CAPITAL STRUCTURE ANALYSIS OF JOINT VENTURE BANKS IN NEPAL

Submitted by:
Pratima Devkota
Campus Roll No. 503/062/063
Shanker Dev Campus
TU Regd. No. 7-2-242-152-2002
Second Year Roll No: 392917

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RECOMMENDATION

This is to certify that the thesis:

Submitted by:
PRATIMA DEVKOTA

Entitled:

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has been prepared as approved by this department in the prescribed format of the Faculty of Management. This thesis is forwarded for examination.

……..……..	……	……
Lecturer Rita Maskey Pradhan	Prof. Dr. Kamal Deep Dhakal	Asso. Prof. Prakash Singh
(Thesis Supervisor)	(Head of Research Department)	(Campus Chief)

VIVA-VOCE SHEET

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

By

PRATIMA DEVKOTA

Entitled:

CAPITAL STRUCTURE ANALYSIS OF JOINT VENTURE BANKS IN NEPAL

And Found the Thesis to be original work of the student and written according to the prescribed format. We recommend the thesis to be acceptance as Partial Fulfillment of the requirements for the degree of **Master of Business Studies (M.B.S.)**

Viva-Voce Committee

Head, Research Department: ……..

Member (Thesis Supervisor): …….

Member (External Expert) …..…….……

DECLARATION

I hereby declare that the work reported in this thesis entitled **"Capital Structure Analysis of Joint Venture Banks in Nepal"** Submitted to Office of the Dean, Faculty of Management, Tribhuvan University, is my original work done in the form of partial fulfillment of the requirement for the Master's Degree in Business Studies (M.B.S.) under the guidance and supervision of **Lecturer Rita Maskey** of **Shankar Dev Campus**, Kathmandu

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Pratima Devkota
Researcher
Campus Roll No. 503/062/063
Shanker Dev Campus
T.U. Regd. No. 7-2-242-152-2002
Second Year Roll No: 392917

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Pratima Devkota
Shanker Dev Campus

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ABBREVIATIONS

AD	: Anon Dominic
AIO	: BAmerican Institute of Banking
ATM	: Automatic Teller Machine
BS	: Bikram Sambat
C.V.	: Coefficient of Variance
D/E	: RatioDebt- Equity Ratio
DNPL	: Dabur Nepal Pvt. Ltd
EBIT	: Earning Before Interest and Tax
EPS	: Earning Per Share
FY	: Fiscal Year
HBL	: Himalayan Bank Limited
JVB	: Joint Venture Bank
M-M	: Modigliani-Miller
NI	: Net Income
NIBBL	: Nepal Bangladesh Bank Limited
NIBL	: Nepal Investment Bank Limited
NIDC	: Nepal Industrial Development corporation
NLL	: Nepal Lever Private Limited
NOI	: Net Operating Income
NPAT	: Net Profit after Tax
PE	: Probable Error
PhD	: Doctorate of Philosophy
SBI	: Nepal SBI Bank Limited
SCBL	: Standard Chartered Bank Nepal Limited
TU	: Tribhuvan University
USA	: United States of America

CHAPTER-I
INTRODUCTION

1.1 General Background

The commercial bank has been a vital ingredient for economic development. They are intermediaries, which mobilize funds through the prudential of investment portfolios in advanced countries. Whereas in Nepal the role of Joint Venture Banks are still to be realized as an essentials machine of mobilizing internal saving through various banking schemes in the economy. Hence, to uplift the backward economic condition of the country, the process of capital should be expedited. Accumulation, among other prerequisites should be expedited.

Capital accommodation plays an essential role in correlation of the economic growth of nations. Which, in turn, is basically determined, among their others by saving and investment propensities? But the capacity of the saving in the developing country is quite low with a relatively higher marginal propensity of consumption. As a result developing countries are badly trapped into the various cycle of poverty. The basic problem of these countries is raising the level of saving and thus investments. In order to collect the enough saving, and put them into productive channels. Financial institution lied a bank are necessary. It will be utilize within economic and will either be divaricated abroad or use for unproductive consumption or speculative activities.

Capital structure concept holds a major place in the financial management. Capital structure refers the proportion of debt and equity capital. A perfect balance between debt and equity is required to ensure the trade-off between risk and return to shareholders. Thus optimal capital is mix of long term as well as short term funds. But it refers to the mix of long term sources of fund. Such as debenture, long term debt, preference share capital and equity share capital including reserve and surplus in general capital structure. Financial structure same but there is a bit differences.

Deducting short term loan from financial structure is capital structure. In other hand, capital structure is part of financial structure not the whole. Thus, optimal capital structure means the capital structure having reasonable proportion of debt and equity. An optimal financial structure makes better use of society's funds of capital resource and thus it increases the total wealth of society also. By increasing the firm's opportunity to engage in future wealth creating investment it increases the economy's rate of investment and growth.

1.1.1 General Background of Banks in Nepal

Commercial banks are the supplier of finance for trade, land, and industry, which plays vital role in the economic and financial life of the country. They help in the information of capital by investing the savings in productive areas.

The history of the systematic development of Joint Venture Banks in Nepal as compared to other developed countries is of resent origin. In Nepal, efforts are being made to accelerate the pace of economic development after the adaptation of first five –year plan in 1994 B.S. Nepal Bank Ltd, the first and oldest bank in modern banking history of Nepal, was established in 30 Kartik, 1994 *B.S.* with 51% Government equity. Nepal Bank Ltd also used to function as Central Bank of the country up to 2012 BS on 2013 BS. Nepal Rastra Bank was established as a Central Bank of Nepal under the Nepal Rastra Bank Act 2012. Government initiated some corrective measures to stabilize the economy with the assistance of if standby arrangement in mid 1980 B.S in FY 1985 B.S, in subsequently: embarked upon the structured adjustment programs encompassing measures to increase mobilization, strengthen financial sectors, and liberalize industrial and trade policies (World Bank:1992).

Since then several financial institutions and commercial joint venture banks have been established in the process of development and liberalization policy for the economic development of the nation.

In the early 1980 B.S, the government permitted the establishment of foreign joint venture banks in Nepal. As a result, three joint venture banks; Nabil, NGBL and

NIBL came into existence by the end of the first half of the 1980 B.S. Henceforth, a number of joint venture banks came into existence. The basic objective to allow Joint Venture Banks to operate in Nepal was mainly to develop the banking sector, to create healthy competition for further development of already existing old banks, and to introduce new technological banks.

The commercial banks collect the scattered merger saving and place them into productive channels. They hold the deposit of many persons; government establishments and business units. They make funds available through their lending and investing activities to borrowers, individuals, business firms, and government establishments. In doing so, they assist both the flows of goods and services form the government. They are media through which monetary policy is affected the joint venture banks help to build country's holistic development agenda. They are the keys to help the bank understand better the political and social contexts in which it operates.

32 Commercial Banks are active in Nepal at present. All of these banks have been successful in making profit. At the same time, a tough competition among them. However, a growth of investment in the productive areas in the ratio the commercial banks are growing. Since some of these banks do not publish their progress reports on time, Nepal Rastra Bank has been unable to get that information. This has ultimately led to the difficulties in their study.

The number of commercial banks in Nepal is 32 at present and it is on the rise. The old banks are also extending their branches in the newer areas. But almost all these commercial banks are concentrated in the urban areas, and they consider the act of extending their services in the rural areas as unprofitable and risky. Therefore, the people of the rural areas have not been able to benefit from the services of the commercial banks. Though the people of the urban areas have been able to enjoy the facilities of relatively lower interest rates, the people in the rural areas are still burdened with very high interest rates. Initially the commercial invested more in the productive areas such as industries, but now they seem to be focused on less productive areas with short term immediate profit making attempt. The reason behind this is basically that it takes a long time to make profit from investment in the areas

that become productive only in the long run. There is a competition among the commercial banks to attract people showing the immediate short term return. The commercial banks of Nepal have a direct impact in the economy of Nepal. Since these banks have not shown any initiatives to invest in the areas beneficial to the country in the long run considering those areas as risky. After sometime, the banks of Nepal should also start making alliance with each other. They can have alliance in expensive technologies such as ATM's, credit card communication device, consortium landing, attracting remittance and other fee base income etc. If the alliance works, then the door for merger opens.

1.1.2 Evolution of Banking Industry

The evolution of banking industry had started a long time back, during ancient times. There was reference to the activities of money changers in the temple of Jerusalem in the New Testament. In ancient Greece the famous temple of Delphi and Olympia served as the great depositories for peoples surplus funds and these were centers of money lending transaction. Indeed the traces of rudimentary banking were found in the Chaldean, Egyption and Phoenician history. The development of banking in ancient Rome roughly followed the Greek pattern. Banking suffered oblivion after the fall of the Roman Empire after the death of Emperor Justinian in 565 AD, and it was not until the revival of trade and commerce in the middle Ages that lessons of finance were learnt anew from the beginning. Money lending in the middle Ages was, however, largely confined to the Jews since the Christians were forbidden by the Canon law to indulge in the sinful act of lending money to other on interest. However, as the hold of the Church loosened with the development of trade and commerce about the thirteenth century Christions also took to the lucrative business of money lending, there by entering into keen competition with the Jews who had hitherto monopolized the business.

As a public enterprise, banking made its first beginning around the middle of the twelfth century in Italy and the Bank of Venice, founded in 1157 was the first public banking institution. Following it, the Bank of Barcelona and the Bank of Genoa in 1401 and 1407 were established respectively. The Bank of Venice and the Bank of

Genoa continued to operate until the eighteenth century. With the expansion of commercial activities in Northern Europe there sprang up a number of private banking houses in Europe and slowly it spread throughout the world. In Nepal, modern banking starts from the establishment of Nepal Bank Limited.

1.1.3 A Brief Introduction of Selected Joint Ventures Banks

Commercial banking in Nepal commenced in a formal manner in 1994 Kartik 30 which the establishment of Nepal Bank Ltd. From that they forward banking in Nepal has taken many strides forward, wit a myriad of Banks and a multitude of financial products entering the market. The entry of joint venture banks in the kingdom opened the doors to international standard banking service and with it heightened costumer expectations. To meet these whiles some chose to complete price, others choose to complete on serviced delivery and customer satisfaction.

1. Nepal SBI Bank Limited

Nepal SBI Bank Limited commenced its operation since 1994 B.S. as a joint venture between the employee's provident funds and the state Bank of India, where the Indian bank holds 50% of the equity. The initial paid up capital in 1994 B.S. was 119.95 million. The bank at present scenario of banking sector, and it is implementing required business plans and strategies to face the challenges and to enhance its profit to a reasonable level by the yearend. SBI Bank has the following future plans.

- Technology up-graduation and automation.
- International banking relationships
- Branches expansion.
- New service and areas of investment.

2. Himalayan Bank Limited

Himalayan Bank Limited was established in 1993 B.S. by the distinguished business personalities of Nepal kin partnership with the employee's provident funds and Habib Bank ltd, which is one of the largest commercial banks of Pakistan. It is the First commercial bank of Nepal with maximum shareholding by the Nepalese private sector. The equity participation of HBL is 20 percent by Habib Bank of Pakistan, 51

percent by promoter shareholders, 14 percent by financial institution, and 15 percent by public shareholders. Besides commercial activates, the bank also offers industrial and marchland banking. Hal's policy is to extend quality and personalized service to its customers as promptly as possible. The bank as far as possible offers tailor-made facilities to its clients, based on the unique needs and requirements. Since 1999, this bank is providing products and services like credit card, tele banking, any branches, automated teller machine (ATM), 24-hour banking, etc. The bank has very aggressive plan of establishing more branches in different parts of the kingdom in the near future.

All branches of HBL are integrated into Globus (developed by Temenos), the single banking software where the bank has made substantial investments. This has helped the bank provide services like' any branch banking facility', internet banking and sms banking. Living unto the expectations and aspirations of the customers and other stake holders of being innovative, HBL very recently introduced several new products and services. Millionaire deposit scheme, small business enterprises loan, prepaid visa card, international travel quota, credit card and online TOEFL, SAT, IELTS, etc.fee payment facilitity are some of the products and services. HBL also has a dedicated offsite 'Disaster Recovery Management System', looking at the number of Nepalese workers abroad and their need for formal money transfer channel. HBL has developed exclusive and proprietary online money transfer software-Himal Remit TM. (www.himalayanbank.com)

1.2 Focus of the Study

The proper evolvement of JVB is quite essential for the sake of economic development countries like Nepal. The research on related topic is of tremendous value to provide the feedback to the policymakers in systematically plans and policy to face the situation. Beside this study, researches beyond more than last three decades conducted several empirical studies. But no empirical testing has been conduct yet to explore the validity of capital structure of Joint Venture Banks.

1.3 Statement of the Problems

Although various joint venture Bank are operating in Nepal after the HMG/N adopted the open liberal and market oriented economic police, the financial sectors has not been enough from them to meet the growing resource need to the economy as expected before. Why is so and what are the problems? To answer the question an analysis of their present capital structure is necessary. So, focus of the present study is on the capital structure of Joint Venture Bank in Nepal with special reference to SBI Bank and HBL.

Efficient capital structure is the major tool to measure the strength and weakness of the bank. Strong Joint Venture Bank contributes to National economy and also attracts further foreign investment in these sectors. It may be an example to a Newcomer Joint Venture Bank. There fore the present study seeks to explore the answers to the following question.

- How far SBI Bank and HBL have been able to mobilize their resource?
- How efficiently these banks are managing their capital structure?
- To what extent these banks have been able to raise their profitability?
- How does leverage affects the cost of capital in Nepalese situation?

1.4 Objectives of the Study

These following objectives are set for this study.

- To analyze the relation of the capital structure and cost of capital of selected Joint Venture Banks.
- To explore the rules and regulation related to capital structure management of JVBs.
- To assess & examine the comparative capital of selected JVBs.
- To evaluate the profitability position of the banks under study.

1.5 Significance of the Study

The significance of Joint Venture Banks can scarcely be underestimated. It beneficial to different parties concerned with the Joint Venture Banks as well as other interested parties. The study is helpful to shareholders regarding the capital structure of their

banks; the comparison will help them to identify the productivity of their funds. The study is helpful to management of respective banks to go deep into the matters as why their performance is better then of competitors. The study is prescriptive to the policymaker while formulating the policy regarding joint banks. The study helps and justify for finding out significant part for management of concerned banks and government too for making plans and strategy. The customers, financing agencies, stock exchanges and stock trades are interested in the capital structure of banks. By this the customers can have view to which banks they can entrust. The financing agencies can understand where their fund is more secured. Similarly, stock exchange and stock teasers can observe the relative appeal to the stocks of each bank.

