trend of ROA from Fiscal year 2055/056 to 2058/059 after that increasing trend of ROA from F.Y. 2058/059 to 2065/066. The ROA is ranges from minimum 7.46 % to maximum 36.95 % over the study period. Only the ratio in F.Y. 2058/059 which is 7.46% is not acceptable while for the rest of F.Y. year it is admirable. The average of ROA of the company over the study period is 20.03%. The figure 4.7 is the representative of ROA of the Co. for the study period.

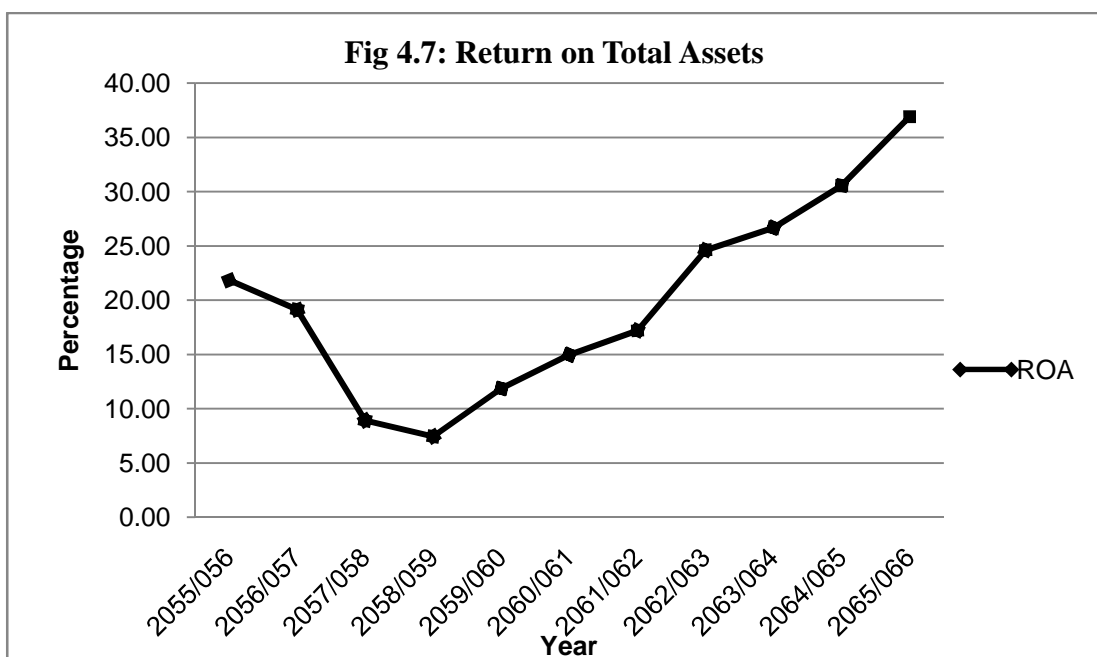


Figure 4.7 shows the trend of ROA of the company from F.Y. 2055/056 to 2065/066. ROA is in decreasing trend till the year 2058/059 and is in increasing trend up to F.Y. 2065/066.

4.9 Return on Shareholder's Equity (ROSE)

The return on shareholders' equity of UNL over the study period has been presented in table 4.9

Table 4.9
Return on Shareholders' Equity
(Rs. In' 000000')

Year	NI	SHE	NI/SHE (in %)
2055/056	119.03	250.40	47.54
2056/057	120.58	324.94	37.11
2057/058	68.04	342.35	19.88
2058/059	42.61	348.13	12.24
2059/060	93.17	358.43	25.99
2060/061	140.78	396.01	35.55
2061/062	189.20	216.93	87.22
2062/063	238.16	224.91	105.89
2063/064	263.06	234.79	112.04
2064/065	335.12	280.48	119.48
2065/066	442.17	687.87	64.28
Average			60.66

Source: Annual Report of UNL

The table 4.9 shows that the UNL's return on shareholder's equity is highly fluctuating ranging between 12.24% of minimum to 119.48% of maximum. The return on shareholder's equity is declining from F.Y. 2055/056 to 2058/059 after that increasing trend up to 2064/065. The average ROSE of the company during the study period is 60.66%.

