# A COMPARATIVE ANALYSIS OF CAPITAL STRUCTURE OF COMMERCIAL BANKS IN NEPAL

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#### **RECOMMENDATION**

This is to certify that the thesis

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# A COMPARATIVE ANALYSIS OF CAPITAL STRUCTURE OF COMMERCIAL BANKS IN NEPAL

has been prepared as approved by this Department in the prescribed format		
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#### **VIVA-VOCE SHEET**

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and found the thesis to be the original work of the student written according to the prescribed format. We recommend the thesis to be accepted as partial fulfillment for

## Master's Degree in Business Studies (M.B.S.)

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#### **DECLARATION**

I hereby, declare that the work reported in this thesis entitled "A Comparative Analysis of Capital Structure of Commercial Banks in Nepal" submitted to Central Department of Management, University Campus, T.U., Kirtipur is my original piece of work done in the form of partial fulfillment of the requirement for the Master's Degree in Business studies under the supervision and guidance of Mr. Sanjay Kumar Shrestha, Associate Professor of Central Department of Management.

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#### **ABBREVIATIONS**

A/C : Account

AD : Anno Domini – abbr. of the Christian Era

ATM : Automated Teller Machine

BS : Bikram Sambat

B/S : Balance Sheet

C/M : Contribution Margin

CSR : Capital sufficiency ratio

DCL : Degree of Combined Leverage

DFL : Degree of Financial Leverage

DOL : Degree of Operating Leverage

EAT : Earning After Tax

EBIT : Earning Before Interest Tax

EBT : Earning Before Tax

F/Y : Fiscal Year

Gov. : Government

i.e. : That is

KBL: Kumari Bank Ltd.

Ltd. : Limited

Mgmt. : Management

NABIL: Nepal Arab Bank Ltd.

NRB : Nepal Rastra Bank

NSBL : Nepal SBI Bank Ltd

P/L : Profit & Loss Account

R/S : Reserve and Surplus

T/E : Time Interest Earned

#### **CHAPTER ONE**

#### INTRODUCTION

#### 1.1 Background of Study

In the context of rapid changing environment, bank plays vital role in the economy of each country whether that may be big or small. A bank is a financial institution established for safe-guarding the assets of different individuals and uses it to grant loans and investments. It is the best advisor on all economic activities to the government. People deposit their savings rather than keeping with themselves to gain additional money or interest. The banker also provides a variety of financial services. The basis of banking business is borrowings from individuals, firms and occasionally government, i.e. receiving deposits from them with resources and also with the bank's own capital, the banker makes profit by borrowing at one rate interest and lending at a higher rate and by charging commission for its services.

Due to the bank's multi-disciplinary functions no one can define exactly about it. In spite of this some authors have tried to define bank as "A bank is a manufacturer of credit and machine for facility exchanges" (White, 1991:108).

"There is no such thing as the model capital structure for all business undertaking one way of planning the capital structure is to make it fit in to model compiled from number of different experiences that may have been drawn from the historical ratio of the firm" (Kuchhal 1977: 390).

"Any institution offering deposits subject to withdraw on demand and making loans of commercial or business nature is bank" (Federal U.S.A. Law).

"I believe in the fact that the banks are not merely purveyors of money, but also in an important sense, manufacturer of money" (Sayers, 1967:216).

"A Banker is a dealer in debt in his own and other peoples. The Bankers business is there to take the debt of other people to offer his own in exchange and thereby to create money" (Geoffrey, 1995:417)

Although there are various types of banks according to nature and function but only commercial banks are considered here for this study.

"A commercial bank means bank which deals in exchanging currency, accepting deposits, giving loans and doing commercial transaction" (Commercial Bank act 2031 B.S)

The origin of bank is linked to either Latin word "Bancus" Italian word "Banca" or French word "Banque". All three meaning bench or German word bank meaning joint stock Company about the evolution of commercial bank, Bank of Venice setup in 1157 was the first commercial bank.

In the context of Nepal, history tells us that in 1994 Nepal's first bank named "Nepal Bank Limited" was established. Similarly in 2013 "Nepal Rastra Bank and" in 2024 "Agriculture Development Bank" was established. Then in 2041 B.S. owing to the liberalization & privatization policy adopted by government in 2039 B.S., another landmark was achieved in the history of commercial banking in Nepal with the establishment of Nepal Arab Bank is the first joint venture bank and also the introduction of private investment in banking sector. It became a grand success and banking sector experienced a boon in the history of joint venture banks.