1.6 Limitations of the Study

The present and the outcome of the study is an individual effort. Therefore the time and resource constraints has limited the in depth study. This study is limited within following factors:

- The study is based on secondary data; therefore, the accuracy of result and conclusions highly depends upon the reliability of these data.
- Analysis evaluated comprising the FY 2064/065 to 2068/069.
- The evaluation is made through the analysis of financial statement published and presented by the banks.
- The study has review possible factors affecting Joint Venture Banks.
- Out of total nine Joint Venture Banks in Nepal only two are taken as sample.

1.7 Organization of the Study

This study includes five chapters, which are as follows:

First chapter is introduction chapter. General background of Commercial Banks, Statement of the Problem, Objectives, Significance, Justification, Limitation and Chapter Plan of the study is included.

Second chapter is review of literature. It includes theoretical framework of Capital Structure, Reviewing issues related to the study are included which are; books, articles, journals, and unpublished thesis, etc.

Third chapter is research methodology. Specially, financial Tools and Techniques as well as Statistical Tools are presented.

Fourth chapter deals the presentation, analysis and interpretation of the study through definite course of research methodology. This chapter also contains major finding of the study.

Fifth chapter is the suggestive framework containing the summary, conclusions and recommendations of the whole research.

Bibliography review of research & journals, Books & unpublished thesis, etc.

Appendix is the coefficient of colleration between HBL & SBI Bank

CHAPTER-II

REVIEW OF LITERATURE

This chapter deals with review of literature. Review of literature means reviewing research studies or other relevant propositions in the related area of the study so that all the past studies, their conclusions and deficiencies may be known and further research can be conducted. Since completely new and original problems are rare it is necessary to show how the problem under investigation relates to previous research works done under similar topic, however a previous study not be exactly replicated. It is believed that the review of literature is literature which is helpful to show the needs of the research work and to justify the work, it tries to clear the conceptual thought and bank related terms.

2.1 Conceptual Framework

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

2.2 Theories of Capital Structure

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

Assumptions

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

- There are no corporate or personal income taxes.
- There are no bankruptcy costs.
- The ratio of debt to equity of a firm can change many times but the total assets remain constant.
- There are no transaction costs.
- The company pays 100 % of its earnings as dividend s
- Operating earnings of the firm remain constant; that is, growth rate is equal to zero.
- The expected values of the subjective probability distributions of expected future operating earnings for each company are the same for all investors in the market.

Common notation used in the analysis of capital structure theories

S = market value of ordinary shares

D = market value of debt

V = total market value of the firm

K_d = cost of debt

K_e = cost of equity

K_o = overall cost of capital or weighted average cost of capital (wacc)

EBIT = Earnings before interest and taxes or net operating income (NOI)

2.2.1 Approaches to Capital Structure

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

2.2.1.1 The Net Income Approach (Capital Structure Matters)

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

Assumptions of This Approach

- The use of debt does not change the risk perception of investors, as a result the equity-capitalization rate (K_e), and the debt-capitalization rate (K_d), remains constant with changes in leverage.
- The cost of debt is less then the equity-capitalization rate or the cost of equity ($K_d<K_e$).
- The corporate income tax doesn't exist.
- Net operating income remains constant.
- Overall cost of capital decreases as leverage increases.

The overall cast of capital is measured as:

$$K_0 \text{ X } \frac{NOI}{V}$$

$$or, \quad K_0 \text{ X } \frac{EBIT}{V}$$

The overall cost of capital (K_o) can also measured as:

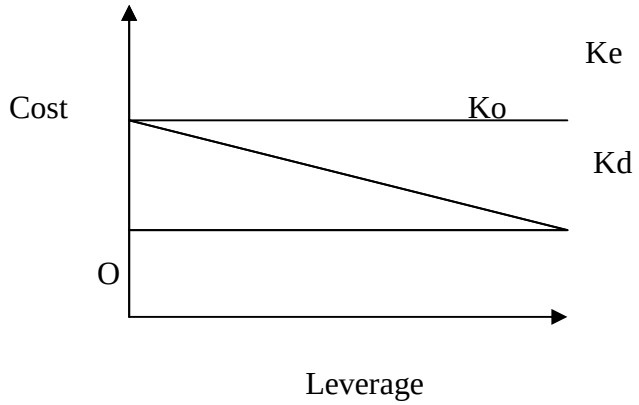
$$K_o = f K_o \text{ Z } K_d \text{ A } \frac{D}{V}$$

The assumption of the NI approach shows that K_e and K_d are constant and K_d is less then K_e. Therefore, K_o will decrease as D/V increases. The effect of leverage on the

firms cost of capital and the effect of leverage on the total market value of the firm is mentioned below graphically:

Figure: 2.1

Effect of Leverage on the Cost of Capital under NI Approach



Source: Bhattrai, 2006

Under NI approach, K_e and K_d are assumed not to change with leverage. When the proportion of debt is increased in the capital structure, it causes overall cost capital to decrease and approach the cost of debt. Thus, the firm will have the maximum value and the lowest cost of capital when it is all most debt-financed, under the NI approach.

2.2.1.2 Net Operating Income Approach (Capital Structure doesn't Matter)

The NOL approach contends that capital structure is irrelevant to the cost of capital and value of the firm. Thus, it is called irrelevancy theory of capital structure. As per this approach the market value of the firm is not affected by the changes in capital structure. The market value of the firm is found out by capitalizing the net operating income at the overall cost of capital, Ko which is a constant.

The market value of the firm is determined as,

V= D+S

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

Where, K_o, the overall capitalization rate depends on the business risk of the firm. It is independent of financial mix; V will be a constant and independent of capital structure changes.

Assumptions of this Approach

- The overall cost of capital (Ko) depends on the business risk and remains constant. The cost of debt (Kd) remains constant.
- The use of less costly debt funds increases the risk of shareholders; this causes the equity-capitalization rate to increase. Thus, the advantage of debt is offset exactly by the increase in the equity capitalization rate (K_e).
- The corporate income tax doesn't exist.
- The net operating income remains constant.

Net operating income approach shows the irrelevancy of the debt equity ratio to the value of the firm. Investors perceive high debt employment risky and so, the increase in debt funds increases the cost of equity which exactly offsets the benefit of accommodating debt funds in capital structure resulting constant overall cost of capital which is used to capitalize the constant net operation income and so, the value of firm remains independent of capital structure decisions.

Here, the market value of equity can be determined as,

$$S = V - D$$

And the cost of equity can be defined as follows,

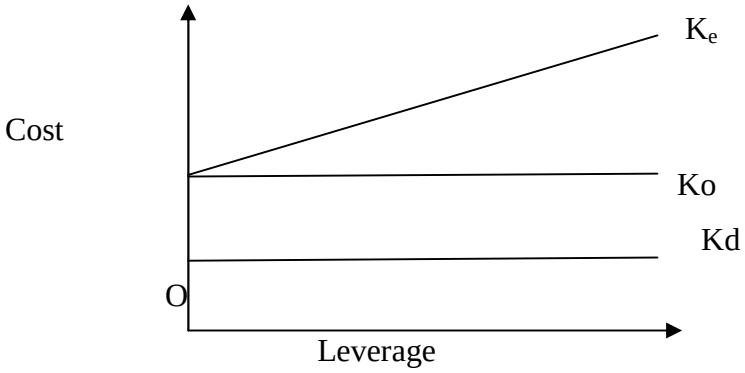
$$K_e = K_o + (K_o - K_d)\frac{D}{S}$$

The equation indicates that, K_e increase with leverage continuously, if K_o and K_d are constant.

The effect of leverage on the value of the firm and cost of capital under NOI approach is further illustrated graphically:

Figure: 2.2

Effect of Leverage under NOI Approach



Source: Bhattrai, 2006

The above figure shows that 'Ko' and 'Kd' are constant and 'Ke' increases with leverage. As 'Ko' remains unaffected, employment of debt is optimal.NOI approach suggests there is no optimum capital structure. As Ko remains the same at all capital structure, every capital structure is optimal.

2.2.1.3 Traditional Approach- An Intermediate Approach (The Existence of Optimum Capital Structure)

This approach assumes the capital structure as relevant matter for the value and cost of capital of the firm. It takes some features of both net income and net operating income approach. This approach strikes a balance the two different approaches net income and net operating income.

Therefore, it is also known as the intermediate approach. It resembles the net income approach in arguing that cost of capital and total value of the firm are not independent of the capital structure. But it does not subscribe to the view of NI approach that value of a firm will necessarily increase for all degree of leverage. In one respect it shares a feature with the NOI approach that beyond a certain degree of leverage, the overall cost increases leading to a decrease in the total value of the firm.

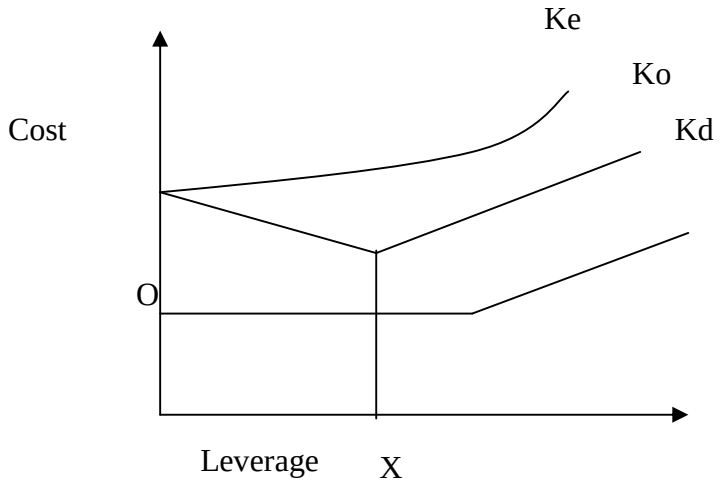
According to this approach, there is an optimal capital structure therefore the firm can increase the total value of the firm through the wise use of leverage. The firm initially can lower its overall cost of capital through the use of cheapest cost debt and raise its

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

The effect of leverage on the firms cost of capital and effect of leverage on the total market value of the firm is mentioned below graphically:

Figure: 2.3

The Cost of Capital Behaviour under Traditional Approach



Source: Bhattrai, 2006

In the above figure, at first, the overall cost of capital declines with increase in debt ratio because the rise in cost of equity (Ke) does not entirely offset the use of cheaper debt funds. As a result, the weighted average cost of capital (Ko) declines with moderate use of leverage. After a point, however, the increase in cost of equity (Ke) more than offsets the use of cheaper debt funds in the capital structure, and overall cost of capital (Ko) begins to rise. The rise in overall cost of capital (Ko) is supported further one cost of debt (Kd) begins to rise. The optimal capital structure is point at

which overall cost of capital (Ko) bottoms out. In the figure, this optimal capital structure is point X. Thus, the traditional position implies that the cost of capital is not independent of the capital structure of the firm and that there is an optimal capital structure.

Under traditional approach, the relation of the cost of capital and the use of leverage can be shown in the three stages.

First Stage: Increasing Value

The first stage begins with the initiation of debt in the total capital. At the beginning, the cost of equity (Ke) remains constant or rises slightly with debt and it does not increase fast enough to offset the advantage of low cost debt. Here the cost of debt (K_d) remains constant or rises negligibly. Thus, the value of the firm (V) increases and the overall cost of capital declines with increasing leverage.

Under the assumption that K_e remains constant within the acceptable limit of debt, the value of the firm will be:

V= S+D

Thus, as long as K_e and K_d are constant the V increases at a constant rate.

$(K_e-K_d)/K_e$ as the amount of debt increases.

$$K_o \text{ X} \frac{X}{V} K_e \text{ f} K_e \text{ Z} K_d \text{ A} \frac{D}{V}$$

This implies that, with $K_e > K_d$, the average cost of capital will decline with leverage.

Second Stage: Optimum Value

Once the firm obtains certain limit of using leverage in the capital structure, the value of the firm is not affected by the leverage. As the benefits of using lower debt funds are exactly offset by the rise in the cost of equity due to the increase in financial risk to shareholders. At this stage, the optimum capital structure point is obtained at the point at which the cost of capital bottoms out. At this point, the value of the firm is maximum.

Third Stage: Decaling Value

Beyond the acceptable limit of leverage, the value of the firm decreases with leverage or the cost of the capital increases with leverage. This is because, investors realize the risk of excessive debt employment debt and demand higher returns out of their investment. The benefits of lower debt funds remains below the cost associated and hence the overall cost of capital rises. The raise in cost of capital means the declining value of the firm.

Overall Effect:

In the words of Khan and Jain (1990), overall effect of these three stages suggest that the cost of capital in the function of leverage. Up to a point, the use of debt will favorably affect the value of firm, beyond the point, use of debt will adversely affect it. At the level of debt- equity ratio, the capital structure is an optimum capital structure. At the optimum capital structure, the marginal real cost of debt, define to include both implicit and explicit, will be equal to the real cost of equity. For the debt-equity ratio before that level the marginal real cost of debt would be less then that of equity capital, while beyond that level of leverage, the marginal real cost of debt would exceed that of equity. Thus, there would, according to traditional view, be an optimum capital structure.

2.2.1.4 The Modigliani-Miller (MM) Approach (Without Corporate Tax)

In 1958, two prominent financial researchers, Franco Modigliani and Merton Miller (MM), showed that, under certain assumptions, a firm's overall cost of capital and therefore its value is independent of the capital structure. In the words of (Panday: 1999) the Modigliani –Miller hypothesis is identified with the net operating income approach. M-M argue that in absence of taxes a firms market value and the cost of capital remains invariant to the consistent behavioral justification in favor of their hypothesis and reject any other capital structure theory as incorrect.

Assumptions of this approach

- There is a perfect capital market.
- There are no transaction costs of buying and selling securities.

- A sufficient numbers of buyer and seller exist in the market so no single investor can have a significant influence on security prices.
- Relevant information is readily available to all investors and is cost-free to obtain.
- All investors can borrow or lend at the same rate.
- All investors are rational and have homogeneous expectations of a firm's earnings.
- All firms are homogeneous in riskiness.
- There are no personal or corporate taxes.
- All cash flows are perpetuities, that is all firms expect zero growth.
- EBIT and bonds are perpetual.

In the no-tax MM case, the cost of debt and the overall cost of capital are constant regardless of a firm's financial leverage position, measured as the firm's debt-to-equity ratio. As a firm increases its relative debt level, the cost of equity capital increases, reflecting the higher return requirement of stockholders due to the increased risk imposed by additional debt. The increased cost of equity capital exactly offsets the benefit of the lower cost of debt, so that the overall cost of capital does not change with changes in capital structure.

Proposition I

In absence of tax, the total market value of the firm is independent of the debt-equity mix which can be obtained by capitalizing its perpetual cash flow, NOI or X by its cost of capital applicable to that particular risk class.