The trend of the ROSE of the company has been presented in Figure 4.8

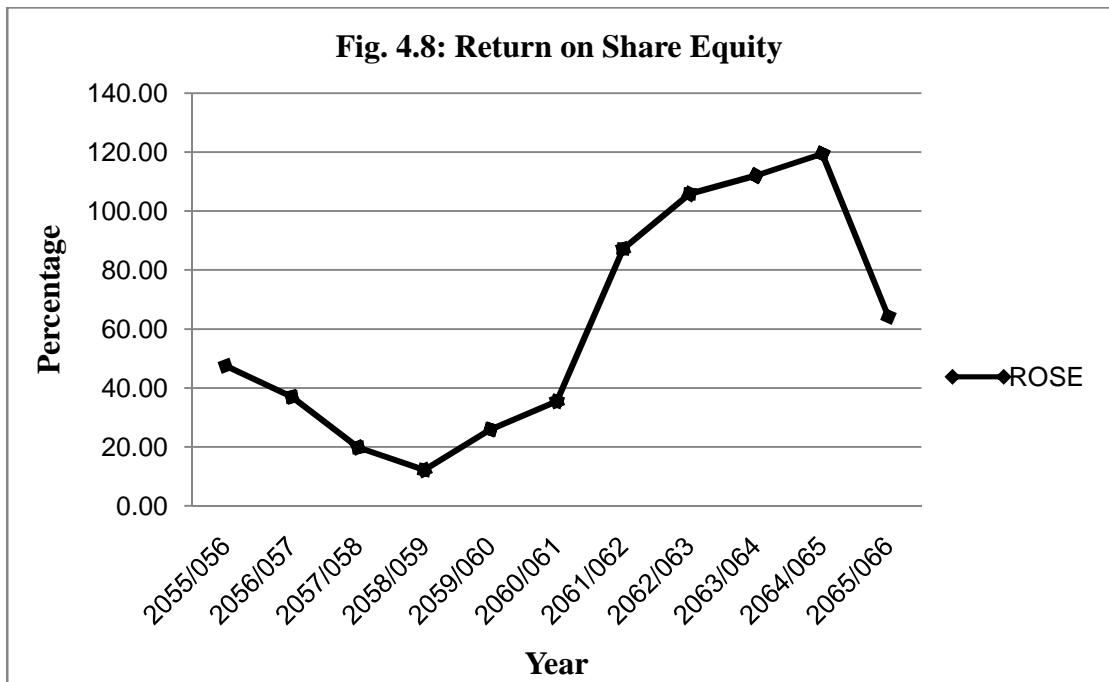


Figure 4.8 shows the trend of ROSE of the company from F.Y. 2055/056 to 2065/066. ROSE is decreasing trend till the year 2058/059 and rapidly increasing up to FY 2064/065. After that it is rapidly decreasing.

4.10 Earning Per Share (EPS)

The Earnings per Share of UNL on the Study Period has been Presented in table 4.10

**Table 4.10.
Earnings per Share**

Year	NI (in Rs.)	No. of Shares	EPS in (Rs)
2055/056	119032385	920700	129.28
2056/057	120576552	920700	130.96
2057/058	68043503	920700	73.90
2058/059	42606160	920700	46.28
2059/060	93167104	920700	101.19
2060/061	140782744	920700	152.91
2061/062	189199474	920700	205.50
2062/063	238156507	920700	258.67
2063/064	263064838	920700	285.72
2064/065	335121739	920700	363.99
2065/066	442172549	920700	480.26
Average			202.61

Source: Annual Report of UNL

Table 4.10 shows the EPS of Co. from F.Y. 2055/056 to 2065/066 .The EPS of UNL ranges from 46.28 to 480.26 in Rs. It indicates that the earning of the company has been highly fluctuated during the study period. The average EPS of the company over the study period is Rs. 202.61. The compound annual growth rate of EPS is 22.01% for the period of 2055/056 to 2065/066. It was growing at the constant absolute amount of Rs 44.61 a year for the study period.

The figure 4.9 is the representative of EPS of the company for the study period.

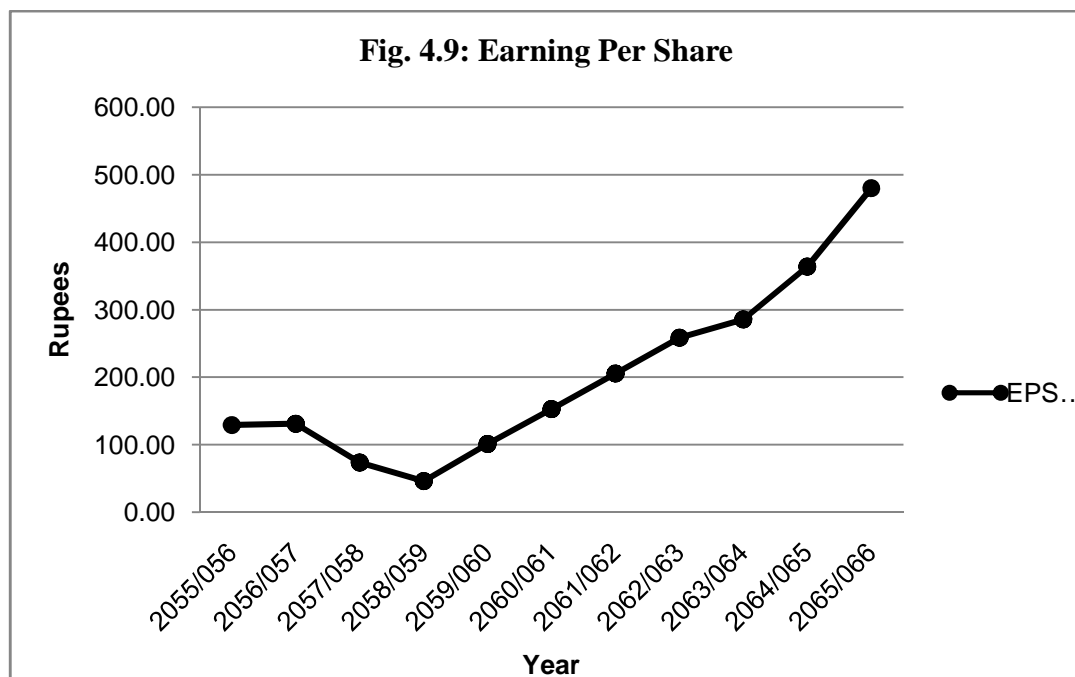


Figure 4.9 shows the trend of EPS of the company from F.Y. 2055/056 to 2065/066. EPS is slowly decreasing trend till the year 2058/059 and is in increasing trend up to F.Y. 2065/066.

4.11 Dividend Per Share (DPS)

The DPS of the UNL over the period has been presented in table 4.11.