Nepal Investment Bank (2043), Standard Charter Bank (Nepal Grindlays Bank 2043), Himalayan Bank limited (2043), Nepal SBI Bank (2050), Everest Bank Limited (2051), Nepal Bangladesh Bank (2051), Bank of Kathmandu (2051), were some of the prominent banks established as joint venture undertaking.

Commercial banks are being run by bank and financial ordinance 2060, which has replaced the previous commercial bank act 2031. The ordinance has been amended once. According to the ordinance, bank and financial institutions are divided into four groups. Commercial banks are placed in group A. There are many commercial banks operating in Nepal, and many are about to establish. Since this thesis report is based on NABIL Bank Ltd., Kumari Bank Ltd., & Nepal SBI Bank Ltd., information about is necessary and given below:-

## 1.2 An Introduction of the Sample Banks

#### 1.2.1 NABIL Bank Limited

NABIL Bank Limited (Previously Nepal Arab Bank Limited) is the first foreign joint venture bank of Nepal which started operations in July 1984 with technical service assistance with Dubai Bank Limited. NABIL was incorporated with the objective of extending international standard modern banking services to various sector of the society looking for its objective. NABIL provides a full range of commercial banking services through various branches across the country and over 170 reputed correspondent banks all around the globe.

NABIL has emerged as a pioneer in introducing many innovative products and marketing concepts in the domestic sector as customer satisfaction its primary worth of doing business.

Highly qualified and experienced management team manages operation of the bank including day to day operation and risk management. Bank is fully equipped with modern technology, which includes ATMs, Credit Cards, State of art, World–renewed software from Infosys Technologies System, Bangalore, India, Internet banking system and Tele banking system.

Today NABIL Bank is a leader in the financial sector in Nepal with a network that has various points of representation spread across the nation, complimented by a network of ATMs & now NABIL net & NABIL Tele the case of access of accounts and information for out customers has never been more convents. NABIL is a full service bank providing in local and foreign currency, visa and master card denominated in rupees and dollars, visa electron, debit cards, personal lending products for Auto, Home and personal loans, Trade financing products, Treasury service and corporate financing.

Table No. 1.1

Capital Structure of NABIL Bank Ltd. Based on Annual Report 066/67

Particulars	Amount in Rs (In '000)	0/0
Equity capital	3834755	7.35 %
Total debt	48315482	92.65%
Total liabilities	52150237	100%

(Sources: annual report of NABIL.)

Table No. 1.2

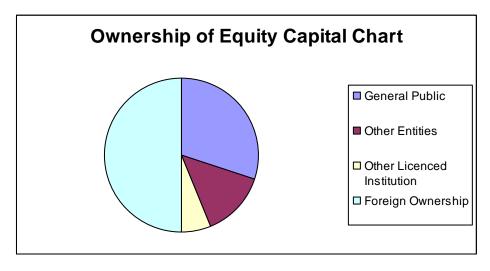
Ownership of Equity Capital of NABIL Bank Limited

Particulars	Share Capital in Rs (In '000)	Owner's Share in %
Domestic ownership		
General public	434737	30%
Other entities	200704	13.85%
Other licensed institution	89121	6.15%
Total domestic ownership	724562	50%
Foreign ownership	724562	50%
Total equity	1449124	100%

(Sources: annual report of NABIL.)

Figure No. 1.1

Graphical Presentation of Ownership of Equity Capital of NABIL



#### 1.2.2 Kumari Bank Limited

Kumari Bank Ltd. Stepped in the private banking sector in the country as a new entrant since Chaitra 21, 2057 B.S. The Bank was promoted by some of the largest renewed business houses in the country.

KBL, the first national level Bank managed by Nepali management is also the bank with highest capital base. It took the initiative of establishing itself when the country was going through major economic and financial crisis. It stands with a vision to be a world class Nepalese Bank and to be a leading financial institution of the country. Its goal is to create its own niche in the market and get recognition as the most preferred organization among its customers, shareholders, regularity, authorities and all its stakeholders.

At present, the bank is running its operation from its head office situated at Putalisadak, Kathmandu and the branches are in Birgunj, Biratnagar, Pokhara, Birtamode, Itahari etc. The bank was successful to register operating profit in the fast year of it operations which is indeed historical. KBL provides a full range of commercial banking service through its outlets spread across the nation and reputed correspondent banks across the global.

