CAPITAL STRUCTURE DECISION AND PROFITABILITY: A STUDY OF NEPALESE MANUFACTURING COMPANIES

A Thesis Submitted

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Certification of Authorship

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree except as fully acknowledged within the text.

I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the reference section of the thesis

Nabeena Basnet

June, 2021

Report of Research Committee

It is certified that the thesis entitled "**Capital Structure Decision and Profitability: A Study of Nepalese Manufacturing Companies"** submitted by Nabeena Basnet is an original piece of research work carried out by the candidate under my supervision. Literary presentation is satisfactory and the thesis is in a form suitable for publication. Work evinces the capacity of the candidate for critical examination and independent judgment. Candidate has put in at least 60 days after registering the proposal. The thesis is forwarded for examination.

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Approval Sheet

We, the undersigned, have examined the thesis entitled "CAPITAL STRUCTURE DECISION AND PROFITABLITY: A STUDY OF NEPALESE MANUFACTURING COMPANIES'' presented by Nabeena Basnet candidate for the degree of **Master of Business Studies** (MBS) and conducted the viva voce examination of the candidate. We hereby certify that the thesis is worthy of acceptance.

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Nabeena Basnet

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List of Abbreviations

BNL	Bottlers Nepal Limited
BNTL	Bottlers Nepal Limited (Terai)
DER	Debt- Equity Ratio
DR	Debt Ratio
EBIT	Earnings before Interest and Tax
EPS	Earnings per Share
HDL	Himalayan Distillery Limited
NEPSE	Nepal Stock Exchange
NLO	Nepal Lube Oil Limited
NPR	Net Profit Ratio
OPR	Operating Profit Ratio
ROA	Return on Assets
ROE	Return on Equity
SPSS	Statistical Package for Social Science
UNL	Unilever Nepal Limited
US	United State
WACC	weighted Average Cost of Capital

Abstract

Organizations' profitability is the key factor for gaining sustainability. In achieving the profitability, capital structure is an important factor and, to increase the profitability, appropriateness of capital structure is must.

Gone are the days when business organizations were operated in traditional way and earning profit. Businesses these days are more competitive and more complex. So, since couple of decades the world is talking about sustainability of the business. Sustainability is the outcome of profitability. And profitability is influenced by proper mix of debt and equity. Earning profit is much important to every business organization because profitability determines the sustainability of an organization in the market. Thus, financial manager should be able to identify the influencing factors for increasing profitability of an organization. In this study, researcher raised four questions and aimed to identify the positions of capital structure and profitability, which were in line with the first two research questions. Similarly, researcher also aimed to examine the relationship between capital structure and profitability, which was in line with the third research question. Finally, it was aimed to examine the impact of capital structure on profitability which was in line with fourth research question. To identify the positions, descriptive research design has been adopted and, to examine the relationship and impact, correlational research design has been adopted. Secondary data are used for the study and have been sourced through annual financial reports of sampled companies. Based on the five yearly data collected from five Nepalese Manufacturing Companies listed in NEPSE, the researcher has examined the relationship of capital structure with profitability. Under the descriptive statistic, minimum, maximum, mean and standard deviation have been used to describe the positions of capital structure and profitability. Under the correlation analysis, Karl Pearson's correlation and regression analysis have been adopted to examine the relationship between capital structure and profitability and test first hypothesis. Similarly, it is used to examine the impact of capital structure on profitability. Under the inferential statistic, analysis of variance test (One-Way ANOVA) has been adopted to test the second hypothesis. Researcher identifies the positions of debt and debt-equity ratios lower to the average in investigated manufacturing companies. The position of ROE is found to be higher than average level. On the other hand, the positions of ROA, NPR and OPR are found to be lower than average level. Debt ratio is found to have negative relationship with ROE, ROA, NPR and OPR. Similarly, debt-equity ratio has negative relationship with ROE and ROA, while it has significant negative relationship with NPR and OPR. The test of second hypothesis confirms that there is no significant difference in ROE in different

groups of sizes of firm, while ROA, NPR and OPR are found to be different among the firms with different sizes. It is concluded by this study that increase or decrease in debt ratio and debt-equity ratio has no significant impact on ROE, whereas increase in debt results in increase in ROA. This is because increase in debt results in tax shielding, which, in turn, results in increased return to equity shareholders, and decrease in equity results in decrease in ROA.

Chapter I
Introduction

1.1 Background of the study

Firms can use either debt or equity capital to finance their assets. The best choice is a mix of debt and equity. This matter is related with capital structure decision. Thus, the study was focused on capital structure decision and its impacts on profitability of manufacturing companies in Nepal. Decision regarding capital structure is the vital one strategic financial decision because it affects the profitability of an organization directly. Hence, Proper investigation and study need to be done in order to make capital structure decision. That is why this study mainly focused on to investigate the relationship between capital structure decision and its impacts on profitability of manufacturing companies of Nepal.

Financial manager has a huge challenge to determine optimum proportion of debt and equity. As a general rule, there should be proper mix of debt and equity capital in financing the assets. This issue is associated with capital structure decision. A firm finances total assets through equity and debt capital. Equity is owner's capital and consists of common stock, paid in capital, reserves and surplus and retained earnings. Debt is borrowed money and has fixed contractual obligation pays interest regularly. Thus, liabilities section of the balance sheet is composed of short term debt, long term debt and equity. The mix of short term debt, long term debt and equity is called financial structure and capital structure is only a part of it. Capital structure is a mixture of debt and equity that is utilized by company's operations. On the other hand, the capital structure represents to the mix of long term sources of capital. Long term debt and equity are the long term sources of capital. Hence, the capital structure of a firm is the mix or proportion of long term financial sources represented by long term debt, preferred stock and common equity (Shubita & alsawalhah, 2012).

The profitability of a firm measures its gains over its operative years. Most managerial decisions are ultimately related to improving their company's profitability. Firm's profitability measure how effectively the firm is being operated and managed. Besides shareholders and managers, the creditors are also interested to know the financial soundness of the firm. The firm's owners are eager to know their returns or

profitability whereas managers to know operating efficiency. And it is also indisputable that the higher return envisages the possibility of higher extent of risk (Chechet & Olayiwola, 2014).

Capital structure carries direct impact on returns and associated risk as well. The appropriate capital structure assists to balance between risks and returns for maximizing the value of firm and minimizing the overall cost of capital of a firm. Increase in leverage results increase in return and risk. Similarly, decrease in leverage results decrease in return along with risk. Firm uses more leverage at a minimum cost which generates maximum return to owners. Therefore, it is important to test the relationship between capital structure and profitability of the firms, which may give a room to make sound capital structure decisions (Sultan & Adam, 2015).

Firm size can reflect a company, so with existence of firm size with large amount makes it easy to produce external funding for creditors that will improve the company's capital structure (Wardani & Subowo, 2020).

Capital structure is one of the most complex areas of financial decision making due to its interrelationship with other financial decisions variables. Capital structure is the composition of debt and equity capital that comprise a firm's financing its assets and can be rewritten as the sum of net worth plus preferred stock plus long-term debts (Nimalathasan, 2010).

It is aforementioned that the choice of capital structure is a most critical point for every firm's financial decision makers because it effects on firm's profitability, performance, cost of capital and firm's value. The study of capital structure has special relevance in a country like Nepal. Nepalese firms area highly levered however the long term debt ratio is significantly low (Baral, 2004).

The fact of high debt use is to accomplish tax advantages and to maximize profit. The most important advantages of using debt is that the interest payment on debt are tax deductible which erects tax shield for the firms. The more use of debt in the capital structure result lower the real after tax cost of capital which will maximize the value of firm. However, more use of debt may cause the increasing Bankruptcy cost and default risk (Modigliani & Miller, 1963).

If interest rates increase, existing equity and existing bonds will both drop in value. The effect of an increase in interest rates would be greater for equity than for debt. Thus, equity falls more, leaving the firm more highly levered. In a tradeoff model, it seems that equity has become somewhat more expensive, and so there should be little or no offsetting actions. Thus, it is predicted that an increase in interest rate increases leverage (Frank & Goyal, 2003).

Organizations that are able to make their financing decision prudently would have a competitive advantage in the industry and thus making superior profits. Nonetheless, it is essential for us to recognize that this decision can only be wisely taken if organizations know how debt policy influences their profitability (Velnamphy & Aloy, 2012).

Every organization has been established with the aim of gaining profit. Profit cannot be increased by the manager; instead, they have to consider so many factors so as to increase profitability of a firm. Managers have to put forth deep attention over the factors that are influential for increasing profitability. Researchers have suggested that profitability can be improved by the firm if appropriate capital structure has been maintained. In this regard, to analyze the impact of capital structure on profitability, this study has been viewed significant from the perspective of both managers and future researchers, as after completion of this study, it will add some knowledge on the analysis of capital structure and profitability.

1.2 Statement of problem

Business organizations used to be operated in a traditional way. Businesses these days are more competitive and more complex. So, since couple of decades the world is talking about sustainability of the business. Sustainability is the outcome of profitability. And profitability is influenced by proper mix of debt and equity (Nimalathasan, 2010) Earning profit is much important to every business organization because profitability determines the sustainability of an organization in the market. Thus, financial manager should be able to identify the influencing factors for increasing profitability of an organization.

Babalola & Abiodun (2013) argued that firm size, both in terms of total assets and total sales, has a positive impacts on the profitability.

On the other hand, Gill & Mathur (2011) have stated that larger board size (large number of directors) negatively impacts the profitability.

Further, Hallowell (1996) also argued that customer satisfaction and customer loyalty have impact on profitability. An estimate of the effects of increased customer satisfaction on profitability suggests that attainable increase in customer satisfaction could dramatically improve profitability.

Babalola (2014) carried out an investigation and concluded that the corporate performance is a nonlinear function of capital structure in the selected Nigerian manufacturing enterprises.

The internal funds (Retained earnings) are used at first and when it is depleted, debt is issued and then if debt is not sufficient to finance, new equity is the last choice of financing. Internal funds incur no flotation costs and require no supplementary admission of proprietary financial information that could show to more strict market regulation and possible losses of great competitive advantages (Rasiah & Kim, 2011).

Therefore, different researchers have suggested different variables that are influencing profitability. Babalola & Abiodun (2013) has suggested that size of firm as prime variable for profitability. Similarly, Gill & Mathur (2011) have suggested size of board, chief executive officer duality and corporate liquidity as prime variables for profitability. On the other hand, Hallowell (1996) has also suggested customer satisfaction and customer loyalty as a prime variables for influencing profitability. Managers often get confused which one variable should be taken carefully into consideration while increasing profitability.

In such confusing situation where financial managers are looking for an appropriate variable that has larger impact on profitability, Can financial manager consider capital structure as one of the influencing factors for profitability? If they can, then what is the position of capital structure? If position of capital structure determines profitability, then what is the position of profitability? If capital structure influences profitability, then what degree of impact the capital structure has on profitability? Therefore, this study has risen following basic questions:

i) What is the position of capital structure in Nepalese Manufacturing Companies?

ii) What is the position of profitability in Nepalese Manufacturing Companies?

iii) Is there any relationship between capital structure and profitability in Nepalese Manufacturing Companies?

iv) Does Capital structure have an impact on profitability in Nepalese Manufacturing Companies?

1.3 Objective of study

The objectives of the study were exactly matched with its research question. Therefore, the objectives of the study as per the research questions were:

i) To identify the position of capital structure in Nepalese Manufacturing Companies.

ii) To identify the position of profitability in Nepalese Manufacturing Companies.

iii) To examine the relationship between capital structure and profitability in Nepalese Manufacturing Companies.

iv) To examine the degree of impact of capital structure on profitability in Nepalese Manufacturing Companies.

1.4 Hypotheses

The hypotheses were developed as per the conceptual framework and the past literatures. Nimalathasan (2010) examined capital structure and its impact on profitability. The analysis of listed manufacturing companies shows that debt-equity ratio is positively and strongly associated to all profitability ratios. Debt ratio is positively and strongly associated to all profitability ratios. The findings of Sultan & Adam (2015) suggested that capital structure positively influence, in a significant way, on the profitability of listed firms in Iraq. Therefore, following hypotheses were set for this study.

i) $H0_1$: There is no significant relationship between capital structure and profitability in Nepalese manufacturing companies.

ii) $H0_2$: There is no significant difference in profitability in different groups of size of firm in Nepalese manufacturing companies.

1.5 Rationale of the study

The industrial enterprises in Nepal are inelegant and infinitesimal in nature. However, they have been expanding day by day along with manufacturing enterprises is also ineluctable. Most of the manufacturing companies are confronting with severe problems in capital structure management and are not taking capital structure seriously. Capital structure decision concerns to identify present capital structure, target desired debt equity mix and payout policy out of which existing capital structure and desired financing mix influences on firm's performance and cost of capital considerably. Determining the appropriate financing mix is very turbulent and difficult to do because it has to be identified very meticulously. The managerial attitudes and adventurism towards taking risk also directly influences on choice of capital structure. The financial management might be risk averse or moderate or aggressive one. The more conservative managers incline to use less debt to increase profit. On the other hand, aggressive manager tries to grow the firm pertinently and mix considerably by using appropriate debt along with equity. Besides it; asset structure, the attitude of lenders, taxes are also the important elements which impacts on capital structure decision. The risk which is existed due to uncertainty from business environment is business risk which varies in accordance with different financial alternatives that effects on financial performance of the firm. An appropriate financing mix maximizes the value of a firm that increase the wealth of its owners and it minimizes the company's weighted average cost of capital which assists to enhance the ability to new wealth creating investment. This study is useful to the companies to overview their capital structure decision, its impacts on profitability of firm and to the further strategies to do much better in their horizon.

This study is an agglomeration which consists of the overview of capital structure decision, determining optimal capital structure and its impacts on profitability of the firm precisely. The weighted average cost of capital (WACC) is influenced by capital structure of a firm. A firm could change its WACC by changing the proportionate mix of debt and equity capital. The effect of different capital structure on firm's WACC is tested while determining appropriate capital structure. Firm's every financial decision affects almost all activities within the company so that the choice of capital structure is considered as a most critical consequential point. This study will help to decision makers to assess current capital structure situation, to estimate target capital structure,

to measure and determine optimal capital structure and its impacts on firm's profitability by pinpointing the cause and effect there by the firm can maximize the return, minimize the risk and enhance the value of firm.

Further, a significant researches have been done to depict the impact of capital structure on firm's profitability in developed and developing countries. In the developed countries aspect, Tailab (2014) did research on American energy, Tifow & Sayilir (2015) did research on Turkey manufacturing firm and on United Kingdom manufacturing sector small and medium enterprise. From 2013 forward, most of the research done in capital structure was carried on developing countries. Akinyomi (2013) did research on Nigeria firm performance. Kajananthan & Nimalthasan (2013) did research on Sri Lankan manufacturing firm, Mwangi, Makau, & Kosimbei (2014) did research on Kenya non-financial listed companies, and Akeem, Terer , Kiyanjui, & Kayode (2014) did research on Nigeria manufacturing companies, Rahman, Sarker, & Uddin (2019) did research on publicly traded manufacturing companies in Bangladesh. Still, many researchers are trying to find out a better relationship between capital structure and firm's profitability.

Therefore, this research will help all the financial specialists to realize the impact of capital formation on the firm's profitability. Moreover, this research will help the company manager and stakeholder to understand more about the influence of capital structure and the sensitivity of debt and equity in the firm's activities. It will provide a guideline to the financial manager to design a better capital structure to reduce the cost of capital, raise the firm's profitability and ultimately maximize shareholder wealth. At the same time, this study can lead the investor to know more about the effect of capital structure choice on their return and form an optimal capital structure.

1.6 Limitation of the study

Nothing is perfect in this world; some boundaries were always there in every attempt made by human. So every research has its own boundary. In this study too, during the course of conducting research some attempts were not made due to many reasons. Therefore, this study was completed within certain boundaries, which will provide scope for future researcher. The limitation of this study will be as follows:

i) This study has used histogram to test the normality of the data and find out whether the data can be analyzed or not.

ii) One-Way ANOVA shows only whether the profitability is different in different groups of sizes of firm, but it does not tell the effect of sizes of firm on profitability.

iii) The sample size for this study was five manufacturing companies regularly traded in line with the regulation of NEPSE. Larger sample was not taken for the study because of time and cost constraints.

iv) Findings of the study may vary over time because of change in financial market and financial condition of an enterprise.

v) Data collection was made from manufacturing companies of Nepal only.

vi) Fixed capital of the companies has been used to measure the size of the firm. But there are other factors too which can be used to determine the size of firms like sales, capital employed, net worth, total assets, raw material, power consumed and number of employees employed etc.

1.7 Chapter plan

It is aforementioned that the study is concerned with the capital structure decision and its impacts on the profitability of manufacturing companies in Nepal. It was divided into five chapters in the pattern as stated below to achieve the objective of this study:

Chapter I: Introduction

This chapter was consist of background of the study, statement of problems (research questions), and objective of the study, research hypotheses, rationale of the study and the limitations of the study.

Chapter II: Literature Review

This chapter dealt about the review of literature which included a discussion on the theoretical review, the review of journal articles, review of previous theses, summary of articles and theses and research gap.

Chapter III: Research Methodology

This chapter set out the methods used in the proposed study. It provided the work plan and described the activities necessary for the completion of research study. This chapter included the use of research design, population, sample and sampling design, nature and sources of data, data collection procedure and instrument, data processing

procedures and data analysis method and research framework and definition of variables.

Chapter IV: Results and Discussion

The purpose of this chapter was to describe the results. It dealt with the presentation of data analysis and interpretation of data by using statistical tools. This chapter further classified into two parts represented by Results and Discussion.

Chapter V: Summary and Conclusion

This chapter presented the summary and conclusion based on the results. Summary, conclusions and proper implications of the study were elaborated in this section Furthermore, all necessary references and appendices had been demonstrated after chapter five.

Chapter II
Literature Review

2.1 Introduction

Determining an appropriate financing mix is very sensitive and critical task for each financial decision makers. The managerial philosophy, asset structure, cost of capital, flotation cost etc. are the domains of capital structure which should be conceived precisely and pertinently. Decisions about a suitable financing mix are very problematic issue and it cannot be identified instaneously. It can be determined by selecting appropriate capital structure decision and by analyzing its impacts on firm's profitability precisely. The position of the value of a firm and overall cost of capital are screened profusely through such study. Hence, it is articulated that the study is concerned with the analysis of capital structure decision and its effects on profitability in Nepalese manufacturing companies that can help to determine optimal capital structure here by minimize the overall cost of capital which leads value of a firm maximum.

Most companies intend to achieve the optimal capital structure and maximize their profitability. Many researchers and managers try to seek an optimal model for capital structure that could improve the firm's ability to increase profitability for long-term success. The performance of a firm is variable in different kinds of industries, and the influence of capital structure on profitability is not similar. Therefore, different scholars focus on diverse industries and various indicators. Meanwhile, different conclusions and models are elicited because the capital structure is different in various industries.

Abor (2005) selected a five-year period data of 22 Ghana listed companies in his research, and used regression models to seek the correlation between capital structure and profitability. The conclusion showed that there was a negative relationship between long-term debt and profitability. The total debt also had a negative correlation with profitability, but the short-term debt had a positive impact on the profitability. The firm size and growth were positively related to profitability. The results indicated that primary financing way should be short-term debt.

Gill, Biger, & Mathur (2011) researched how the capital structure impacts profitability with a sample of 272 U.S. companies from 2005 to 2007. They utilized a regression model to seek the relationship between capital structure and profitability. They found that debt to total assets has a positive relation with profitability in the manufacturing companies.

In this regard, literatures were reviewed for the purpose of identifying variables, setting research framework, ensuring type of data required for the study; its collection procedures, tools for collecting and analyzing the data as well as identifying the research gap. The technical aspects in presenting literatures have strictly been followed. The literatures are presented in direct and paraphrasing format.

2.2 Theoretical review

The firm's total assets are financed through equity and debt. Equity capital is the owner's capital consists of common stock, paid in capital and retained earnings. Debt is classified as a short term debt and long term debt. The financial structure is the mix of short term debt, long term debt, preferred stock and common equity. A firm's capital structure is only part of financial structure (Ebaid, 2009). It refers to the mix of long term sources of financing represented by long term debt and equity. Capital structure is the permanent financing of a firm represented by long term debt plus preferred stock plus net worth (Nimalathasan, 2010). The capital structure choice of a manufacturing firm is the most significant decision taken by the management of the firm to maximize profits and at the same time minimize costs of capital leads to the maximization of stockholders wealth. Basically, there are two main sources of finance. One is internal finance which is equity and another is external finance which is debt. Most firms use a combination between equity and debt which appearance the capital structure (Rahman, Sarker, & Uddin, 2019). The capital Structures has many relevant dimensions, the financing mix is one. Other dimensions involve the investment decision of the company and the optimal used of leverage, within the constraints imposed by the internal and external environmental conditions. These conditions, in turn affect the decision of firm with respect to timing of the investment and financing transaction as well as the acceptable level of risk and liquidity.

2.2.1 Optimal capital structure

Determining an optimal capital structure is a most critical and problematic issue for each financial decision makers. Using only debt in the capital structure can be risky due to risk of bankruptcy though it has tax shield benefits (Huang & Thi, 2003) Issuing only share is also not beneficial for firm because a firm must use cash to fund new investment, however shares may not generate cash at all time the firm needs to pay for the new investment (Huang & Thi, 2003). Hence, the main argument of is that firms need to find an optimal appropriate combination of debt and equity that will ultimately increase the overall profitability of the firm.