Table 4.11
Dividend per Share (DPS)

Year	Dividend	No. of Share	DPS (inRs)
2055/056	36,828,000	920700	40
2056/057	46,035,000	920700	50
2057/058	50,638,500	920700	55
2058/059	36,828,000	920700	40
2059/060	82,863,000	920700	90
2060/061	92,070,000	920700	100
2061/062	368,280,000	920700	400
2062/063	230,175,000	920700	250
2063/064	253,192,500	920700	275
2064/065	299,227,500	920700	325
2065/066	0	920700	0
Average			147.73

Source: Annual Report of UNL

Table 4.11 shows that the dividend per share paid by company ranges from Rs. 0 to Rs. 400 of maximum. The Co. has not pay dividend in F.Y. 2065/066 the average DPS of the company for the study period is Rs. 147.73. The compound annual growth rate of DPS of UNL is 33.45% for the study period. It was growing constant absolute amount of Rs. 49.42 a year for the given period.

The trend of DPS of the Co. for the study period has been represented below in fig. 4.10

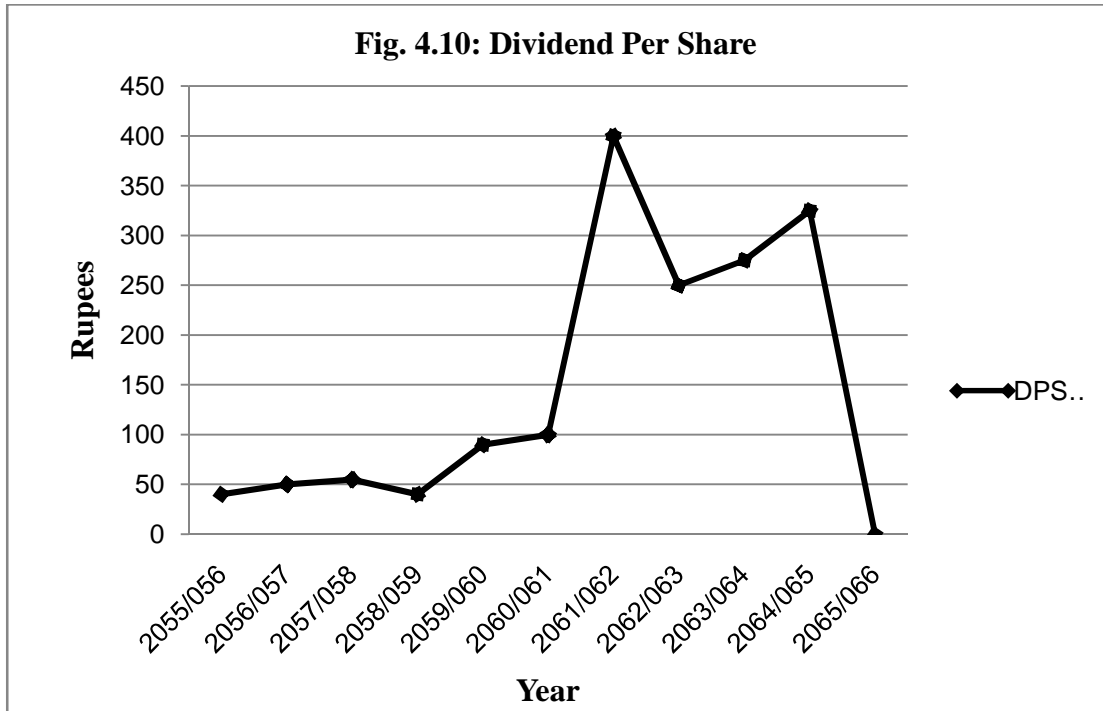


Figure 4.10 shows the trend of DPS of the company from F.Y. 2055/056 to 2065/066. DPS is rapidly increasing in the year 2061/062, 2064/065 and rapidly decreasing in F.Y. 2065/066.

4.12 Dividend Payout Ratio (DPR)

Dividend payout Ratio of the UNL is presented in table 4.12

**Table 4.12:
Dividend Payout Ratio (DPR)**

Year	Dividend (in Rs)	Net Income	DPR (in %)
2055/056	36,828,000	119,032,385	30.94
2056/057	46,035,000	120,576,552	38.18
2057/058	50,638,500	68,043,503	74.42
2058/059	36,828,000	42,606,160	86.44
2059/060	82,863,000	93,167,104	88.94
2060/061	92,070,000	140,782,743	65.40
2061/062	368,280,000	189199473	194.65
2062/063	230,175,000	238156507	96.65
2063/064	253,192,500	263064837	96.25
2064/065	299,227,500	335121739	89.29
2065/066	0	442172549	0.00
Average			78.29

Source: Annual Report of UNL

The table 4.12 shows that the DPR of the Company ranges from 0% to 194.65% during the study period. The DPR of the co. is highly fluctuative in nature. In the initial year it is in increasing trend that has fallen slightly and gone up quite impressively again has fallen down. The average DPR of the Co. is 78.29%.

The trend of DPR of the Co. for the study period has been presented in the fig. 4.11.