So, for it have been able to associate their customer with banking products like interest banking, mobile banking and auto sweep facilities which has helped them to meet their objectives of adapting modern technologies and coming up with innovative banking products the success of the achievement relay on their organization values of good team work and high professionalism.

Table No. 1.3

Capital Structure of Kumari Bank Ltd. Based on Annual Report 066/67

Particulars	Amount in Rs. (In '000)	%
Equity capital	1785759	8.70%
Total debt	18736716	91.30%
Total liabilities	20522475	100%

(Sources: annual report of KBL.)

Table No. 1.4

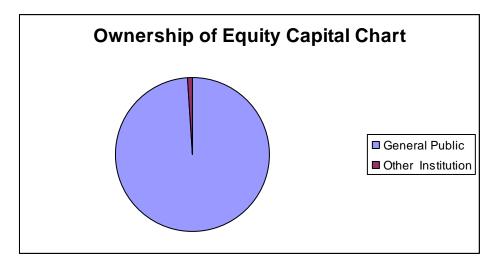
Ownership of Equity Capital of Kumari Bank Limited

Particulars	Share Capital in Rs (in '000)	Owner's Share in %
Domestic ownership		
General public	1304449	99.88%
Other Institution	1567	0.12%
Total domestic ownership	1306016	100
Foreign ownership	-	-
Total equity	1306016	100%

(Sources: annual report of KBL.)

Figure No. 1.2

Graphical Presentation of Ownership of Equity Capital of KBL



## 1.2.3 Nepal SBI Bank Limited

Nepal SBI Bank limited is one of the leading joint venture Bank. It was established in 2050 B.S. under the 'Company Act 2021' and 'Banijya Bank Act 2031 B.S.' as a joint undertaking with State Bank of India. The bank started its operation with an authorized capital of 24 crores and paid of capital of 12 crores. Out of which 50% was invested by state bank of India, 15% by employee provident fund (EPF), 5% capital is held by Agricultural

Development Bank (ADB) and the rest 30% is from the general public of Nepal through issuing shares.

This bank has been able to secure an outstanding position among the commercial banks. It is able to draw the attraction of many people due to its customer friendly approach. Owing to its experience of international banking transaction round the globe, it has better reputation and goodwill among the commercial bank. Today this bank has various branch offices and a team of enthusiastic, dedicated and efficient employees have been able to satisfy its customers with fast, easy and reliable banking services.

The principle activities of the bank during the year were personal & cooperate financial services, international network services, foreign currency exchange dealing etc. A part from the traditional banking services, the bank has entered into the new era generation next banking by providing ATM services, credit card, safety deposit locker, remittance services letter of credit and many other such services.

The main pillars of support for Nepal SBI Bank Ltd are its customers, shareholders and its employees. It is Bank's mission to deliver quality banking and stakeholder satisfaction in the true meaning of the word. Bank fully grasp the ultimate importance of engaging more closely in customer relations at every level, ensuring satisfactory, sufficient profits and ploughing back the fruits of the business successes back to customers, the community, and shareholders.

Nepal SBI Bank's Code of Conduct encapsulates international best practices applicable to Nepali context. The level of commitment of the people to take SBI Bank to greater heights has been a huge catalyst. The team spirit within the organization is something the Bank is proud of.

Table No. 1.5

Capital Structure of Nepal SBI Bank Ltd. based on Annual Report

066/67

Particulars	Amount in Rs. (In '000)	%
Equity capital	2450554	6.44%
Total debt	35597125	93.56%
Total liabilities	38047679	100%

(Sources: annual report of NSBL.)

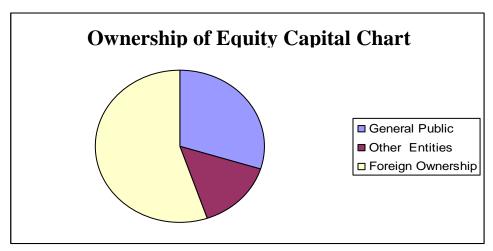
Table No. 1.6

Ownership of Equity Capital of Nepal SBI Bank Limited

Particulars	Share Capital in Rs (In '000)	Owner's share in %
Domestic Ownership		
General public	490134	29.64%
Other entities	249366	15.08%
Total domestic ownership	739500	44.72%
Foreign ownership	914124	55.28%
<b>Total equity</b>	1653624	100%

(Sources: annual report of NSBL.)