It is articulated that the used of higher debt financing maximizes Earning per Share of stock holders due to cost of debt financing is relatively cheaper and limited. However it also increases the financial risk. It leads stock holders to seek higher required rate of return on their investment to compensate against financial risk. As a result firms should attempt to maintain optimum capital structure. An optimum capital structure is one that minimizes cost of capital and maximizes value of firm. It can properly be defined as the mix of debt and equity that attempts the stated managerial goals maximization of the firm's wealth which reduces overall cost of capital.

2.2.2 Capital structure decision

Capital structure refers to the different alternatives used by a firm in financing the assets (Bhaduri, 2002). Basically, the firm can manage the funds either through debt or via equity. Decisions about financing the assets by determining appropriate financing mix is very crucial work for every financial decision makers since it effects on earnings before interest and taxes and leads to change in market value of firm's share (Negasa, 2016). How a firm chooses the financing mix in their capital structure depends upon various factors such as characteristics of the firm, the economy and perception of managers (Brigham & Daves, 2004). Hence, determining the appropriate capital structure decision is one of the most strategic decisions public interest entitles are confronted with. A wrong decision has a tendency of stalling the fortune of any business. Hence, conscious steps must be taken in the right direction and at the right time to identify those factors that must be taken into cognizance in determining the appropriate financing mix. Capital structure decision is a significant managerial decision influences on organization's risk and return.

2.2.3 Factors affecting the capital structure decision

i) Cost of Capital

Debt is normally least expensive rather than common stock because debt has tax benefit opportunity leads to minimize overall cost of capital of a firm. The impact of financing decisions on the overall cost of capital should be evaluated and the criteria should be to minimize overall cost of capital (Babalola, 2014). It is therefore necessary to analyze the cost of capital while making the capital structure decision.

ii) Size of a firm

Basically, there is a positive relation between capital structure and size of a firm. However, it may not exist at all the firm within all situations. The size of a firm is closely related to the extent of risk associated with it and bankruptcy cost (Vasiliou , Eriotis, & Dakskalakis, 2005). The large firms are more diversified, has easy access to the capital market, receive higher credit ratings for debt issue and pay lower interest rate on debt. Further larger firms are less prone to bankruptcy and this implies the less probability of bankruptcy and lower bankruptcy cost. Hence, larger firms tend to use more debt than smaller firms.

iii) Business risk

The association between business risk and leverage is different for different countries and this might reflect the institutional structures within which the firms operate (Marsh, 1982). Basically, there is negative relation between capital structure and business risk (Berle & Means, 1932). The chance of business failure is greater if the firm has less stable earnings. Similarly, as the probability of bankruptcy increases, the agency problem related to debt become more aggravating. Hence as business risk increases the debt level in capital structure of firm should decrease.

iv) Growth in sales

Pandey (1995) concluded that when a firm experiences high growth in sales, it often needs to acquire more noncurrent assets which mean the higher growth firms have a greater need for future funds. Anticipated growth rate in sales provide a measure of the extent to which the earning per sales are likely to be magnified by increase. The Firm’s with significant growth in sales would have high market price per share as result of which they might prefer equity financing. The firm should make a relative

cost benefits analysis against debt of equity financing in anticipation to growth in sales to determine appropriate capital structure.

v) Stability in cash flow

The Firm's cash flow stability also influences its capital structure. If firm's cash flow 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.

vi) Asset 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 limited. In contrast, the firms with relatively greater investment in receivables and inventory rather than fixed assets firm attempts to use short term financing. (Miller, M.H, 1977) supported that most capital structure theories argue that a contributing factor of capital structure is the types of assets owned by a firm.

vii) Lender's 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 the industry norms, this may reduce the credit rating of the firm. As a result, lenders do not permit for additional debt financing.

2.2.4 Capital structure approaches

Different theories of capital structure have been developed over the period. Among them they are presented in some details.

i) Net income approach

This approach was propounded by David Durand in 1952. This approach reveals the capital structure decision is relevant to the valuation of the firm. Change in the financial leverage will lead to a corresponding change in the cost of capital as well as value of firm. The financial leverage in accordance with the Net Income approach is an important variable in the capital structure decision of a firm with a judicious mixture of debt and equity a firm can involve an optimal capital structure, which will be the one at which value the firm uses no debt or if the financial leverage is zero, the

overall cost of capital will be equal to equity capitalization rate, the weighted cost of capital will decrease and will approach the cost of debt as the degree of leverage reaches one (Petersen & Rajan, 1994). The essence of this approach is that the firm can increase its value and lower the overall cost of capital by increasing the proportion of debt in the capital structure (Pandey, 1995). Basic Assumptions of this approach are:

i) No corporate taxes

ii) Cost of debt is less than cost of equity (Kd<Kc)

iii) Cost of debt remains constant to acceptable range leverage.

From the above assumption, the overall cost of capital can be presented as:

Ko= O/V

Where Ko- Overall Cost of Capital

O- Earnings before interest and taxes

V- Total Value

The total value of firm increases and overall cost of capital decreases as firm uses more proportion of debt. The optional Capital Structure is determined where a value of firm is maximum and weighted average cost of capital (WACC) of firm is minimum. According to this approaches, the firm will have the maximum value and minimum cost of capital when it uses all debt financing or as much as debt possible

ii) Net operating income approach

This is another approach suggested by David Durand. This approach states the capital structure decision is irrelevant to the value of firm. Any change in leverage does not lead to change value of firm and overall cost of capital. The cost of equity is assumed to increase linearly with leverage. As a result, weighted average cost of capital remains constant and total value of firm also constant. The total value of the firm remains unaffected by its capital structure. Whatever benefits result from debt financing, it will offset by the rise in cost of equity with result that overall cost of capital remains unaffected for all the degree of financial leverage and hence, there exists no optimal capital structure and investors are indifferent to change in capital structure (Paramasivan & Subramanian , 2009). The basic assumptions of this approach are pointed as:

i) Debt capitalization rate (Kd) remains constant.

ii) Overall cost of capital (Ko) remains constant.

iii) Market value of equity is the residual value.

iv) Overall capitalization rate depends on Business risk and it is independent to the capital structure.

v) No corporate taxes and income taxes.

vi) The use of less costly debt funds increases the rises of shareholders. This causes equity capitalization rate (Ke) to increase.

Ke = E/S

Where Ke- Cost of equity

E- Earning available to equity share holders

S- Market value of stock

iii) Traditional approach

According to this approach, a Judicious mix of debt and equity capital can increase the value of firm by reducing weighted average cost of capital up to certain level of debt. Weighted average cost of capital (WACC) decreases only within the reasonable limit of financial leverage and after reaching the minimum level, it starts increasing with financial leverage. So, firm has an optimum capital structure that occur when weighted average cost of capital is minimum and thereby on maximizing the value of firm. The value of the firm can be increased or cost of capital can be reduced by a judicious mix of debt and equity (Negasa, 2016). The value of the firm can be increased or cost of capital can be reduced weighted average cost of capital (WACC) declines with the moderate level of leverage since low debt is replaced for expensive equity capital. Financial leverage, resulting in risk to shareholders will cause the cost of equity to increase. But traditional theory assumes that at moderate level of leverage, the increase in cost of equity is more than offset by lower cost of debt.

iv) Modigliani- Miller approach (MM-Approach)

Modigliani and miller in their original position advocate that the relation between leverage and the cost of capital is explained by net operating income approach. They make a formidable attack on the traditional position by offering behavioral justification for having the cost of capital, Overall cost of capital remains constant throughout the all degree of leverage. The assumptions are:

i) Capital markets are perfect.

ii) No transaction cost, investors are free to sell and buy the securities and they can burrow without any restriction.

iii) The absence of corporate and personal taxes are assumed Modigliani and Miller removes this assumption later.

iv) Expected values of the probabilities distribution of expected operating earnings for all future periods are same as present operating earnings.

Proposition-I

The Modigliani and miller proposition-I states that the market value of firm is independent of its capital structure. The reason is that the value of firm is determine by the capitalizing the net operating income at a rate for the firm risk class (Modigliani and Miller, 1958). According to this proposition, there is no relationship between firm's capital structure and value of firm thereby cost of capital. This proposition ignores the taxes.

Proposition-II

The proposition-II states that the cost of the equity raises proportionality with increase in financial leverage to compensate in the form of premium for bearing additional risk arising from increased leverage. Proposition-II assumes the corporate and personal taxes and revels that the value of firm increases with every additional units of debt financial. Theory also suggest that it is always better to have maximum debt financing with increases value of firm by decreasing cost of capital.

2.2.5 Leverage

Leverage arises due to the presence of fix operating cost in the capital structure of a firm or due to use of a source of finance on which the firm pays a fix return. Leverage has magnifying effects that is a small change in sales may bring a disproportionate change in profit of the firm. Increase in the leverage results increase in risk along with return. There are three types of leverage among them financial leverage is useful to analysis capital structure decision (Saleyi & Biglar, 2009).

i) Financial leverage

The leverage caused by the use of a source of financing carrying a fixed rate of return is called financial leverage. For instance on loans, debentures, preference share etc. the firm has an obligation to give fixed return independent of the operating profit. As

result, when operating profit of the firms increases, earning per sales increases more than proportionately. Financial leverage exists because of the use of fixed charge bearing securities like bond, preferred stock. In fact the financial leverage refers to the use of debt in the firm. Fixed charge bearing security obviously impacts on the earnings and risk can be understood by financial leverage. Financial leverage involves the use of funds obtained at a fixed cost in the hope of increasing the return to the shareholders (Pandey, 1995). Financial leverage can be more precisely expressed in terms of the degree of financial leverage.

Degree of financial leverage= percent change in Earning per share/ percent change in operating profit.

Higher levels of risks are attached to higher degree of financial leverage. Financial leverage increases when financial fixed cost of a firm increases which leads to increase high financial risk. If the firm is unable to cover fixed financial expenses, it ultimately forces to the firm into liquidation. Hence financial manager should take into consideration all such factors while formulating the firm's financial plans in terms of the mix of various sources of long term funds. That is long-term debt, P.S, Equity funds including retained earnings (Petersen & Rajan, 1994).

Financial leverage: effects on shareholders return

The primary motive of the company is using financial leverage is to magnify the shareholders return under favorable economic condition. The role of financial leverage is to magnify the return of the shareholders is based on the assumptions that the fixed charge funds can be obtained at a lower cost than the firm's rate of return on net assets. Hence when the difference between the earnings generated by assets financed by the fixed charge funds and cost of these funds is distributed to the shareholders is higher, the earning per sales or return on equity increases. However earning per sales will fall if the firm obtains the fixed charges funds at a higher cost rather than the rate of return on the firm's assets. Earnings per share are the important indicator to analyze the shareholders return. Earnings per Share = EAES/N or EAT/N

Return on Equity (ROE) = Net Income/ Net worth (Book value of Equity)

Where EAES- Earning Available to equity shareholders

EAT- Earning after tax, N- No. of shares.

Financial leverage: Effects on shareholders risk

The variability of earnings before interest and tax causes earning per sales to fluctuate within wider range with debt in capital structure with use of more debt, Earning per sales rises and falls proportionately faster than the rate rise and fall in operating profit. Hence financial leverage does not only magnify earning per sales but also increase its variability.

Operating risk

Operating risk can be defined as the variability of earnings before interest and tax or return on total asset. It is an unavailable risk.

Financial risk

The variability of earnings per sales caused by the use of financial leverage is called financial risk. Unlevered firm manages total assets via equity that is no debt is used in their financing. A totally equity financed firm will have no financial risk. It is an available risk because it exists only when firm raises capital through debt capital. An increase in debt leads to increase both the expected value of earning per sales and its variability is measured by the standard deviation and coefficient of variation. The relationship between debt ratio and risk measured by the standard deviation which is upward slopping as shown in diagram below

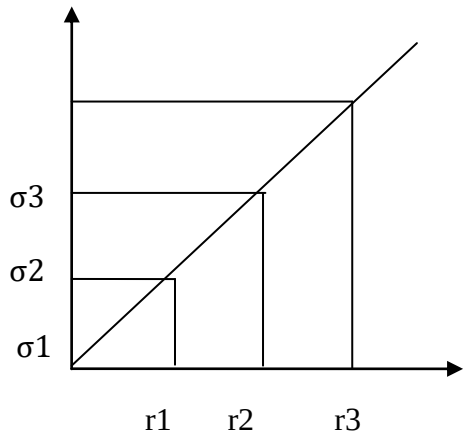


Figure shows the relationship of expected earnings per sale and its standard deviation with debt. r1, r2, r3…..shows the expected earnings and σ1, σ2, σ3……are respective risk. It is clearly said that the debt increases both risk and return (expected EPS).

Cost of capital

A firm may raise capital from different sources by issuing securities such as capital structure, preferred stock, bond etc. All these sources of capital that are employed in a business are not free of cost. A firm must pay periodic interest to the bond holders, pay dividend to the capital structure holders. All these obligations like interest on bond, pay dividend on preferred stock, equity dividend on common equity are known as cost of capital.

Component of Cost of Capital

i) Cost of debt = Kd (1-T)

ii) Cost of Preferred stock (KPS) = DPS/(Po-F) = DPS/NP

Where,

Kd- cost of debt

T- Tax rate

Dps- dividend on preferred stock

Po- price of preferred stock

F- Flotation cost

NP-Net proceed

iii) Cost of common stock

Internal Equity

Ks = D1/Po + g

External Equity

Ke = D1/NP + g

Where,

Ks- Cost of internal equity

D1- expected dividend

Po- price of stock

g- Growth rate

NP- net proceed

Ke- cost of external equity

Weighted average cost of capital (WACC)

The firm's overall cost of capital, weighted average cost of capital (WACC) is the combined costs of all long term sources of financing viz. debt, preferred stock, common stock. The WACC is the weighted average and after tax costs of each of the

source of capital used by a firm where weights are the proportions of each source in the total financing.

WACC = WD*Kdt + W.P.S*K.P.S + Ws*Ks + We*Ke

Where,

Wd- weight of debt

Kdt- cost of debt after tax

WPS- weight of preferred stock

KPS- Cost of preferred stock

Ws- Weight of internal equity

Ks- Cost of internal equity

We- Weight of new equity or new issues

Ke- Cost of new equity or new issues.

2.2.6 Determinants of capital structure decision

The capital structure decision is most critical and sensitive one in that it affects value of firm, earnings per share and cost of capital. Firm should plan properly and systematically to determine optimal capital structure at which determined financing mix assets to increase the value of firm by minimizing overall cost of capital. The capital structure is designed initially when firm is incorporated. The management of the company should set a target capital structure and subsequent financing decision should be made to achieve target capital structure. The financial manager has to deal also with the existing capital structure (Pandey, 1995). Determinants of a firm's capital structure have long been an important area in corporate finance since Miller and Modigliani's pioneer work in 1958. After the work of MM in the beginning of the 1960, this is almost one of the first studies considered in capital structure literature. This issue has been noticed by other researchers can be classified into two major 2groups: first is about the determinants of capital structure, and second is relationship between capital structure and firms value. A glance to the works of Bradley , Michael, & Hankim (1984), Long, Michael & Illen, (1985) and Itman, Sheridan, & Roberto (1988) supports a number of variables that affect the capital structure choice in various countries and vector of these affects. Declared variables in the above studies consists of asset structure, operating risk, non-debt tax shields, growth opportunities and firms size. The determinants of capital structure consist of industry type, size of firm, business risk and operating leverage (Adekunle & Sunday, 2010). The company

needs capital to finance assets and other activity continuously. When capital is needed for the firm, financial manager should test merits and demerits of several source of financing and select the most appropriate one. The financial manager can use several approaches while determining appropriate capital structure. The following approaches have been pointed to decide the firm's capital structure.

2.2.6.1 Earnings before interest and tax (EBIT) and earnings per share (EPS) approach

One of the methodology of examine the effect of leverage is to analyze the relationship between EBIT and EPS. Essentially, the method involves the comparison of alternative methods of financing under various assumptions as to EBIT.

The EPS also increases when the preference share capital is used to acquire assets (Pandey, 1995). Increased EPS assists to enhance more value of firm on which a firm always conceives to ensure that. One means of examining the effect of leverage is to analyze the relationship between EBIT and EPS (Bokpin & Issahaq, 2008). The EBIT- EPS method delineates the effect of various financing alternatives on EPS at various level of EBIT. This analysis is useful for two reasons: one is the EPS is a measure of a firm's performance given the price earnings ratio, the larger the EPS larger will be the value of firm's share. The second is given the importance of EPS and the function of EBIT- EPS analysis to show the value of EPS under the various alternatives at different EBIT level (Petersen & Rajan, 1994). This approach examines the impacts of several financial plans on firm's earnings per share. It is a must common approach to establish an appropriate capital structure. This approach states the effects of long term sources of debt or preferred stock financing on EPS. Firm should select that plan which maximizes earnings per share (EPS). If the assets financed with the use of debt yielding greater return than cost of debt, the EPS would be increased without an increase in owner's investment. Keeping in view the primary objectives of financial management of maximizing the market value of the firm, the EBIT and EPS analysis should be considered logically as the first step in the direction of designing a firm's capital structure. The EBIT and EPS analysis shows the impact of various financing alternatives on EPS at various level of EBIT. This analysis is useful for two reasons

(i) The earnings per share is a measure of a firm's performance given the price earnings ratio, the higher the earnings per share the higher is the value of firm.
(ii) Given the importance as earnings per share and function of the EBIT and EPS analysis to show the value of EPS under various financial alternatives at different level of EBIT.

2.2.6.2 Cash flow approach

Cash flow approach states that the capital of the firm to pay fixed charges on the basis of its ability of cash generation. The fixed charges consist of payment of interest, preferred dividend and principal and they depend on both the amount of senior securities and the terms of payment. When the company raising additional capital, should be analyzed its expected future of cash flows to meet the fixed charges. If a company is not able to generate enough cash to meet its fixed charges obligation, it may result the firm into liquidation. If a firm borrows more than its debt capacity and therefore fails to meet its obligation in future, the lenders may seize the assets of the company to satisfy their claims. The basic existence therefore of the company would be endangered (Petersen & Rajan, 1994). The analysis of cash flow ability of the firm to service fixed charges is an important exercise to be carried out in capital structure planning in addition to profitability analysis. The exercise is of overwhelming significance in the context of the rise of bankruptcy. If firm borrows more than its debt capacity and therefore fails to meet its obligation in the future, the lenders will seize the assets of firm to confront their claims. Hence the basic existence of the firm would be endangered.

Debt servicing ratio is an important financial tool which examines the optimal capital structure. Debt service ratio indicates the number of times the fixed financial obligations are covered by the net cash inflow generated by the firm. The greater the ratio, the greater the amount of debt a company use. Although a company with a small coverage ratio can also employ a large amount debt if there are not significant yearly variance in its cash inflows and a small probability of the cash inflows being considerably less to meet fixed charges in a given period. Hence it is not the average cash flows but the yearly cash inflows are important to determine the debt capacity of a company.

2.2.6.3 Cost of capital and valuation approach

The cost of equity is normally expensive rather than debt and preferred stock due to the flotation cost. The cost of debt is cheaper than other sources of financing due to the tax advantages benefits. The high degree of operating leverage of a company adds more costs while raising further required fund by debt itself. Preference share capitals possess both the characteristics of debt and equity and in cost of capital are moderate between these two sources of financing. Preference share capital is cheaper than equity buy more expensive than debt.

2.2.7 Theories of capital structure

2.2.7.1 Irrelevant and relevant theory

The development of modern capital structure theory can be traced back to the contribution of Modigliani and miller (M-M) who contend that capital structure is irrelevant in determining cost as capital and value of firm in 1958. Modigliani and miller argue that in a perfect market, value of firm is independent with its capital structure. They provide a convincing argument that a firm cannot charge total value of its outstanding shares by charging the proportionate mix of debt and equity. They depict that total value of a firm depends on its underlying profitability and risk and not as how the firm is financed. Hence irrelevance proposition of Modigliani and Miller states that two firms alike in every respect except their capital structure must command the same total value. If not profit seeking investors tend to sell shares of overvalued firm and buy the shares of undervalued firm there by enforcing two firms in to equilibrium. It is therefore pinpointed that the value of a firm should not depend on its capital structure (Modigliani & Miller, 1958). And this approach was supported by other accredited academicians and researchers as well at that time. There is no gain from switching between debt and equity because the costs of the different forms of capital do not vary independently (Barker & Wurgler, 2002).

The Irrelevance proportion of Modigliani and Miller is based on the perfect market hypothesis. However there exist many imperfections in the capital market that make capital structure relevant in affecting cost of capital and value of the firm. The relevance approach to capital structure takes into account such imperfections. One of the imperfections exists due to the effect of taxes. When taxes are introduced the value of firm is relevant to the capital structure because interest payment on debt is

allowable deductions for tax purpose, total income available for both debt holders and shareholders is greater when debt is used. Debt is one of the important items in capital structure that provides a medium for corporate financing as firms borrow money to obtain the capital they require for capital expenditure (Zeitun & Tian, 2007). Modigliani & Miller (1963) adjusted their own model by including corporate tax and further research by Miller (1977) also included personal tax in the model. The benefit of using debt is that the interest payments on debt are tax deductible which creates a tax shield for the firms. Tax shield allows a firm to pay lower taxes when using debt capital than they would when using only their own capital (Eriotis , Vasiliou, Ventoura, & Neokosmidi, 2007). Hence financing the high portion of debt in the capital structure, it will lower the real after tax cost of capital which will enhance the value of firm. Tax does matter because value of a levered form is greater than value of unlevered firm due to the presence of present value of tax saving on debt.