The value of the firm $V \text{ X } S \Gamma D \text{ X} \frac{X}{K_o} \text{ X} \frac{NOI}{K_O}$

Where,

V = the market value of the firm.

S = the market value of the firms ordinary equity

D = the market value of debt.

X = the expected net operating income on the assets of the firm.

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

The case can be stated in terms of the firm's average cost of capital, which is the ratio of the expected earnings to the market value of all its securities. That is:

$$\frac{X}{S \Gamma D} \mathrm{X} \frac{X}{V} \mathrm{X} K_o$$

If Kd and Ke are defined as the expected return on the firm's debt and equity respectively, then, expected net operating income is:

$$X = K_oV = K_eS + K_dD$$

By definition,

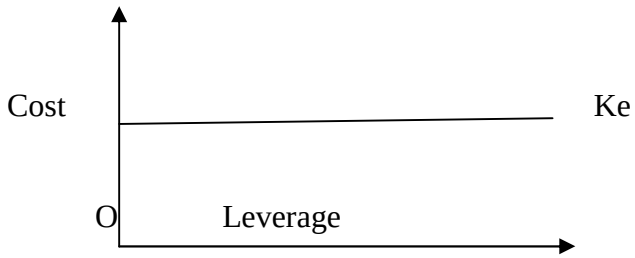
$$K_o = \frac{X}{V}$$

$$Ko = K_e \frac{S}{V} \Gamma K_d \frac{D}{V}$$

Since, MM conclude that the total market value of the firm is unaffected by the debt-equity mix, if follows that the cost of capital is completely independent of its capital structure and is equal to the capitalization rate. The cost of capital function, as hypothesized by MM is presented in figure 2.4.

Figure: 2.4

The Cost of Capital under MM Proportion I



Source: Bhattrai, 2006

Thus, two firms identical in all respects except to the capital structure have the same value and cost of capital. In this case, arbitrage will take place to enable investors to engage in personal leverage as against the corporate leverage to restore equilibrium in the market.

Proposition II

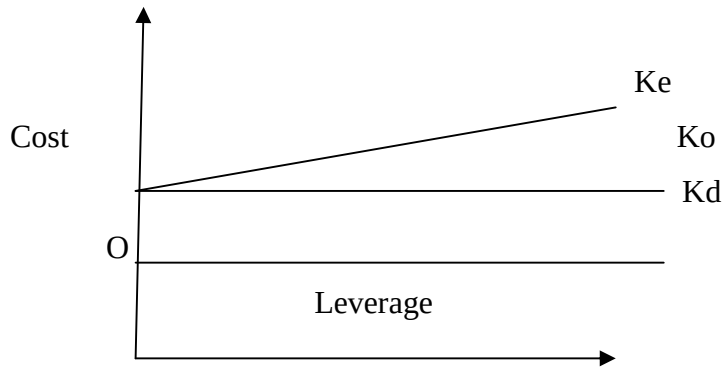
MM's proposition II, which defines the cost of equity, follows the proposition I. the expected yield on equity, can be defined as:

$$K_e = K_o + (K_o - K_d)\frac{D}{S}$$

The MM proposition could be valid if Kd remains constant for any degree of leverage. But in practice kd increases with leverage beyond a certain reasonable level of debt. However, MM maintains that even if Kd is increasing, Ko will remain constant. They argue when Kd will increase at a decreasing rate and may turn down eventually. This is shown in the figure 2.5.

Figure: 2.5

Cost of Equity under MM Proportion II



Source: Bhattrai, 2006

In above figure (2.5) when Kd increases with debt, Ke will become less sensitive to further borrowing. The reason for this is that debt-holder, in extreme situation, on the firm's assets and bares some of the firm's business risk. Since risk of shareholders is transferred to debt-holders, Ke declines.

2.2.2 Arbitrage Process

MM model of irrelevant theory of capital structure is based on the assumption of an arbitrage mechanism. In a perfect capital market the capital structure of two firms, like every other aspect, must have the same total value. Otherwise, arbitrage will be possible, and its occurrence will cause the two firms to sell in the market at the same total value.

Arbitrage is the process of simultaneously buying and selling the same or equivalent securities in different markets to take advantage of price differences and make a profit. Arbitrage transactions are risk-free.

The essence of arbitrage is that the investors are able to substitute personal or homemade leverage for corporate leverage. The behavior of the investors will have the effect of:

- Lowering the price of shares of the firm whose share are being sold.
- Increasing the share price of the firm whose shares are being purchased. This arbitrage process will continue until the value of the two firms become equal.

Steps of Arbitrage

- A rational investor sell the holding (shares) of a levered firm.
- The investor borrows an equal amount of debt in proportional ownership in the levered firm.
- The investor buys the shares of an un livered firm in equal proportion as that of a levered firm.

Income Calculation in Livered and Un Livered Firms

Livered firm:

Total income= Net income × Proportion of ownership in the firm

Unlevered firm:

Total net income= Net income of firm ×proportion of ownership − interest on personal borrowing of debt

2.2.3 Types of Leverage

There are three types of leverage, which are identified with the marginal analysis approach to profit planning. All types of leverage are related to the measurement of profit in order to operate the financial activities.

2.2.3.1 Operating Leverage

Operating leverage is the potential use of fixed operating costs to magnify the effect of change in sale on earnings before interest and taxes (EBIT) (Gilman: 1988) . Operating leverage refers to the use of fixed costs in the operating of a firm. If there is no use of fixed cost then the rate of the firm for fixed costs and total costs will be nil. In that situation we can say that the firm has no operating leverage. Actually leverage exists when change in revenue produce a greater change in EBIT (Hampton: 1994). It measures the percentage change in EBIT due to specific percentage change in level of output. Most of the companies are always active in operating the business activities with the main objective of maximizing the profit. An increasing sales volume is the best way of earning maximum profit. But an increase in sales volume depends upon the firm's capacity as will as the market demand. To fulfill the market demand, the company should invest extra amount as fixed asset. So the operating leverage result from the existence of fixed operating costs in the firm's income stream (Gilman: 1988).

The measurement of the relationship between percentage change in earning before interest and taxes (EBIT) and the percentage in sales is known as operating leverage (Dongol & Parajuli: 1998). In other words, the analysis of change in EBIT due to a change in output quantity is described as an operating leverage. A change in fixed operating cost affects the operating leverage significantly. When a firm is highly levered, operating profit will increase at a faster rate for few increases in sales. But the operating profit of a highly levered firm would suffer more loss than the firm with nil or low operating profit when sales volume falls. So the operating leverage is double-edged sword.

It is already clear that the degree of operating leverage is related to the fixed costs of the firm. If the company has a large fixed cost more than its marginal contribution, it

should try covering all fixed costs by following some corrective action. When the company reaches its break-even point, a small change in sales causes the large percentage change in EBIT. Once the company reaches its break-even point, the fixed cost will be equal to the contribution margin. In this situation, when the company has a high degree of operating leverage, a small change in sales brings comparatively a high change in EBIT. So the analysis of operating leverage tells the financial manager about the impact of change in sales, EBIT automatic rise in and that if the change brings a small decline in sales, EBIT must be in negative position and the company may suffer great loss. As a very risky factor, a fluctuated operating leverage may damage the good reputation of the company. So it should try to operate the business activities efficiently above the break-even point in order to avoid the dangerous condition that may damage the efforts of achieving the profitability of the firm. All these information and suggestion can be gained only after the study of operating leverage.

2.2.3.1.1 Degree of Operating Leverage (DOL)

The degree of operating leverage at any single sales volume can be calculated from a ratio of marginal contribution to EBIT (Hampton: 1994). The degree of operating leverage at any single sales volume can be calculated from a ratio of operating leverage (DOL) which may be defined as the percentage change in operating profit resulting from a percentage change in sales (Pandey: 1995).

$$DOL\ \mathrm{X}\frac{\%\,change\ in\ operating\ profit}{\%\,change\ in\,sales}$$

$$or, DOL\ \mathrm{X}\frac{\zeta\,EBIT\,/\,EBIT}{\zeta\,Sales\,/\,Sales}$$

2.2.3.2 Financial Leverage

Financial leverage measures the responsiveness of EPS to change in EBIT (Chandra: 1960). The use of fixed charge source capital along with the owner's equity in the capital structure is described as a financial leverage. There is the high probability of

financial leverage when debt capital is collected in more amounts then the equity for an investment purpose. The capital with fixed interest charges is called debt and the payment of interest as well as principal on debt is an obligation of the firm that must be paid before any remaining profit after taxes is available for shareholders (Weston & Copland: 1990). As rate of equity dividend is not fixed and depends on the dividend policy of the firm, the higher use of debt capital indicates the low profit for the shareholders. From the measurement of the degree of financial leverage, we can analyze the debt capital position in the firm's capital structure. If the financial leverage is more then 1, it indicates that the company is using debt in its capital structure. The ratio should not be less then 1 even if the company is not using debt capital as investment. The ratio must be equal to 1 when the firm uses only equity capital for investment purpose.

Financial leverage is the potential use of fixed financial cost to magnify the changes in earnings before interest and taxes (EBIT) on earning per share (EPS) (Gitman: 1988). As we know that financial leverage exists when a company uses a debt capital in its capital structure and it results from the presence of fixed financial costs in the firm's income stream.

Normally there are two types of fixes financial cost in the firms income statement. Both charges must be payable unless the amount of EBIT is not available to them. So, sometime the debt capital may be the most risky from of capital for investment. But being a tax deducting capital source, debt is the major source of capital investment. However it should be used in proportion to which the company will be in the condition of high profitability. In that situation, the main problem is about the proportion to which the company should use the debt capital to earn maximum profit. The main solution to the problem is calculating the financial leverage. Financial leverage is the best way to analyze the appropriate rate of debt capital with which, the company can earn high profit then the cost of capital.

Financial leverage shows up as interest expenses causing additional variability in net income over and above the variability in net income that reflects financial risk

(Weston & Brigham: 1982). When the company wants to expand its capacity, it needs more money to invest in fixed capital. The need of large investment can be fulfilled by equity and debt. When the cost of debt is less then the company may be profitable with debt capital investment. In this way, the profitability of company, by using debt capital can be measured only with the help of financial leverage.

2.2.3.2.1 Degree of Financial Leverage (DFL)

The degree of financial leverage (DFL) is the numerical measure of the firm's leverage (Gitman: 1988). When the economic condition is good and the firm's EBIT is increasing, its EPS increases faster with more debt in the capital structure. The degree of financial leverage is defined as the percentage change in EPS due to a given percentage change in EBIT.

$$DFL\ \mathrm{X}\frac{\%change\,in\,EPS}{\%\,change\,inEBIT}$$

$$or, DFL\ \mathrm{X}\frac{\zeta EPS / EPS}{\zeta EBIT / EBIT}$$

2.2.3.3 Combined Leverage

The combined leverage is the potential use of fixed costs both operating and financial to magnify the effort of change in sales on the firms earning per share (EPS) (Gitman: 1988). The effort on earning per share due to total cost used by firm is described as a combined leverage. The combined leverage also called total leverage, representing the combination of operating and financial leverage. Measure the relationship between Q and EPS. Through the study of the combined leverage, we can analyze the effort of operating and financial leverage on the firms risk by using framework to develop individual concept of leverage. Due to inclusion of all types of fixed costs, this leverage can be viewed as the total impact of the fixed cost in firms operating and financial structure, combined leverage is used to compare charge in revenue with changes in EBT and also change in net income (Hampton: 1994). When the company has high level of operating and financial leverage, even a small change in sales volume will have dramatic effort on EPS. The operating and financial leverage together is main cause of wide fluctuation in EPS for a given change in sales volume.

But swing in EPS will be more pronounced if the company also used high amount of operating and financial leverage (Pandey: 1995).

2.2.3.3.1 Degree of Combined Leverage (DCL)

The combined leverage measures the relationship between percentage change in EPS and percentage change in sales. Calculating the effect of total leverage on EPS associated with a given change in sales is described as a combined leverage. The degree of combined leverage is defined as a percentage change in EPS due to given percentage change in sales.

$$DCL = \frac{\%\,change\,in\,EBIT}{\%\,change\,in\,sales} \times \frac{\%\,change\,in\,EPS}{\%\,change\,EBIT}$$

$$= \frac{\%\,change\,in\,EPS}{\%\,change\,in\,sales}$$

2.3 Commercial Bank Concept

Commercial banks are those financial institution and giving loans against securities. They provide working capital needs or trade, industry and even to agriculture sectors. Moreover commercial banks also provide technical and administrative assistance to Industries trades and business enterprises.

The present structure of financial institutions is based on the foundation laid by commercial banks. The commercial banks command the highest share of national resources which must be utilized for rapid economic development of the country. Realizing the importance of commercial bank, Dr. Pant has remarked," indeed no institution has a greater or closer interest in well established, expanding and successful Industry and Agriculture than a commercial bank (Pant: 1971).

Under the Commercial Bank Act 1947, the commercial banks are those banks, which provide sort term and long-term dents whenever necessary for trade and commerce. They accept deposits from the public and grant loans in different form, purchase and discount the bill for exchange, promissory notes exchange foreign currency.

A commercial bank is one, which exchange money, deposits money accepts deposits, grants loan and performs commercial banking functions and which is not a bank meant for cooperative, agriculture, and industry of for such specific purpose (NCB Act: 1974 B.S)

Reviewing the legislation behind commercial banks, we have commercial bank Act 2031 of Nepal which it states," A Commercial Bank is one which exchanges money, deposits money, accepts deposits, grants loans and perform commercial banking function and is not a bank meant for co-operating agriculture, industries or specific purpose. It further points out; Commercial Banks provided short term debts necessary for trade and commerce. They take deposits from the public and grant loans in different forms. They purchase and discount bills of exchange, promissory note and exchange foreign currency. They discharge various functions on behalf of their customers provided that they are paid for their services," (Commercial Bank Act 2031 B.S).

The American Institute of Banking has laid down the four major functions of the commercial bank such as receiving and handling payments for its clients, making loan investments and creating money by extension of credit (AIOB: 1972).

Meanwhile, under the free enterprises system like USA, the interest of the nation as well as that of individual stock holders are supposed to be best served by vigorously profit seeking. But profit is a sole objective of an enterprise and it should not be evaluated just on the basis of the profit earned. Neither the bank nor the community will be best served if the banker unreasonably sacrifices safety is fund or liquidity of his bank is an effort to increase income (AIOB: 1972).

Commercial banks are the institution that accepts deposits from the public and in turn advances loans by creating credit (Jhingam.M.L: 1989).