Figure No. 1.3
Graphical Presentation of Ownership of Equity capital of NSBL



#### 1.3 Focus of the Study

Capital is the most crucial factor from beginning of the business organization. In the lack of capital, business organization cannot operate their daily activities properly. Therefore, to ensure the smooth operation of the firm, it must take into account its capital structure.

Capital structure concept holds a major place in the financial management including the banking institutions. Capital structure refers to the proportion of debt & equity capital. A perfect balance between debt and equity is required to ensure the trade-off between risk and return. Since capital structure is the liabilities part, therefore, it is highly riskier & sensitive. Debt equity ratio indicates the extent to which debt financing is used relative to equity financing. Dividing total debt by shareholder's equity, this ratio is calculated. Total debt consists of current liabilities & long-term debt whereas shareholder's equity consists of owner's fund, reserve & surplus retained earning etc.

The proper composition of debt & equity helps to generate high return to the business organization and helps in long-term solvency. Investors invest their funds in ownership securities or debt securities of the organization with the expectation of getting favorable return in the future. In the absence of proper utilization of the capital, it fails to meet their expectation & minimizes the credit worthiness of the organization and leads to fall the market value of the organization. On the other hand, optimum financial structure makes better use of society's fund and thus it increases the total wealth of the society.

#### 1.4 Statement of Problem

The two principal sources of long-term financing are equity & debt capital. The composition of these two financing is known as financial structure or capital structure. One of the critical of all banking problems in recent years centers on raising & maintaining sufficient capital. A commercial bank has access to their sources of funds: capital, deposits and borrowing. Collection & maintenance of proportion of capital from different sources form the capital structure. Bank capital can not be treated as single & homogenous item. Choices of the form of capital structure & the way of raising it has important implication for bank's profitability because as the debt increases interest payable also increases and it will lesser the shareholder's profit. So this study has tried to access the following research questions.

- 1. What is the capital structure of sample banks?
- 2. What are the factors affecting capital structure management decisions?
- 3. What are the capital structure related variables?
- 4. What are the capital structure ratios, long term solvency, debtservicing capacity and capital adequacy / sufficiency ratio of the sample bank?
- 5. How is the trend of composition & capital of the sample bank?

## 1.5 Objective of the Study

The primary objective of the study is to have a comparative analysis of capital structure and the overall performance of NABIL Bank Ltd, Kumari Bank Ltd. and Nepal SBI Bank Ltd.

This report has been prepared in order:

- To have precise insight about the capital structure of the sample banks.
- To find out factors affecting capital structure management decisions.
- To analyze capital structure related variables.
- To analyze capital structure, long-term solvency, debt servicing capacity and capital adequacy/sufficiency of the sample banks.
- To analyze the trend of composition & capital of the sample banks.

## 1.6 Significance of the Study

The financial institutions holding lenders and owners are most concerned with the firm's long-term financial strengths. To judge the long-term financial position of the firm, capital structure & profitability of the firm are worthy to analyze. Capital structure and profitability would help to indicate and to follow the appropriate mix of debt & owner's equity in financing the firm's assets where profitability analysis would help to indicate the condition of earning from the various resources and to allow the appropriate profitability pattern. A firm having good return & efficient management is supposed to be better & bright in the future. Therefore, to this significance on account, this study on behalf of the firm's capital structure and profitability and its relationship is justified as a specific subject matter.

#### 1.7 Limitation of the Study

The researches suffering various problems like financial data are not available due to business secrecy, financial problem and time is limited. Therefore, researchers basically suffering from the following limitations:-

- The duration available for the study was very short. For a good research work the time available would not be enough even to collect data.
- This study just analyzes the capital. It excludes other components.
- Many seasonal factors have been ignored in this analysis.
- The study is based on the historical data. So the facts by the study may misguide for the future. It may be inappropriate for the study.
- The study is based on mostly secondary data. Therefore, conclusion drawn may not be fully true in real situation.
- The analysis is based on the limited year. Therefore, it is difficult to analyze the overall performance of the bank.

## 1.8 Organization of the Study

The comparative analysis of capital structure between NABIL Bank Ltd, Kumari Bank Ltd, and Nepal SBI Bank Ltd., has been divided mainly into five chapters which are as follows:-

## **Chapter- I (Introduction)**

This chapter, includes background, banks profile and statement of problem, objective of the study, significance of the study and limitation of the study where related subject matters have been included.