However it does not mean that increased use of debt enhances value of the firm linearly. There is other imperfections as well that distorts the benefits using debt capital beyond certain limit. The use of debt creates fixed financial burden to the firm because interest and principal are fixed obligations. If these obligations are not satisfied timely the firm may risk some sort of financial distress or bankruptcy. As a result the cost of financial distress tend to offset the advantages of debt tax saving. More debt a firm uses, more corporate tax saving it generates; but it also increases the cost of financial distress. Hence optimal capital structure assumes that a firm balances the marginal present value of interest tax saving against the cost of financial distress. This interaction between the tax effects and the cost financial distress makes capital structure relevant in determining value of firm overall cost of capital.

2.2.7.2 Agency cost theory

The use of debt in the capital structure can also lead to agency costs which arise due to a conflict of interest between parties. According to (Jensen & Meckling, 1976), conflicts of interest can exist and arise either between shareholders and bondholders or between shareholders and managers. Shareholders expect to run the firm and take opportunities that will increase shareholder’s wealth. However, management may expect to over expand the size of the firm to maximize their own personal wealth at the expense of shareholders (Jensen & Meckling, 1976). Hence, there might exist

agency conflict. The monitoring and controlling mechanisms result in agency cost is very expensive. Debt can be used as a sensitive mean which assists to reduce agency costs (Sibilkov, 2009). When firms increase the debt, their legal obligation to pay interest will also be increased. In turn, the possible remaining cash flows will be reduced. This implies that the managers will rather use their remaining cash flows to pay their interest than use these cash flows for their personal wealth. Therefore, agency cost might be reduced. An optimal capital structure will therefore be derived from the balance between the costs of debt and benefits of debt (Eriotis , Vasiliou, Ventoura, & Neokosmidi, 2007).

Agency cost theory is a theory concerning the relationship between the principal (shareholders) and the agent of principal (company's managers). This suggests that the firm can be viewed as a nexus of contracts (loosely defined) between resource holders. An agency relationship arises whenever one or more individual called principals, hire one or more other individuals called agents to perform some service and then delegate decision making authority to the agents. The agency theory concept was initially developed by Berle & Means (1932) who argued that due to a continuous dilution of equity ownership of large corporations, ownership and control become more separated. The situation gives professions managers and opportunity to pursue their interest instead of that of shareholders. Jensen & Meckling (1976) suggested that for an optimal debt level in capital structure by minimizing the agency cost arising from the divergent interest of managers with shareholders and debt holders. They suggest that either ownership of manager in the firm should be incorporated to align the interest managers to control managers, tendency for excessive extra consumptions. Jensen (1986) presents agency problem associated with free capital structure. He suggested that capital free cash flow problem can be somehow controlled by increasing the stake of managers in business or by increasing debt in the capital structure, thereby reducing the amount of free cost available to managers. Therefore firm which are mostly financed by debt given managers less decision power of these financed mostly by equity and thus debt can be used as a control mechanism in which lenders and shareholders becomes the principal parties in the corporate governance structure.

2.2.7.3 Trade-off theory

The trade-off theory states that there is an optimal capital structure that maximizes the value of firm. The firm therefore should set a target leverage ratio and then gradually move towards that. The firm select target leverage ratios based on a trade-off between the benefits and costs of increased leverage, the ratio is driven by three factors: Tax, financial distress costs and agency costs (J.H, 2006). Hence, the trade-off theory of the capital structure suggests that a firm's target leverage is driven by three competing elements taxes, bankruptcy cost or financial distress of the agency cost. Therefore the firm seeks that level of debt which balances the tax advantages of additional debt against the costs of possible financial distress of agency conflict. Therefore a firm sets target leverage ratio and gradually moves toward it.

2.2.7.4 Pecking order theory

The pecking order theory of capital structure is introduced by Donaldson (1961) is among the most influential theories of corporate leverage. It goes contrary to the idea of firms having a unique combination of debt and equity finance which minimizes their cost of capital. The theory suggests that when a firm is looking for ways to finance its long terms investments, it has a well-defined order of preference with respect to the sources of finance it uses. It states that a firm's first preference should be the utilization of internal funds (retained earnings) followed by debt and then external equity. He argues that the more profitable the firms become the lesser they borrow because they would have sufficient internal finance to undertake their investments projects. He further argues that it is when the internal finance is inadequate that a firm should source for external finance and most preferably bank borrowings or corporate bonds. And after exhausting both internal and bank borrowing and corporate bonds, the final and least preferred source of finance is to issue new equity capital. The firms have perfect hierarchy for financing decisions. The first choice is to use retained earnings, then issue debt and then issue of equity is the last choice of financing the funds. Internal funds incur no flotation costs and require no supplementary admission of proprietary financial information (Rasiah & Kim, 2011). According to Myres (1984) the first choice is to use internal funds (retained earnings) then use debt and the equity is the last resort for financing the funds.

Pecking order theory tries to capture the costs of asymmetric information which states the companies priorities their sources of financing (from internal financing to equity) according the principle of least effort or of least résistance preferring to raise equity as a financing means of last resort. Hence, internal funds is used first and when that is exhausted debt is issued and when it is not sensible to issue any more debt and corporate bond new equity shares is issued. Pecking order theory on the other hand captures the effect of asymmetric information upon the mispricing of new securities which says that there is no well-defined target debt ratio. Pecking order theory Myres and Majiuf (1984) also depicted into their account such matter. They opined that investors generally perceive that managers issue risky securities when they are overpriced. The perceptions of investors lead to underpricing of new equity issue. Sometimes this underpricing becomes so severe that it causes substantial loss to the existing shareholders. To avoid the problem arising from information asymmetry firms usually fulfill their financing needs by preferring retained earnings as their main source of financing followed by debt and finally external equity financing is used.

Therefore, this study is based on Modigliani and Miller Approach: Propositions with taxes (The Trade-Off Theory of Leverage) where, with an increase in debt component, the equity shareholders perceive higher risk to the company. Hence, in return, the shareholders expect higher return, thereby increasing the cost of equity. Similarly, this theory also advocates that the actual cost of debt is less than the nominal cost of debt due to tax benefits. The trade-off theory advocates that a company can capitalize its requirements with debt as long as the cost of distress, i.e., the cost of bankruptcy, exceeds the value of the tax benefits. Thus, increased debts, until a given threshold value, will add value to a company. This study has also tried to see the linkage between capital structure and profitability. The conclusion of this study is made in line with the based theory.

2.3 Empirical Review

Empirical review incorporates review of articles and review of previous theses, which are separately presented below.

2.3.1 Review of journal articles

Myres (1984) confirmed that variable firm’s growth has a significant positive relationship with firm’s profitability. The study also reveals that there is positive

relationship between firm size and return on asset. The result further showed not a significant result that is larger fixed asset is less important in affecting the profitability. More over variable liquidity has a significant negative relationship with return on asset.

Friend & Lang (1988) and Berger & Wharton (2002) concluded a significantly negative relationship between profitability and debt. Rajan & Zingales (1995) and Baral (2004) also confirmed a debt and profitability would be negatively associated.

Muhammad, Shah, & Islam (2014) confirmed the impact of capital structure on firm's performance of cement companies listed in Karachi Stock Exchange. And found out the relationship between capital structure and firm's performance. The results implied negative relationship between debt ratio and firm performance variable (gross profit margin, net profit margin, return on assets & return on equity) Similarly, positive relationship between debt-equity ratio and firm performance variable (gross profit margin & net profit margin) whereas a negative relationship between debt-equity ratio and firm performance variable (return on assets & return on equity).

Akhtar (2005) investigated the negative association between returns and leverage, positive relationship between growth and long term debt and dividend and total debt of the firms. Brazilian Mesquita & Lara (2003) resulted a negative relationship between the profitability variable and long term debt ratio and they conclude that the larger the debt, lower the profitability. However, short term debt has a positive relationship with profitability.

On the other hand, Kyereboah (2007) confirmed the debt ratio and profitability would be positively related. It is supported by Abor (2005) also. Adeyemi & Oboh (2011) used a sample size of 150 respondents and 90 firms were selected for both primary and secondary data. They employed descriptive statistics and chi square test and revealed the significant positive relationship exists between a firm's choice of capital structure and its market value in Nigeria.

Asset structure may have impinged on capital structure and also reported that capital structure are influenced by different sorts of assets of the firm. Booth, Aivazian, Demirguc- Kunt, & Maksimovic (2001) and Vasiliou , Eriotis, & Dakskalakis (2005) found that most capital structure theories contributing factor of capital structure is the

type of assets owned by a firm. They also confirmed that the asset structure of a firm is classified into tangible and intangible assets. Akhtar (2005) concluded that the tangible assets, more especially noncurrent assets can be used as a collateral for debt which means that the more tangible assets a firm has, the lower the risk for the debt provider. Also tangible assets are associated with higher leverage because they provide better collateral for loans.

On the other hand, Chen & Strange (2005) argued that firms with more intangible assets face more serious information asymmetry problems, which will result in more agency costs for the firm. The majority of previous studies found that a positive relationship between tangibility of assets and leverages. However, contradicting results were also found with regard to the association between the tangibility of assets and leverage. Bevan & Danbolt (2002) and Booth, Aivazian, Demirguc- Kunt, & Maksimovic (2001) found that the tangibility of assets is negatively related to leverage.

The traditional literature confirms that the profitable firms can employ more debt because they are exposed to lower risks of bankruptcy and financial distress. There is negative relationship between profitability and leverage, which supports the pecking order theory where firms prefer internal financing to external financing (Fama & French , 2002). This negative relationship is observed for both developed and in developing countries (Chen & Strange, 2005). On the other hand, Baral (2004) supported that more profitable firms have more capacity to borrow and debt providers will be more willing to provide funds in that the possibility of default and bankruptcy is lower than for less profitable firms. The firms with high profitability imply higher debt capacity and consequently less risk for debt providers.

The capital structure obviously is influenced by the size of a firm which also closely related to the amount of risk associated and bankruptcy cost. Larger firms tend to have less risk than smaller firms, because they are more diversified and hence have more stable cash flows. Consequently, the larger firms will have a lower possibility of bankruptcy and results lower financial distress costs (Vasiliou , Eriotis, & Dakskalakis, 2005).

Kyereboah (2007) confirmed that a positive relationship between total debt ratio and profitability. Similarly, Abor (2005) also explained that there is a significant positive relationship between short term debt and return on equity, and it suggests that profitable firms use more short-term debt to finance their operation. However, the same study showed a negative relationship between long-term debt and ROE, there was a significant positive relationship between total debt ratio and ROE.

The liquidity increases debt capacity because higher liquidity may increase on the firm's value in liquidation and thus liquidity could reduce a firm's ability to issue debt. On the other hand, if liquidity is very low, it represents the firm does not have the ability to cover its current liabilities. If the firm's liquidity is continually declines, then it will eventually lead to bankruptcy problems. Hence the balance between current assets and current liabilities is influenced by the financing decision of the firm. The more debt a firm uses, the more current liabilities will be implied and few current assets will remain after dealing with the liabilities (Zietlow, Hankin, & Seidner , 2007).

Sibilkov (2009) defined the liquidity is the ability of a firm to fulfill its short term obligations; the ease with which a firm's assets can be converted into cash. A firm with higher liquidity has sufficient current assets available to cover its current liabilities which represents the firm has less chance of bankruptcy. According to Gill, Biger, & Mathur (2011) seeks to extend Abor (2005) findings regarding the effect of capital structure on profitability by examining the effect of capital structure on profitability of the American service and manufacturing firms. The Empirical results of the study show a positive relationship between short-term debt to total assets and profitability and between total debt to total assets and profitability in the service industry. The findings of this paper also show a positive relationship between short-term debt to total assets and profitability, long-term debt to total assets and profitability, and between total debt to total assets and profitability in the manufacturing industry.

Babalola (2014) studied 31 manufacturing firms with audited financial statements for a period of fourteen years (1999-2012) from static trade-off point of view. He employed the triangulation analysis and the study revealed that capital structure is a trade-off between the costs and benefits of debt, and it has been refuted that large

firms are more inclined to retain higher performance than middle firms under the same level debt ratio. In another study, using a sample of 10 firms for a period of 10 years (‘2000-2009) from agency and static trade-off point of view. He used the regression analysis and concluded that the manufacturing industry’s capital structure in Nigeria is consistent with trade-off theory and the hypothesis tested that the corporate performance is a nonlinear function of the capital structure.

Sultan & Adam (2015) this study tests the effect of capital structure on the profitability of the Iraqi firms that listed in Iraq stock exchange. The study used statistical methods such as multiple regression model represented by ordinary least squares as a technique to investigate the claimed effect of capital structure on the profitability by applying the same on four firms from the Iraqi industrial sector for the period (2004-2013). The study findings suggest that capital structure positively influence, in a significant way, on the profitability of listed firms in Iraq. Furthermore, profitability, and assets (firm-size) have been found to be negatively influencing the capital structure of the listed firms. These findings generally concur with the predictions of the pecking order theory and the signaling effects of capital structure decisions of firms. The concerned companies must have to enhance their firm size that negatively correlated with return on equity, its growth and continuity.

Rahman, Sarker, & Uddin (2019) studied sample of 50 observations of selected 10 manufacturing companies listed in Dhaka Stock Exchange has been analyzed over the period of 2013 to 2017. This research reveals that the debt ratio and equity ratio have a significant positive impact but debt to equity ratio has a significant negative impact on return on assets. This paper also exposes that, equity ratio has a significant positive impact but debt to equity ratio has a significant negative impact on return on equity.

Wardani & Subowo (2020) the main theories in this research are trade off theory and signal theory. The population in this study were 155 manufacturing companies listed on the Indonesia Stock Exchange in 2015-2017. The sample selection used a purposive sampling technique and selected 90 companies with 235 units of analysis. The analysis techniques used descriptive statistical analysis, inferential analysis, and moderated regression analysis. The results show that business risk and time interest earned have a significant negative effect on capital structure while fixed asset ratio has a significant positive effect on capital structure. Profitability is able to moderate

the effect of fixed asset ratios on capital structure but is not able to moderate the influence of business risk and time interest earned on capital structure. The conclusion of the study is that business risk has a negative effect significant to the capital structure and fixed asset ratio have significant positive effects on capital structure. This can be used as the basis that companies must be careful when raising external funds because it can affect the efficiency and profitability of the company.

2.3.2 Review of previous theses

The thesis prepared by Martis (2013) examined the impact of capital structure on firm performance and was based on the constituents of the S&P 500. The research was based on panel estimation covering the periods 2003-2008 and 2003- 2011. His models were based on the Return on Assets, Return on Equity and firm's Tobin's Q, to proxy firm's performance. He found evidence suggesting a negative link between leverage ratios and return on assets, while he found no statistical evidence suggesting a relationship with regards to leverage and Return on Equity. Only short-term debt and total debt seemed to have a significant negative impact when analyzing the impact of leverage on firm's Tobin's. Furthermore, the majority of his control variables proved to have the expected impact on firm performance at his usual confidence levels.

Fred (2015), analyzed the effect of capital structure on profitability of listed manufacturing companies in Tanzania using panel data of six companies listed in the Dar Es Salaam Stock Exchange during a 5 year period. The period was from 2009 to 2013 in which 30 observations were obtained. Panel data for the selected companies were analyzed using fixed effect regression statistical technique to test the relationship between capital structure variables and return on asset (ROA) and random effect used to test the relationship between capital structure variables and return on equity (ROE). Other statistical methods of partial correlation and summary of descriptive statistics were also used to analyze the study results. The results of this study revealed the mixed results, a negative relationship revealed between debt to equity ratios and return on equity. Debt to asset ratios indicated a positive relationship with return on equity when random effect regression used. Other results indicated a positive relationship between ROA and all capital structure variables using fixed effect regression method. Both, Correlation and regression models indicated a positive

relationship between debt to assets ratios and company profit in terms of ROE and ROA while only debt to equity ratios showed a negative relationship with ROE as indicated by both methods (regression and correlation models). This study recommend to managers of manufacturing companies to increase the reliance of short term debt to asset ratios and long term debt to asset ratios as a source of finance because they have much influence in profit generation on both return on equity (ROE) and return on asset (ROA) as indicated by regression results.

The thesis prepared by Abu (2015) examined the impact of capital structure on firm's financial performance. The main objective of the study was to determine the overall effect of capital structure on corporate financial performance of Palestinian firms by establishing the relationship that may exist between the capital structure choices of firms in Palestine and their financial performance.

The study used three financial performance measures including return on assets , return on equity , and return on investment as dependent variables and three capital structure measures including short term debt to total assets , long term debt to total assets and total debt to total assets as independent variables. In addition, the firm size and industry type was used as control variables. The population of this study consisted of 49 Palestinian corporations listed on Palestine Exchange. 35 Corporations were selected on the basis of availability of information necessary for conducting the study and the readiness of annual financial reports for the period of 5 years from 2009-2013. The results showed that there was a relationship between capital structure and corporate financial performance. For the market, there was a negative influence for short term debt to total assets and total debt to total assets on financial performance measurements except the return on equity. The results according to each sector in the market were as the following: For Banking, there is a positive influence for capital structure on firm's financial performance. For Insurance, there is a negative influence for short term debt to total assets on financial performance measurements except the return on equity. For Investment Firms, there is a negative influence for short term debt to total assets on financial performance measurements except the return on assets. For Industrial firms, there is no significant influence for capital structure on firm's financial performance. For Services firms, the results indicated positive influence for short term debt to total assets and total debt to total assets on return on

assets and negatively on return on equity, and return on investment. It was concluded that Palestinian firms are majorly financed by mixing of equity and short term financing. The study recommended the firms to achieve the best debt ratio with the minimum cost to maximize the financial performance. Also, the firms should rely less on short term debt which formed the major part of their leverage and focus more on developing internal strategies that can improve their financial performance.

Hove (2017) in his dissertation empirically examined the impact of capital structure on the profitability of the industrial firms listed on the Johannesburg Securities Exchange over a period 2006-2015. The sample consists of 52 industrial companies with a complete data set of at least 8 consecutive years. The effects of capital structure on profitability were estimated on the whole sample, then on large firms and small firms, and lastly on different sub- sectors. It also used different measures of profitability and debt to asset ratios in an integrated framework in order to provide a comprehensive analysis of the problem. The regression model was used to estimate the effects of capital structure on profitability. The empirical findings of this study revealed that total debt and long-term debt negatively and significantly affect the profitability (NPR, ROA and EPS) of the whole sample. In the case of small and large firms, the results present a statistically significant negative relationship between ROA and debt ratios in small firms while exhibiting a strong negative impact on profitability (ROA, EPS and NPR) for large firms. Total debt and long-term debt had a negative influence on the profitability of all sectors and especially on ROA where the influence is significant. However, short-term debt positively influences the ROA and NPR of the construction and materials sub-sectors, but affects other sectors differently. Based on the findings of the study, debt appeared to be a costly source of financing for industrial firms in South Africa as its increase results in the decline of profits. Firm managers should consider using internally generated funds which are a cheaper source of financing or issuing equity which is less risky since it does not have the fixed monthly interest and principal payments that debt has.

Wu (2019) investigated, in his partial fulfillment of the requirements for the master degree, the relationship between capital structure and profitability. The objective of this study was to identify the relationship between capital structure and profitability of U.S. manufacturing companies. Historical data (2009-2018) were collected from the

audited financial reports of a sample of 15 U.S. manufacturing companies for this study. Applying the panel analysis techniques, the regression models of capital structure and profitability ratios were empirically constructed. The result revealed that the capital structure plays a vital role in the overall profitability of the underlying organization. Particularly, the Coverage Ratio was significantly and positively related to profitability which was represented by Return on Assets and Return on Invested Capital. Total Debt to Equity and Total Debt to Tangible Assets ratios had a significantly negative relationship with profitability. Firm Size, as control variable, had a positive impact on profitability. Therefore, profitability had a strong correlation with the capital structure of U.S. manufacturing companies.

2.3.3 Summary of articles and theses

As been detailed above, there is no general agreement on the appropriate direction of impact of capital structure on profitability. Theories suggest that using either of only one –debt or equity- completely by the firm as capital has negative impact on risk and return of the firm. The excess use of debt possesses the financial risk to the firm and bankruptcy may be the result. Similarly, the excess use of equity may have negative impact on firm's profitability. Therefore, theories suggest that there should be an optimum combination of debt and equity so as to make balance between risk and return. This assumption of theory has been supported by many empirical evidences found by different empirical researches.

For the purpose of this research, those literatures that have supported the relationship existed between capital structure and profitability have been adopted. The main advantage of taking these literatures is that they have provided the researcher a guideline for completing the research and a strong basis for making the conclusion.

The adopted literatures have argued that there exist relationship between capital structure and profitability. It means capital structure has impact on profitability of the firm. But the arguments are inconclusive. Different researchers have put their own-own arguments over the direction and degree of impact of capital structure on profitability. It has been proposed that the total debt and long-term debt negatively and significantly affect the profitability. Similarly, it has also been argued that debt to assets ratio indicates a positive relationship with return on equity. Some literatures have derived the mixed results. That is, negative relationship between debt to equity

ratio and return on equity with debt to assets ratio indicating positive relationship with return on equity when random effect regression used. It is also observed that, in the same research, the different results in different sector of business have been revealed due to the presence of control variables. For example, in the research conducted by Abu (2015) he has taken firm's size and industry type as control variables. His findings showed that**,** for Insurance, there is a negative influence for short term debt to total assets on financial performance measurements except the return on equity. For Investment Firms, there is a negative influence for short term debt to total assets on financial performance measurements except the return on assets. For Industrial firms, there is no significant influence for capital structure on firm's financial performance. For Services firms, the results indicated positive influence for short term debt to total assets and total debt to total assets on return on assets and negatively on return on equity, and return on investment. It was concluded that Palestinian firms are majorly financed by mixing of equity and short term financing. This shows that the presence of control variables influence the results of the research with same samples.