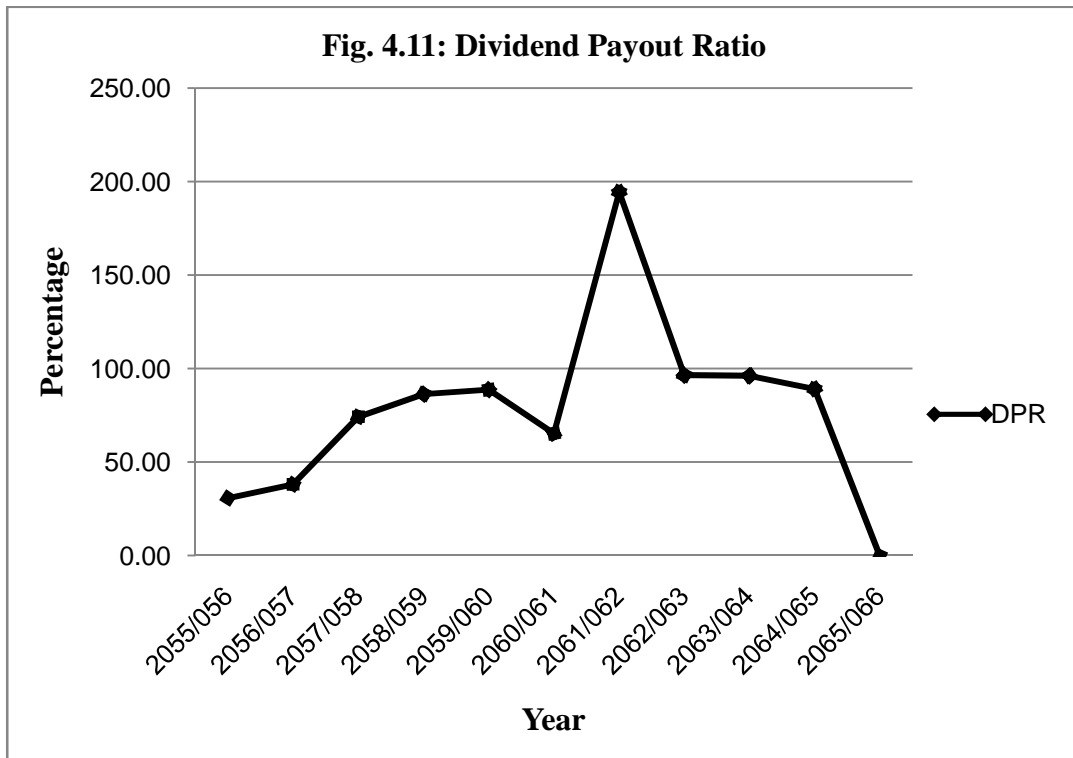


Figure 4.11 shows the trend of DPR of the company from F.Y. 2055/056 to 2065/066. DPR is in increasing trend till year 2061/062 and is slowly decreasing after that.

4.13 Determinant of Capital Structure

4.13.1 Multiple Regression Analysis

Coefficient correlation of dependent variable

Multiple regression was run in SPSS version 16 to test the set hypothesis. Before running the regression, investigation into the multicollinearity problem was carried out. First of all, bivariate correlations among the independent variable were examined to find out the multicollinearity problem. The existence of correlation of

about 0.8 or larger indicates that there is problem of multicollinearity (Baral, 2004, p. 8). From the analysis result there was coefficient of correlation between Size of the firm and earning rate. Correlation coefficient was greater than 0.8 which was -0.812. So examination of correlation among the dependent variable found multicollinearity problem. The pair- wise correlation approach of diagnosing the multicollinearity problem does take the relation of ER and Size of the firm into account. Table 4.13 presents the result of correlation coefficient of dependent variable.

Table 4.13 Coefficient correlation Matrix

Variable	DC	DPR	ER	Size
DC	1.000	.296	-.092	-.346
DPR	.296	1.000	-.098	.126
ER	-.092	-.098	1.000	-.812
Size	-.346	.126	-.812	1.000

Source : Appendix 2.3

Test of Hypothesis

From table value F (4, 6) is 4.53 and calculated F value from ANOVA table (Appendix 2.1) is 8.569. Calculated F value is greater than table value. Hence, we conclude that there is a high significance among the variables under study.

Table 4.14 Determinants of Capital structure- Regression Result

Variable	Beta Coefficient	Std. Error	Sig.	Result
(Constant)	-.596	5.883	.923	
Size X1	.080	.652	.906	Insignificant
ER X2	1.270	.589	.074	Insignificant
DPR X3	.210	.054	.008	significant
DC X4	-1.545E-5	.000	.055	Insignificant

Source : Appendix 2.2

The alternative hypothesis implies a two tailed test. Beta coefficient of X_1 test the first hypothesis. The calculated P value is greater than 0.05 i.e. $.906 > 0.05$. So null hypothesis (H_{01}) accepted and alternative hypothesis (H_{A1}) is rejected. The relation between size of the company and financial leverage is positive but it is

insignificant. There is no significant relationship between size of the company and financial leverage. This is consistent with the theoretical relation explain by the bankruptcy cost theory.

Beta coefficients of X_2 test the second hypothesis. The calculated value of P is greater than 0.05 i.e. $.0.074 > 0.05$. So null hypothesis (H_{02}) accepted and alternative hypothesis (H_{A2}) is rejected. Thus, the relation between earning rate and financial leverage is positive but it is insignificant. There is no significant relationship between earning rate and financial leverage. However, the positive relationship implies that it is inconsistent with the theoretical relation explain by the pecking order theory.

Beta coefficients of X_3 test the third hypothesis. The calculated P value is less than 0.05 i.e. $0.008 < 0.05$. So null hypothesis (H_{03}) rejected and alternative hypothesis (H_{A3}) is accepted. Thus, the relation between Dividend payout ratio and financial leverage is significant. The correlation implies that it is consistent with the theoretical relation explain by the pecking order theory.