#### **Chapter- II (Review of Literature)**

In this chapter, related subject matter and findings have been reviewed, so far as possible. In this study, concept of capital structure etc has been reviewed.

#### **Chapter- III (Research Methodology)**

In this chapter, research design and methodology has been discussed. Basically this chapter includes sources of data, data collection techniques, different data analysis tools that financial tools and various ratio analysis etc.

#### **Chapter- IV (Data Presentation and Analysis)**

This chapter deals with the data presentation and analysis on the basis of data received from the related banks. In this chapter various tools mentioned on the research methodology are used to analyze the capital structure of the sampled banks.

## **Chapter- V (Summary, Conclusion and Recommendation)**

The fifth chapter or the last chapter presents the summary of the study, conclusion drawn form the study and recommendation for the future package of plan of action. The exhibits and bibliography are incorporated at the end of the study.

#### **CHAPTER TWO**

#### **REVIEW OF LITERATURE**

#### 2.1 Review of Literature

This chapter highlights upon the literature that is available in this particular topic. This chapter is divided into two parts: First part deals with the conceptual review & second chapter deals with relating some available literature including books, journals, articles & thesis etc.

The purpose of reviewing the literature is to develop some expertise in one's area to see what new contribution can be made and to receive some ideas for developing research design. Thus, the previous studies can't be ignored because they provide the foundation to the present study.

## 2.1.1 Conceptual Review

The term capital has a special meaning in the balance sheet of bank. Capital refers to those funds contributed by the bank's owner, consisting mainly of stocks; reserves & earning that are retained in the bank rather than paid out to the stockholders. Outsider's loan is instruments of in debt ness. But these loans are used by bank as a permanent part of capital structure. Capital is a scare source and is much more essential to maintain smooth operation of any firm. The available capital & financial source should be utilized so efficiently that could generate maximum return.

Capital structure is very crucial part of the financial management as the various composition of debt and equity capital may impact differently on risk and rate of return to equity shareholders. The funds required to business

enterprises are raised either through the ownership securities (i.e. equity share & preference share) or creditors share (i.e. debenture or bonds). A business enterprise has to maintain proper mix of both the securities in a manner that the cost & the risk perception to the shareholders are minimized. The mix of different securities is portrayed by the firm's capital structure (Kamal Koirala 1990:105).

Capital structure refers to the mix of long-term sources of funds, such as debt ness, long-term debt, preference share capital & equity share capital including reserves & surplus (Pandey: 1999: 18). The optimum capital structure may be defined as that capital structure or combination of debt and equity that leads to the maximum value of the firm (Khan and Jain; 1990:487). Capital structure is the permanent financing of the firm, represented primarily by long-term debt, preferred stock and common equity, but excluding all short-term credit. Thus, a firm's capital structure is only a part of its financial structure.

Capital structure theories developed so far for the question of existence of optimal capital structure. Most of the theoretical & empirical debates so far are revolved around the maximization of the value of firm through the judicious composition of its debt & equity fund. At the time of expanding the branches of commercial bank, emphasis was given to the deposit mobilization & credit disbursement. However, the importance of quality credit could not be recognized & the banking sector failed to witness the expected developments. Subsequently, the banking sector faced the problem of bad debts, overdue loans, accrued interest, and accumulation of the non-banking assets and excess liquidity in the banking system. In addition to these expected happenings new challenges were added to the Nepalese

banking sector due to the adverse development in the domestic economy resulting from the deteriorating peace and security situation & continuous persistence of natural calamities inside the country on one hand & the global recession primarily caused by international terrorism on the other. To overcome such credit risk, market risk and operational risk, capital is a must. Viewing the need of capital for commercial banks Nepal Rastra Bank came with the 'Capital Adequacy Framework' to run commercial banks in a risk free environment.

The capital adequacy framework outlines the Nepal Rastra Bank's proposed guidelines of the revised international convergence of capital measurement and capital standard popularly known as Basel 2. Basel 2 is a new international capital standards set by the Basel Committee on Banking Supervision (BCBS). Basel Committee on Banking Supervision's (BCBS'S) recommendations on capital accord are important guiding framework for the regulatory capital requirement to the banking industry all over the world and Nepal is no exception. Now, the BCBS came out with Basel 2 framework which seeks to provide regulatory capital requirements that are more comprehensive and more sensitive to risk. Basel 2 is a major revision of the international standard on Bank's capital adequacy, which requires banks to implement risk management policies that align capital adequacy assessment with underlying credit risk, market risk and operational risk. Basel 2 establishes a more coherent relationship between how supervisors assesses regulatory capital and how they supervise banks, enabling examiners and better evaluate whether banks are holding prudent capital levels compared with their risk profiles. In short, the basic theme of capital adequacy framework based on Basel 2 is that for every kind of assets of bank there

must be some amount of capital back up so that all the credit risk, market risk & operational risk can be avoided.