All researchers have used the research design according to their research objectives. Descriptive and correlational research designs have been adopted by almost all researchers in the literature. Under the research designs, statistical methods such as regression, partial correlation and summary of descriptive statistics have been used.

The summary of literatures has shown the research gap on the research topic which has opened the door for conducting the research on this topic.

2.4 Research gap

The researcher have gone through the purpose of literature review and found out the topic in the area of interest. After passing through the literatures, researcher has found out the area of contradiction that has been taken as topic for the further research. It was found out that there were contradictory views of different experts regarding increasing profitability. Similarly, very few researches have studied in the area of capital structure and profitability in manufacturing companies, which is the untouched area for this study.

In such contradictory views of different researchers in increasing profitability, how the organization can increase profitability is the major question, most of the financial

managers around the world are asking. As it was mentioned above, different theories in the area of capital structure and profitability have been developed. Different researchers have suggested different variables majorly responsible for increasing profitability. One group of researchers – Kyereboah (2007), Gill, Biger, & Mathur (2011), Adeyemi & Oboh (2011) - has suggested capital structure as prominent variable for increasing profitability. On the other hand, next group of researchers have argued, not capital structure but customer satisfaction and customer loyalty, Hallowell (1996), larger board size, and corporate liquidity, Gill & Mathur (2011), size of firm, Babalola & Abiodun (2013) have been found as a prime variables for increasing profitability so, and the result is inconclusive. Financial managers often get confused about which one variable should be taken carefully into consideration so as to increase profitability. In such existing financial problems, where financial managers are looking for an appropriate solution, this contradictory view of different researchers in increasing profitability is the serious research gap for this study. Thus, to capture the existing research gap that whether the capital structure plays vital role in increasing profitability or not, this study is doing.

Modiagliani and Miller approach has advocated that the use of high debt positively influence the profitability of the firm. Mainly empirical researches - Nimalathasan (2010) and Sultan & Adam (2015) - have confirmed this approach. The findings of Chechet & Olayiwola (2014) and Rahman, Sarker, & Uddin (2019) contradict this approcah.

Similarly, in Nepal, very few researches have been done in the area of profitability. And whatever researches have been conducted in the area of capital structure and profitability, the researchers have considered the data related to capital structure and profitability of Nepalese manufacturing companies up to 2017. Further researches by considering the data after 2017 on this topic have not been conducted. Thus, due to the contradictory views of different experts in increasing profitability and very few researches have been done in the manufacturing companies in Nepal, there is research gap in terms of variables and timing of data consideration, and context which this study, to some extent, has tried to capture.

Chapter III
Research Methodology

3.1 Introduction

This section describes and ensures the procedures for data collection and method of data analysis meticulously that was used for this research. This section hence, adheres and explores the most suitable research methodology required for the collection presentation and interpretation of data for the study with a view of reaching objective outcome. The methodology of this study consists of research design, population, sample and sampling design, nature and sources of data, data collection procedure and instrument and, data processing procedure and data analysis method in the analysis and interpretation of data have also been outlined. This chapter assists to analyze the impact of capital structure decision on profitability of manufacturing companies in Nepal using model specification with some specific and determined variables.

This chapter consists of the methods and procedures those will be applied during the research work. The basic objective of the study is to determine capital structure decision and its impact on risk and return of manufacturing companies in Nepal. The following aspects of methodology therefore, have been delineated elaborately along with extensive use of secondary data and models application. The secondary data has been gathered by various types of annual reports and other related financial publications.

3.2 Research design

Descriptive and correlational research designs have been adopted. To describe the position of capital structure and profitability and so achieve first two research objectives, descriptive research design has been adopted. To examine the relationship between capital structure and profitability and, to measure the degree of impact of capital structure on profitability and so achieve second two research objectives, correlational research design has been adopted.

Under the descriptive research design, descriptive statistic has been adopted to present the positions. Under correlational research design, correlation analysis has been used to examine the relationship. In the similar research conducted by Velnamphy & Aloy

(2012) have used descriptive statistics and correlation analysis to find out the association between the variables.

3.3 Population, sample and sampling design

Population for this study is particularly not very large, manufacturing enterprises which have been listed in Nepal Stock Exchange (NEPSE) are taken as sample. The population for the study consists of the entire 18 manufacturing companies listed in the NEPSE out them, 5 manufacturing enterprises that have been regularly traded in line with the regulation of NEPSE have been selected as sample. Therefore, purposive sampling technique has been adopted. In the similar research conducted by (wardani & Subowo, 2020), have also used purposive sampling technique. Regularly traded in line with the regulation of NEPSE manufacturing companies are Bottler Nepal limited, Unilever Nepal limited, Himalayan distillery limited, Bottler Nepal limited (Terai) and Nepal Lube Oil Limited.

Data have been collected from 5 manufacturing companies in Nepal that has been regularly traded in NEPSE out of 18 manufacturing companies by using purposive sampling. The collected data have been put into statistical package for social science (SPSS). Under descriptive statistic, minimum, maximum, mean and standard deviation have been calculated. Under correlation analysis, Karl Pearson's correlation and regression analysis have been used. Under inferential statistic, analysis of variance test has been used.

3.4 Nature and sources of data

Data used in the study were secondary and had been sourced through internet and annual published reports collected by visiting websites of concerned organization. This study has employed the data which were collected from five manufacturing companies in Nepal for five consecutive years.

The data related to sales, operating profit and net profit were sourced through income statement of the sampled companies. And data related to total debt, total equity and total assets were sourced through balance sheet of the sampled companies. The information related to debt ratio, debt-equity ratio, return on equity, return on assets, net profit ratio and operating profit ratio were obtained through excel sheet.

3.5 Data collection procedure and instrument

It is aforementioned that the secondary sources are extensively used in this investigation. Most of data were gathered from financial and government data base. The most secondary data were collected from audited financial statement of manufacturing companies in Nepal. Along with this, websites of the related firms, websites of the regulatory bodies were also used to gather the required financial information and data. The information from firm's annual reports can be extensively depended upon as they are audited by external experts or repute.

3.6 Data processing procedure and data analysis method

The collected raw data are first cleaned up and organized for the processing. Once the data are cleaned up, they are put in the Statistical Package for Social Science computer software as inputs. Then, the data inputted to the computer are processed and outputs are calculated for interpretation.

Under the descriptive statistic, mean, maximum, minimum and standard deviation have been calculated. Mean has been calculated to describe the position of debt ratio, debt to equity ratio, return on equity, and return on assets, net profit margin and operating profit ratio. Similarly, minimum and maximum have been calculated to identify the two extreme levels of independent and dependent variables. Standard deviation has been calculated to see the deviation of sample mean from its population mean.

Under the correlation analysis, Pearson correlation coefficient and regression analysis have been used. Pearson's 'r' has been calculated to test significance of the relationship between capital structure and profitability. Regression analysis has been used to examine the degree of impact of capital structure on profitability. To test the normality, histogram has been used; for the variation in dependent variable explained by independent variable, coefficient of multiple determination has been used; and, for the fitness of regression model, analysis of variance test has been used.

Under the inferential statistic, analysis of variance test (One-Way ANOVA) has been adopted. This test is adopted to test the difference in profitability in different groups of sizes of firm.

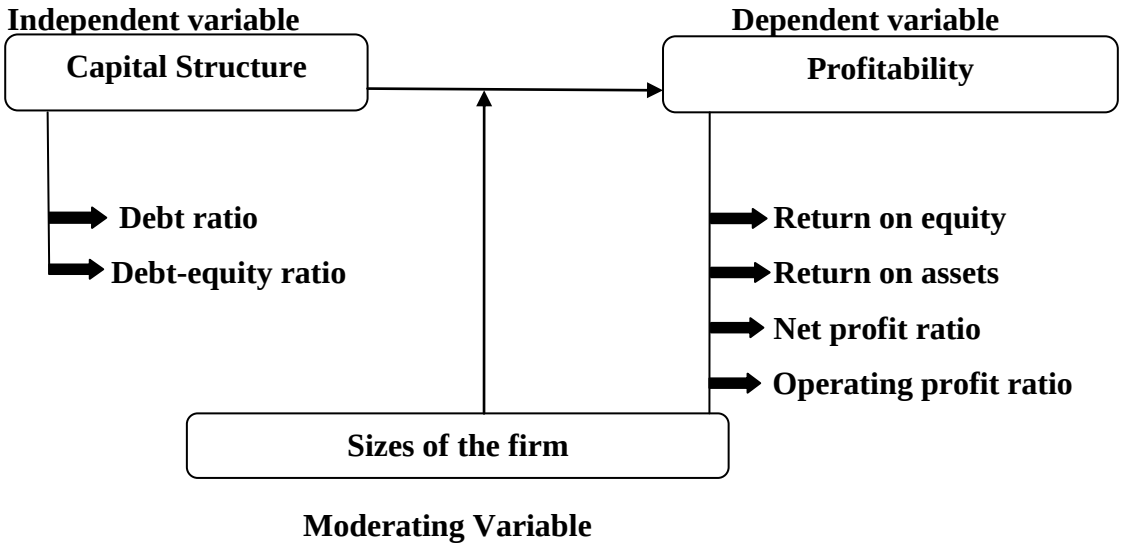
In the similar research conducted by Abor (2005) regression analysis was used in the estimation of functions relating the return on equity (ROE) with measures of capital structure. Gill, Biger, & Mathur (2011), in the research correlation and regression analysis were used to estimate the functions relating to profitability (measured by return on equity) with measures of capital structure. Sultan & Adam (2015) have used correlation and regression analysis in their research.

3.7. Research framework and definition of variables

Sultan & Adam (2015) the study findings suggest that capital structure positively influence, in a significant way, on the profitability. Furthermore, profitability, and assets (firm-size) have been found to be negatively influencing the capital structure. Thus, based on the reviewed literatures, the research framework for this study is presented as:

Figure 1.1

Research Framework



Source: *Gill, Biger & Mathur (2011)*

In this study, capital structure and profitability are the independent and dependent variables respectively; size of the firm has been considered as moderating variable which controls the relationship between capital structure and profitability. To measure the capital structure, debt ratio and debt to equity ratio have been used. Debt ratio is calculated by dividing total debt by total assets; debt-equity ratio is calculated by dividing total debt by total equity. Similarly, to measure the profitability, return on

equity, return on assets, net profit ratio and operating profit ratio have been used. Return on equity is obtained by dividing net income by total equity; return on assets is calculated by dividing net income by total assets; net profit ratio is calculated by dividing net profit by sales and operating profit ratio is calculated by dividing operating profit by sales. Size of firm has been used to see whether the profitability is different in different groups of sizes of firm. Sampled companies have been categorized into three category according to their fixed capital small, medium and large. In Nepal, companies having fixed capital up to Rs. 150 million come under small firms, companies having fixed capital exceeding Rs. 100 million but less than Rs. 500 million come under middle- sized firm and similarly, large companies have fixed capital exceeding Rs. 500 million.

Chapter IV
Results and Discussion

This chapter mainly incorporates data presentation, analysis and interpretation. Presented data are analyzed and interpreted by using statistical tools like mean, maximum, minimum, standard deviation, correlation, regression coefficient, analysis of variance test(One-way ANOVA) so as to achieve the results. This chapter is organized into five different sections: (a) position of capital structure (b) position of profitability (c) relationship between capital structure and profitability (d) impact of capital structure on profitability (e) test of hypotheses. At the end, major findings and discussion based on data analysis and interpretation has been presented.

4.1 Results

4.1.1 Position of capital structure

This study has aimed to identify the position of capital structure. The capital structure has been measured in terms of debt ratio and debt-equity ratio. The results on these ratios have been presented in this section.

4.1.1.1 Individual positions of debt ratio

The data related to total debt and total assets of five Nepalese Manufacturing Companies were collected and put them into excel sheet so as to calculate debt ratio. The results on debt ratio and its average with standard deviation are presented in table 4.1.

Table 4.1

Individual position of debt ratio

Year	BNL	BNTL	UNL	NLO	HDL
2015/16	20	40	33	73	36
2016/17	10	20	38	67	43
2017/18	7	10	41	68	33
2018/19	20	30	40	68	30
2019/20	30	50	47	60	37
Average	17.4	30	39.8	67.2	35.8
Standard Deviation	9.15	15.81	7.07	4.82	6.99

Source: Annual reports of shareholders (2015-2020)

Table 4.1 depicts BNL has 17.4% average debt ratio (DR) and NLO has 67.2% average DR. BNL has lower average than other companies, it indicates that company has financed most if its assets by equity (low debt is used). Conversely, NLO has higher average than other companies; it indicates that the firm is using high debt rather than equity to finance the assets. Therefore, the NLO is highly levered company and so it has been able to take more advantages of leverage. This advantage has made the company able to shield the tax and increase net income. Above overall situations have increased earnings per share of the company.

4.1.1.2 Individual positions of debt-equity Ratio

The data related to total debt and total equity of five Nepalese Manufacturing Companies were collected and put them into excel sheet so as to calculate debt-equity ratio. The results on debt-equity ratio and its average with standard deviation are presented in table 4.2.

Table 4.2

Individual position of debt-equity Ratio

Year	BNL	BNTL	UNL	NLO	HDL
2015/16	80	160	49	275	57
2016/17	30	60	60	202	76
2017/18	10	20	68	214	50
2018/19	50	110	66	209	42
2019/20	90	170	89	149	59
Average	52	104	66.4	209.8	56.8
Standard Deviation	33.46	64.26	14.82	44.80	16.11

Source: Annual reports of shareholders (2015-2016)

Table 4.2 depicts that NLO has 209.8% average debt-equity ratio (DER) and BNL has 52% average DER. Thus, NLO has higher average DER than other companies; it implies that the company is very aggressive in financing its growth with debt. BNL has lower average than other companies which implies that the company wants to retain much control over company.

4.1.1.3 Aggregate position of capital structure

Five years data related to debt ratio and debt-equity ratio of Nepalese manufacturing companies were calculated by using the excel sheet to identify the position of capital structure and so achieve first research objective. The results on position of debt ratio and debt-equity ratio are presented in table 4.3.

Table 4.3

Position of capital structure

	N	Minimum	Maximum	Mean	Std. Deviation
DR	25	7.00	73.00	38.04	18.66923
DER	25	10.00	275.00	97.80	69.89814

Source: *SPSS Output*

As shown in Table 4.3, the mean value of debt ratio is 38.04. In the similar research conducted by Arjal (2017), the mean value was found to be 54.87. This implies that the debt ratio is lower in recent years in comparison to the past. Therefore, the proportion of Nepalese Manufacturing Companies' assets is less financed by debt in recent years. This has achieved the first research objective.

Similarly, the mean value of debt-equity ratio is 97.80. In the similar research conducted by Arjal (2017), the mean value was found to be 187.58. This implies that the debt-equity ratio is lower in recent years in comparison to the past. Therefore, the Nepalese Manufacturing Companies' are financing lower amount of debt in comparison to the equity in recent years. This has achieved the first research objective.

4.1.2 Position of profitability

This study has aimed to identify the position of profitability. The profitability has been measured in terms of return on equity, return on assets, net profit ratio and operating profit ratio. The results on these ratios have been presented in this section.

4.1.2.1 Individual positions of return on equity

The data related to net income and total equity of five Nepalese Manufacturing Companies were collected and put them into excel sheet so as to calculate return on equity and calculated value of return on equity with its average and standard deviation are presented in table 4.4.

Table 4.4

Individual position of return on equity

Year	BNL	BNTL	UNL	NLO	HDL
2015/16	24	32	55	33	40
2016/17	29	38	47	34	8
2017/18	30	37	53	29	37
2018/19	18	19	46	25	54
2019/20	-2	0.2	18	4	37
Average	19.8	25.24	43.8	25	35.2
Standard Deviation	13.08	15.91	14.74	12.27	22.24

Source: Annual reports of shareholders (2015-2020)

As shown in table 4.4, the UNL having maximum ROE than other firms with an average of 43.8%.which represents that the firm is very efficient in employing their owners' fund and have much return from investment whereas BNL has an average of 19.8% which is very low that can be concluded the firm is not quite efficient in return from employing shareholders' money.

4.1.2.2 Individual positions of return on assets

The data related to net income and total assets of five Nepalese Manufacturing Companies were collected and put them into excel sheet so as to calculate return on assets and calculated value of return on assets with its average and standard deviation are presented in table 4.5.

Table 4.5

Individual position of Return on Assets

Year	BNL	BNTL	UNL	NLO	HDL
2015/16	7	7	37	9	25
2016/17	10	11	29	11	5
2017/18	15	17	31	9	25
2018/19	7	6	28	8	38
2019/20	-1	0.1	10	2	23
Average	7.6	8.22	27	7.8	23.2
Standard Deviation	5.81	6.26	10.12	3.42	15.13

Source: Annual reports of shareholders (2015-2020)

Table 4.6 depicts that the UNL has maximum average with 27%. It indicates that the UNL is very efficient in employing their owners' fund and have earned much return on their employed assets than other firms. Conversely, the average ROA of BNL (7.6%) is very minimum which implies that the firm is not very efficient in employing their shareholders' money.

4.1.2.3 Individual positions of net profit ratio

The data related to net income and sales of five Nepalese Manufacturing Companies were collected and put them into excel sheet so as to calculate net profit ratio and calculated value of net profit ratio with its average and standard deviation are presented in table 4.6.

Table 4.6

Individual position of net profit ratio

Year	BNL	BNTL	UNL	NLO	HDL
2015/16	7	8	3	5	15
2016/17	9	10	22	6	4
2017/18	11	13	21	5	12
2018/19	8	8	19	5	17
2019/20	-0.9	0.1	6	2	19
Average	6.82	7.82	14.2	4.6	13.4
Standard Deviation	4.56	4.77	10.12	1.52	5.85

Source: Annual reports of shareholders (2015-2016)

As indicated in table 4.6, net profit margin of all five manufacturing enterprises have been computed and derived. UNL is having maximum net profit ratio than other firms with an average of 14.2% indicates that UNL is in better position to cope up various market challenges like price, competition, demand etc. conversely, except UNL, other four firms have minimum net profit ratio which implies that they all are able to earn net earnings through their current sales but they are not in a better position to address the aforementioned market challenges.

4.1.2.4 Individual positions of operating profit ratio

The data related to operating income and sales of five Nepalese Manufacturing Companies were collected and put them into excel sheet so as to calculate operating profit ratio and calculated value of operating profit ratio with its average and standard deviation are presented in table 4.7.

Table 4.7

Individual position of operating profit ratio

Year	BNL	BNTL	UNL	NLO	HDL
2015/16	11	13	4	10	25
2016/17	12	14	28	11	7
2017/18	14	17	27	10	41
2018/19	11	12	24	9	26
2019/20	3	6	10	7	29
Average	10.2	12.4	18.6	9.4	25.6
Standard Deviation	4.2	4.03	9.48	1.52	12.20

Source: Annual reports of shareholders (2015-2020)

As indicated by data presented in table 4.7, HDL has high average (25.6%) implies that the firm is bringing much efficiency in their operation. Oppositely, average of NLO (9.4%) is very low indicates that there is lacking efficiency in the firm's operation.

4.1.2.5 Aggregate position of profitability

Five years data related to return on equity, return on assets, net profit ratio and operating profit ratio of Nepalese manufacturing companies were calculated to identify the position of profitability and achieve second research objective. The results on position of return on equity, return on assets, net profit ratio and operating profit ratio are presented in table 4.8.

Table 4.8

Position of profitability

	N	Minimum	Maximum	Mean	Std. Deviation
ROE	25	-2.00	55.00	28.60	16.01837
ROA	25	-1.00	38.00	14.76	11.40836
NPR	25	-0.90	22.00	9.37	6.45444
OPR	25	3.00	41.00	15.24	9.45727

Source: *SPSS Output*

As shown in Table 4.8, the mean value of return on equity is 28.60. Similar research conducted by Arjal (2017) reported the mean value of 29.30. This implies that the return on equity is lower in recent years in comparison to the past years. Therefore, the profit or net income the Nepalese Manufacturing Companies earn at per rupee investment in recent years is lower than past years. This has achieved the second research objective.

The mean value of return on assets is 14.76. Similar research conducted by Arjal (2017) reported the mean value of 15.89. This implies that the return on assets is lower in recent years in comparison to the past years. Therefore, the Nepalese Manufacturing Companies are not efficiently earning a return on its investment in assets in recent years than past years. This has achieved the second research objective.

Similarly, the mean value of net profit ratio is 9.37. In the similar research conducted by Arjal (2017) the mean was found to be 8.46. This implies that the net profit ratio is higher in recent years in comparison to the past years. Therefore, the remaining profit after all costs of production, administration, and financing is higher of Nepalese Manufacturing Companies in recent years in comparison to past years. This has achieved the second research objective.

The mean value of operating profit ratio is 15.24. In the similar research conducted by Arjal (2017) the mean was found to be 18.65. This implies that the operating profit ratio is lower in recent years in comparison to the past years. The profit of Nepalese Manufacturing Companies after paying variable costs of production such as wages, raw materials, etc. is lower in recent years than past years. This has achieved the second research objective.