Beta coefficients of X_4 test the fourth hypothesis. The calculated P value is greater than 0.05 i.e. $0.055 > 0.05$. So null hypothesis (H_{04}) rejected and alternative hypothesis (H_{A4}) is accepted. Thus, the relation between debt service capacity and financial leverage is insignificant. This suggests that the company do not manage the fund considering their debt service capacity.

4.13.2 The linear regression equation of Dividend Payout Ratio (X) on Financial Leverage (Y).

Table 4.15 presents the result of correlation between financial leverage and dividend payout ratio

Table 4.15
Correlations between financial leverage and dividend payout ratio

		Y	DPR
Y	Pearson Correlation	1	.692
DPR	Pearson Correlation	.692	1

Source : Appendix 2.4

This analysis shows that the correlation coefficient between financial leverage and dividend payout ratio. The correlation coefficient (r) indicates the strength and

direction of a linear relationship between two random variables. In this analysis it was assumed that the dividend payout ratio was the dependent variable, whereas the financial ratio is the independent variable. The results of the analysis showed a positive correlation coefficient (r) of 69.2%. Based on the correlation coefficient calculated, a coefficient of determination (r^2) was derived as 47.9%. At this level, it shows that 47.9% of the changes in dividend payout ratio is due to financial leverage ratio.

The linear equations show the relationship between financial leverage ratio and the dividend payout ratio. The equation is shown as $X = -.633 + 2.366Y$ (Appendix 2.6). This indicates that in case the Financial Leverage ratio is nil, that is, if the Company is wholly equity financed then the dividend payout ratio will be about .633%. But then for every percentage increase in the level of Leverage ratio, the payout ratio would increase by 2.366%.

4.14 Major Findings of the study

The major findings of the study on capital structure of the UNL are as follows:

1. The DOL of the company over the study period is in highly fluctuating trend. It ranges From 1.55 times to 4.05 times. The average DOL of the company is 2.35 times over the study period.
2. The DFL of the Company over the study period is in fluctuating trend. It ranges from minimum 0.86 times to Maximum 1.24 times over the study period. The average DFL of the company is 1.04 times over the study period.
3. The DCL of the Company over the study period is in fluctuating trend. The DCL of UNL range from minimum 1.6 times to Maximum 5.3 times over the study period. The average DCL of the Company is 2.5 times over the Study Period.
4. The shareholder's equity to total assets ratio of the company highly fluctuates over the study period ranging from 19.74 % to 60.93%. The average ratio of shareholder's equity to total assets of company is 40.11% over the 11 year of study period. The compound annual growth rate of equity is 17.78 percent for the period. It was growing at the constant absolute amount of Rs 59.249 million a year for the study period.
5. The financial leverage ratio of the company is highly fluctuating ranging from 39.07% of minimum to 80.26 % of maximum. The average FLR of UNL for the period is 59.89% over the study period. However, the company is highly

dependent on short term financing. The company has no long term debt in its capital structure. The compound annual growth rate of debt is 13.11% for the period 2058/059 to 2065/066. It was growing at the constant absolute amount of Rs 70.428 million a year for the study period.

6. The D/E ratio of the UNL for the study period ranges from 64.12% of minimum to 406.06 % of maximum. The ratio is highly fluctuating over the study period of F.Y. 2055/056 to 2065/066. The average D/E ratio of UNL for the period is 210.18% over the study period.
7. The interest coverage ratio of UNL ranges from a minimum of 5.85 times to maximum of 19921.74 times. The ratio is highly fluctuated over the study period of F.Y. 2055/056 to 2065/066. The average ICR of the company is 2178.52 times over the study period.
8. The ROA of Company fluctuates with downward from Fiscal year 2055/056 to 2058/059 then upward trend during the study period. The ratio of the company ranges from minimum 7.46%, to maximum 36.95%. The average of ROA of the company over the study period is 20.03%.
9. The return on shareholder's equity of the company is highly fluctuating ranging between 12.24% of minimum to 119.48% of maximum. The return on shareholder's equity is declining from F.Y. 2055/056 to 2058/059, after that it is in increasing trend up to 2064/065. The average ROSE of the company during the study period is 60.66%.
10. The EPS of UNL ranges from 46.28 to 480.26 in Rs. It indicates that the earning of the company has been highly fluctuated during the study period. The average EPS of the company during the study period is Rs. 202.61. The compound annual growth rate of EPS is 22.01% for the period of 2055/056 to 2065/066. It was growing at the constant absolute amount of Rs 44.61 a year for the study period.
11. The dividend per share paid by company ranges from minimum Rs. 0 to maximum Rs. 400. The Company has not pay dividend in F.Y. 2065/066. The average DPS of the company for the study period is Rs. 147.73. The compound annual growth rate of DPS of UNL is 33.45% for the study period. It was growing constant absolute amount of Rs. 49.42 a year for the given period.
12. The DPR of the Company ranges from 0% to 194.65% during the study period. In the initial year it is in increasing trend that has fallen slightly and gone up quite impressively again has fallen down. The average DPR of the Company is 78.29%.