The capital adequacy framework also emphasizes on capital and optimum capital structure.

#### **Assumptions:**

The following assumptions are made to grasp the elements of the capital structure and the value of the firm or the cost of capital controversy properly (Van Horne; 1985:243)

- Firms use only two sources of capital i.e. debt capital and equity capital.
- The total assets of the firm are given. The degree of leverage can be changed by selling debt to repurchase shares or selling shares to retire debt
- The corporate and personal income taxes do not exist. This assumption is relaxed later on.
- The firm has a policy of paying 100% dividends.
- The operating earnings are not expected to grow.
- The business risk is assumed constant and independent of capital structure and financial risk.

In the analysis of capital structure theories, following notations are used:

Vs = Market value of ordinary shares/market value of equity

Vd = Market value of debt

Vf = Total market value of the firm

 $K_d$  = Cost of debt

 $K_e = Cost of equity$ 

 $K_o$  = Overall cost of capital

EBIT = Earning before interest and taxes or NOI

#### 2.1.2 Theories of Capital Structure

Several theories have been developed under the relevancy of capital structure to the value of firm and cost of capital. Net income approach and traditional approach argued capital structure as relevant matter and net operating approach and MM approach argued capital structure as irrelevant matter. They are:

Net Income Approach (NI)

Net Operating Income (NOI) approach

Traditional approach

J Modigliani-Miller approach(MM)

## The Net Income Approach:

The net income approach is also known as relevant theory of capital structure, as the capital structure decision is relevant to the valuation of the firm suggested by David Durand. This approach contends that the value of a firm can be maximized by the proportion of debt minimize in the capital structure and minimize the overall cost of capital. The crucial assumptions of this approach are as below (Pandey, 1999: 26).

## **Assumptions of NI approach:**

a) The debt capitalization rate is less than the equity-capitalization rate or cost of equity  $(K_d < K_e)$ .

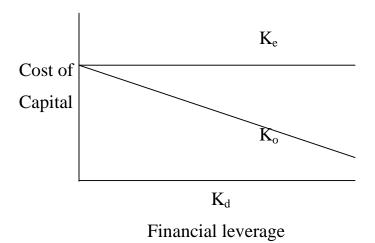
- b) The use of debts doesn't change the risk perception of investors, as a result, the equity- capitalization rate  $(K_e)$ , and the debt-capitalization rate  $(K_d)$ , remains constant with changes in leverage.
- c) The corporate income taxes do not exist.

The overall cost of capital  $(K_0)$  can be measured as:

$$K_{o} = NOI / Vf$$
 
$$or,$$
 
$$K_{o} = EBIT / Vf$$
 
$$or,$$
 
$$K_{o} = K_{e}\text{-}(K_{e}\text{-}K_{d}) \ Vd / Vf$$

Figure No. 2.1

The effects of leverage on the cost of capital under NI approach



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 of 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.

#### The Net Operating Income Approach:

Net operating income approach is an irrelevant theory of capital structure. This approach is also known as modern theory or an independent hypothesis of capital structure which is also propounded by David Durand. This theory assumes that the capital structure (proportion of debt and equity) is irrelevant to the value of firm and the overall cost of capital. Under this approach, net operating income is capitalized at an overall capitalization rate to obtain the total market value of the firm. The market value of debt, then, is deducted from the total market value to obtain the market value of the stock.

The market value of the firm is determined as:

$$Vf = Vd + Vs$$

$$Or,$$

$$Vf = EBIT/K_o$$

Where,  $K_o$  is the overall capitalization rate depends on the business risk of the firm. It is independent of financial mix. If NOI and  $K_o$  are independent of financial mix, V will be a constant and independent of capital structure changes. The critical assumptions of NOI approach are (Pandey; 1999: 31)

#### Assumptions of NOI approach:

- a) The market capitalizes the value of the firm as a whole. Thus, the split between debt and equity is not important.
- b) The market uses an overall capitalization rate  $(K_o)$  to capitalize the net operating income.  $K_o$  depends upon risk.
- c) If the business risk is assumed to remain unchanged,  $K_0$  is a constant.