Commercial banks are organized as a joint stock company system, primarily for the purpose of earning profit. They can be either of the branch banking types us we see in

most of countries, with a large network branches in Nepal or of unit banking type as we see in the united states where a banks operations are contained to a single office or to a few branches with in a strictly limited area(Shekhar and Shekhar: 1999).

2.4 Joint Venture Banks

A joint Venture Banks is the Joining of forces two or more enterprise for the purpose of carrying out specific operations (industrial or commercial investment, production or trade) (Gupta: 1984).

The JVBs are operationally more efficient than the local commercial bank. He admit that this is the indication of enhanced banking capabilities supported by the modern banking method,' whereas local commercial banks have been burdened by the government policy of rural branching and financing PEs having no reimbursement capacity. He further explores that local commercial banks have number of loopholes like absence of modern global balance sheet, absence of precise classification of loans and observe of proper development of computer networks. Moreover, local commercial banks have to face various problems from Socio-economic political system on one hand spectrum and that of issues and challenges from JVBs commanding significant banking business on other spectrum. (Shrestha, 1985)

Therefore, the major objectives are to join economic forces to achieve some result, which each of the patterns could not achieve separately. For Joint Venture, there should be least two partners. A prerequisite for joint venture is that is should establish a favorable investment climate. In Nepal, three of the dramatic reforms were carried out in 1980s. The measures were allowing the foreign banks to operate as a joint Venture, lifting of central on interest rate and introduction of the action of government's securities (K.C: 2048).

NG's deliberate of following foreign JVBs to operate in Nepal is basically targeted to encourage to run local traditionally commercial banks to enhance their bankable capacity thought competition, efficiency, modernization, mechanization via computerization and prompt customer service (Shrestha: 1990).

“Commercial Banks Comparative Performance Evaluation,” concludes that JVBs are new, operationally more efficient having superior performance while comparing with local banks, better performance of JVBs in due to their sophisticated technology, modern banking methods and skill. Their better performance is also due to the government branching policy in rural areas and financing PEs local banks are efficient and expertise in rural sector, but having number of deficiencies. So, local banks have to face growing constraints of socio-economic of JVBs commanding significant banking business on other spectrum. (Shrestha: 1990).

Made an attempt to insight some of the important indicators, which have contributed to the efficiency and performance of joint venture banks in the field of commercial banks. He has remarked that the establishment of JVBs, a decade ago, has brought the modern banking era in Nepal i.e. computerization, hypothecation, consortium finance and modern fee-based activities into the economy. (Bista, 1992)

2.5 Review of Related Studies

Many studies have been conducted upon the capital structure op Nepalese corporations. In order to assist this research work, some of the relevant studies have been stated below.

2.5.1 Review of Research work & Journal

Shrestha (1990) in his article *“ Capital Adequacy of Bank"* The Nepalese context has thrown precaution over to the capital base that it should neither be too much leading to inefficient allocation of scarce resources nor so weak as to expose to extreme risk while dealing highly risky transactions to maintain strong capital base. He accept the facts that the operations of banks and the degree of risk associated with them are subject to change country wise, bank wise and time period wise. Therefore the study entirely suggests to present standard capital adequacy ratios for each individual bank keeping in mind various relevant factors.

Jackson, 1995 *"Study on commercial bank"* regulation, structure, and performance with reference to empirical analysis using data covering 1644 banks over the period of 1989-1991. Relatively "desirable" banking performance is associated with several traits, including bank asset size, non-bank competition, low cash holding, low labor cost, state nonmember banks status, multi- bank holding company legislation, national bank status, low time deposit and low equity capitalization. Demand levels and temporal variations also significantly affect banking. Moreover, some variables favorably associated with one performance characteristic may tend to be adversely related to another. The study thus suggests that traits associated with freedom to completed and efficient bank management rather than ones associated with limits on financial competition have generally desirable effects on the performance of the banking industry.

Shrestha (2006) has carried out a study under the topic fo *"interrelationship of capital structure"* with various important variable such as earning per share(EPS), dividend per share (DPS) and net worth of the joint venture banks and provide suggestions to overcomes various issues and gaps. The study has used financial tools such as ratio analysis, EBIT-EPS analysis, and overall capitalization rate equity capitalization rate. Total value calculation and statistical tools such as Karl Pearson's correlated and probable error. The study concluded that all the joint venture banks are using high percentage of total debt in raising the assets and all the banks are able to pay the interest. The study suggested that the bank must control total deposit and the bank must control investment, the bank needs to reduce its expenses and control fluctuations in the earnings per share to improve its market price per share.

Karki (2008) has carried out a study on "*capital structure and profitability*" a comparative case study between the Nepal Indosuez bank ltd (now Nepal Investment Bank Ltd) and then Nepal Grindlay Bank Ltd (now Standard Chartered Bank Ltd)". The capital structures of both banks are highly levered, so it is difficult for them to pay interest and principal that may ultimately lead them to liquidity or for them to pay interest and principal that may ultimately dead them to liquidity or bankruptcy. There is no significant relationship between debt and equity ratio in terms of fixed deposits

to net worth and overall capitalization rates of the banks. The ROE fluctuation is found to be influenced by the dividend payout ratio and interest margin in NIB Ltd. Both banks vary in the case of total assets, number of bank branches and volume of transactions. Both the banks are efficient and well established and doing well. He has suggested that NIB Ltd should expand assets and branches, which may ultimately affect the banks performance and increase the profitability more than ever.

2.5.2 Review of Unpublished dissertation

Koirala (2006) in his Study *"A Comparative Evaluation of Capital Structure between Dabur Nepal Pvt Ltd (DNL) and Nepal Lever Ltd (NLL)"*.

His Main Objectives are as follows:

- To analyze the financial ratio of Dabur Nepal Pvt Ltd (DNL) and Nepal Lever Ltd (NLL .
- To evaluated the impact and analyze relationship between different ratio.
- To give a suggestion and recommendation for the selected commercial banks.

His Research Methodologies are as follows:

The research, data are analyzed by using different types of tools. For this study following statistical tools Arithmetic mean, Standard Deviation, Correlation Coefficient, Probable Error and Regression Analysis and financial tools Earnings per Share, Price Earnings Ratio, Return on Total Assets and Return on Share are also use.

His Major Findings are as follows:

- Dabur Nepal Pvt Ltd is highly levered firm and NLL is unlevered since four years. The debt equity ratio in terms of long term debt and shareholders' equity of DNL is higher than NLL.
- The capital structure of DNL is debt based whereas NLL cut off long term debt financing. So, he has suggested both the companies to change their debt

by changing long term debt to share capital and in the case of NLL, to consider long term debt while financing.

- Both the companies are suggested to maintain appropriate debt ratio, which minimizes the cost and maximizes the return of the firm. He further finds that the DNL is bearing high amount of interest expenses due to higher debt equity ratio and other operating ewpenses. Similarly, NLL is also bearing high interest expenses even it does not use long term debt in its capital structure.
- As a result, the return of the firm is not satisfactory. So, he has recommended both the companies to minimize interest expenses by using cheaper debt as well as other operating expenses to the return of the firm.

Subedy Study (2008), in his study " *A study on Capital Structure on Nabil Bank* Ltd" In this studies specific objective were analyzed the capital of Nabil Bank ltd to show financial position examine the different profitability ratio and show overall trend analysis.

His Main Objectives are as follows:

- To examine the position of capital Structure on Nabil Bank Ltd.
- To analyze risk return of Nabil Bank Ltd..
- To assets than turnover of capital structure and analyze.

His Research Methodologies are as follows:

In his thesis the data are analyzed by using different types of tools. As per topic requirements, emphasis is given on statistical tools rather than financial tools. So for this study following statistical tools and financial tools are use. such as Arithmetic means, Standard Deviation and Correlation Coefficient.

His Major Findings are as follows:

- This study used various tools such as graph, %, diagram, mean, standard deviation and covariance. He found and concluded that total liabilities and capital item show the overall situation of bank fallen down.

- Deposit is the biggest amount in the balance sheet, fix deposited is taken as long term debt in banking business. It is key determinant factor to capital structure debt and equity are properly mixed good capital structure in found.
- Price earnings ratio reflected the price currently reported EPS. It measures investors expectation and the market appraised of the performance of a firm. This study suggests, deposit is the measure concern to the capital structure, it effects on investment policy.
- The more the fix deposit increase the more long term investment become possible is become more successful and competent as per its capacity to collect the fix deposit. So fix deposit should collected as more as possible.

Shrestha, (2009) has done a research on *"Working capital management of selected manufacturing companies in Nepal"* .The study is covered only the five years data of 2002 AD to 2006 A.D. It study is based on only six manufacturing companies, like unlevel ltd bottlers Nepal, Dabur Nepal, Dairy development corporation, Nepal tea development corporation and Nepal drugs.

His Main Objectives are as follows:

- To examine the position of working capital is selected companies.
- To analyze risk return of working capital position.
- To assets than turnover of working capital and analyze.

His Research Methodologies are as follows:

In his thesis the data are analyzed by using different types of tools. As per topic requirements, emphasis is given on statistical tools rather than financial tools. So for this study following statistical tools and financial tools are use such as Debt to Equity ratio, Debt Ratio Interest Coverage Ratio, Earnings per Share, Price Earnings Ratio, Return on Total Assets, Return on Share Holder's Fund or Equity, Arithmetic means, Standard Deviation and Correlation Coefficient.

His Major Findings are as follows:

- Is the composition of working capital in manufacturing companies is appropriate.

- The overall selected manufacturing companies are positive on other correlation coefficients between various components of working capitals with moderate sales.
- Those liquidity and profitability position of all selected companies is satisfactory.

Shrestha, Sagun (2010) has done a research on *"A study on working capital management of Nepal lube oil limited."*

His Main Objectives are as follows:

- To examine the working capital position of NLOL.
- To examine the structure of working capital of NLOL
- To assess the financial liquidity position of the NLOL.

His Research Methodologies are as follows:

Research methodology is the focal part of the study. Ranges of financial and statistical tools are used to analyze the collected data and to achieve the objectives of the study. The analysis of the data will be done according to pattern of data available. Because of limited time and resources, simple analytical statistical tools such as graph, percentage, coefficient of correlation, regression analysis and the technique of least square are adopted in this study. Financial tools such as ratio analysis and trend analysis have also been used for financial analysis.

His Major Findings are as follows:

- The company had lesser participation of fixed assets in total assets. cash holds of the company was relatively a small proportion total assets and inventory held largest portion indicating un sounded inventory management.
- The company has insufficient in collecting receivable

Adhikari (2011) in his study entitled, *"Evaluating the financial performance of Nepal Bank Limited"* has calculated and analyzed the different ratios by observing

figures of balance sheets of Nepal Bank Limited for the period FY 2004/05 to 2009/10. He remarked that the bank is not found to have been able to utilize its fund effectively and efficiently for the development of the economy.

His Main Objectives are as follows:

- The collection of deposit and loan investment done by the commercial banks also to sustain themselves in the environment of competitions.
- The deposit funds in productive sectors and to grants more priority to the local manpower.

His Research Methodologies are as follows:

The research is analyzed by using different types of tools. For this study following statistical tools and financial tools are use such as Loans and advances to Total Risk, Weighted Assets Ratio, Non-performing Loan to Total Loans and advances Ratio, Loan Loss Provision to Non Performing, Loan Ratio Loan Loss Provision to Total Loans and Advances, Arithmetic mean, standard Deviation, Correlation Coefficient, Probable Error, Regression Analysis and Test of Hypothesis.

His Major findings are as follows:

- Economic development of a country cannot be imagined without the development of commerce and industry
- He has focused on utilization and mobilization of funds and resources of Nepal Bank Ltd.

Baidya (2012) in his Study *"Capital Structure Management of manufacturing companies listed in NEPSE"*.

His Main Objectives are as follows:

- To analyze, evaluate and interpret their capital structure employed by the selected organization.
- To examine the capital structure Management of manufacturing companies listed in NEPSE".

His Research Methodologies are as follows:

The research is analyzed by using different types of tools. For this study following statistical tools and financial tools are use such as Loans and advances to Total Risk, Weighted Assets Ratio, Non-performing Loan to Total Loans and advances Ratio, Loan Loss Provision to Non Performing, Loan Ratio Loan Loss Provision to Total Loans and Advances, Arithmetic mean, standard Deviation, Correlation Coefficient, Probable Error, Regression Analysis and Test of Hypothesis.

His Major findings are as follows:

- Economic development of a country cannot be imagined without the development of commerce and industry
- He has focused on utilization and mobilization of funds and resources of Nepal Bank Ltd.
- The average ratio between shareholder equity and total assets for Arun Vanaspati Udyog and Jyoti Spinning nill is negative. It shows the negative value of shareholder equity. In this study EPS, P/E ratio and Book value per share of Nepal Lever Limited is higher than other companies.
- The higher price ratio indicates the greater confidence of investors with its future. At last he suggests to be a sage mode against liquidation, debt amount is very huge and that is need to reduce the debt capital.

2.6 Research Gap

This study is different in the sense that the selected companies are totally different from the previous studies. The study totally revolves around the banking and the named of selected commercial banks. This study done considering the data of five year (2064/065 to 2068/069) of all the HBL and SBI banks. This study is also observed defect in capital structure. As for, example in many enterprises their debt capital was comparatively high their equity, progress of time, there to bring down the amount of beta capital. Despite the companies performs have not better signs of recovery the defective capital structure shown in the studies induced the research for the further study on the subject. Various studies have been conducted on capital structure management of various study owned and Public Limited Companies of

Nepal. Most of the study individual that a sound principle of capital structure, cost of capital and its management have not been followed thoroughly by the enterprises in Nepal.The most of the studies has been considered many more objectives which made their study more complicated but in this research report only four objectives are taken into study. The researcher has tried he is best to fill up the gap created by previous studies. Even there are not enough study conducted on the topic of relationship between capital structure and cost of capital. Therefore, this study is also devoted to test the relationship and affect between structure and cost of capital in Nepalese enterprises.

CHAPTER-III
RESEARCH METHODOLOGY

3.1 Introduction

In order to fulfill the aim of study the study, needs the suitable research methodology. 'Research Methodology' in composed of two words 'Research and Methodology'.

Research is systematic and organized effort to investigate a specific problem that needs a solution (Sekaran: 1992). The process of investigation involves a series of well thought out activities of gathering, recording, analyzing and interpreting the data with the purpose of finding solution of the problem (Wolff and Pant: 1999).

In other hand, Methodology is the research method used to test the hypothesis for study purpose. Research methodology is the way to solve systematically about the problem. For this proposes the research is exploratory as well as analytical in order to accomplish the objective of this study. The research methodology has been designed on the basis of secondary data by using useful financial and statistical tools (Kothari: 1989).