4.1.3 Relationship between capital structure and profitability

To achieve the third research objective and test the first research hypothesis, Pearson's Correlation Coefficients are calculated; the results on these coefficients are presents in Table 4.13.

Table 4.9

Correlation Analysis

	DR	DER	ROE	ROA	NPR	OPR
DR	1					
DER	.878**	1				
ROE	-.143 (p=.496)	-.294 (p=.154)	1			
ROA	-.185 (p=.376)	-.472* (p=.017)	.897**	1		
NPR	-.293 (p=.155)	-.492* (p=.012)	.738**	.740**	1	
OPR	-.188 (p=.368	-.405* (p=.044)	.611**	.679**	.847**	1

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Source: *SPSS Output*

As indicated by the data presented in Table 4.9, debt ratio has negative relationship with ROE, ROA, NPR and OPR, but the relationship is not significant since p-values are greater than 0.05. Similarly, debt-equity ratio has negative relationship with ROE, this relationship is not significant since p-value is greater than 0.05, while it has significant negative relationship with ROA, NPR and OPR at 0.05 level. It has been found that the variables having insignificant relationship among them have been processed further for analysis by Rahman, Sarker & Uddin (2019), too. The results of correlational analysis imply that debt ratio and debt-equity ratio both are negatively related to the firms' profitability measured by ROE, ROA, NPR and OPR.

These relationships have achieved third research objective set as to examine the relationship between capital structure and profitability in Nepalese Manufacturing Companies of the research.

4.1.4 Impact of capital structure on profitability

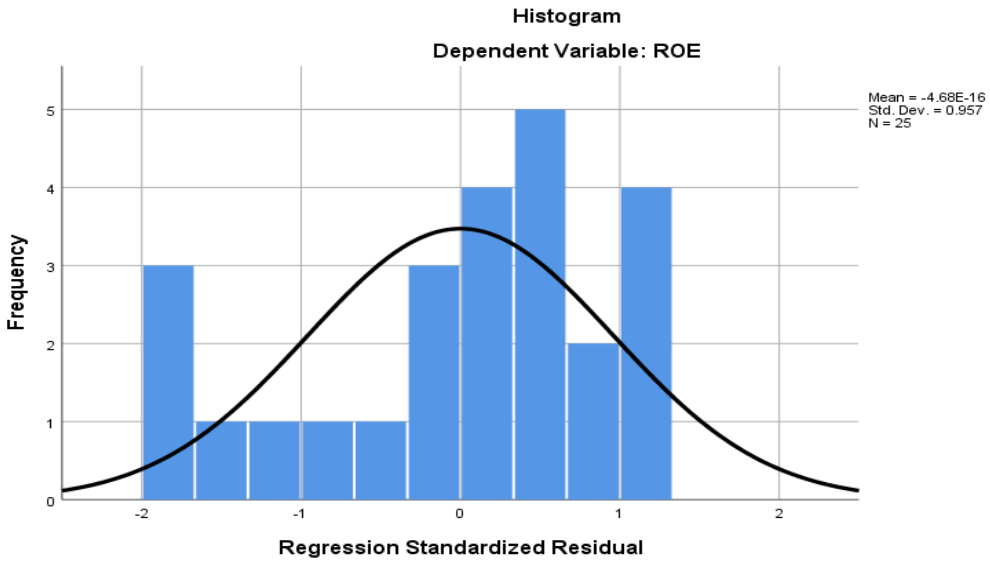
This study has aimed to see the impact of capital structure on profitability in Nepalese Manufacturing Companies. The results of regression analysis have been presented in this section.

4.1.4.1 Normality test (in Case of ROE)

To ensure that whether the collected data can be processed for analysis or not, normality test has been done. The result on normality test is presented in graph 4.1.

Graph 4.1

Normality test of ROE



Source: SPSS Output

As shown in the graph 4.1, the normal distribution can be seen as a bell-shaped curve with majority of the observations being around the mean value, which can be seen as the center of the curve. So, the data is normal.

4.1.4.2 Variation in ROE explained by DR and DER

To see the variation of DR and DER in ROE, coefficient of multiple determinations (R square) has been used. The results on coefficient of multiple determinations (R square) are presented in Table 4.10. This shows the total variation in ROE explained by DR and DER.

Table 4.10

Variation in ROE explained by DR and DER

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.379	.144	.066	15.47931

a. Predictors: (Constant), Debt ratio, Debt-equity ratio

b. Dependent Variable: Return on equity

Source: *SPSS Output*

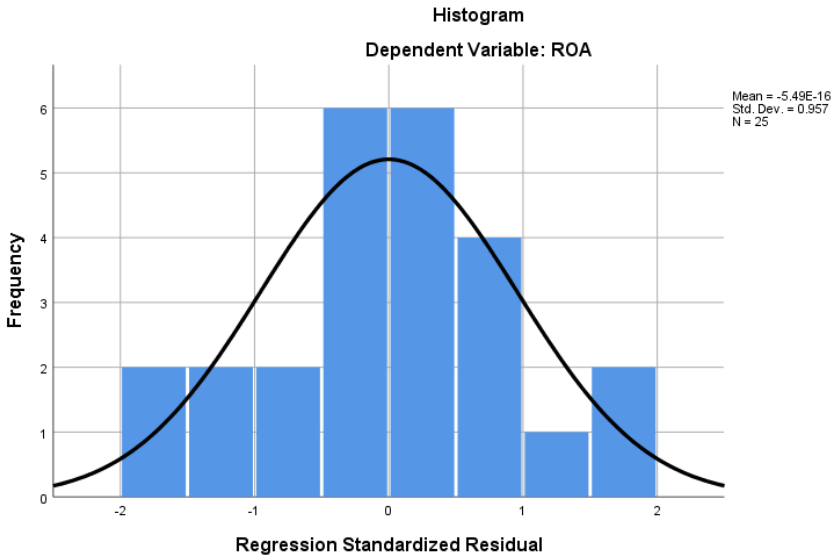
As shown in Table 4.10, the value of coefficient of multiple determination is .144. This implies that the variation in ROE can be explained by DR and DER is 14.4%. Due to very low value of R square, which shows very less variation of ROE explained by DR and DER, impact of DR and DER on ROE has not been processed further for study.

4.1.4.3 Normality test (in case of ROA)

To ensure that whether the collected data can be processed for analysis or not, normality test has been done. The result on normality test is presented in graph 4.2.

Graph 4.2

Normality test of ROA



Source: SPSS Output

As shown in the graph 4.2, the normal distribution can be seen as a bell-shaped curve with majority of the observations being around the mean value, which can be seen as the center of the curve. So, the data is normal.

4.1.4.4 Variation in ROA explained by DR and DER

To see the variation of DR and DER in ROA, coefficient of multiple determinations (R square) has been used. The results on coefficient of multiple determinations are presented in Table 4.11. This shows the total variation in ROA explained by DR and DER.

Table 4.11

Variation in ROA explained by DR and DER

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
2	.672	.452	.402	8.82012

a. Predictors: (Constant), Debt ratio, Debt-equity ratio

b. Dependent Variable: Return on asset

Source: *SPSS Output*

As shown in Table 4.11, the value of coefficient of multiple determinations is .452. This implies that the variation in ROA can be explained by DR and DER is 45.2%.

4.1.4.5 Model fitness

To test whether the regression model can be fit or not, ANOVA test has been made. The results of this test are presented in table 4.12.

Table 4.12

Goodness of fit of regression

Model		Sum of Squares	Mean Square	F	Sig.
2	Regression	1412.138	706.069	9.076	.001
	Residual	1711.479	77.795		

a. Dependent Variable: Return on asset

b. Predictors: (Constant), Debt ratio, Debt-equity ratio

Source: *SPSS Output*

As indicated in Table 4.12, the null hypothesis is rejected since p-value is significant (0.001). This implies that DR and DER contribute to the ROA.

4.1.4.6 Regression analysis of ROA on DR and DER

For regression analysis, the constant value and regression coefficients are calculated; the results of these values are presented in table 4.13.

Table 4.13

Regression analysis of ROA on DR and DER

Model		Unstandardized Coefficients		Sig.
		B	Std. Error	
2	(Constant)	13.061	4.326	.006
	Debt ratio	.661	.201	.006
	Deb-equity ratio	-.220	.054	.000

a. Dependent Variable: Return on assets

Source: *SPSS Output*

As indicated in Table 4.13, the constant value is found to be 13.061, which is the Y intercept. This implies the ROA that we expect when DR and DER are zero. The slopes of regression line of DR and DER are .661 and -.220 respectively. This implies that, as DR increases by 1%, ROA would be increased by .661% and vice-versa. Similarly, as DER increases by 1%, ROA would be decreased by .220% and vice-versa. The regression coefficients of both debt ratio and debt-equity ratio are significant since p-values- 0.006 and 0.000 are less than 0.05. Thus, the regression equation of ROA on DR and DER in line with the equation Y = a+b1X1+b2X2 is given by:

$$ROA = 13.061 + (.611)\ DR - (.220)\ DER$$

Where,

Y = Dependent Variable (ROA)

X1= Independent Variable (DR)

X2 = Independent Variable (DER)

a = Constant (13.061)

B1 = Slope of the regression line

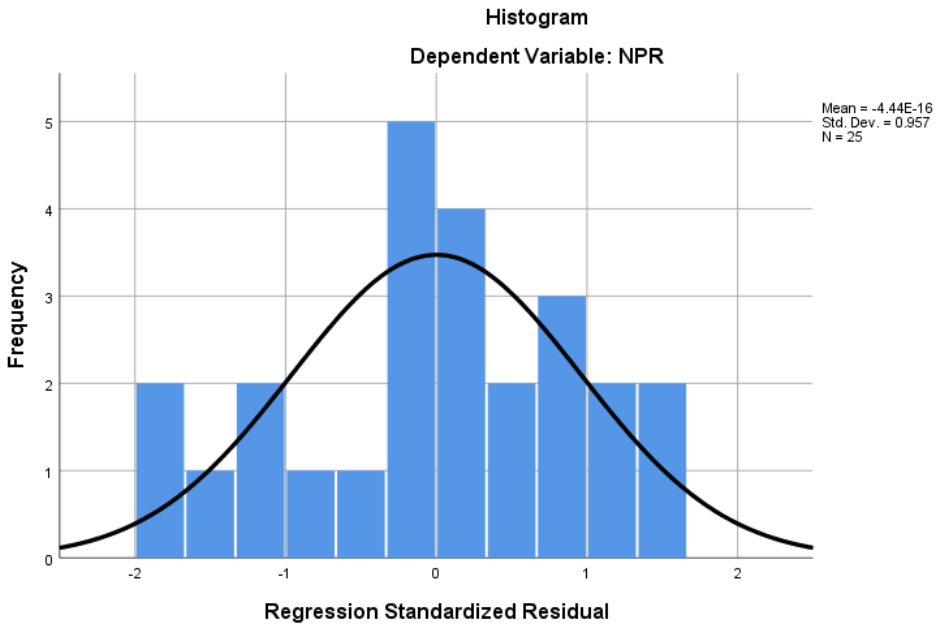
B2 = Slope of the regression line

4.1.4.7 Normality test (in case of NPR)

To ensure that whether the collected data can be processed for analysis or not, normality test has been made. The result on normality test is presented in graph 4.3.

Graph 4.3

Normality test of NPR



Source: SPSS Output

As shown in the graph 4.3, the normal distribution can be seen as a bell-shaped curve with majority of the observations being around the mean value, which can be seen as the center of the curve. So, the data is normal

4.1.4.8 Variation in NPR explained by DR and DER

To see the variation of DR and DER in NPR, coefficient of multiple determinations (R square) has been used. The results on coefficient of multiple determinations are presented in Table 4.14. This shows the total variation in NPR explained by DR and DER.

Table 4.14

Variation in NPR explained by DR and DER

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
3	.572	.327	.266	5.53085

a. Predictors: (Constant), Debt ratio, Debt-equity ratio

b. Dependent Variable: Net profit ratio

Source: *SPSS Output*

As shown in Table 4.14, the value of coefficient of multiple determination is .327. This implies that the variation in NPR can be explained by DR and DER is 32.7%.

4.1.4.9 Model fitness

To test whether the regression model can be fit or not, ANOVA test has been made. The results of this test are presented in table 4.15.

Table 4.15

Goodness of fit of regression

Model		Sum of Squares	Mean Square	F	Sig.
3	Regression	326.848	163.424	5.342	.013
	Residual	672.987	30.590		

a. Dependent Variable: Net profit ratio

b. Predictors: (Constant), Debt ratio, Debt-equity ratio

Source: *SPSS Output*

As indicated in Table 4.15, the null hypothesis is rejected since p-value is significant (0.013). This implies that DR and DER contribute to the NPR.

4.1.4.10 Regression Analysis of NPR on DR and DER

For regression analysis, the constant value and regression coefficients are calculated; the results of these values are presented in table 4.16.

Table 4.16

Regression analysis of NPR on DR and DER

Model		Unstandardized Coefficients		Sig.
		B	Std. Error	
3	(Constant)	10.645	2.713	.001
	Debt ratio	.210	.126	.011
	Deb-equity ratio	-.095	.034	.010

a. Dependent Variable: Return on assets

Source: *SPSS Output*

As indicated in Table 4.16, the constant value is found to be 10.645, which is the Y intercept. This implies the NPR that we expect when DR and DER are zero. The slopes of regression line of DR and DER are .210 and -.095 respectively. This implies that, as DR increases by 1%, NPR would be increased by .210% and vice-versa. Similarly, as DER increases by 1%, NPR would be decreased by .095% and vice-versa. The regression coefficient of both debt ratio and debt-equity ratio is significant since p-values- .011 and .010 are lesser than 0.05.Thus, the regression equation of NPR on DR and DER in line with the equation Y = a+b1X1+b2X2is given by:

NPR = 10.645 + (.210) DR - (.095) DER

Where,

Y = Dependent Variable (NPR)

X 1= Independent Variable (DR)

X2 = Independent Variable (DER)

a = Constant (10.645)

B1 = Slope of the regression line

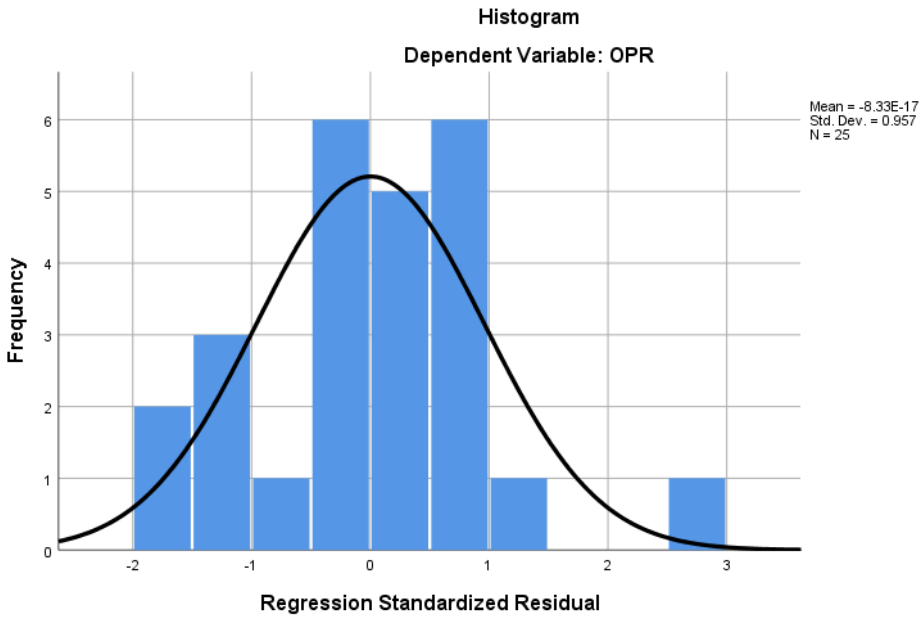
B2 = Slope of the regression line

4.1.4.11 Normality test (in Case of OPR)

To ensure that whether the collected data can be processed for analysis or not, normality test has been made. The result on normality test is presented in graph 4.4.

Graph 4.4

Normality test of OPR



Source: SPSS Output

As shown in the graph 4.4, the normal distribution can be seen as a bell-shaped curve with majority of the observations being around the mean value, which can be seen as the center of the curve. So, the data is normal.

4.1.4.12 Variation in OPR explained by DR and DER

To see the variation of DR and DER in OPR, coefficient of multiple determinations (R square) has been used. The results on coefficient of multiple determinations are presented in Table 4.17. This shows the total variation in OPR explained by DR and DER.

Table 4.17

Variation in OPR explained by DR and DER

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
4	.536	.287	.222	8.33924

a. Predictors: (Constant), Debt asset ratio, Debt equity ratio

b. Dependent Variable: Operating profit ratio

Source: *SPSS Output*

As shown in Table 4.17, the value of coefficient of multiple determination is .376. This implies that the variation in OPR can be explained by DR and DER is 37.6%. It has been found that the explanation variable having similar value of R square is processed by previous researches too.

4.1.4.13 Model fitness

To test whether the regression model can be fit or not, ANOVA test has been made. The results of this test are presented in table 4.18.

Table 4.18

Goodness of fit of regression

Model		Sum of Squares	Mean Square	F	Sig.
4	Regression	616.614	308.307	4.433	.024
	Residual	1529.946	69.543		

a. Dependent Variable: Operating profit ratio

b. Predictors: (Constant), Debt ratio, Debt-equity ratio

Source: *SPSS Output*

As indicated in Table 4.18, the null hypothesis is rejected since p-value is significant (0.024). This implies that DR and DER contribute to the OPR.

4.1.4.14 Regression Analysis of OPR on DR and DER

For regression analysis, the constant value and regression coefficients are calculated; the results of these values are presented in table 4.19.

Table 4.19

Regression analysis of OPR on DR and DER

Model		Unstandardized Coefficients		Sig.
		B	Std. Error	
4	(Constant)	14.997	4.090	.001
	Debt ratio	.371	.190	.004
	Debt-equity ratio	-.142	.051	.011

a. Dependent Variable: Operating profit ratio

Source: *SPSS Output*

As indicated in Table 4.19, the constant value is found to be 14.997, which is the Y intercept. This implies that OPR that we expect when DR and DER are zero. The slopes of regression line are .371 and -.142. This implies that as DR increases by 1%, OPR would be increased by .371% and vice- versa. Similarly, as DER increases by 1%, OPR would be decreased by .142% and vice-versa. The regression coefficient of both debt ratio and debt-equity ratio is significant since p-values- .004 and .011 are lesser than 0.05.Thus, the regression equation of OPR on DR and DER in line with the equation Y = a+b1X1+b2X2 is given by:

$$OPR = 14.997 + (.371)\ DR - (.142)\ DER$$

Where,

Y = Dependent Variable (OPR)

X 1= Independent Variable (DR)

X2 = Independent Variable (DER)

a = Constant (14.997)

B1 = Slope of the regression line

B2 = Slope of the regression line

4.1.5 Test of hypotheses

The study had proposed to test two different hypotheses. We now test the hypotheses on the basis of the Pearson's Correlation Coefficient and Analysis of Variance test.

Hypothesis 1

$H0_1$: There is no significant relationship between capital structure and profitability in Nepalese Manufacturing Companies.

For testing this hypothesis, Pearson's Correlation Coefficients are calculated; the results on these coefficients are presented in Table 4.9.

As indicated in Table 4.9, DR has negative relationships with ROE, ROA, NPR and OPR, but these relationships are not significant. Thus, null hypothesis cannot be rejected. It means there are no significant relationships of DR with ROE, ROA, NPR and OPR in Nepalese Manufacturing Companies. Similarly, DER has negative relationship with ROE but the relationship is not significant. Thus, null hypothesis has again been accepted. It means there is no significant relationship of DER with ROE in Nepalese Manufacturing Companies. DER has significant negative relationships with

ROA, NPR and OPR, which has rejected the null hypothesis. It means there are significant relationships of DER with ROA, NPR and OPR in Nepalese Manufacturing Companies.

Hypothesis 2

$H0_2$ There is no significant difference in profitability in different groups of sizes of firm in Nepalese Manufacturing Companies.

For testing this hypothesis, Analysis of Variance test (One-way ANOVA) was made; the results on this test are presented in table 4.20.

Table 4.20

Group differences in profitability across sizes of firm

		Sum of Squares	F	Sig.
ROE	Between Groups	1404.881	2.873	.085
	Within Groups	5379.717		
ROA	Between Groups	1118.368	5.881	.012
	Within Groups	2091.809		
NPR	Between Groups	1504.273	19.317	.056
	Within Groups	856.617		
OPR	Between Groups	616.107	3.777	.276
	Within Groups	1794.133		

Source: *SPSS Output*

As shown in Table 4.20, in the case of ROE, the null hypothesis cannot be rejected since p-value (.085) is greater than .05. This implies that there is no significant difference in ROE among the firms with different sizes. Thus, second hypothesis is confirmed in the case of ROE. That is, there is no significant difference in ROE in different groups of sizes of firm.

As shown in Table 4.20, in the case of ROA, the null hypothesis was rejected since p-value (.012) is less than .05. This implies that there is significant difference in ROA among the firms with different sizes. Thus, second hypothesis is not confirmed in the case of ROA. That is, there is significant difference in ROA in different groups of sizes of firm.

As shown in Table 4.20, in the case of NPR, the null hypothesis cannot be rejected since p-value (.056) is greater than .05. This implies that there is no significant difference in NPR among the firms with different sizes. Thus, second hypothesis is confirmed in the case of NPR. That is, there is no significant difference in NPR in different groups of sizes of firm.