13. The alternative hypothesis implies a two tailed test. The calculated P value is greater than 0.05 i.e. $.906 > 0.05$. So null hypothesis (H_{o1}) accepted. The relation between size of the company and financial leverage is positive but it is insignificant. There is no significant relationship between size of the company and financial leverage. This is consistent with the theoretical relation explain by the bankruptcy cost theory.
14. The calculated value of P is greater than 0.05 i.e. $.0.074 > 0.05$. So null hypothesis (H_{o2}) accepted. Thus, the relation between earning rate and financial leverage is positive but it is insignificant. However, the positive relationship implies that it is inconsistent with the theoretical relation explain by the pecking order theory.
15. The calculated P value is less than 0.05 i.e. $0.008 < 0.05$. So null hypothesis (H_{o3}) rejected Thus, the relation between Dividend payout ratio and financial leverage is significant. The correlation implies that it is consistent with the theoretical relation explain by the pecking order theory.
16. The calculated P value is greater than 0.05 i.e. $0.055 > 0.05$. So null hypothesis (H_{o4}) rejected. Thus, the relation between debt service capacity and financial leverage is insignificant. This suggests that the company do not manage the fund considering their debt service capacity.
17. The correlation coefficient (r) is assumed that the dividend payout ratio is the independent variable, whereas the financial ratio is the dependent variable. The results of the analysis showed a positive correlation coefficient of 69.2%. Based on the correlation coefficient calculated, a coefficient of determination (r^2) was derived as 47.9%. At this level, it shows that 47.9% of the changes in dividend payout ratio is due to financial leverage ratio. The correlation coefficient (r) indicates the strength and direction of a linear relationship between financial leverage and dividend payout ratio.
18. The linear equation is shown as $X = -.633 + 2.366Y$ indicates that if the financial leverage ratio is nil then the dividend payout ratio will be about .633%. But then for every percentage increase in the level of Leverage ratio, the payout ratio would increase by 2.366%.

CHAPTER V

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary

The study is carried out as academic requirements for master's degree of business studies on the topic of "Analysis of capital structure and its effect on dividend payout ratio of Unilever Nepal Limited". The study covers data of 11 years from F.Y. 2055/056 to 2065/066.

The study is conducted with the general objectives to analyze the capital structure and effect of capital structure on dividend amount of UNL. The specific objectives of the study are to analyze the trend of total debt and equity capital employed, debt service capacity, proportion of total debt and equity, return on equity, return on total assets and determinant of capital structure of the UNL in the period of F.Y. 2055/056 to 2065/066. Various materials are received from journals, articles, dissertations and published books to find out the destination of research work.

The study is based on the secondary data. The main source of the data is the annual reports of UNL. In this study various financial and statistical tools have been used to get the research objectives.

From the analysis of capital structure and its effect on dividend of UNL, it is found that the DOL, DFL, DCL of the company are in highly fluctuating trend. This reveals that the company has a high business risk. The shareholder's equity to total assets ratio, total debt to total assets ratio and debt to equity ratio are highly fluctuating trend. It means that the company does not have judicious mix of debt and equity in its capital structure. The interest coverage ratio of the company is highly fluctuating so, the company doesn't have stable debt service capacity.

The ROA and ROE of Company fluctuates with downward from Fiscal year 2055/056 to 2058/059 then upward trend during the study period. The average ROA and ROE of the company during the study period are 20.03% and 60.66% respectively, which shows better management of assets and liabilities during the study period.

The compound annual growth rate of EPS & DPS is high for the course of study period. The company has been able to pay dividend regularly except in F.Y 2065/066. The DPR of the company is in increasing trend in the initial year that has

fallen slightly and gone up quite impressively again has fallen down up to 0%. The payment of dividend is highly fluctuating.

Out of four examined explanation variables Size, ER, DPR and DC, only one DPR is statistically significant determinant of financial leverage. Beta coefficient with dividend payout ratio is statistically significant at .05 levels.

The correlation coefficient (r) indicates the strength and direction of a linear relationship between financial leverage and dividend payout ratio. The results of the analysis showed a positive correlation coefficient of 69.2%. Based on the correlation coefficient calculated, a coefficient of determination (r^2) is derived as 47.9%. At this level, it shows that 47.9% of the changes in financial leverage is due to dividend payout ratio.

The linear equations show the relationship between financial leverage ratio and the dividend payout ratio. The equation is shown as $X = -.633 + 2.366Y$, which indicates that if the Financial Leverage ratio is nil, then the dividend payout ratio will be about .633%. But then for every percentage increase in the level of Leverage ratio, the payout ratio would increase by 2.366%.

5.2 Conclusion

Based on the findings, following conclusions have been drawn as a concluding framework of the study on capital structure and effect of capital structure on dividend amount.

- 1) The DOL of the company is highly fluctuated. This result reveals that the company has a high business' risk.
- 2) The DFL of the Company shows that the company has not been able to take leverage benefit as expected.
- 3) The DCL of the Company over the study period is in fluctuating trend. It reveals that the company has high business risk.
- 4) The shareholder's equity to total assets ratio of the company is highly fluctuated. It indicates that the company does not have judicious mix of debt and equity in its capital structure. The company does not prefer to employ a long term debt. The company prefers short term debt financing rather than equity financing.
- 5) The debt to total assets ratio (Financial leverage ratio) is unstable in the company. It indicates that the company is not following stable debt policy.

- 6) The interest coverage ratio of UNL is in increasing trend. It indicates that the unused debt capacity on the firm is missing the opportunity to take the advantage of financial leverage. The company does not have a stable debt service capacity.
- 7) The ROA of Company indicates that the company has the ability to manage and utilize the assets to generate profits.
- 8) The return on shareholder's equity of the company reveals that the company has earned satisfactory return for its equity shareholders though the earning is highly fluctuated.
- 9) The EPS of the company is highly fluctuating with high growth rate. This indicate that the company is able to use its resources to generate the profit efficiently
- 10) The DPS and DPR of the company are in fluctuating trend. It means that the company does not have stability of dividend policy. The analysis showed that there is inconsistency and irregularity in dividend payment. The residual theory of dividend policy is being followed by the company.
- 11) Out of four examined explanation variables Size, ER, DPR and DC, only one DPR is statistically significant determinant of financial leverage. Beta coefficient with dividend payout ratio is statistically significant at .05 levels. Statistically insignificant coefficients associated with size, earning rate and debt service capacity and statistically significant coefficients associated with dividend payout ratio imply that the company does not care size, earning rate and debt service capacity while designing the capital structure.
- 12) The data analysis also showed that there is strong positive correlation between the financial leverage and the dividend payout ratio.