3.2 Research Design

A research design is purely and simply the frame work or plan for a study that guides the collection and analysis of the data (Goel: 1989). The research design known as the plan, structure and strategy of investigation conceived so as to obtain answer to raise questions and to control variance. Analysis of this study is based on certain research design keeping on the objective of the study in mind. Researcher design means definite procedure and technique, which guide in studying profound ways for research ability.

For the analysis of the capital structure of Joint Venture Banks, analytical as well as descriptive designs are applied to achieve the objective of the research.

Descriptive research is used to compare and to asses the opinions, behaviors of the firms and to describe the situation and events occurring during the study period where analytical research is used to find out the result employing financial as well as statistical tools.

3.3 Population and Sample

3.3.1 Population

There are 32 Commercial Banks in Nepal but out of them only 25 banks are listed. Out of them 9 Commercial Banks are established as Joint Venture in Nepal. So, all the Joint Venture Banks operating in Nepal are considered as the population for the research. Thus, following banks are the population of the study:

1. Nepal Arab Bank Ltd. (Nabil Bank Ltd)
2. Nepal Investment Bank Ltd.
3. Himalayan Bank Ltd.
4. Nepal SBI Bank Ltd.
5. Standard Chartered Bank Nepal Ltd.
6. Nepal Bangladesh Bank Ltd.
7. Everest Bank Ltd.
8. Bank of Kathmandu Ltd.
9. Nepal Credit and Commercial Bank Ltd

3.3.2 Sample

The sample used in this research is purposive in nature. Thus, two Joint Venture Banks cover 22.22% of the population as sample (2/9x100). They are:

- Himalayan Bank Ltd.
- Nepal SBI Bank Ltd.

3.4 Nature and Source of Data

This study, however, based on the secondary data. This secondary data are extensively used in this study. The raw secondary data are modified to some extent for the study purpose. These secondary data collected from the different published

sources. In additional to the published data, some information are collected from the visit of the concerned banks, conversation with the employees, and the observation of concerned banks, telephonic inquirers, personal visit, inquires by e-mail etc. the major sources of secondary data are: Brochure of concerned banks, thesis, documents, various related journal in management, published reports from Security Board, economic surveys and websites of concerned banks. The basic sources of data used are as follows:

- Annual reports
- Published materials from concerned JVBs
- Financial statements of concerned JVBs
- Related books and journals

3.5 Method of Data Analysis

As mentioned earlier, this study is confined to the Capital Structure Analysis of Joint Venture Banks of Nepal. To reach the objectives, the collected data are computed and analyzed using financial and statistical tools. Mainly financial methods are applied for the purpose of this study. Appropriate statistical tools are also used.

3.5.1 Financial Tools

The measuring instrument, which can be used in financial analysis, is known as financial tool. It helps to calculate the relationship between two financial variables on ratio and percentage basis. Analysis of leverage cannot be complete without financial analysis. Due to this reason, this study highly depends upon financial tools like as degree of leverage, ratio analysis and other.

Ratio Analysis

This tool of analysis is broadly used in the every financial analysis. Ratio analysis helps to analyze the qualitative and quantitative result on the organization's financial position and performance too. It is the analytical tool or technique which helps to know the financial structure and capital structure as well. In other word it is the one of the main financial indicator of the any organization. Financial ratio reflects the

relationship between two accounting figures, expressed mathematically. Ratio analysis is defined as the systematic use of ratio to interpret the financial statement so that the strengths and weakness of a firm as well as its historical performance and current financial condition can be determined.

According to (khan and Jain: 1990)," Ratio refers to the numerical or quantitative relationship between two items or variables. A ratio is calculated by dividing one item of the relationship with other."

The primary purpose of ratio analysis is to point out areas of further investigation. Further more, ratio analysis stands for the process of determining and presenting the relationship of items and groups of items in the financial statement.

The study considers only those ratios which are related to the capital structure.

3.5.1.1 Leverage Ratio

Mainly the term leverage concerned with the debt fund used in the capital structure. Leverage ratios are associated with the long terms financing sources and assets.

The ratio of leverage measure the financial proportion owners compared with the financial proportion of external parties. Leverage ratios also measures risk of debt financing through computation the fix charge coverage. Ratios regarding leverage used in the study are defined below properly.

a. Financial Leverage Ratio

This ratio measures the relation between the total debt and total assets of the firm. It simply reflects the proportion of long term debt used to finance the total assets of the firm. The higher ratio indicates the unfavorable situation and vice-versa. This ratio can be calculated by using the following formula:

$$\text{Debt to Total Assets Ratio} = \text{Total Debt} / \text{total Assets}$$

b. Debt -Equity Ratio

This ratio indicates the relative claims of borrower and owners against the firm's assets. In the words of (Gitman), "The debt to equity ratio indicates the relationship between the long- term fund provide by creditors and those provided by the firm's owners."

This ratio is calculated by the following formula:

Debt Equity Ratio = Long- Term Debt/ Shareholder's Equity

Or

Total debt/ Shareholder's Equity

c. Interest Coverage ratio

This ratio shows the relation between the interest and earning before interest and taxes. The interest coverage ratio also known as the time-interest-earned ratio is one of the most conventional coverage ratio used to test the firm's debt-servicing capacity. The ratio show the number of times the interest charges are covered by funds that are ordinarily available for their payment. The interest coverage ratio is thus computed as:

Interest Coverage Ratio = EBIT / Interest

Higher ratio indicates the strong debt service capacity of the company and vice –versa. Too high ratio refers the unused debt capacity of the company.

d. The Degree of Financial Leverage (DFL)

Financial leverage includes the debt, preference share and equity shares in the capital structure. The degree of financial leverage is the relationship between percentage changes in the earning per share and percentage change in the earning before interest and taxes. In other way the degree of financial leverage measure a proportionate change in EBT as a change in EBIT. The degree of financial leverage can be calculated as:

Degree of Financial Leverage = % Change in EPS / %Change in EBIT

Or

Degree of Financial Leverage = EBIT / EBIT-I (EBT)

3.5.1.2 Profitability Ratio

Profitability ratios help to examine the performance of the firm on the basis of its competencies to utilize the available resources for increasing the value of the firm. The major profitability ratios used in the study are:

a. Return on Total Assets (ROA)

A ratio between net profits to assets is known as return on asset. But generally return on asset can express the relationship between net profit after taxes and total assets. Return on total assets can be formulated as:

ROA = Net Profit After Tax/Total Assets

Higher ratio implies that the available source and tools are employed efficiently.

b. Return on Total Deposit Ratio

Major financial source of bank is deposit collection and deposits are mobilized for insurance and advance and in other investment to earn profit. This return helps to find the profit earned using total deposits.

Return on total deposits ratio can be formulated as below:

Return on Total Deposit = Net Income / Total Deposit

c. Return on Shareholders Equity (ROE)

Return shareholders equity is calculated to see the profitability of owner's investment. The shareholders equity includes paid-up share capital, share premium and reserve and surplus less accumulated losses. The return on shareholders equity is net profit after taxes divided by shareholders equity. Return on shareholders equity can be formulated as below:

ROE = Net Profit After Tax/ Shareholder's Equity

Higher ratio is more efficient of management and utilization of shareholder's funds and vice versa.

3.5.1.3 Market Related Ratio

Market related ratios include EPS, DPS and Dividend- Payout Ratio which helps to obtain the firm's position in the market. This ratio indicates the firm's position and good will in the market place.

a. Earnings Per Share (EPS)

The income per share of common stock is known as earning per share. This ratio is mostly used in capital structure to known the availability of return for shareholders. The earnings per share is calculated by dividing the profit after taxes by the total number of common share outstanding.

EPS = Net Profit Available to Common Shareholder's/ Number of Share Outstanding
The increasing EPS means the increasing return for shareholders.

b. Dividends per Share (DPS)

Dividend per share is the earnings distributed to ordinary shareholder's dividend by the number of ordinary shares outstanding. Dividends per share can be formulated as:

DPS = Dividend/ Number of Share Outstanding

c. Dividend-Payout Ratio (DPR)

The dividend-payout ratio is dividend per share divided by the earning per share. It can be formulated as:

DPR = Dividend per Share/ Earning per Share

3.5.1.4 Analysis of Capital Structure

The analysis of capital structure is a concept of vital importance for this study. Here, both NI and NOI approaches are considered to analysis the capital structure of the overall capitalization.

a. Overall Capitalization Rate under NI Approach

The NI approach known as relevant theory of capital structure is already discussed in former chapter. Hence, the formulas used to compute the value of the firm and overall capitalization rate under NI approach is given;

Market value of the firm = market value of debt + market value of stock.

Or, $V=B+S$

And,

Overall Capitalization Rate = EBIT/ Value of the Firm

Or

$Ko = EBIT/ V$

b. Equity Capitalization Rate under NOI Approach

The equity is one of the sources of capital, which has its own cost and it is known as cost of equity. A large amount of equity means the higher amount of cost of equity. The equity capitalization rate under NOI approach can be calculated as:

Equity Capitalization Rate = EBT/ Market Value of Common Share

Or

$Ke = EBT/ S$

3.5.2 Statistical Tools

Besides financial tools, statistical tools are used to verify the relationships between the variables and also used to identify the differences between the variables of one bank to other. For the purpose of the study simple statistical tools are used. Mainly

financial tools and techniques have been used to show the financial condition of the selected joint venture banks. Hence, statistical tools used in the study are as follows:

3.5.2.1 Sampling

Sampling may be defined as the selection of part of an aggregate or totality on the basis of which a judgment or inference about the aggregate or totality is made (Kothari: 1994). Thus, sampling is the process of selecting samples from the population with the view of study. For the purpose of present study, random sampling technique is used to select the two JVBs. These, samples represent the whole Joint Venture Banks operation with in the country.

3.5.2.2 Tabulation

The raw data and the findings are shown in tabulated from to show the clear view and to make the comparison easier. Many variables can be shown and the same graph and comparison can be made.

3.5.2.3 Average

Average is the sum of all the observations divided by the number of observation. Average is a single value within the range of the data that is used to represent all of the values in the series. Since an average is some where within the range of the data, it is sometimes called a measure of central value. Average is calculated by the dividing the sum of the observations with number of observations.

The average can be calculated mathematically as follows:

$$\text{Average} = \sum X/n$$

3.5.2.4 Correlation Analysis

The correlation analysis refers to the techniques used in measuring the closeness of the relationship between the variables. It attempts to determine the degree of relationship between variables. There are several methods of measuring correlation. In this research, Karl Pearson's methods known as Pearson an coefficient of correlation is used. Karl Pearson's coefficient of correlation is simply denoted by the symbol 'r'. To interpret the result obtained from calculation of 'r', following general rules are applied:

If the value of r = +1, there is perfect correlation between the variables.

If the value of r = 1, there is no relationship between the variables, i.e. the variables are uncorrelated.

The closer r is to +1 or -1, the closer the relationship between the variables and the closer r is to o, the less close the relationship.

Study of the correlation helps in decision-making. In this research, the correlation between return and net worth is examined by applying the following formula:

$$r = \frac{\sum dx\, dy}{\sqrt{\sum (dx)^2}\sqrt{\sum (dy)^2}}$$

Here,

N = number of pairs of x and y observed

X = Value of loans and advance

Y = value of total deposits

r = Pearson an correlation coefficient.

3.5.2.5 Coefficient of Determination (r^2)

The coefficient of determination is a measure of the degree of linear association or correlation between two variables; it helps to indicate the percentage variations in independent variable due to the variations in dependent variables.

3.5.2.6 The Probable Error

The probable error of the coefficient of correlation helps in interpreting its value. With the help of probable error it is possible to determine the reliability of the value of the coefficient in so far as it depends on the condition of random sampling. The probable error of the coefficient of correlation is obtained as follows:

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

Here,

r = correlation coefficient.

n = number of pairs of observations.

If the value of ‘r’ is less then the probable error (P.E), there is no evidence of correlation, i.e., the value of ‘r’ is not at all significant. Then, if the value of ‘r’ is more then six times the probable error (P.E), the coefficient of correlation is practically certain, i.e., the value of ‘r’ is significant.

3.5.2.7 Coefficient of Variation

“The coefficient of variation is the measure of dispersion, comparable across distribution which is defined as the rate of the standard deviation to the mean expressed in percent (Levin & David: 1994).In this study is calculated in order to know and compare the variability of observed data between the banks; (i.e. Nepal SBI Bank & HBL).C.V. Coefficient of variation is denoted by C.V and is obtained as follows:

$$C.V. = \frac{\pm}{\overline{X}} \times 100$$

Here, ± Xstandard deviation.

$\overline{X}$ = Actual mean or average.

CHAPTER-IV

PRESENTATION AND ANALYSIS OF DATA

4.1 Introduction

This chapter named, as presentation and analysis of data constitute the most crucial part of study. It deals with the presentation and analysis of data in order to accomplish the objectives as started earlier. Presentation of data simply means tabulating the collected data and information. So that the comparisons can be accurately conducted and arrive at the authentic conclusions. For the purpose of data analysis, research methodology as explained in Chapter 3 has been followed. All the efforts have been undertaken so that the meaningful picture of operation could be provided to JVBs under study.

For facilitating meaningful analysis, both descriptive as well as statistical tools have been used. Besides, all the findings derived through computation have been presented in a table to depict the view of real picture of things going on in each JVBs. It is hoped that the results obtained could be of immense help to each JVB to design further path to have successful figures than the previous days.

4.2 Leverage Ratio

4.2.1 Analysis of Financial Leverage Ratio

Financial leverage shows the portion of debt in the firm's capital structure used to finance the total assets of the organization. The use of debt capital is favorable at the booming period as it helps to generate more income and makes worst in case any firm is working under adverse condition.

Too high & too little both the condition is unfavorable to the organization as too high ratio indicates high risk and too little shows the condition of becoming more risk averse than needed. Thus, a firm should maintain the right portion of debt employment in capital structure.

Table: 4.1

Financial Leverage

(Ratio in %)

FY	**HBL**	**SBI**
2064/065	94.66	92.58
2065/066	94.46	93.34
2066/067	94.00	92.46
2067/068	93.60	91.63
2068/069	93.05	91.77
Average	**93.95**	**92.36**
S.D	0.65	0.69
C.V	0.69	0.75

Source: Appendix I &II

The computation from the Table 4.1 of financial leverage in terms of total debt to total assets reveals that the two JVBs are highly leveraged on five years time horizon. It means the assets of selected banks have been financed more by funds collected from creditors.

The JVBs under study operate with riskier capital structure during the study period. Himalayan Bank has the most stable trend among two banks over the study period. On an average, total debt to total assets of 93.95% which indicates that 93.95% of total assets are financed by the use of debt fund. It has only 6.05% of total assets financed by ownership capital. The ranges of ratios are between 93.05% to 94.66%. The highest ratio of HBL is 94.66% in FY 2064/065.