As shown in Table 4.20, in the case of OPR, the null hypothesis cannot be rejected since p-value (.276) is greater than .05. This implies that there is no significant difference in OPR among the firms with different sizes. Thus, second hypothesis is confirmed in the case of OPR. That is, there is no significant difference in OPR in different groups of sizes of firm.

4.2 Major findings

i) The mean value of debt and debt-equity ratios are investigated in sampled manufacturing companies and found to be 38.04 and 97.80 respectively.

ii) This study had also aimed to identify the positions of profitability in terms of return on equity, return on assets, net profit ratio and operating profit ratio. The mean values of return on equity, return on assets, net profit ratio and operating profit ratio are investigated in sampled manufacturing companies and found to be 28.60, 14.76, 9.37 and 15.24 respectively.

iii) This study also reveals that debt ratio has negative relationship with ROE, ROA, NPR and OPR. Similarly, debt-equity ratio has negative relationship with ROE while it has significant negative relationship with ROA, NPR and OPR. This implies that debt ratio and debt-equity ratio both are negatively related to the firms profitability measured by ROE, ROA, NPR and OPR.

iv) Addition to the relationship, increase or decrease in debt ratio and debt-equity ratio has no significant impact on ROE, whereas increase in debt results in increase in ROA. In the case of NPR, increase in debt results in increase in NPR and decrease in equity results in decrease in NPR. Similar results are reported in the case of OPR.

4.3 Discussion

Different researches in the area of capital structure and profitability have been conducted. Different researchers have suggested different variables majorly responsible for increasing profitability. One group of researchers – (Kyereboah, 2007), (Gill, Biger, & Mathur, 2011), (Adeyemi & Oboh, 2011), (Arjal, 2017), (Rahman, Sarker, & Uddin, 2019) - has suggested capital structure as prominent variable for increasing profitability. On the other hand, next group of researchers have argued not capital structure but customer satisfaction and customer loyalty, (Hallowell, 1996), larger board size and corporate liquidity, (Gill & Mathur, 2011), size of firm, (Babalola & Abiodun, 2013) have been found as prime variables for increasing profitability. So, the result is inconclusive.

In such confusing situation where financial managers are looking for a specific factor that has larger impact on profitability, can financial manager consider capital structure as one of the influencing factors for increasing profitability? If managers can, then what is the position of capital structure? If position of capital structure determines profitability, then what is the position of profitability? If capital structure influences profitability, is there any relationship between capital structure and profitability? If there is relationship between capital structure and profitability, does capital structure has impact on profitability? These were some research questions asked by this study and objectives were set in line with the research questions.

The mean value of debt and debt-equity ratios are investigated in sampled manufacturing companies and found to be 38.04 and 97.80 respectively. In the similar research conducted by Arjal (2017), the researcher found the same values as 54.87 and 187.58. The comparison among the calculated values of mean shows that the debt ratio and debt-equity ratio are lower in recent years in comparison to the past years. These ratios in Nepalese Manufacturing Companies result the low financial risk leaving the companies with low earning per share. These explorations and its comparison with findings of Arjal (2017) are made by using descriptive statistic.

The mean values of return on equity, return on assets, net profit ratio and operating profit ratio are investigated in sampled manufacturing companies and found to be 28.60, 14.76, 9.37 and 15.24 respectively. In the similar research conducted by Arjal (2017), the researcher found the same values as 29.30, 15.89, 8.46 and 18.65

respectively. The comparison among the calculated values of mean shows that return on equity, return on assets and operating profit ratio are lower, but net profit ratio is higher in recent years in comparison to the past years. This implies that the profit or net income the Nepalese Manufacturing Companies earn at per rupee investment is lower in recent years. Likewise, the Nepalese Manufacturing Companies are not efficiently earning a return on their investments in assets, but the remaining profit after all costs of production, administration, and financing is higher in recent years at Nepalese Manufacturing Companies. Finally, the profit after paying variable costs of production such as wages, raw materials, etc. is lower at Nepalese Manufacturing Companies in recent years in comparison to past years. In overall, the profitability of Nepalese Manufacturing Companies seems to be poor.

This study also reveals that debt ratio has negative relationship with ROE, ROA, NPR and OPR. Similarly, debt-equity ratio has negative relationship with ROE while it has significant negative relationship with ROA, NPR and OPR. This implies that debt ratio and debt-equity ratio both are negatively related to the firms profitability measured by ROE, ROA, NPR and OPR. In the similar research, Rahman, Sarker, & Uddin (2019) have revealed that DR has negative relationship with ROE and ROA. Similarly, DER also has negative relationship with ROE and ROA. Addition to the relationship, increase or decrease in debt ratio and debt- equity ratio has no significant impact on ROE, whereas increase in debt results in increase in ROA. Similar results are reported by Rahman, Sarker, & Uddin (2019). The similarities, even though the contexts are different, between the findings are detected because of the similarities in research variables, nature of sampled organizations, objectives of the research and research methodology to achieve the research objective. In the case of NPR, increase in debt results in increase in NPR and decrease in equity results in decrease in NPR. Similar results are reported in the case of OPR. These detections are made by using the correlation analysis. The test, in the case of ROE, NPR and OPR of second hypothesis confirms that there is no significant difference in ROE, NPR and OPR in different groups of sizes of firm. On the other hand, there is significant difference in ROA among the firms with different sizes. Therefore, second hypothesis has not been confirmed in the case of ROA.

Chapter V
Summary and Conclusion

This chapter is classified in the three sub-heads like summary, conclusion and implication. Summary incorporates the data findings in a logical and rational way to the problem area, research objectives, research questions within the framework presented in chapter I, importance of hypotheses to develop theory and entire works performed by the researcher since beginning to the end. This chapter has incorporated the brief summarization of major findings, comparison of those findings with previous researches and the logics of researcher. That is, conclusion has been made based on discussion. Implication part incorporates the major uses of this study to managers to know the impact of capital structure on profitability as well as to the future researchers, who want to do research on same or related topic.

5.1 Summary

Sustainability is the outcome of profitability and profitability is influenced by proper mix of debt and equity (Nimalathasan, 2010). Earning profit is very important to every business organization because profitability determines the sustainability of an organization in the market. Thus, financial manager should be able to identify the influencing factors for increasing profitability of an organization. A failure to assess factors influencing profitability may lead the managers dealing with many organizational problems. Therefore, profitability has become major issues for every business organization.

To deal with these financial issues and solve the financial problems, this study aimed to examine the relationship between capital structure and profitability, and the impact of capital structure on profitability. It also aimed to identify the positions of capital structure and profitability of studied companies. It was hypothesized that there is no significant relationship between capital structure and profitability. Likewise, it was also hypothesized that there is no significant difference in profitability in different groups of sizes of firm. To achieve the research objectives and test the hypotheses, descriptive and correlational research designs were used.

The sample for study comprised 5 Nepalese Manufacturing Companies listed in NEPSE. The sampling technique used for the study was purposive. The data were obtained through annual financial reports published in web sites of respective companies. The data thus obtained were analyzed using descriptive statistic, correlation, regression analysis and analysis of variance test. Under the descriptive statistic, mean, maximum, minimum and standard deviation were used to describe the positions of capital structure and profitability. Under the correlation analysis, Pearson correlation coefficient and regression analysis were used. Pearson's 'r' was calculated to test the first hypothesis. Regression analysis was used to examine the degree of impact of capital structure on profitability. Under the inferential statistic, analysis of variance test was made. Analysis of variance test was made to test the second hypothesis. Also, analysis of variance test was made to test the goodness of fit of regression

In line with the emerging financial issues, statement of problems, research questions and research objectives, the findings of this study were drawn. It was first found out that the mean values of debt ratio and debt-equity ratio were lower in recent years than past years. Similarly, the mean value of return on equity in investigated Nepalese Manufacturing Companies was found to be lower in recent years in comparison to past years. Again, the mean values of return on assets and operating profit ratio in investigated Nepalese Manufacturing Companies were lower than past compared years. Likewise, the mean value of net profit ratio in investigated Nepalese Manufacturing Companies was found to be higher than past compared years.

The Pearson's correlation coefficient showed the negative relationship of debt ratio with ROE, ROA, NPR and OPR; negative relationship of debt equity ratio with ROE while it had significant negative relationship with ROA, NPR and OPR. The test of second hypothesis by using the analysis of variance test showed that there is no significant difference in ROE, NPR and OPR among the firms with different sizes. On the other hand, ROA is found to be significantly different among the firms with different sizes.

5.2 Conclusion

In this study, researcher analyzes the effect of capital structure on the profitability of Nepalese Manufacturing Companies listed on NEPSE taking data from 2015 to 2020. Results of this study and their comparison with the findings of Arjal (2017) show that the debt ratio and debt-equity ratio are lower in recent years in comparison to the past years. So, it is concluded that Nepalese Manufacturing Companies have the low financial risk leaving the companies with low earning per share. Similarly, return on equity, return on assets and operating profit ratio are lower, but net profit ratio is higher in recent years. So, this study concludes that the Nepalese Manufacturing Companies have been earning lower amount of profit at their investment. Likewise, Nepalese Manufacturing Companies do not seem to be making return efficiently on their investments in assets, but they seem to be making good profit after all costs of production, administration, and financing. Finally, they are earning lower amount of operating profit in recent years than past years. In overall, it is concluded that the profitability of Nepalese Manufacturing Companies seems to be poor.

The study also shows that debt ratio has negative relationship with ROE, ROA, NPR and OPR. Similarly, debt-equity ratio also has negative relationship with ROE while it is significantly negatively related to ROA, NPR and OPR. It is also concluded that increase or decrease in debt ratio and debt- equity ratio has no significant impact on ROE, whereas increase in debt results in increase in ROA, this is because increase in debt results in tax shielding, which, in turn, results in increased return to equity shareholders, and decrease in equity results in decrease in ROA. Similar results are reported by (Rahman, Sarker, & Uddin, 2019). Tax has a significant positive influence on return on assets. It may be because with increase tax rate, the quantum of tax shield will increase for a given amount of interest on debt. This further results in increase in return to the firm. Thus, it is inferred that capital structure has a significant impact on profitability. The results of this study are in line with (Rahman, Sarker, & Uddin, 2019) and in contrast to the results reported by (Friend & Lang, 1988)**.** In the case of NPR, increase in debt results in increase in NPR and decrease in equity results in decrease in NPR. Similar results are reported in the case of OPR. The study also concludes that ROE, NPR and OPR is not different across the sizes of firm, while ROA is different across the sizes of firm.

5.3 Implications

The researcher has viewed the implications of this study from the view point of financial managers and future researchers. Therefore, the implications of this study have been separated as managerial implications and future research implications.

5.3.1 Managerial Implications

A failure to assess variables influencing profitability may result in financial managers leaving grate problems regarding performance of organization in terms of profit. By fixing the appropriate capital structure, the financial managers may influence in profitability of the firms. Therefore, this study also highlights the importance of capital structure for enhancing profitability of the organization. Thus, the managerial implications are pointed as follows:

1. This study suggests that there is significant negative relationship of debt-equity ratio with ROA, NPR and OPR. With the knowledge of this relationship, managers can go for increasing ROA, NPR and OPR by decreasing amount of debt making debt-equity ratio lower.
2. This study has shown that capital structure has no or very less impact on return on equity. So, financial managers can be aware about not spending or wasting time and effort in increasing return on equity through capital structure.

5.3.2 Future Research Implications

It is important to mention that the results of this study may be affected by the limitation of the study. The limitations of this study open the door to the future researchers to conduct similar or same research. Therefore, the recommendations for the future researcher vis-à-vis the limitations of this in terms of scope, methodology and assumption are made as follows: The future study can focus on a larger group of companies or it can be industry-specific.

1. This study was conducted in only 5 Nepalese Manufacturing Companies listed in NEPSE. Now, future researchers can conduct similar or same research in other manufacturing companies than sampled companies of this study.
2. The data used for the study were of only 5 years. Future researchers can go for taking more years data than only 5 years data.

3. Longitudinal research is especially more important concerning profitability, as nowadays profitability of the organizations are increasingly affected by many external environmental factors. So, future researchers can conduct longitudinal research for the confirmation of findings of this research.
4. The future researchers can use sales, capital employed, net worth, total assets, raw material, power consumed and number of employees employed etc. to determine the size of firm.

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Appendices

Unilever Nepal Limited

Amounts in NPR

Year	Sales	Operating Profit (OP)	Net Profit (NP)	Total Debt (TD)	Total Equity (TE)	Total Assets (TA)
2015/16	39,464,755,648	1,407,479,425	1,121,677,327	997,452,450	2,048,988,640	3,046,441,090
2016/17	4,442,374,517	1,260,695,328	965,230,306	1,247,557,296	2,074,271,113	3,321,828,409
2017/18	4,868,313,101	1,329,816,085	999,377,544	1,299,564,497	1,903,476,700	3,203,041,197
2018/19	5,754,061,451	1,371,517,108	1,065,392,296	1,532,773,726	2,324,414,179	3,857,187,905
2019/20	5,547,221,624	572,327,947	358,005,252	1,750,326,403	1,973,095,461	3,723,421,864

Financial Ratios

OPR=OP/Sales	NPR=NP/Sales	ROE=NP/TE	ROA=NP/TA	DR=TD/TA	DER=TD/TE
3.566421233	2.842225445	54.74297442	36.8192686	32.741564	48.6802333
28.37886187	21.72780125	46.53346903	29.0571994	37.556344	60.1443701
27.3157469	20.52821015	52.50274637	31.2008957	40.572831	68.2732022
23.8356354	18.51548346	45.83487339	27.6209592	39.738114	65.9423669
10.31738023	6.453775895	18.14434522	9.61495273	47.008544	88.7096665

Nepal Lube Oil Limited

Amounts in NPR

Year	Sales	Operating Profit (OP)	Net Profit (NP)	Total Assets (TA)	Total Equity (TE)	Total Debt (TD)
2015/16	512,730,727	49,848,482	27,589,396	310,150,730	82,710,503	227,440,227
2016/17	632,027,424	68,005,778	35,865,464	315,042,016	104,164,493	210,877,523
2017/18	781,251,831	76,886,367	40,285,946	431,217,503	137,137,536	294,079,967
2018/19	909,125,132	79,028,634	42,982,976	537,321,320	173,656,304	363,665,017
2019/20	673,334,427	43,878,362	9,825,938	668,630,577	268,844,461	399,786,116

Financial Ratio

OPR=OP/Sales	NPR=NP/Sales	ROE=NP/TE	ROA=NP/TA	DR=TD/TA	DER=TD/TE
9.722156168	5.380874316	33.3565811	8.89547995	73.3321592	274.983489
10.75994101	5.674668952	34.4315639	11.3843431	66.9363172	202.446647
9.841431911	5.156589003	29.3763088	9.34237264	68.1975952	214.44163
8.692822497	4.727949375	24.751751	7.999492	67.6811069	209.416536
6.516577831	1.459295353	3.65487835	1.46956157	59.7917789	148.705357

Himalayan Distillery Limited

Amounts in NPR

Year	Sales	Operating Profit (OP)	Net Profit (NP)	Total Assets (TA)	Total Equity (TE)	Total Debt (TD)
2015/16	1,654,977,243	415,088,930	242,258,160	959,253,312	612,808,469	346,444,843
2016/17	1,347,871,152	96,640,481	48,868,066	1,017,923,667	580,017,109	437,906,559
2017/18	2,424,603,867	998,203,775	293,486,788	1,190,744,447	794,648,701	396,095,745
2018/19	3,128,905,728	815,641,133	537,042,746	1,403,641,355	988,486,658	415,154,697
2019/20	2,404,628,250	707,070,738	466916954	1,995,616,245	1,252,432,296	743,183,949

Financial Ratios

OPR=OP/Sales	NPR=NP/Sales	ROE=NP/TE	ROA=NP/TA	DR=TD/TA	DER=TD/TE
25.08124699	14.63815657	39.5324432	25.2548682	36.1161	56.533952
7.169860476	3.625573997	8.42528009	4.80075939	43.01959	75.498904
41.16976751	12.10452528	36.9328972	24.6473363	33.26455	49.84539
26.06793569	17.16391584	54.3297921	38.2606813	29.57698	41.999019
29.40457586	19.41742779	37.2808139	23.3971313	37.24082	59.339251

Bottlers Nepal Limited

Financial Analysis

Vertical Analysis					
Particulars	For the year 2076-77	For the year 2075-76	For the year 2074-75	For the year 2073-74	For the year 2072-73
Revenue	6,865,186,384	9,506,740,405	9,083,454,385	7,696,782,805	6,398,229,089
Gross Profit	1,770,360,293	3,009,264,240	3,160,682,807	2,400,690,761	1,930,517,332
Earning before Interest, Depreciation and Tax (EBIDT)	1,001,559,741	1,703,081,624	1,812,429,149	1,390,921,733	1,112,317,746
Operating Profit	199,127,567	1,040,797,909	1,304,683,191	945,314,406	683,317,825
Profit Before Tax	(34,104,755)	1,022,883,823	1,308,575,851	882,207,159	563,121,774
Profit After Tax	(61,854,742)	739,176,763	1,040,344,037	702,860,934	433,835,836
Earning Per Share	(32)	379	534	361	223
Horizontal Analysis					
Particulars	Year Ended 2077	Year Ended 2076	Year Ended 2075	Year Ended 2074	Year Ended 2073
No. of Shares	1,948,887	1,948,887	1,948,887	1,948,887	1,948,887
Total Assets	11,152,228,589	10,516,288,848	6,960,091,971	6,835,354,908	5,793,945,016
Plant Property and Equipment	7,663,507,959	7,574,155,058	4,219,041,255	3,945,801,850	3,723,755,128
Current Assets	3,279,709,596	2,807,498,276	2,593,016,334	2,714,347,693	2,029,835,649
Net Current Assets (-Ve)	1,332,299,734	1,858,447,277	222,218,379	1,060,313,458	1,064,593,327
Long Term Liabilities	2,658,518,010	1,826,292,033	707,848,070	667,602,259	917,106,141
Current Liabilities	4,612,009,330	4,665,945,553	2,815,234,713	3,774,661,152	3,094,428,976
Long Term Borrowings	1,700,407,009	958,958,221	707,848,070	667,602,259	917,106,141
Debt	3,642,917,528	2,115,755,383	496,608,770	810,574,979	1,377,167,875
Shareholder equity/ Net Assetes	3,881,701,249	4,024,051,262	3,437,009,187	2,393,091,498	1,782,409,899
Capital Employed	6,540,219,259	5,850,343,295	4,144,857,257	3,060,693,757	2,699,516,041
Market Capitalization	3,566,463,210	3,430,041,120	3,299,465,691	3,235,152,420	3,235,152,420
Ratio Analysis					
Particulars	Year Ended 2077	Year Ended 2076	Year Ended 2075	Year Ended 2074	Year Ended 2073
Gross Profit Ratio	26%	32%	35%	31%	30%
EBIDT Ratio	14.6%	17.9%	20.0%	18.1%	17.4%
Operating Profit Ratio	3%	11%	14%	12%	11%
Profit Before Tax Ratio	-0.5%	11%	14%	11%	9%
Current Ratio	0.7	0.6	0.9	0.7	0.7
Debt Equity Ratio	0.9	0.5	0.1	0.3	0.8
Assets Turnover Ratio	1.6	1.1	0.8	0.9	0.9
Return on Equity	-2%	18%	30%	29%	24%
Return on Total Assets	-1%	7%	15%	10%	7%
Earning Per Share	(32)	358	499	338	223
Market Value Per Share (NPR)	1,830	1,760	1,693	1,660	1,660
Price Earning Ratio	(57.2)	4.9	3.4	4.9	7.5
Net Worth Per Share/Return on Share Holder's Fund (NPR)	1,992	2,065	1,764	1,228	915
Return on Capital Employeed	3%	18%	31%	31%	25%

Bottlers Nepal Limited (Terai)

Financial Analysis

Figures in NPR

Vertical Analysis					
Particulars	For the year 2076-77	For the year 2075-76	For the year 2074-75	For the year 2073-74	For the year 2072-73
Revenue	4,893,349,428	5,581,385,389	5,658,415,620	4,574,001,380	3,525,802,032
Gross Profit	1,190,294,118	1,728,037,237	2,042,011,123	1,461,946,129	1,043,437,612
Earning before Interest, Depreciation and Tax (EBIDT)	844,053,817	1,101,715,532	1,244,708,108	926,739,835	703,041,105
Operating Profit	291,242,664	668,428,859	941,708,846	649,898,602	446,940,032
Profit Before Tax	8,258,244	624,664,353	911,342,615	589,306,378	343,582,201
Profit After Tax	5,629,707	453,542,784	741,329,079	482,622,709	276,708,392
Earning Per Share	5	375	613	399	229

Horizontal Analysis					
Particulars	Year Ended 2077	Year Ended 2076	Year Ended 2075	Year Ended 2074	Year Ended 2073
No. of Shares	1,210,000	1,210,000	1,210,000	1,210,000	1,210,000
Total Assets	8,323,076,209	7,746,715,786	4,249,163,846	4,203,845,356	3,749,916,910
Plant Property and Equipment	6,158,935,286	6,076,197,779	2,987,897,469	2,776,232,218	2,611,062,810
Current Assets	2,108,679,212	1,823,645,895	1,303,361,022	1,355,337,901	1,137,027,955
Long Term Borrowing	1,700,407,009	958,958,221	-	-	376,000,000
Current Liabilities	3,891,593,039	3,980,054,228	1,889,839,986	2,588,896,537	2,244,911,573
Debt	3,945,980,517	2,558,248,457	496,808,770	810,574,979	1,354,743,136
Shareholder equity	2,266,050,786	2,340,948,429	1,987,033,423	1,266,778,572	860,206,200
Capital Employed	3,966,457,795	3,299,906,650	1,987,033,423	1,266,778,572	1,236,206,200