- d) 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  $(K_e)$ .
- e)  $K_d$  is a constant.
- f) The corporate income taxes do not exist.

The market value of equity can be determined as:

$$Vs = Vf-Vd$$

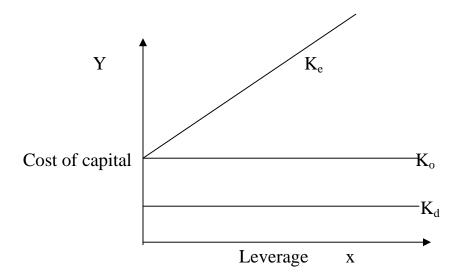
the cost of equity can be defined as follows:

$$K_e = K_o + (Ko + K_d) \ Vd \ / \ Vs$$

The equation indicates that  $K_{\text{e}}$  increases with leverage continuously, if  $K_{\text{o}}$  and  $K_{\text{d}}$  are constant

Figure No. 2.2

The effects of leverage on the cost of capital under NOI approach



As the average cost of capital,  $K_0$ , is constant this approach implies that there is not any unique optimum capital structure. It means, every capital structure is optimum, as the cost of capital is the same at all capital structure.

#### **Traditional Approach:**

This approach assumes the capital structure as relevant matter for the value and cost of capital of the firm. The traditional view (Solomon; 1969: 139), which is also known as an intermediate approach is a compromise approach between the net income approach and the net operating income approach. This approach contends that overall cost of capital of the firm can be minimized by judicious mix of debt and equity capital. This view clearly implicates that the cost of capital decreases within the reasonable limit of debt and the increase with leverage. Thus, an optimum capital structure exists and it occurs when the cost of capital is minimum or the value of the firm is maximum. This theory carries the simple implication that the cost of debt plus the cost of equity together on a weighted basis will be less than the cost of equity, which existed on equity before debt financing.

According to the traditional position, the manner in which the overall cost of capital reacts to changes in capital structure can be divided into three stages (Solomon; 1969: 139).

## First Stage: Increasing Value

The first stage begins with the initiation of debt in the total capital. In the beginning, the cost of equity  $(K_e)$  remains constant or rises 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, (Vf), increases and the overall cost of capital declines with increasing leverage.

Under the assumption that K<sub>e</sub> remains constant within the acceptable limit of debt, the value of the firm will be:

$$Vf = Vs + Vd$$

Thus, as long as  $K_e$  and  $K_d$  are constant the value of the firm, Vf, increases at a constant rate.  $(K_e-K_d)/K_e$ , as the amount of debt increases.

$$K_0 = X/Vf.K_e-(K_e-K_d)Vd/Vf$$

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

#### **Second Stage: Optimum Value**

Once the firm has reached the certain degree of leverage, increase in leverage in have a negligible effect on the value or the cost of capital of the firm. This is so because the increase in the cost of equity due to the added financial risk exactly offsets the advantage of low cost debt. Thus, within that range or at the specific point, the value of the firm will be maximum or the cost of capital will be minimum.

## Third Stage: Declining Value

Beyond the acceptable limit of leverage, the value of the firm decreased with leverage or the cost of the capital increases with leverage. This occurs because investors perceive a high degree of financial risk and demand a higher equity-capitalization rate, which offers the advantage of low-cost debt.

The overall effect of above three stages is to imply that the cost of capital is a function of leverage. At first it declines with leverage and after entering a minimum level it starts rising. The relation between cost of capital and leverage is graphically shown in figure below, where the overall cost of capital curve, Ko, is saucer-shaped with a horizontal range. It indicates that there is a range of capital structures in which the cost of capital is minimized. Ke is assumed to increase slowly at first and then at a faster rate.

## **Modigliani-Miller Approach (without tax):**

In 1958, two prominent financial researchers, Franco Modigliani and Morton Miller have been developed this theory. MM theory asserts that capital structure decision is irrelevant and there is no level of optimum capital structure. MM theory states that, in the absence of taxes the value and overall cost of capital is the expected net operating income divided by the total market value of the firm and it is equal to the capitalization rate of a pure equity stream of its risk class. In their 1958 article (Pandey:1999: 33), they provide analytical sound and logically consistent behavioral justification in favors of their hypothesis and reject any other capital structure theory as incorrect.