SBI Bank shows the fluctuating trend of debt to total assets ratio during the study period. It has an average of 92.36% of debt employment and remaining 7.64% is financed by equity capital to obtain the total assets of the bank. SBI Bank has the lowest average ratio i.e. 92.36% among two banks. It has the debt ratio of 91.63% at minimum and highest debt ratio of 93.34%. The ratio of JVBs is in slightly fluctuating trend. The standard deviation of HBL is 0.65 and SBI Bank is 0.69. The standard deviation of HBL is 0.65,

which is slightly lower than SBI Bank. The C.V. shows that the ratio of HBL is 0.69% which is lowest in comparison to SBI Bank.

4.2.2 Analysis of Debt-Equity Ratio

The debt-equity ratio helps to derive the long term liquidity of the firm that determines its capacity to meet long- term obligations. It is great concern to the current as well as perspective invertors to find whether the firm is employing relatively higher debt portion in the capital structure.

This ratio indicates the portion of debt and equity in the firm's long term financing. The high ratio indicates unfavorable situation signaling greater risk to equity shareholders. For the computation of debt to equity ratio, total debt is divided by shareholder's equity. Total debt comprises current accounts, saving accounts, calls and short deposits, over-draft, fixed deposits, loan and advance and borrowing from other banks. Whereas shareholder's equity or net worth includes paid- up capital, reserve & surplus. The D/E ratio of two selected JVBs during the study period was as tabulated below:

Table 4.2

Debt-Equity Ratio

(Ratio in times)

FY	**HBL**	**SBI**
2064/065	17.74	12.47
2065/066	17.06	14.01
2066/067	15.68	12.27
2067/068	14.62	10.95
2068/069	13.40	11.15
Average	**15.70**	**12.17**
S.D	1.77	1.23
C.V	11.27	10.11

Source: Appendix I & II

Himalayan Bank has the highest D/E ratio in comparison to SBI Bank. The debt- equity ratio has ranged between 13.40 to 17.74 times. On an average, it has 15.70 times of debt-

equity ratio which is the highest among other bank. This indicates that Himalayan Bank utilizes highest debt employment in its capital structure. On an average, the debt employment is 16 times higher than equity employment. It has comparatively high risk than SBI Bank. The decreasing trend of D/E ratio implies that HBL Bank is adopting highly conservative strategy.

The ratio of SBI Bank shows the lowest ratio in comparison to HBL Bank. It also shows the utilization of debt and equity in its capital structure follows the fluctuating trend. On an average, SBI Bank has the lowest of 12.17 times that means debt employment is 12 times greater than equity employment.

The ratio of JVBs shows the fluctuating trend. The standard deviation of SBI is 1.23, which is lowest than HBL. It reveals that JVBs banks are highly leveraged. Thus, it can be concluded that all the banks have lower rate of shareholder's equity over the claims of creditors.

4.2.3 Analysis of Interest Coverage Ratio

The interest coverage ratio also named as the times-interest earned ratio is used to test the firm's debt servicing capacity. Interest coverage ratio reflects the firm's ability to pay interest out of earnings. This ratio shows the numbers of times the interest charge are covered by funds that are ordinarily available for their payment.

Too high or too low ratio as well is unfavorable to the banks. Too high ratio implies unused debt capacity or a firm's conservativeness in using debt to its best advantage. Whereas, low ratio imply a danger signal that the firm is using excessive debt and does not have the ability to offer assured payment of interest to the creditors.

Table: 4.3

Interest Coverage Ratio

(Ratio in times)

FY	HBL	SBI
2064/065	1.86	1,43
2065/066	1.93	1.48
2066/067	2.04	1.60

2067/068	1.96	1.92
2068/069	2.13	1.84
Average	**1.98**	**1.65**
S.D	0.10	0.22
C.V	5.05	13.33

Source: Appendix I & II

Table 4.3 has been constructed to show the effect of interest coverage ratio of two selected banks over five year's period. It is noticeable that SBI Bank has the lowest interest coverage ratio to 1.65 times which shows that its debt servicing capacity is low in comparison to HBL Bank. The analysis of table 4.3 shows the fluctuating interest coverage ratio on the part of HBL Bank.

SBI Bank showed the increasing interest coverage ratio which ranged between 1.43 to 1.92 times. The interest coverage ratio of SBI Bank was 1.43 times in FY 2064/065 which was the lowest ratio over the study period. The ratio was increasing trend. The average ratio is 1.65 times of SBI bank.

The computed interest coverage ratio of these banks in above table shows how many times the interest charges are cover by funds that the ordinary available to pay interest charges. The ratio of these joint ventures banks in fluctuating trend. The standard deviation of HBL is 1.10, SBL and SBI Bank is 0.22. The standard deviation of HBL is 0.10, which is lowest than SBI Bank. The highest C.V. is 13.33 for SBI Bank and the lowest is 5.05 for HBL.

4.2.4 Analysis of Degree of Financial Leverage.

It is a already started that financial leverage referred to the use of interest bearing debt and preferred stock along the debt capital. The degree of financial leverage indicates the degree of financial risk, i.e., higher the value of degree of financial leverage indicates higher the degree of financial risk and vice versa. The degree of financial leverage generally calculated dividing EBIT by EBT.

The calculation of the degree of financial leverage of employ selected JVBs has been tabulated in table 4.4.

Table: 4.4

Degree of Financial Leverage

(Ratio in times)

FY	**HBL**	**SBI**
2064/065	2.17	3.34
2065/066	2.08	3.06
2066/067	1.96	2.68
2067/068	2.04	2.09
2068/069	1.87	2.19
Average	**2.02**	**2.67**
S.D	0.48	1.39
C.V	23.76	52.06

Source: Appendix1& II

HBL Bank has also fluctuating trend of degree of financial leverage over the study period. The DFL of HBL Bank in FY 2064/065constitutes the highest DFL of 2.17 times. It implies that if the bank is able to increase EBIT by 100%, then it would lead to 217% increase in EPS and vice versa. In case of this bank, 2.17 times of DFL represents the highest figure of DFL, which has lowered in subsequent years. HBL Bank has the lowest ratio of 2.02 times DFL on an average, which reflects the banks has lower degree of financial risk.

The DFL of SBI Bank shows the decreasing trend. SBI Bank has the highest degree of leverage of 3.34 times in the FY 2064/065, which has lowered in subsequent years.

On an average its DFL is 2.67 times. SBI Bank has more financial risk as it has the highest DFL. The highest C.V is 52.06 for SBI Bank.

4.3 Profitability Ratios

4.3.1 Analysis of Return on Total Assets

Return on total assets ratio measures firm's efficiency to use the available assets to derive satisfactory return out of them. The ratio explains net income for each unit of assets utilized. It shows the contribution of assets to generate income. Every firm should make use of available assets in the most productive way so that they are converted into the earning of the firm. Higher ratio indicates efficiency in utilizing its overall resource and vice-versa. It is the major tool to judge the operating efficiency of a firm. The return on assets ratio of selected banks is presented as below.

Table: 4.5

Return on Total Assets

(Ratio in %)

FY	**HBL**	**SBI**
2064/065	1.06	0.72
2065/066	1.11	0.55
2066/067	1.55	0.90
2067/068	1.47	1.83
2068/069	1.76	1.44
Average	**1.39**	**1.09**
S.D	0.30	0.53
C.V	21.58	48.62

Source: Appendix I & II

HBL has the return on total assets ratio in the FY 2064/ 065 to 2068/069. It has highest in the FY 2068/069, which implies that it has utilized the available assets in most efficient way in the FY 2068/069. Sometimes, it shows very efficient utilization of its assets as in the FY 2068/069 with return on assets ratio of 1.76% and vice versa. The stability of returns should be maintained. Considerable fluctuations provide bad signal to the potential investors as well

as existing shareholders. On an average, it has 1.39% of return on total assets ratio which is highest among other bank under study. It also indicates that HBL Bank is consciously in utilizing its available assets to the best level to increase the satisfactory return out of it. The coefficient of variation is also less. That indicates its ability to generate stable returns by the use of available of assets.

In case of SBI bank shows the fluctuating trend over the period of study. The highest was in the FY 2067/068. The ratio indicates that SBI Bank is not providing enough attention in asset utilization. It must pay enough attention towards making figure stable by considering the right way to make correction to improve the performance.

The banks show the fluctuating return on total assets. In comparison to other bank HBL shows the highest an average of 1.39%. This reveals that HBL is more efficient to make use of its resources in income generating projects than the SBI Bank.

The C.V. of SBI Bank is highest. Which means there is more fluctuation of its ratio in comparison to HBL. Where as C.V. of HBL is lowest. It is clear that it is capable of maintaining stable return through the utilization of available assets.

4.3.2 Analysis of Return to Total Deposit Ratio

Return on total deposit ratio assists to identify the banks overall performance as well as its success in generating profit. The ratio here is calculated in order to diagnosis whether the banks are well efficient or not in mobilizing its total deposit so that corrective action could be forwarded to concerned banks. Higher ratio signifies better mobilization and utilization of deposits and vice versa.

Table: 4.6

Return on Total Deposit

(Ratio in %)

FY	HBL	SBI
2064/065	1.19	0.76
2065/066	1.24	0.89

2066/067	1.73	1.10
2067/068	1.64	2.23
2068/069	2.00	1.81
Average	**1.56**	**1.36**
S.D	0.34	0.63
C.V	21.79	46.62

Source: Appendix I & II

Table 4.6 present the amount of deposits collection of the entire sample JVBs under study. HBL shows the increasing trend of deposit collection from FY 2064/065 to the FY 2066/067. Then, there shows decrease in the collection for FY 2067/068, there shows the growth in deposit collection amounting to the highest in FY 2068/069 of 31842.79 (Rs in million). This implies that HBL has able o retain and attract the potential depositors towards its banking services. On an average, the ratio between total deposits and net profit for 5 years time period has come up to 1.5%. this indicates its efficiency make use of deposit collection in generating satisfactory return through the attempt must go on to increase the ratio.

SBI Bank has the fluctuating trend. It has increasing trend of ratio through in the FY 2064/065 and slight decrease in the FY 2068/069. In the FY 2067/068, it has recorded the highest ratio of 2.23% this means it has been able to earn more interest or has invested the deposited amount in the profitable area in that year. On an average, it has recorded return on total deposits of 1.36%. Considering C.V. of banks, SBI Bank has relatively higher C.V.in comparison to HBL.

4.3.3 Analysis of Return on Shareholder's Equity

A return on shareholder's equity is calculated to see the profitability of owner's investment. It shows how well the firm has utilized the owner's resources to generate income. This tool is very efficient to find out the efficiency of the firms to generate income to the shareholder's. The result of return on shareholder's equity is very delicate as it ensures the adequate supply of capital fund necessary for the operation, expansion and diversification. While making investment, rational shareholders

calculate the existing return on equity resulted by firm's current operation. If the ratio is high, it supplies positive signal to the investor and encourage them in investment activities and vice- versa. So, the higher ratio is favorable that indicates the firm's efficiency to satisfy the shareholders by generating considerable income to their investment. This ratio is great concern to the shareholders to make proper decision about the organization.

Table: 4.7

Return on Shareholder's Equity

(Ratio in %)

FY	**HBL**	**SBI**
2064/065	19.87	9.71
2065/066	20.00	8.33
2066/067	25.90	12.04
2067/068	22.91	22.10
2068/069	25.30	17.64
Average	**22.80**	**13.96**
S.D	2.84	5.77
C.V	12.46	41.33

Source: Appendix I & II

HBL has the highest return on equity ratio in the FY 2066/067 which means it was able to utilize the shareholder's fund in an efficient way. The return was also more stable in comparison to SBI Bank. Among all the JVBs under study it has the highest return on equity ratio of 22.80% on an average, over the study period. This indicates

its ability to deliver the highest return to its shareholders in comparison to other bank. Even the fluctuation is kept at the minimum which provide the satisfactory operating of HBL in utilizing the owner's capital in generating proper income.

Return on shareholder's equity of SBI ranges in between 8.33% to 22.10% over the study period. The ratio indicates the highest return was achieved in the FY 2067/068 which means during that year the bank has been successful in utilizing the shareholder's fund more efficiently in comparison to the remaining years. On an average, it has 13.96% of return on equity. The fluctuation can be seen in the result of computation. Such fluctuation is not preferred by the shareholder's rather they demand stable income over their investment. So, proper consideration should be made to make the returns to shareholders less volatile.

On the basis of standard deviation of SBI Bank has highest than HBL, which explain that the variability of return on shareholder's equity is quit higher than remaining bank. The S.D. of HBL is 2.84 and SBI Bank is 5.77 respectively. The higher C.V is 41.33 for SBI Bank.

4.4 Market Related Ratios

4.4.1 Analysis of Earning per Share

Earning per share simply shows the profitability of the firm on a per share basis, it does not reflect how much is paid as divided and how much is retained in the business. EPS is one of the most widely used measures of the bank's performance. It is an important index of the bank's performance and investors rely heavily on it for their investment decisions. In order to see the strength of the share in the market, EPS of selected JVBs is calculated as below:

Table: 4.8

Earning Per Share

(In Rs)

FY	HBL	SBI

2064/065	49.05	14.26
2065/066	47.91	13.29
2066/067	59.24	18.27
2067/068	60.66	39.35
2068/069	62.74	28.33
Average	**55.93**	**22.7**
S.D	6.92	11.05
C.V	12.37	48.68

Source: Appendix I & II

HBL has the highest EPS in comparison to SBI Bank under study. It maintained its net profit in better way and kept fluctuation to the limit. SBI Bank showed decreasing EPS during FY 2065/066 and again followed the increasing trend. It recorded highest of Rs62.74 in the FY2068/069. This is the result of highest net profit. On an average it has EPS of Rs55.93 for the 5 year's time period.

The EPS for SCBL is fluctuating trend. The amount is decreased in first two years but it is increased in FY 2066/067, again it decreased in FY 2067/068 and FY 2068/069. SBI Bank normally shows the decreasing trend of EPS which has come up to Rs28.33 in the FY 2068/069. On an average, it has EPS of Rs22.7 which is lowest in comparison to HBL under same industry.

Regarding standard deviation, EPS of SBI Bank has higher than HBL, which is 11.05. The standard deviation for HBL is 6.92 and SBI Bank is 11.05 respectively. The highest C.V is 48.68 for SBI Bank.