5.3 Recommendation

The capital structure of UNL shows that the company is not well capitalized as shown by the financial leverage ratio. The following recommendations are based on the conclusions as suggestion to overcome the weakness as regard to capital structure and its effect on dividend amount of UNL.

1. The fluctuation trend in DOL, ICR, ROA, ROSE and EPS increases in risk position of investors. Company should try to stabilize these variables.
2. It is recommended that UNL has to issue long term debt and take tax benefit of interest for a long run as it has no long term debt.
3. The company is highly dependent on short term debt. So it is recommended to use both short term and long term debt. of its capital structure
4. The proportion of debt and equity capital should be the affect of tax advantage and financial distress. But the company has no appropriate debt equity proportion. So it is recommended to management of the company to maintain optimal capital structure to minimize overall cost of capital.
5. It is recommended to the financial manager of the company to take into account the variables such as size, earning, dividend payout ratio and debt service capacity while taking decision regarding the capital structure. This action can help to maximize shareholders wealth.
6. Since the dividend policy directly effects on the value of the firm, capital structure decision and the market price of the share. So it is recommended to follow static or consistently growing dividend policy. The company should define their dividend strategy clearly, which may contribute on maximize the value of the firm and shareholder equity.

Finally, the researcher would like to point out that there are several ways in which the study could be improved, the immediate one being to increase on the sampling size.

BIBLIOGRAPHY AND REFERENCES

Books

- Bhattacharai, R. (2005). *Capital structure management*. Kathmandu: Dhaulagiri Books and Stationary.
- Brigham, E.F. & Ehrhardt, M.C. (2004). *Financial management*. Theory and practice. Bangalore: Eastern Press Private Limited.
- Gitman, L. J. (2004). *Principles of managerial finance*. Delhi: Person Education.
- Van Horne, J. C. (2003). *Financial management and policy*. New Delhi: Prentice Hall of India Private Limited.
- Khan, M.Y. & Jain, P.K. (2002). *Financial management*. Text and problem. New Delhi:
Tata MC Graw-Hall Publishing company Limited.
- Pandey, I. M. (2005). *Financial management*. New Delhi: Vikash Publishing House.
- Pandey, I.M. (1981). *Capital structure and cost of capital*. New Delhi: Vikash Publishing House.
- Pant, P. R. (2009). *Social science research and thesis writing*. **Kathmandu**: Buddha Academic Enterprises Pvt. Ltd.
- Poudel, R. B., Baral, K. J., Gautam, R.R. & Rana, S.B. (2006). *Fundamental of corporate finance*. Bhotahiti, Kathmandu: Asmita Publication.
- Pradhan, S. (2000). *Basics of financial management*. Kathmandu: Book Palace.
- Pradhan, S. (2004). *Basics of financial management*. Kathmandu: Book Palace.
- Shakya, S.R., Josji, P. R., Goet, J., Khanal, J. R., Dhakal, R. K., Neupane, A., Shah, M., Shrestha, I. K., Shrestha. A. K., & Giri, A. (2005). *Accounting for financial analysis and planning*. Kathmandu: Asmita Publication.
- Sharma, P. R. (2008). *Research methodology with spss*. Kritipur: Resuga Computer.
- Shrestha, H. B. (2007). *Business statistics and data management*. Kathmandu: Ekta Books Distributors Pvt. Ltd. Weston, J. F. & Copeland, T. E. (1992). *Managerial finance*. New york: The Dryden Press.

Journals and Publications

- Baral, K. J. (2004). Determinants of Capital Structure. A case Study of Listed Companies of Nepal. *The Journal of Nepalese Business Studies* 1: p.1-13.
- Boateng, A. (2004). Determinants of capital structure: Evidence from International joint venture in Ghana. *International Journal of Social Economics* 31: p. 56 – 66 [2009 April 3]
<<http://www.emeraldinsight.com/10.1108/03068290410515411>>
- Country Studies Program. (1989). *Nepal- The Economy*. Library of Congress. [2008 June 6]
<http://www.mongabay.com/reference/country_studies/nepal/ECONOMY.html>
- Eriotis.N., Vasiliou. D., Neokosmidi. J.Y. (2007). How firm characteristics affect capital structure: an empirical study. *Journal of Managerial Finance* 33: p. 321 – 331 [2009 April 3]
<<http://www.emeraldinsight.com/Insight/viewContentItem.do;jsessionid=253618ECA94D4F698C8305D8553AF34F?contentType=Article&contentId=1602603>>
- Kim, H., Heshmate, A., Aoun, D. (2006). Dynamics of Capital Structure: The Case of Korean Listed Manufacturing Companies. *Journal of East Asian Economic* 20: P. 275-302 [2009 April 3]
<http://econpapers.repec.org/article/blaasiaec/v_3a20_3ay_3a2006_3ai_3a3_3ap_3a275-302.htm>
- Lorente, J. D. V. (2001). Specificity and opacity as resource-based determinants of capital structure: evidence for Spanish manufacturing firms. *Journal of Strategic Management* 22: p. 157 – 177 [2009 April 3]
< <http://www3.interscience.wiley.com/cgi-bin>>