Ratio Analysis					
Particulars	Year Ended 2077	Year Ended 2076	Year Ended 2075	Year Ended 2074	Year Ended 2073
Gross Profit Ratio	25%	31%	36%	32%	30%
Operating Profit Ratio	6%	12%	17%	14%	13%
Profit Before Tax Ratio	0.2%	11%	16%	13%	10%
EBIDT Ratio	18.0%	19.7%	22.0%	20.3%	19.9%
Current Ratio	0.5	0.4	0.7	0.5	0.5
Debt Equity Ratio	1.7	1.1	0.2	0.6	1.6
Assets Turnover Ratio	1.8	1.4	0.8	0.9	1.1
Return on Equity	0.2%	19%	37%	38%	32%
Return on Total Assets	0.1%	6%	17%	11%	7%
Earning Per Share	5	375	613	399	229
Market Value Per Share (NPR)	6,200	6,890	6,813	6,085	5,936
Price Earning Ratio	1,240	18.4	11.1	15.3	26.0
Net Worth Per Share (NPR)	1,873	1,935	1,642	1,047	711
Return on Capital Employeed	7%	20%	47%	51%	38%

Unilever Nepal Limited

STATEMENT OF FINANACIAL POSITION

As at 31 Ashad 2077 (15 July 2020)

Figures in NPR

	Note	As at 31 Ashad 2077	As at 31 Ashad 2076
ASSETS			
Non-Current Assets			
Property, plant and equipment	3	1,08,30,64,053	88,02,12,897
Intangible assets	4	7,92,49,567	10,15,12,828
Other non-current assets	6	92,887	40,99,708
Deferred tax assets	13	4,73,17,382	-
Total Non-Current Assets		**1,20,97,23,889**	**98,58,25,433**
Current assets			
Inventories	7	62,61,20,697	82,24,22,530
Financial assets			
Trade and other receivables	8	84,67,51,848	1,16,32,65,370
Investments	5	33,49,00,000	57,40,23,418
Cash and cash equivalents	9	66,17,21,545	21,01,05,770
Bank balance other than CCE	10	3,50,13,416	3,89,61,499
Other current assets			
Current tax assets	22	-	5,84,13,149
Prepayments		91,90,469	41,70,736
Total current assets		**2,51,36,97,975**	**2,87,13,62,472**
Total assets		**3,72,34,21,864**	**3,85,71,87,905**
EQUITY AND LIABILITIES			
Equity			
Share capital	11	9,20,70,000	9,20,70,000
Employees' housing reserve	12	79,60,59,325	79,60,59,325
Retained earnings	12	1,08,49,66,136	1,43,62,84,854
Total Equity		**1,97,30,95,461**	**2,32,44,14,179**
Liabilities			
Non-Current Liabilities			
Deferred tax liabilities	13	-	1,04,21,301
Provisions	14	1,34,37,379	99,83,537
Total Non-Current Liabilities		**1,34,37,379**	**2,04,04,838**
Current Liabilities			
Financial liabilities			
Trade and other payables	15	1,58,86,38,265	1,36,42,97,764
Provisions	14	11,44,49,868	14,80,71,124
Current tax liabilities	22	3,38,00,891	-
Total Current Liabilities		**1,73,68,89,024**	**1,51,23,68,888**
Total Liabilities		**1,75,03,26,403**	**1,53,27,73,726**
Total Equity and Liabilities		**3,72,34,21,864**	**3,85,71,87,905**

The accompanying notes are an integral part of these financial statements. As per our report of even date

Dev Bajpai
Chairman

Ravi Bhakta Shrestha
Director

Amlan Mukherjee
Managing Director

Shashi Satyal
Partner
PKF TR Upadhya & Co
Chartered Accountants

Asha Gopalakrishnan
Director

Subhas Bajracharya
Independent Director

Vasudhesh Bhat
Chief Finance Officer

Yogesh Mishra
Director

Krishnan Sundaram
Director

Elina Acharya
Company Secretary

Date: September 25, 2020

STATEMENT OF PROFIT AND LOSS

For the year ended 31 Ashad 2077 (15 July 2020)

Figures in NPR

	Note	For the year 2076-77	For the year 2075-76
Revenue from operations	16	5,54,72,21,624	5,75,40,61,451
Other income	17	14,04,94,146	51,78,55,476
TOTAL INCOME		**5,68,77,15,771**	**6,27,19,16,927**
EXPENSES			
Cost of materials consumed	18	3,00,06,17,161	3,17,50,14,884
Changes in inventories of finished goods (including stock-in-trade) and work-in-progress	19	8,04,19,759	(8,57,77,514)
Employee benefits expenses	20	33,22,82,499	41,23,26,976
Depreciation and amortisation expenses	3,4	9,86,44,632	6,69,35,216
Other expenses	21	1,60,34,23,772	1,33,19,00,256
TOTAL EXPENSES		**5,11,53,87,823**	**4,90,03,99,818**
Profit before tax		**57,23,27,947**	**1,37,15,17,108**
Income Tax Expense	22	(21,43,22,694)	(30,61,24,813)
Profit from continuing operations		**35,80,05,252**	**1,06,53,92,296**
Net Profit for the year		**35,80,05,252**	**1,06,53,92,296**
Basic and Diluted Earnings per share	24	389	1,157

The accompanying notes are an integral part of these financial statements. As per our report of even date

Dev Bajpai
Chairman

Asha Gopalakrishnan
Director

Yogesh Mishra
Director

Ravi Bhakta Shrestha
Director

Subhas Bajracharya
Independent Director

Krishnan Sundaram
Director

Amlan Mukherjee
Managing Director

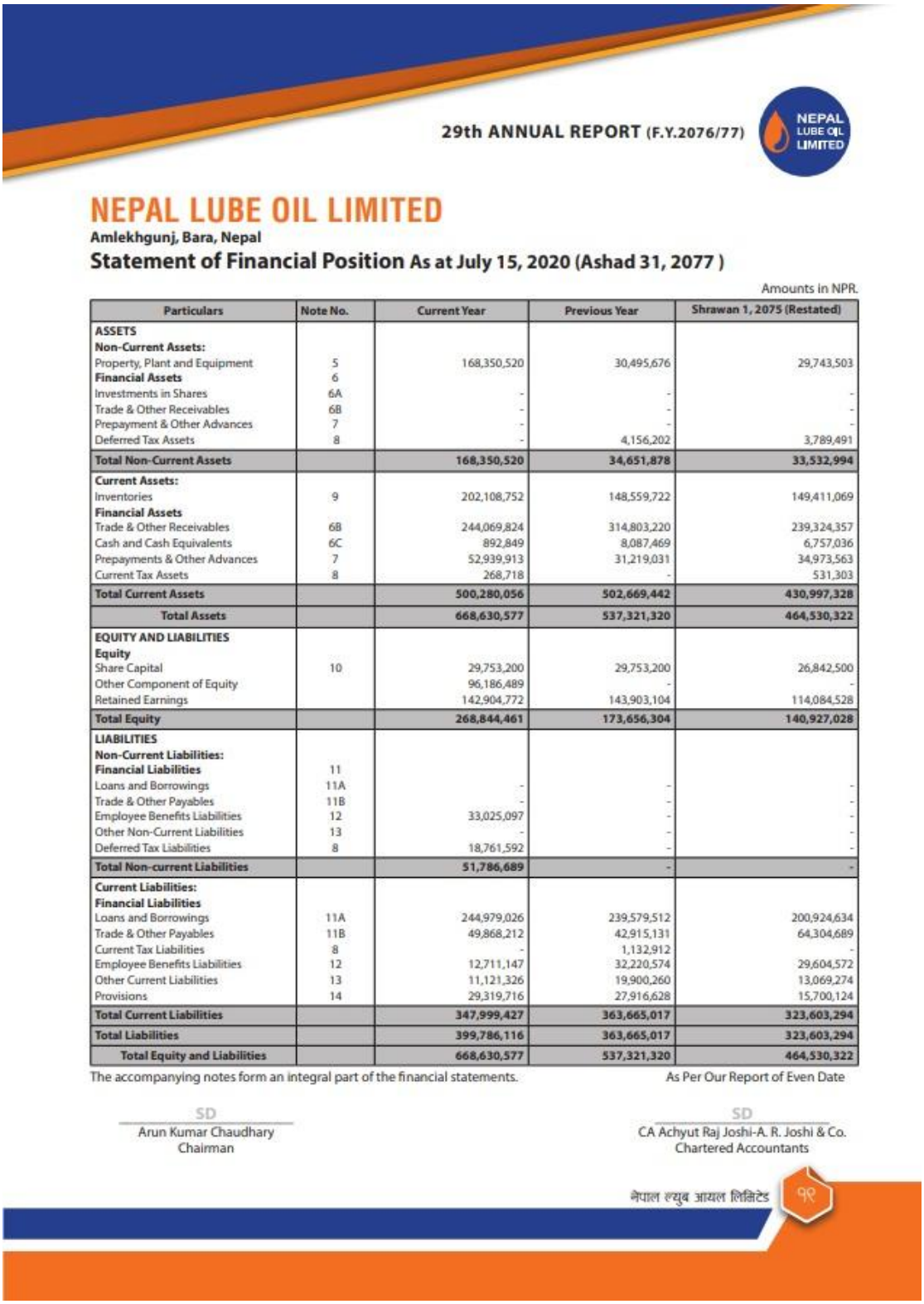
Vasudhesh Bhat
Chief Finance Officer

Elina Acharya
Company Secretary

Shashi Satyal
Partner
PKF TR Upadhya & Co
Chartered Accountants

Date: September 25, 2020

Nepal Lube Oil Limited



29th ANNUAL REPORT (F.Y.2076/77)

NEPAL LUBE OIL LIMITED

NEPAL LUBE OIL LIMITED

Amlekhgunj, Bara, Nepal

Statement of Financial Position As at July 15, 2020 (Ashad 31, 2077)

Amounts in NPR.

Particulars	Note No.	Current Year	Previous Year	Shrawan 1, 2075 (Restated)
ASSETS				
Non-Current Assets:				
Property, Plant and Equipment	5	168,350,520	30,495,676	29,743,503
Financial Assets	6			
Investments in Shares	6A	-	-	-
Trade & Other Receivables	6B	-	-	-
Prepayment & Other Advances	7	-	-	-
Deferred Tax Assets	8	-	4,156,202	3,789,491
Total Non-Current Assets		**168,350,520**	**34,651,878**	**33,532,994**
Current Assets:				
Inventories	9	202,108,752	148,559,722	149,411,069
Financial Assets				
Trade & Other Receivables	6B	244,069,824	314,803,220	239,324,357
Cash and Cash Equivalents	6C	892,849	8,087,469	6,757,036
Prepayments & Other Advances	7	52,939,913	31,219,031	34,973,563
Current Tax Assets	8	268,718	-	531,303
Total Current Assets		**500,280,056**	**502,669,442**	**430,997,328**
Total Assets		**668,630,577**	**537,321,320**	**464,530,322**
EQUITY AND LIABILITIES				
Equity				
Share Capital	10	29,753,200	29,753,200	26,842,500
Other Component of Equity		96,186,489	-	-
Retained Earnings		142,904,772	143,903,104	114,084,528
Total Equity		**268,844,461**	**173,656,304**	**140,927,028**
LIABILITIES				
Non-Current Liabilities:				
Financial Liabilities	11			
Loans and Borrowings	11A	-	-	-
Trade & Other Payables	11B	-	-	-
Employee Benefits Liabilities	12	33,025,097	-	-
Other Non-Current Liabilities	13	-	-	-
Deferred Tax Liabilities	8	18,761,592	-	-
Total Non-current Liabilities		**51,786,689**	**-**	**-**
Current Liabilities:				
Financial Liabilities				
Loans and Borrowings	11A	244,979,026	239,579,512	200,924,634
Trade & Other Payables	11B	49,868,212	42,915,131	64,304,689
Current Tax Liabilities	8	-	1,132,912	-
Employee Benefits Liabilities	12	12,711,147	32,220,574	29,604,572
Other Current Liabilities	13	11,121,326	19,900,260	13,069,274
Provisions	14	29,319,716	27,916,628	15,700,124
Total Current Liabilities		**347,999,427**	**363,665,017**	**323,603,294**
Total Liabilities		**399,786,116**	**363,665,017**	**323,603,294**
Total Equity and Liabilities		**668,630,577**	**537,321,320**	**464,530,322**

The accompanying notes form an integral part of the financial statements.

As Per Our Report of Even Date

SD
Arun Kumar Chaudhary
Chairman

SD
CA Achyut Raj Joshi-A. R. Joshi & Co.
Chartered Accountants

NEPAL LUBE OIL LIMITED

Amlekhgunj, Bara, Nepal

Statement of Profit or Loss and Other Comprehensive Income

For the year ended Ashad 31, 2077 (July 15, 2020)

Particulars	Note No.	Current Year	Previous Year
Revenue From Operations	15	673,334,427	909,125,132
Cost of Operations/Sales	16	(453,634,538)	(620,231,346)
Gross Profit		**219,699,889**	**288,893,785**
Other Operating Revenue/Income	17	290,200	3,075,711
Selling & Distribution Expenses	20	(140,508,472)	(178,465,213)
Administrative & General Expenses	21	(35,478,777)	(33,894,604)
Other Operating Expenses	22	(124,478)	(581,045)
Profit From Operations		**43,878,362**	**79,028,634**
Finance Cost	23	(31,555,064)	(25,065,646)
Other Expenses/Losses	24	-	-
Other Income	25	-	-
Profit Before Tax		**12,323,298**	**53,962,988**
Income Tax (Expenses)/Income:			
- Current Tax	10A	(3,626,188)	(11,346,723)
- Deferred Tax	10C	1,128,828	366,711
Profit From Continuing Operations		**9,825,938**	**42,982,976**
Profit/ (Loss) on Discontinued Operations(net of tax)		-	-
Net Profit for the Year		**9,825,938**	**42,982,976**
Other Comprehensive Income:			
Other Comprehensive Income that is subsequently not reclassified to profit or loss			
Actuary gain/(loss) on Defined Benefit Obligation		(9,139,954)	-
Revaluation Gain on Land & Building		129,373,065	-
-Income Tax Relating to Components of Other Comprehensive Income		(24,046,622)	
Total Other Comprehensive Income, Net of Tax		96,186,489	-
Total Comprehensive Income for the Period		**106,012,427**	**42,982,976**

SD
Arun Kumar Chaudhary
Chairman

SD
CA Achyut Raj Joshi-A. R. Joshi & Co.
Chartered Accountants

SD
Bijay Bahadur Shrestha
Director

SD
Karan Kumar Chaudhary
Executive Director

SD
Anil Basnyat
General Public Shareholders

SD
Hemant Agrawal
Director

SD
Mohan Timalsina
Rastriya Beema Co. Ltd.

SD
NiranjanNeupane
General Public Shareholders

Nepal Oil Corporation Ltd.

SD
Ganga Raj Bhattarai
General Manager

Himalayan Distillery Limited

हिमालयन डिष्टिलरी लिमिटेड

२०७७ साल अषाढ मसान्त सम्मको एकिकृत वित्तिय अवस्थाको विवरण (वासलात)

(रुपैयाँमा)

विवरणहरु	नोट समूह । उद्योग	समूह यस वर्ष रु.	समूह गत वर्ष रु	उद्योग यस वर्ष रु	उद्योग गत वर्ष रु
सम्पति					
गैर चाल सम्पति					
क) जायजेथा, प्लाण्ट र उपकरण	३क । ३क	५९०,२४२,२०३	६२५,१८६,७९६	४४७,३७०,७६०	६०५,०४३,२४३
ख) पुंजीगत कार्य प्रगती	३ख । ३ख	-	-	-	-
ग) अदृश्य सम्पति	३ग । ३ग	८७४,२२०	१,३९२,९६७	८७४,२२०	१,३९२,९६७
घ) वित्तीय सम्पति					
ईक्वीटी उपकरणमा अग्रिम लगानी		-	-	२०,०००,०००	२०,०००,०००
ङ) अन्य गैर चाल सम्पति	४।४	२०,१९३,१४२	२०,१९३,१४२	२०,१९३,१४२	२०,१९३,१४२
जम्मा गैर चाल सम्पति		६१९,३०९,५६५	६४६,७७२,८२५	५९८,४३८,१२२	६४६,६२९,३५२
चाल सम्पति					
क) जिन्सी मौज्दात	५।५	४२६,१०४,८८२	३०१,६३२,९०८	४२६,१०४,८८२	३०१,६३२,९०८
ख) वित्तीय सम्पति					
ट्रेड आसामीहरु	६।६	९९१,५७६,९४४	४०३,१७५,७४४	९९१,५७६,९४४	४०३,१७५,७४४
नगद तथा नगद सरह	७।७	१२,६९१,४७९	४,१४४,२०३	१२,१३६,९४९	३,४९४,३८३
ग) अन्य चाल सम्पति	४।४	३२,५४३,५०९	४६,७१४,४१८	३४,६३१,३६८	४८,६०८,९६८
जम्मा		१,३८२,९२६,९९४	७५५,६६७,२७३	१,३८४,४५०,१४३	७५७,०१२,००३
घ) गैर चाल सम्पति - होल्ड फर सेल	..।८	-	-	१२,७२७,९७०	-
जम्मा चाल सम्पति		१,३८२,९२६,९९४	७५५,६६७,२७३	१,३९७,१७८,१२३	७५७,०१२,००३
जम्मा सम्पति		१,९९४,२३६,४७९	१,४०२,४४०,०९८	१,९९५,६९६,२४५	१,४०३,६४१,३५५
ईक्वीटी तथा दायित्वहरु					
ईक्वीटी					
क) ईक्वीटी					
शेयर पुंजी	८।९	५७८,४६८,२५०	३८५,६४५,५००	५७८,४६८,२५०	३८५,६४५,५००
ख) अन्य ईक्वीटी					
संचित र जगेडा	९।१०	६७२,५३९,०८०	६०१,५९२,२००	६७३,९६४,०४६	६०२,८४१,१५८
जम्मा ईक्वीटी		१,२५१,००७,३३०	९८७,२३७,७००	१,२५२,४३२,२९६	९८८,४८६,६५८
गैर चाल दायित्वहरु					
क) वित्तीय दायित्वहरु					
ऋण परिचालन	१०।११	१,९५६,०३०	३,७६५,२४६	१,९५६,०३०	३,७६५,२४६
ख) डिफर्ड कर दायित्व	११।१२	२९,५८७,४३६	२८,५२५,२३९	२९,५८७,४३६	२८,५२५,२३९
जम्मा गैर चाल दायित्व		३१,५४३,४६६	३२,२९०,४९५	३१,५४३,४६६	३२,२९०,४९५
चाल दायित्वहरु					
क) वित्तीय दायित्वहरु					
ऋण परिचालन	१०।११	१५०,३९५,६३८	१६२,७१०,८६८	१५०,३९५,६३८	१६२,७१०,८६८
ट्रेड साहहरु	१२।१३	११३,६४५,७२३	६३,११०,३२४	११३,६०१,१२३	६३,०६५,७२४
अन्य वित्तीय दायित्वहरु	१३।१४	५९,७८८,१३९	५३,७६५,०५९	५९,७८८,१३९	५३,७६५,०५८
ख) अन्य चाल दायित्वहरु	१४।१५	३१२,०२५,०९१	९६,३४९,५२६	३१२,०२४,४९१	९६,३४६,४२६
ग) चाल कर दायित्व (खुद)	१५।१६	७५,९०१,०९२	६,९७६,१२६	७५,९०१,०९२	६,९७६,१२६
जम्मा चालु दायित्व		७१९,६८५,६८३	३८२,९११,९०३	७१९,६४०,४८३	३८२,८६४,२०२
जम्मा ईक्वीटी तथा दायित्व		१,९९४,२३६,४७९	१,४०२,४४०,०९८	१,९९५,६९६,२४५	१,४०३,६४१,३५५

यसमा संलग्न बुंदाहरु यस एकिकृत वित्तिय विवरणका अभिन्न अंगहरु हुन् ।

आजको मितिको हाम्रो संलग्न प्रतिवेदन अनुसार

निरज सुवेदी
प्रमुख वित्त अधिकृत
स्थान : काठमाण्डौं
मिति : २ पौष २०७७ (सन् डिसेम्बर १७, २०२०)

सान्तु बेष्ठ
संचालक

अखिलेश्वर प्रसाद सिंह
अध्यक्ष

मनिष अमात्य
साझेदार
एन. अमात्य एण्ड कम्पनी
चार्टर्ड एकाउन्टेन्ट्स्

1. Review of FY 2019/20

Key Indicators:

Particulars	FY 2019/20 (in NPR)
Sales	2,404,628,250
Gross Profit	1,235,053,382
Operating Profit	707,070,738
Profit before Tax	627,093,632
Profit after Tax	466,916,954

Production and sales were adversely affected in FY 2019/20 due to the COVID-19 pandemic and the 3-month nation-wide lockdown from 24th March 2020 onwards. However, due to high staff morale infused by timely action and efficient management the Company was successful in making a profit of NPR 466.9 million.