4.4.2 Analysis of Dividend per Share

Dividend is the income paid to shareholders for their investment in companies share. Companies generally prefer to pay cash dividends. The amount of dividend is the part of earnings which is distributed among the shareholders after retaining required percentage of earning for their expansion and growth activities. The amount of dividend that a company pays has considerable importance in case of market

phenomenon. The stable dividend policy reveals the companies stability of income and usually investors prefer the stable dividend policy. Generally the existing as well as potential shareholders are interested in dividend per share than earning per share.

Table: 4.9

Dividend per Share

(In Rs)

FY	**HBL**	**SBI**
2064/065	20.00	0.00
2065/066	43.16	0.00
2066/067	65.00	10.00
2067/068	55.00	60.18
2068/069	70.00	0.00
Average	**50.63**	**14.04**
S.D	19.97	26.16
C.V	39.44	186.32

Source: Appendix I & II

HBL has distributed DPS in 2064/065 to 2068/069. The highest DPS of study period of HBL is Rs 70.00 in FY 2068/069. The average DPS of HBL is Rs 50.63, it is greater than SBI Bank. That means it is paying the highest dividend to its shareholders. In comparison, HBL is found to have less fluctuating DPS than SBI Bank.

The dividend distribution of SBI Bank doesn't follow the satisfactory trend. SBI Bank can't distribute dividend in FY 2064/065 and 2065/066. The bank has not able to paid dividend in FY 2068/069. The average for SBI Bank is Rs 14.04.

The S.D. of two banks is 19.97 and 26.16 for HBL and SBI Bank respectively. The entire selected banks dividend per share is fund in fluctuating trend. The higher S.D. is 26.14 for SBI bank. The highest C.V. is 186.32 for SBI Bank.

4.4.3 Analysis of Dividend payout ratio

The ratio represents the percentage of the profit distributed as dividend and the percentage retained as revenue and surplus for the growth of the bank. The shareholders usually prefer higher ratio whereas very high ratio may also slow down the growth rate of the firm. This ratio is used to segregate the proportion of dividend and the retained earnings. The statement of dividend payout ratio of the selected JVBs has been presented in table 4.10.

Table: 4.10

Dividend payout ratio

(Ratio in %)

FY	**HBL**	**SBI**
2064/065	40.77	0.00
2065/066	90.09	0.00
2066/067	109.72	54.73
2067/068	90.62	152.94
2068/069	111.57	0.00
Average	**88.55**	**41.53**
S.D	0.26	0.67
C.V	0.29	1.61

Sources: Appendix I & II

The selected banks have unstable dividend pay out ratio. No standard rate has been fixed for the dividend distribution. The ratios for the bank are fluctuating because the dividend distribution is also fluctuating. The ratios are increased in first three years. On an average, shows HBL the highest ratio of 88.55%.

SBI Bank also has failed to maintain the rigid dividend payment ratio. It has fluctuating dividend payment ratio. The average ratio for SBI Bank is 41.53%.

On the basis of S.D. the variability of DPR is higher in SBI Bank that other bank that is 0.67. The highest C.V. is 1.61 for SBI.

4.5 Analysis of Capital Structure

4.5.1 Analysis of Overall Capitalization Rate under Net Income (NI) Approach

According to the NI approach, net income is capitalized at an overall capitalization rate to obtain the total market value of the firm. Under this approach, the capital structure decision is relevant to the valuation of the firm, if leverage is increased, the weight average cost of capital will be decreased and due to this reason, the value of the firm will be increased.

The overall capitalization rate of selected banks under NI approach is shown in table 4.11.

Table: 4.11

Overall capitalization Rate (K_o) under NI approach

(Ratio in %)

FY	**HBL**	**SBI**
2064/065	3.26	4.00
2065/066	3.37	3.46
2066/067	3.10	3.35
2067/068	3.22	3.89
2068/069	3.30	2.89
Average	**3.25**	**3.52**

Source: Appendix I & II

Over viewing the table no 4.11 calculated over capitalization, rate, SBI bank has on average i.e. 3.52% and HBL had on average i.e. 3.25%.

HBL has 3.25% on an average of overall capitalization rate. The over capitalization rate trend was fluctuating trend over the five fiscal years. Thus, the decreasing trend of HBL's overall capitalization rate indicates that HBL was able to increase the value of the bank and lower the overall capitalization rate by increasing debt proportion in the capital structure.

SBI bank has 3.52% on an average of overall capitalization rate. The overall capitalization rates trend was fluctuating trend over the five fiscal years. It has maximum overall capitalization rate 4.00% in FY 2064/065. The ratio in FY 2065/066 is 3.46% due to increase in market value of the firm and decrease in EBIT.

4.5.2 Analysis of Equity Capitalization Rate under Net Operating Income (NOI) Approach

Net operating income approach is the irrelevant theory of capital structure. Net operating income approach suggests that, market value of the firm is not affected by its capital structure. Market price of the share remains constant but equity capitalization rate increases with the use of financial leverage. Equity capitalization rate shows the extent to which the shareholders value is capitalized in the market. It relates the earning available to the shareholders after deduction of interest and taxed to the market value of the stock out standing. Equity capitalization rate of 5 years presented below in the table.

Table: 4.12

Equity Capitalization Rate (K_e) under NOI Approach

(Ratio In %)

FY	**HBL**	**SBI**
2064/065	9.34	8.36
2065/066	8.83	8.65
2066/067	7.92	5.10
2067/068	5.09	4.98
2068/069	4.73	2.90
Average	**7.18**	**6.00**

Source: Appendix I & II

The equity capitalization rate of HBL ranges between 9.43% to 4.73%. HBL has decreases trend of equity capitalization rate over the study period. HBL has highest equity capitalization rate of 9.34% in the FY 2064/065 and lowest of 4.73% in the FY 2068/069. On an average, it has equity capitalization rate (Ke) of 7.18%.

Over the viewing above computed equity capitalization rate of SBI bank, equity cost of capital five fiscal years was fluctuating in nature. The average ratio of SBI bank is 6%, which is lower than HBL.

Over viewing the above computed equity capitalization rate, the HBL is higher than SBI, which is 7.18% and 6% respectively.

4.6 Statistical Analysis

The statistical analysis includes various methods of measuring relationship between two or more variables as well as their significance. In this study, different relationship have been calculated with the help of Karl Person's formula of correlation co-efficient and calculating PE for measuring significant correlation.

4.6.1 Coefficient of Correlation between EBIT and Interest Payment.

The relationship between EBIT and Interest payment is evaluated in order to measure debt-servicing capacity of the banks. It is assumed that there is a significant relationship between EBIT and interest payments. Here, interest payment (X) is dependent variable and EBIT(Y) is independent variable. The following result is obtained for two selected joint venture banks.

Table: 4.13

Correlation Coefficient between EBIT and Interest Payment

Banks	r	r^2	P.E	6P.E	Significance/Insignificance
HBL	0.99	0.98	0.006	0.036	Significance
SBI	0.98	0.96	0.12	0.072	Significance

Source: Appendix III& IV

From the table no 4.13 analysis, it's clear that the correlation between EBIT and Interest Payment in case of HBL is 0.99, which shows higher positive relationship. It refers that increase in EBIT increased Interest Payment on the other hand. The correlation between EBIT and Interest Payment in case of SBI Bank is 0.98, which shows positive relationship. Considering the P.E, the value of 'r' of both banks was greater than 6 times of the P.E. Therefore, it is depicted that the value of 'r' in banks is significant i.e. there is significant relationship between EBIT and Interest Payment depicts us that the banks are significantly able to service their debt.

4.6.2 Coefficient of Correlation between Overall Cost of Capitalization rate (Ko) and D/E Ratio

Coefficient of correlation between Overall Cost of Capitalization rate (Ko) and D/E ratio is evaluated that there is significant relationship. D/E ratio (Y) is independent variable and overall cost of capitalization (X) is dependent variable. The following result is obtained for two selected joint venture banks.

Table: 4.14

Coefficient of Correlation between Overall Cost of Capitalization (K_o) and D/E

Banks	r	r^2	P.E	6P.E	Significance/Insignificance
HBL	0.086	0.007	0.30	1.8	Significance
SBI	0.052	0.003	0.30	1.8	Significance

Source: Appendix V & VI

From the table no 4.14 calculation correlation between overall capitalization rate and debt equity ratio of HBL and SBI Bank shows the low positive relationship i.e. 0.086 and 0.052 respectively, which indicated that increase in debt capital portion in capital structure poorly increase overall capitalization rate. Considering the PE, the value of 'r' of both the banks was found less than 6 times their P.E, which indicate that there is insignificant relationship between debt equity ratio and overall capitalization rate.

Hence, it can be conclude that value of 'r' is insignificant and there is no proper relationship between overall capitalization rate and debt equity ratio on HBL and SBI Bank.

4.7 Major Finding of the Study

From the presentation and analysis of the data, the following findings are down out.

All JVBs has used high percentage of total debt in raising the assets and finance its activities. Financial leverage shows that the HBL has the most stable trend among two banks over the study period. On an average, the highest financial leverage ratio belongs to HBL of 93.95%, which means that it is exposed to the greatest financial

risk. The high leverage is not favorable to any organization so these two banks should check their financial leverage ratio carefully to avoid any distress in coming future.

- HBL has the highest debt equity ratio in comparison to SBI Bank, which is 15.70 times. On an average, the debt employment is 16 times higher than equity employment. It has comparatively high risk than SBI Bank. HBL D/E ratio is in decreasing trend. Hence, the decreasing trend of D/E ratio implies that HBL is adopting highly conservative strategy on an average, SBI Bank has the lowest debt equity ratio of 12.17 times that means debt employment is 12 times greater than equity employment. It also shows the utilization of debt equity ratio in its capital structure follows the fluctuating trend.
- The analysis of interest coverage ratio shows how well the earnings of JVBs have been successful in meeting the regular interest payment. The higher coverage ratio is desirable. The analysis shows that HBL has the highest interest coverage ratio of 1.98 times on an average, which indicates that it has been successful in generating sufficient income through the utilization of leverage. The lowest belongs to SBI Bank of 1.65 times and it should try to retire some debt portion to have the comfortable coverage ratio. Apart, from this, the analysis shows that all the banks are in position to meet their interest obligation.
- The HBL has fluctuating trend of degree of financial leverage over the study period. In the case of this bank it has the lowest ratio of 2.02 times DFL on an average, which reflects the bank has lower degree of financial risk. On an average, SBI Bank has the highest DFL of 2.67 times. Among all the banks, SBI Bank has more financial risk as it has the highest degree of financial leverage.
- The return on total assets computed for the selected banks depicts the exact utilization of assets made by them. The stability of returns should be maintained. Considerable fluctuations provide bad signal to the potential investor as well as existing shareholders. In comparison to all the banks, HBL has the highest return on total assets which means that it is successful in the utilization of assets to generate more efficiency. The C.V. of HBL is also less than SBI Bank. That indicates its ability to generate stable returns by the use of available of assets.
- Both the JVBs show the fluctuating trend. On an average, the HBL bank has the highest return on total deposit of 1.56%. Hence, higher ratio indicates that the

HBL is utilizing the deposits collection in the most efficient way. On an average, it has recorded that return on total deposits of 1.36%, which is lowest than HBL.

- The result obtained through return on shareholder's equity calculation of all the selected JVBs shows the positive reflection of their efficiency of providing satisfactory returns to their shareholders. HBL has the highest return on shareholder's equity of ratio of 22.80%, which means its capacity to utilize the shareholder's equity in an efficient way. Even the fluctuation is kept at the minimum which provide the satisfactory operation of HBL in utilizing the owner's capital in generating proper income. SBI Bank also shows the satisfactory result through the lowest return on shareholder's equity. SBI Bank has the fluctuating trend such fluctuation is not preferred by the shareholder's rather they demand sable income over their investment.
- The analysis shows that all the JVBs have the fluctuating EPS sometimes increasing and decreasing the other time. HBL shows the highest EPS of Rs 55.93 on an average which is the positive sign to the management. SBI Bank has EPS of Rs 22.7. They should try to improve its EPS through proper management of their operation to complete with HBL. Even, EPS is the reflection of how any organization is carrying on its operation. Higher EPS shows the efficiency and vice versa.
- Dividend is the return to the shareholders investment which is distributed upon the management decision only after the entire outsiders claim has been satisfied. The constant and regular dividend payment provides satisfaction to the shareholders and hence the DPS analysis is very much necessary to indicate the banks efficiency in satisfying the shareholders. In dividend payment, HBL has maintained proper balance in comparison to SBI Bank. SBI Bank can't distribute dividend in FY 2064/065, 2065/066 and 2068/069. SBI Bank should attempt to improve their way of dividend distribution as this may signal to the prospective investors as well as to the market.
- The dividend payout ratio provides the positive insight to the shareholders about any organization. The stable ratio should be maintained for the better signaling to the public regarding the operation of the organization as it indicates that the organization is able to generate stable income out of its operation and is

successful in distributing the stable dividend to its shareholders. Thus, the fluctuating trend is least favored and should be avoided by the selected Joint Venture Banks. Through, the study results indicate the fluctuating dividend payout ratio of every JVB's under study.

- Overall capitalization rate reveals the total cost of acquiring funds to finance over the entire activities of the organization. The result that HBL has the lowest capitalization rate. Computation also reveals the fact that the overall capitalization rate decrease with an increase in debt portion which indicates debt funds are cheaper in comparison to the equity funds. Every firm should try to bring the overall cost of capital at its minimum and maximize the value of the entire firm. So, the optimum capital structure is that debt and equity mix which maximizes the total market value of the firm and minimizes the overall cost of capital to obtain the desired optimum capital structure, all the Joint Venture Banks under study should try to employ the proper amount of debt and equity at which the overall value of entire banking organization is maximum and the overall cost of capital is kept to be at minimum level.
- The coefficient correlation between overall capitalization rate and debt equity ratio of HBL and SBI Bank found 0.086 and 0.052 respectively. The value of 'r' is found low positive correlated in HBL and SBI Bank. It initiate that the overall capitalization rate and debt equity ratio of both the banks is statistically insignificant i.e. increase in debt equity ratio does not significantly decrease overall capitalization rate. Since the correlation ship is statistically insignificant, the banks tend to have interest burden. This further implies that there is no significant relationship between the capital structure position and profitability of both the banks i.e. the capital structure position of both the banks is not better.

CHAPTER-V

SUMMARY, CONCLUSION & RECOMMENDATIONS

5.1 Summary

This concluding chapter deals with the findings derived out of the logical and rational analysis to the problems of research within the frame work stated in introduction chapter. The relevance of all the related ratios to the capital structure and their contribution to analysis are described in this chapter. Similarly, this chapter is also related with the findings and conclusions deride from the study of the selected joint venture banks in Nepal. This chapter is composition of three sections firstly, the summary of the study; secondly, conclusion of the study; and lastly, some practical recommendations are suggested to help to solve the problems observed on the basis of findings.