- Lowe, J., Naughton, J., & Taylor, P. (2006). Impact of corporate strategy on the capital structure of Australian companies. *Journal of Managerial and Decision Economics* 15:p.245-257[2009March29]
<http://www3.interscience.wiley.com/journal/113457385/abstract?CRETRY=1&SRETRY=0>
- Ooi, J.(1999). Determinant of capital structure evidence on UK property companies, *Journal of Property Investment & Finance* 17: p. 464-480 [2009 March 29]
<http://www.emeraldinsight.com/Insight/viewContentItem.do;jsessionid=F722253B7C29970E57311E9C180823F2?contentType=Article&contentId=845085>
- Seppa, R. (2008). Capital structure decisions: Research in Estonian non-financial companies, *Journal of Management* 3: p.55-70 [2009 April 2]
<http://www.emeraldinsight.com/Insight/viewContentItem.do;jsessionid=9FFB B055E1264F1F5D93204163D2EB83?contentType=Article&contentId=1642118>
- Serrasqueiro, Z. M. S., & Rogao, M. C. R. (2009). Capital structure of listed Portuguese companies: Determinants of debt adjustment. *Journal of Accounting and Finance* 8: p. 54 – 75 [2009 April 3]
<http://www.emeraldinsight.com/Insight/viewContentItem.do;jsessionid=4C3FD8A6420A21E0C806C84F5F942680?contentType=Article&contentId=1775104>
- Srinivasan, R. (2010).** Important theories of dividend policy—an appraisal. *Corporate finance theory*: [2010, March 9].
 <<http://www.simama.Org/article/important-theories-of-dividend-policy-an-appraisal> >
- Tebogo, B. (2008). *Capital structure and dividend policy discussion*: How does Standard Chartered Bank Botswana contribute to this discussion. **Term Paper: MBA**
 < <http://www.baitshepi-tebogo.com/SCB.docx> >
- Unilever Nepal Limited. Eighteenth Annual Report and accounts [July 16, 2008 – July 16, 2009]

Master Dissertations

- Basnet, S. B. (2007). *Capital structure, capital adequacy and profitability management of domestic private bank in Nepal*: Unpublished Master's Thesis, TU.

- Devkota, M. (2002). *Analysis of capital structure of Necon Air Limited*: Unpublished Master's Thesis, TU.
- Gurung, D.D. (2003). *Analysis of capital Structure in selected joint venture bank of Nepal* : Unpublished Master's Thesis, TU.
- Kandel , D.R .(2008). *Status of dividend practice of some leading commercial bank and finance company*: Unpublished Master's Thesis, TU.
- KC, K. (2007). *Dividend practices of Nepalese commercial bank*: Unpublished Master's Thesis, TU.
- Panday, A. (2001). *A comparative analysis of capital structure between Lumbini sugar factory Limited and Birgung sugar factory Limited*: Unpublished Master's Thesis, TU.
- Sharma R.R. (2005). *A study on capital structure of selected commercial bank in Nepal*: Unpublished Master's Thesis, TU.
- Suhang, T. P. (2006). *Capital structure of Unilever Nepal Ltd*: Unpublished Master's Thesis, TU.

Websites

www.emeraldinsight.com

www.mongabay.com

econpapers.repec.org

www3.interscience.wiley.com

www.simama.Org

www.baitshepi-tebogo.com

Appendix 2 SPSS Outputs

Appendix 2.1

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.180	4	.045	8.569	.012 ^a
	Residual	.032	6	.005		
	Total	.212	10			

a. Predictors: (Constant), DC, DPR, ER, Size

b. Dependent Variable: Y

Appendix 2.2

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-.596	5.883		-.101	.923	-14.991	13.799
	Size	.080	.652	.054	.123	.906	-1.515	1.675
	ER	1.270	.589	.859	2.157	.074	-.171	2.710
	DPR	.210	.054	.718	3.899	.008	.078	.342
	DC	-1.545E-5	.000	-.633	-2.379	.055	.000	.000

a. Dependent Variable: Y

Appendix 2.3

Coefficient Correlations

Model		DC	DPR	ER	Size
Correlations	DC	1.000	.296	-.092	-.346
	DPR	.296	1.000	-.098	.126
	ER	-.092	-.098	1.000	-.812
	Size	-.346	.126	-.812	1.000
Covariances	DC	4.219E-11	1.036E-7	-3.520E-7	-1.466E-6
	DPR	1.036E-7	.003	-.003	.004
	ER	-3.520E-7	-.003	.346	-.312
	Size	-1.466E-6	.004	-.312	.425

a. Dependent Variable: Y

Appendix 2.4

Correlations

		Y	DPR
Y	Pearson Correlation	1	.692
	Sig. (2-tailed)		.018
	N	11	11
DPR	Pearson Correlation	.692	1
	Sig. (2-tailed)	.018	
	N	11	11

Appendix 2.5

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.184	1	1.184	8.252	.018 ^a
	Residual	1.292	9	.144		
	Total	2.476	10			

a. Predictors: (Constant), Y

b. Dependent Variable: DPR

Appendix 2.6

Coefficients correlation

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
1 (Constant)	-.633	.506		-1.252	.242	-1.777	.511
Y	2.366	.824	.692	2.873	.018	.503	4.229

a. Dependent Variable: DPR