हिमालयन डिष्टिलरी लिमिटेड

२०७६ साल श्रावण १ देखि २०७७ साल अषाढ ३१ सम्मको एकिकृत नाफा/ नोक्सान विवरण

(रुपैयाँमा)

विवरणहरु	नोट	समूह		उद्योग	
	समूह । उद्योग	यस वर्ष रु.	गत वर्ष रु	यस वर्ष रु	गत वर्ष रु
संचालनबाट आय	१६।१७	४,७६७,०६०,४७१	६,४३९,३५६,९३२	४,७६७,०६०,४७१	६,४३९,३५६,९३२
घटी: अन्त शुल्क		२,३६२,४३२,२२१	३,२५९,८१६,०६३	२,३६२,४३२,२२१	३,२५९,८१६,०६३
घटी: बिक्रीको लागत मूल्य	१७।१८	१,०९०,५७२,०८२	१,४१७,६०५,९२२	१,०९०,५७२,०८२	१,४१७,६०५,९२२
घटी: उत्पादन खर्च	१८।१९	७९,००२,७८६	१३८,२१०,२१७	७९,००२,७८६	१३८,२१०,२१७
कुल नाफा		१,२३५,०५३,३८२	१,६२३,७२४,७३०	१,२३५,०५३,३८२	१,६२३,७२४,७३०
अन्य संचालन आम्दानी	१९।२०	८७९,९४९	७९३,०६०	९५९,९४९	१,७७४,५८७
जम्मा संचालनबाट आम्दानी		१,२३५,९३२,५३१	१,६२४,५१७,७९०	१,२३६,०१२,५३१	१,६२५,४९९,३१७
कर्मचारी सुविधा खर्चहरु	२०।२१	१६१,३४६,७३५	१८४,६०४,८६३	१६१,३४६,७३५	१८४,६०४,८६३
प्रशासनिक तथा अन्य खर्चहरु	२१।२२	१४६,९७१,२२३	१७१,१८३,१४३	१४६,८७५,२१५	१७१,०७०,७१२
बिक्री तथा वितरण खर्चहरु	२२।२३	२२०,७१९,८४३	४५४,१८२,६०९	२२०,७१९,८४३	४५४,१८२,६०९
संचालन नाफा		७०६,८९४,७३०	८१४,५४७,१७५	७०७,०७०,७३८	८१५,६४१,१३३
ह्रास कट्टी तथा अपलेखन		४९,६८९,४९२	४५,७७३,७४७	४९,६८९,४९२	४५,७७३,७४७
वित्तीय खर्च	२३।२४	३०,२८७,६१४	१९,८१३,०७३	३०,२८७,६१४	१९,८१३,०७३
आयकर पूर्वको नाफा		६२६,९१७,६२४	७३८,९६०,३५५	६२७,०९३,६३२	७४०,०५४,३१३
आयकर खर्च					
चालु कर	२४।२५	१५९,११४,४८१	२०६,४७१,५७६	१५९,११४,४८१	२०६,४७१,५७६
डेफर्ड कर	२४।२५	१,०६२,१९७	(३,४६०,००९)	१,०६२,१९७	(३,४६०,००९)
यस वर्षको नाफा		४६६,७४०,९४६	५३५,९४८,७८८	४६६,९१६,९५४	५३७,०४२,७४६
अन्य विस्तृत आम्दानी					
नाफा नोक्सान विवरणमा पुन: वर्गिकरण नगरिएका:					
१) परिभाषित लाभ दायित्वको पुन: मापन		-	-	-	-
२) यी कुराहरु संग सम्बन्धित आयकर क्रेडिट(खर्च)		-	-	-	-
अन्य विस्तृत आम्दानी		-	-	-	-
यस वर्षको जम्मा विस्तृत आम्दानी		४६६,७४०,९४६	५३५,९४८,७८८	४६६,९१६,९५४	५३७,०४२,७४६
नाफाको हिस्सा:					
हिमालयन डिष्टिलरी लिमिटेडका शेयर धनिहरुलाई		४६६,७४०,९४६	५३५,९४८,७८८	४६६,९१६,९५४	५३७,०४२,७४६
जम्मा		४६६,७४०,९४६	५३५,९४८,७८८	४६६,९१६,९५४	५३७,०४२,७४६
जम्मा अन्य विस्तृत आम्दानीको हिस्सा:					
हिमालयन डिष्टिलरी लिमिटेडका शेयर धनिहरुलाई		-	-	-	-
जम्मा विस्तृत आम्दानीको हिस्सा:					
हिमालयन डिष्टिलरी लिमिटेडका शेयर धनिहरुलाई		४६६,७४०,९४६	५३५,९४८,७८८	४६६,९१६,९५४	५३७,०४२,७४६
जम्मा		४६६,७४०,९४६	५३५,९४८,७८८	४६६,९१६,९५४	५३७,०४२,७४६
प्रति शेयर आम्दानी (प्रति शेयर परल मूल्य रु. १००)					
आधारभूत प्रति शेयर आम्दानी	२५।२६	८०.६९	१३८.९७	८०.७२	१३९.२६
डाईलुटेड प्रति शेयर आम्दानी	२५।२६	८०.६९	१३८.९७	८०.७२	१३९.२६

यसमा संलग्न बुंदाहरु यस एकिकृत वित्तिय विवरणका अभिन्न अंगहरु हुन् ।

आजको मितिको हाम्रो संलग्न प्रतिवेदन अनुसार

निरज सुवेदी
प्रमुख वित्त अधिकृत

सान्दु श्रेष्ठ
संचालक

अखिलेश्वर प्रसाद सिंह
अध्यक्ष

मनिष अमात्य
साझेदार
एन. अमात्य एण्ड कम्पनी
चार्टर्ड एकाउन्टेन्ट्स्

स्थान : काठमाण्डौं
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CAPITAL STRUCTURE DECISION AND PROFITABILITY: A STUDY OF NEPALESE MANUFACTURING COMPANIES

A Thesis Proposal

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1. Background of study

The study focuses on capital structure decision and its impacts on profitability of manufacturing companies in Nepal. Decision regarding capital structure is the vital one strategic financial decision because it affects the profitability of an organization directly. Hence, Proper investigation and study need to be done in order to make capital structure decision. That is why this study will mainly be focusing on to investigate the relationship between capital structure decision and its impact on profitability of manufacturing companies of Nepal.

Decisions regarding financing the assets are very crucial for every firms. The matter of determining optimum proportion of debt and equity is very challenging for financial manager. The capital structure is the particular combination of debt and equity where the mixture of debt and equity capital should be proper in order to financing the assets. This issue is associated with capital structure decision.

Capital Structure refers to the mix or proportion of firm's long term financial sources represented by long term debt, preferred stock and common equity. Capital structure decision is a most significant strategic managerial decision as it involves wherever funds need to be raised in order to finance. The capital structure decision influences the risk and return that is why induction of study of capital structure decision is indispensable. The appropriate capital structure assists to balance between risks and returns for maximizing value of firm and minimizing overall cost of capital. Capital structure decision plays a vital role in making financial decision which affects earnings before interest and tax, earnings per share and leads to change in market value of firm and share value.

Capital structure carries direct impact on returns and associated risk as well. Increase in leverage results increase in return and risk. Similarly, decrease in leverage results decrease in return along with risk. Firm uses more leverage at a minimum cost which generates maximum return to owners. A decision regarding optimal capital structure is a critical decision for any firm. The decision is crucial not only because of need to maximize returns to various constituencies but also to develop organizational ability to deal with competitive environment of all aspects of capital investment decision. Capital structure decision is most important decision because the profitability and risk

of an enterprise gets directly affected by such decision. There exist thousands of options but to decide and implement the best one is tough job in organization. Interest in particular scenario need to have deep study and investigation.

Capital structure is one of the most complex areas of financial decision making due to its interrelationship with other financial decisions variables. Capital structure is the composition of debt and equity capital that comprise a firm's financing its assets and can be rewritten as the sum of net worth plus preferred stock plus long-term debts (Balasundaram, 2010).

The study of capital structure has special relevance in a country like Nepal. Nepalese firms are highly levered however the long term debt ratios significantly low (Baral, 2004).

The fact of high debt use is to accomplish tax advantages and to maximize profit. The most important advantages of using debt is that the interest payment on debt are tax deductible which erects tax shield for the firms. The more use of debt in the capital structure result lower the real after tax cost of capital which will maximize the value of firm. However, more use of debt may cause the increasing Bankruptcy cost and default risk (Modigliani and Miller, 1963)

If interest rates increase, existing equity and existing bonds will both drop in value. The effect of an increase in interest rates would be greater for equity than for debt. Thus, equity falls more, leaving the firm more highly levered. In a tradeoff model, it seems that equity has become somewhat more expensive, and so there should be little or no offsetting actions. Thus, it is predicted that an increase in interest rate increases leverage (Frank and Goyal, 2003).

2. Statement of problems

Earning profit is very much important to every business organization because profitability determines the sustainability of an organization in the market. Thus, financial manager should be able to identify the influencing factors for increasing profitability of an organization.

Abiodun (2013) argued that firm size, both in terms of total assets and total sales, has a positive impacts on the profitability.

On the other hand, Gill and Mathur (2011) have stated that larger board size (large number of directors) negatively impacts the profitability. Similarly, Chief Executive Officer Duality and corporate liquidity positively impact the profitability.

Further, Hallowell (1996) also argued that customer satisfaction and customer loyalty have impact on profitability. An estimate of the effects of increased customer satisfaction on profitability suggests that attainable increase in customer satisfaction could dramatically improve profitability.

Therefore, different researchers have suggested different variables that are influencing profitability. One group has suggested that size of firm as prime variable for profitability. Similarly, other groups have suggested size of board, chief executive officer duality and corporate liquidity as prime variables for profitability. On the other hand, some researchers have also suggested customer satisfaction and customer loyalty as a prime variables for influencing profitability. Managers often get confused which one variable should be taken carefully into consideration while increasing profitability.

In such confusing situation where financial managers are looking for an appropriate variable that has larger impact on profitability, Can financial manager consider capital structure as one of the influencing factors for profitability? If they can, then what is the position of capital structure? If position of capital structure determines profitability, then what is the position of profitability? If capital structure influences profitability, then what degree of impact the capital structure has on profitability? Therefore, this study will ask following basic questions:

i) What is the position of capital structure in Nepalese Manufacturing Companies?
ii) What is the position of profitability in Nepalese Manufacturing Companies?
iii) Is there any relationship between capital structure and profitability in Nepalese Manufacturing Companies?
iv) Does capital structure have an impact on profitability in Nepalese Manufacturing Companies?

3. Objective of the study

The objective of the study will be exactly be matched with its research question. Therefore, the objective of the study as per the research question will be:

i) To identify the position of capital structure in Nepalese Manufacturing Companies.

ii) To identify the position of profitability in Nepalese Manufacturing Companies.

iii) To examine the relationship between capital structure and profitability in Nepalese Manufacturing Companies.

iv) To examine the degree of impact of capital structure on profitability in Nepalese Manufacturing Companies.

4. Research framework

The conceptual framework will be developed based on the reviewed literature. The reviewed literatures have two variables – dependent and independent. Independent variable influences the dependent variable. In this study capital structure will be independent variable and profitability will be dependent variable.

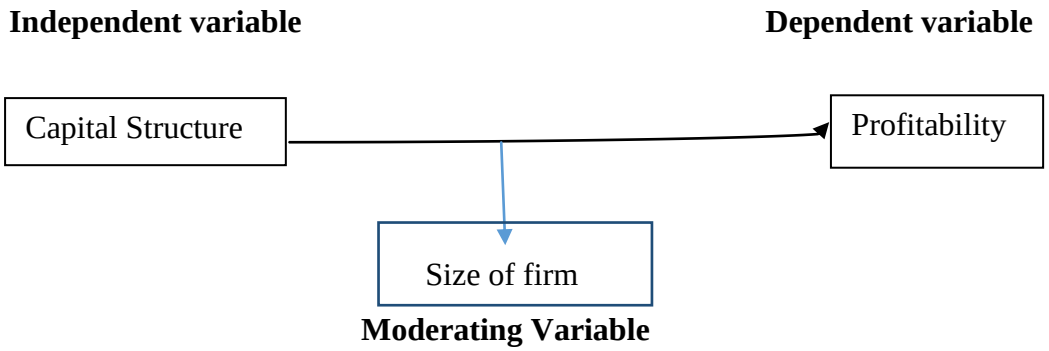
Chiang (2002) results show that capital structure and profitability are interrelated, the study sample includes 35 companies listed in Hong Kong.

Shubita and Alsawalhah (2012) their result reveals significantly negative relation between debt and profitability. This suggests that profitable firms depend more on equity as their main financing option.

Azhagaiah and Gavoury (2011) the study proves that low income with low expenditure are highly profitable but profitability of these groups of firms is independent of the level of debt fund in their capital structure.

Figure:

Conceptual framework



Source*: Gill, Biger & Mathur (2011)*

5. Rationale of the study

The industrial sector of Nepal are expanding day to day. The nation has been going through a lot of hurdles in recent days. This has made its impact on the manufacturing sectors as well. In this situation, this study will be helpful to the companies to over view their capital structure decision, its impact on profitability and to the further strategies to do much better in their horizon. Maintaining appropriate capital structure has been neglecting by most of the manufacturing companies, they are not taking capital structure seriously. So, the study will help decision maker to assess present capital structure situation, to estimate target capital structure, to measure and identify the optimal capital structure and its impacts on profitability. Further, the concerned academician, investors and researcher will also be benefited from these studies.

6. Limitation of the study

Nothing is perfect in this world; some boundaries are always there in every attempt made by human. So every research has its own boundary. Therefore, this study will be completed within certain boundaries, which will provide scope for future researcher. The limitation of this study will be as follows:

i) Larger sample will not be taken for the study because of time and cost constraints. So, finding of this study may not represent the whole population.

ii) Findings of the study will vary over time because of change in financial market and financial condition of an enterprise.

iii) Data collection will be made from manufacturing companies of Nepal only. Its finding may not be useful for banks, finance companies, insurance companies etc.

iv) Fixed capital of the companies will be used to measure the size of the firm. But there are other factors too which can be used to determine the size of firms like sales, capital employed, net worth, total assets, raw material, power consumed and number of employees employed etc.

7. Literature review

The quarter of decades the world is accepting the sustainability of firm, maximization of wealth rather than maximizing the immediate profit. They are the outcome of financial decision management also and it is accomplished by determining appropriate financing mix that is optimal capital structure. Capital structure decision is the most debatable issue for the academicians and practitioner of corporate finance. Modigliani and miller (1958) stated that the firm's value is independent from capital structure by assuming assumption of perfect capital market, no corporate tax and no transaction cost. Modigliani and Miller (1963) introduced corporate taxes in their earlier assumption and stated that capital structure matters the value of firm and opined that optimal capital structure can be attained 100% debt financing through getting tax advantage of using debt. There is an ongoing debate within financial theory that whether or not capital structure affects value of firm. We have observed that weighted average cost of capital (WACC) is minimum and value of firm is maximum at optimal capital structure. However different theoretical arenas that explain whether capital structure matter or not in determining the value of a firm. Total value of a firm is defined as the total market value of equity and its debt. No doubt rational firms seek to minimize cost of capital in that minimum cost of capital leads to higher stock price and this maximizes value of firm. The firms contend that it is universally acceptable in the recent days. Importantly when taxes are incorporated, the value of firm will be relevant to the capital structure. Because interest payment on debt is tax deductible expenses enhances tax saving benefit leads weighted average cost of capital minimum and value of firm maximum. The study of bankruptcy cost, agency cost are indispensable also to determine appropriate capital structure, high use of debt is the essence cause of financial leverage which is existed by the fixed financial cost. High financial leverage enhances higher return on shareholders with higher variability

along with. It is contend that capital structure affects to the weighted average cost of capital, stock price, value of firm and risk and return of shareholders. Hence my study is concerned with the impact of capital structure on risk and return along with value of firm.

Zeitun and Tian (2007) investigated the effect which capital structure has on corporate performance and their result showed that a firm's total debt ratio had significant negative impact on the firm's performance measures, in both the accounting and market's measures. Their results further indicated that variable firm's growth and firm's size have a significant positive influence on the firm's profitability, while assets tangibility negatively related with firm's performance in their study. Their result further indicated that firm growth and size have a significant positive influence on the firm's profitability while assets tangibility negatively related with firms performance.

Kyereboah (2007) confirmed that a positive relationship between total debt ratio and profitability. Similarly, Abor (2005) also explained that there is a significant positive relationship between short term debt and return on equity, and it suggests that profitable firms use more short-term debt to finance their operation. However, the same study showed a negative relationship between long-term debt and ROE, there was a significant positive relationship between total debt ratio and ROE.

Negasa (2016) confirmed that variable firm's growth has a significant positive relationship with firm's profitability. The study also reveals that there is positive relationship between firm size and return on asset. The result further showed not a significant result that is larger fixed asset is less important in affecting the profitability. More over variable liquidity has a significant negative relationship with return on asset.

Babalola (2014) used 31 manufacturing firms with audited financial statements for a period of fourteen years (1999-2012) from static trade-off point of view. He employed the triangulation analysis and the study revealed that capital structure is a trade-off between the costs and benefits of debt, and it has been refuted that large firms are more inclined to retain higher performance than middle firms under the same level debt ratio. In another study, using a sample of 10 firms for a period of 10 years

(‘2000-2009) from agency and static trade-off point of view. He used the regression analysis and concluded that the manufacturing industry’s capital structure in Nigeria is consistent with trade-off theory and the hypothesis tested that the corporate performance is a nonlinear function of the capital structure.

The result indicates that performance and variability are nonlinear function of the leverage. Akinyomi (2013), using three manufacturing companies selected randomly from the food and beverage categories and a period of five years (2007-2011) using the static trade-off and the pecking order theory point of view. He adopted the use of correlation analysis method and revealed that each of debt to capital, debt to common equity, short term debt to total debt and the age of the firms’ is significantly and positively related to return on asset and return on equity but long term debt to capital is significantly and relatively *Capital Structure on Firm’s Performance of Manufacturing Companies in Nigeria* 45 related to return on asset and return on return on equity. His hypothesis also tested that there is significant relationship between capital structure and financial performance using both return on asset and return on equity.

Hsia (1981) revealed that impact of total debt, as a firm, debt to equity ratio and long term debt to capital employed ratio on the return on investment and return on assets. The relationship between independent variables and firms performance was being analyze through the return on investment, the results revealed that there is negative relationship between total debt, long term debt to capital employed ratio and age of the firm’s and return on investment and positive relationship exists between debt to equity ratio and return on investment.

Marsh (1982) seeks to extend Abor’s (2005) findings regarding the effect of capital structure on profitability by examining the effect of capital structure on profitability of the American service and manufacturing firms. The Empirical results of the study show a positive relationship between short-term debt to total assets and profitability and between total debt to total assets and profitability in the service industry. The findings of this paper also show a positive relationship between short-term debt to total assets and profitability, long-term debt to total assets and profitability, and between total debt to total assets and profitability in the manufacturing industry.

8. Research methodology

This section is consist of the methods and procedure those will be applied during the research work. The basic objective of the study is to determine capital structure decision and its impact on profitability of manufacturing companies of Nepal. This chapter will mainly deal with research design, population and sample, sources of data and collection procedure and data analysis tools.

8.1 Research design

The research design will be set as per the objective of the study. For first two objective descriptive research design will be used and for last two objectives correlational research design will be used.

8.2 Population, sample and sampling design

There are 18 manufacturing NEPSE listed manufacturing companies in Nepal, which will be population of this study. Out of them 5 manufacturing companies will be taken as sample. They are; Unilever Nepal limited, Nepal Lube Oil Limited, Bottlers Nepal, Bottlers Nepal (Terai) and Himalayan Distillery Limited. For this study, convenience sampling method will be used.

8.3 Nature and sources of data

This study is based on secondary sources. The secondary data will be extensively used in this subject area. Secondary data are mainly collected from annual reports, internet and other sources. The measuring factors of capital structure will be debt ratio, debt to equity ratio and similarly measuring factors of profitability will be return on equity, return on assets, net profit margin, operating profit ratio, earning per share.

8.4 Data collection procedure and instrument

Secondary data published in the annual reports of concerned organization will be collected through personal visit to the concerned authority and for further collection procedure researcher will use internet surfing and various web sites.

8.5 Data processing procedure and data analysis method

The collected data will be analyzed by using the statistical tools with the help of Statistical Package for Social Science (SPSS). Under the descriptive statistics; mean, maximum, minimum and standard deviation, correlation coefficient and regression analysis will be used.

9. Chapter Plan

It is aforementioned that the study is concerned with the capital structure decision and its impacts on the performance of manufacturing companies in Nepal. It will be divided into five chapters in the pattern as stated below to achieve the objective of this study:

Chapter I: Introduction

This chapter will consist of background of the study, statement of problems (research questions), and objective of the study, significance of the study and the limitations of the study.

Chapter II: Literature review

The second chapter is literature review. It incorporates with conceptual review, review of previous works and research gap.

Chapter III: Research methodology

This chapter sets out the methods used in the proposed study. It provides the work plan and describes the activities necessary for the completion of research study. This chapter includes the use of research design, population and sample, sources of data, procedure of data collection, data processing procedures and data analysis tools and techniques.

Chapter IV: Results and Discussion

The purpose of this chapter is to describe the results. It will deal with the presentation of data, analysis and interpretation of data by using statistical tools. This chapter further will be classified into two parts represented by Results and Discussion.

Chapter V: Summary and Conclusion

This chapter will present the summary and conclusion based on the results. Summary, conclusions and proper implications of the study are elaborated in this section.

Furthermore, all necessary REFERANCES and APPENDICES will have been demonstrated after chapter five.

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