Basically, the entire research work has focused on the comparative study on Capital Structure of Joint Venture Banks. For the study, two Joint Venture Banks are selected i.e. Himalayan Bank Limited and Nepal State Bank of India Bank Ltd, are taken as sample and analyzed their capital structure.

Five fiscal years secondary data, i.e. from the year 2064/065 to 2068/069 are taken for the purpose study. For the analysis the appropriate statistical as well as financial tool are selected.

The first chapter consists of framework of the study as well as profile of selected joint venture banks. Similarly, second chapter is a good review of the issues and literatures related with the capital structure. The attempt has been made to reach out the most possible literature available relating to the topic capital structure. Third chapter provides the description of all the capital structure as well as statistical tools and techniques are analysis of the study. The fourth chapter of the study tries to explore the available information and bring a result to reveal the performance of selected joint venture banks. All the results obtained through the analysis of the available data and

facts of the selected JVBs are properly examined and basis on those facts this final part of the study tries to mention each and every detail to bring out significant conclusion. It also includes recommendation part which provides suggestions to solve or improve the present situation.

5.2 Conclusions

The globalization of joint venture banks is a reality of the present world economy. Only through the globalization of banking sectors, the world economy has reached to the present state. In the context of Nepal, joint venture banks presents as the most appealing sector of the economy which has contributed a great deal by extending loans and developing new, highly innovative financial techniques, providing challenging employment opportunities to the people around and so on. The development of JVBs is seen as the positive sign as a country is gaining favorably due to its services and activities. On the basis of entire study, some conclusion has been deduced.

This study particularly deals with conclusion about “capital structure Analysis of joint venture Banks of Nepal.” The analysis of capital structure is very significant in project appraisal of the stiff competition. Thus, this study is mainly an effort to confer general account of joint venture banks in terms of ratios related wit capital structure on the basis of financial statement.

Many joint venture banks are operating in Nepal as commercial and merchant banks. The growth is still going on as so many new banks are coming into existence after this study. So JVBS are operating with higher technology and new efficient methods in banking sector.

But this study has been undertaken only two JVBs HBL and SBI Bank to examine and evaluate the financial data. Besides, latest financial statements of five fiscal years from 2064/065 to 2068/069 have been conferred for the purpose of the study. This has been mainly conducted on the basis of secondary data that are processed and analyzed.

All JVBs has used high percentage to total debt in raising the assets. The higher ratio the higher ratio constitutes that the outsider's claim in total assets of the banks is higher than owner's claim. The high leverage is not favorable to any JVBs. Thus, a firm should maintain the right portion of debt employment in capita structure.

A high debt equity ratio implies that a proportion of long term financing is from debt sources that are the firm is using great deal of financial leverage. In all banks, the creditor's margin of safety is low which means they have high risk. It reveals that JVBs are highly leveraged. Thus, it can be concluded that all the banks have lower rate of shareholder's equity over the claims of creditors.

ICR shows that the all banks are able in paying interest. In comparison HBL is operating efficiently in terms of ICR. SBI Bank should make effort to retire excessive debt to have comfortable coverage ratio.

SBI Bank's average degree of financial leverage constitutes 2.67 times which indicates the higher degree of financial risk. Though the banks are highly leverage, SBI Bank seems to be more leveraged banks in comparison with selected banks.

The ROA computed for the selected banks depicts the exact utilization of assets made by them. In comparison to all the banks, HBL has the highest ROA which means that it is successful in the utilization of assets to generate more efficiency.

Joint venture bank's ability to make the most efficient utilization of deposits collection in the productive area and generate returns. Higher ratio indicates the favorable return that signifies that the sample joint venture banks are utilizing the deposits collection in the most efficient way and vice versa. So, in this case, return on total deposits ratio is computed in order to identify the efficiency of the banks in utilizing the deposit collection successfully and generate sufficient income out of it. Higher ratio signifies better mobilization and utilization of deposits whereas the lower ratio shows the inefficient utilization of available deposits.

The Average ROE of JVBs i.e. HBL and SBI Bank are 22.80% and 13.96% respectively. The ROE ratio has great impact to show the relative performance and strength of the bank in attractive further investment. HBL earning of 22.80% infers that the bank has been able to utilize the shareholder's equity in efficient way. The ROE ratio of SBI Bank shows they have satisfactory return of earning that is most desirable objectives of a business. The ratio of ROE reflects the extent to this objective has been accomplished. Likewise, SBI has 13.96% earning on shareholders equity, which is in comparison with other banks slightly low rate of return.

Earnings per share of all selected banks fluctuating trend, the HBL has the higher EPS so investors are attracted to buy the share. Hence, the banks are suggested to collect the funds thought issuing shares.

5.3 Recommendations

- JVBs in Nepal have concerned their business with big businessman and industrialists. Their clients are mostly big manufacture carpet and garment exporters, multinational companies, large scale industries, NGO as well as INGO, travel agencies, cargo agencies, etc. Mostly they are providing services to the high class of the society. Therefore, the JVBs are suggested to design the special package to include the small depositors as well as entrepreneurs.
- The capital structure of all the selected banks is highly leveraged. The proportion of debt and equity capital decided keeping in mind the efforts of tax advantages and financial distress. The banks, when it is difficult to pay interest and principle, ultimately lead to liquidation or bankruptcy. Financial risk will be created by long term debt, therefore this JVBs has to be reduce in long term debt by increasing the equity proportion in financial structure.

- The debt equity Ratio indicates the proportionate claims of owners and outsider's against the assets of the firm. In this regard owners want to higher debt finance to increase to EPS where as the outriders want that share holders should invest more. Debt equity ratio both the JVBs capital structure follows the fluctuating trend. To maintain stable capital structure, JVBs should increase the sales and collect the receivables in time to generate cash flow.
- The analysis of interest coverage ratio measures how much net income before interest and taxes could be provide coverage of total interest expenses: It is sometimes called as debt service ratio. It reflects the relationship between the net profit before interest and tax and the amount of interest payments for the period. The higher coverage ratio is desirable. Highest interest coverage ratio indicates that it has been successful in generating sufficient income through the utilization of leverage. To generate higher interest coverage ratio both the JVBs should increase the level of EBIT & reduce the fixed & operating cost.
- The higher the ratio of debt to total capital structure the higher the financial leverage. SBI Bank is said to have a high degree of financial leverage. It is using higher percentage of fixed charge bearing funds. Higher DFL indicates higher degree of financial risk because of use of high fixed charge bearing funds in the Bank, So SBI Bank to reduce the high uses of debt capital by increasing the equity proportion in financial structure.
- n on shareholder’s equity are slightly satisfactory in the selected banks. Having geared up capital structure position and insufficient returns indicates the week aspects of the banks. All the selected banks are suggested to use the resource into most profitable sector and be more concerned to get better return and be careful about their financial condition so that their returns would not be depressed anymore.
- Similarly, JVBs are basically not concentrated to mobilize their deposit funds in productive areas. So, there are proposed to come forward to match

government obligation by financing the priority sector development programs.

- As Nepalese shareholders pay more attention to the dividend payment rather than the proper analysis of financial statement. Banks are suggested to pay cash dividend regularly and consistently. So that they can build the positive image upon the Nepalese investors. While determining dividend payout ratio, the management should consider about the shareholder's expectation and the growth requirements of the banks. The higher payout ratio satisfies the existing investors as well as it is the tool to attract the potential investors which increases the market price of the share. Especially, SBI is weak in paying cash dividend.
- Dividend payout ratio should be determined considering the shareholder's expectation and the growth requirements of the banks. A higher payout attracts both the existing and potential investors leading to increase in market price of the share, which consequently leads to the strengthened financing capability.
- The banks should give continuity in providing both conceptual and practical training to the staff to enhance their knowledge, skill and competency level, there should remain consistently vigilant in enhancing their more and motivation. The bank has to enhance effectiveness, efficiency and proper coordination of its departmental tasks by continuously reviewing its structural design in accordance with the need of the changing time and situation.

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Appendix I

Himalayan Bank Ltd.

Rs. in million

Years	Total Debt	Total assets	Share holders equity	EBIT	EPS	Interest charge	NPAT	No of share	Value of firm	EBT	Market value of share	dividend	Total deposit
2064/065	23493.23	24817.4	1324.17	912.12	49.05	491.54	263.05	5362500	27997.73	420.58	4504.5	107.25	22010.33
2065/066	26302.94	27844.69	1541.75	1084.5	47.91	561.96	308.28	6435000	32223.14	522.54	5920.2	277.73	24814.01
2066/067	27694.21	29460.39	1766.18	1321.22	59.24	648.84	457.46	7722000	36188.41	672.38	8494.2	501.93	26490.09
2067/068	31372.64	33519.14	2146.5	1464.81	60.69	747.41	491.82	8108100	45481.54	717.4	14108.9	445.94	30048.42
2068/069	33662.4	36175.53	2512.99	1772.69	62.74	832.74	635.87	10135125	53729.95	948.84	20067.55	709.46	31842.79

Appendix II

Nepal SBI Bank Ltd.

Rs. In million

Years	Total Debt	Total assets	Shareholders equity	EBIT	EPS	Interest charge	NPAT	No of share	Value of firm	EBT	Market value of share	dividend	Total deposit
2064/065	7813.77	8440.41	626.64	365.45	14.26	255.92	60.85	4268759	9124.28	109.53	1310.51	0.00	7966.64
2065/066	9656.36	10345.37	689.01	383.62	13.29	258.43	57.39	4318656	1103.11	125.19	1446.75	0.00	6456.53
2066/067	12053.47	13035.84	982.37	534.53	18.27	334.77	117.00	6402361	15971.71	199.76	3918.24	64.02	10653.40
2067/068	12737.91	13901.2	1163.29	791.27	39.35	412.22	254.91	6477984	20356.02	379.05	7618.11	389.85	11445.29
2068/069	15772.80	17187.45	1414.64	837.76	28.33	454.92	247.77	8745278	28986.92	382.84	13214.12	0.00	13715.39

Appendix III

Coefficient of correlation between EBIT (X) and interest payment (Y) for HBL

FY	X	Y	dx= X-A	dy= Y-A	$(dx)^2$	$(dy)^2$	dx.dy
2064/065	9.12	4.91	-4.09	-1.58	16.7281	12.4964	6.4622
2065/066	10.84	5.63	-2.37	-0.87	5.6169	0.7569	2.0619
2066/067	13.21	6.49	0	0	0	0	0
2067/068	14.64	7.47	1.43	0.98	2.0449	0.9604	1.4014
2068/069	17.72	8.33	4.51	1.84	20.3401	3.3856	8.2984
	65.53	32.82			44.73	7.5993	18.2239

$$\text{Correlation co-efficient } (r) = \frac{\sum dxdy}{\sqrt{\sum (dx)^2}\ \sqrt{\sum (dy)^2}}$$

$$= \frac{18.2239}{\sqrt{44.73}\ \sqrt{7.5993}}$$

Therefore (r) = 0.99

Calculation of coefficient of determination (r^2) = 0.98

Calculation of probable error

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

$$= \frac{0.6745\ (1 - 0.99^2)}{\sqrt{5}}$$

= 0.006

6P.E. = 0.036

Appendix IV

Coefficient of correlation between EBIT (X) and interest payment (Y) for SBI

FY	X	Y	dx= x-A	dy= y-A	$(dx)^2$	$(dy)^2$	dx.dy
2064/065	3.65	2.56	-1.72	-0.79	2.9584	0.6241	1.3588
2065/066	3.84	2.58	-1.51	-0.77	2.2801	0.5929	1.1627
2066/067	5.35	3.35	0	0	0	0	0
2067/068	7.91	4.12	2.56	0.77	6.5536	0.5929	1.9712
2068/069	8.38	4.55	3.03	1.20	9.1809	1.44	3.636
					20.973	3.2499	8.1287

Correlation co-efficient (r) = $$\frac{\sum dxdy}{\sqrt{\sum (dx)^2}\ \sqrt{\sum (dy)^2}}$$

$$= \frac{8.1287}{\sqrt{20.973}\ \sqrt{3.2499}}$$

Therefore (r) = 0.98

Calculation of coefficient of determination (r^2) = 0.96

Calculation of probable error

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

$$= \frac{0.6745\ (1 - 0.98^2)}{\sqrt{5}}$$

= 0.012

6P.E. = 0.072

Appendix V

Coefficient of correlation between Overall Capitalization Rate (x) and D/E ratio (y) for HBL

FY	X	Y	dx= x-A	dy= y-A	$(dx)^2$	$(dy)^2$	dx.dy
2064/065	3.26	17.74	0.16	2.06	0.0256	4.2436	0.3296
2065/066	3.37	17.06	0.27	1.38	0.0729	1.9044	0.3726
2066/067	3.10	15.68	0	0	0	0	0
2067/068	3.22	14.62	0.12	-1.06	0.0144	1.1236	-0.1272
2068/069	3.30	13.40	0.20	-2.28	0.04	5.1984	-0.456
					0.1529	12.47	0.119

Correlation co-efficient $(r) = \frac{\sum dxdy}{\sqrt{\sum (dx)^2}\ \sqrt{\sum (dy)^2}}$

$= \frac{0.119}{\sqrt{0.1529}\ \sqrt{12.47}}$

Therefore $(r) = 0.086$

Calculation of coefficient of determination $(r^2) = 0.007$

Calculation of probable error

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

$= \frac{0.6745\ (1 - 0.007)}{\sqrt{5}}$

$= 0.30$

$6P.E. = 1.8$

Appendix VI

Coefficient of correlation between Overall Capitalization Rate(X) and D/E Ratio(Y) for SBI

FY	X	Y	dx= x-A	dy= y-A	$(dx)^2$	$(dy)^2$	dx.dy
2064/065	4.00	12.47	0.65	0.20	0.4225	0.04	0.13
2065/066	3.46	14.01	0.11	1.74	0.0121	3.0276	0.1914
2066/067	3.35	12.27	0	0	0	0	0
2067/068	3.89	10.95	0.54	-1.32	0.2916	1.7424	-0.7128
2068/069	2.89	11.15	-0.46	-1.12	0.2116	1.2544	0.5152
					0.9378	6.0644	0.1238

Correlation co-efficient (r) = $\frac{\sum dxdy}{\sqrt{\sum (dx)^2}\ \sqrt{\sum (dy)^2}}$

$= \frac{0.1238}{\sqrt{0.9378}\ \sqrt{6.0644}}$

Therefore (r) = 0.052

Calculation of coefficient of determination (r^2) = 0.003

Calculation of probable error

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

= $\frac{0.6745\ (1 - 0.003)}{\sqrt{5}}$

= 0.30

6P.E. = 1.8