# **Assumptions of MM approach:**

The MM approach can be best explained in terms of their propositions I and II. Their propositions based on certain assumptions, particularly related to

the behavior of investors and capital market, the actions of the firm and the tax environment, can be described as (Pandey; 1999: 34)

- Firms can be grouped into homogenous risk classes. It is generally implied that firms within same industry constitute a homogenous class.
- ) Securities are traded in the perfect capital market situation. This specifically means that:
  - a. Investors are free to buy and sell securities.
  - b. No restriction as the firms does.
  - c. They behave rationally and transaction costs do not exist.
- ) No corporate income taxes exist.
- The risk of investors is defined in terms of the variability of the net operating income.
- Firms distribute all net earnings to the shareholders, i.e. 100% payout.

# **Proposition I**

With given assumptions, MM argue that for the firms in the same risk class, the total market value is independent of the debt-equity mix and is given by capitalizing the expected net operating income by the rate appropriate to that risk class (Pandey; 1999: 34).

Proposition I can be defined as  $Vf = Vs + Vd = X/K_o = NOI/K_o$ 

Where,

Vf = The market value of the firm

Vs = The market value of the firm's ordinary equity

Vd = 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 started in terms of the firm's average cost of capital.

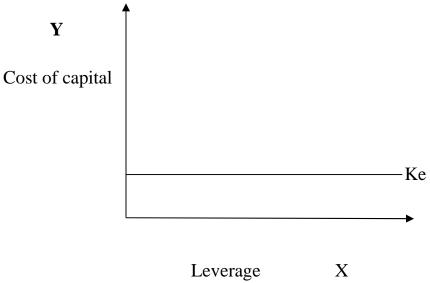
If  $K_d$  and  $K_e$  are defined as the expected return on the firm's debt and equity respectively, then, expected net operating income is:

$$X = K_oVf = k_{e..VS} + K_dVd$$

Since MM conclude that the total market value of the firm is unaffected by the debt equity mix, it 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 the figure.

Figure No. 2.3

The cost of capital under MM hypothesis proposition I



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 (Pandey, 1999: 37)

## **Proposition II**

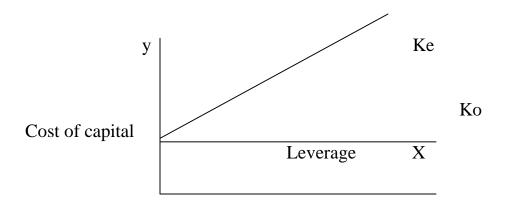
MM's proposition II, which defines the cost of equity, follows the proposition I. The expected yield on equity can be defined as:

$$Ke = Ko + (Ko - Kd) Vd/Vs$$

The MM proposition could be valid, if Kd remains constant for any degree of leverage. But in practice Kd increases with leverage beyond the 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 may even turn down eventually. This is shown in figure

Figure No. 2.4

The cost of Equity under MM hypothesis proposition II



#### 2.2 Review from Journals and Articles

Weston's study (Weston; 1963:107), in "A test of cost of capital proposition," made some important-improvement in the cost of capital

modes. He included firm size and growth as additional explanatory in his model.

He found that the regression co-efficient of leverage to be positive and significant, when dol. However, when the multiple regressions were run, he found that the correlation coefficient is significant and the regression coefficient of leverage is negative and significant when the influence of growth is isolated leverage is found to be negative correlation with the cost of capital.

He concluded that the apparent lack of influence of leverage on the overall cost of capital observed by MM was due to the negative correlation of leverage with earning growth. Weston also listed MM preposition II.

Sharma and Rao (Sharma and Rao; 1969, 77) conducted the test of MM hypothesis on the influence of debt on the value of a firm to a non-regulated industry. They argued that estimate of cost of capital arrived at through this model will be accurate only when their hypothesis on debt and dividends are correct, this is an essential condition for the employment of this model. For the study purpose, they used samples of 30 engineering equation for three cross-section year: 1962, 1964 and 1965. Calculations of variables were done in exactly the same ways that done by MM with two exceptions. They experimented with total assets and sales for deflecting the variables and the results were meaningful when fixed of total assets were used as the deflector. They argued that when the growth rate of fixed assets was used as the growth variable, the results were somewhat inconsistent with the economic reasoning. They included that debt has non-tax advantage also. Thus, this paper support that the investors prefer corporate to personal

leverage and therefore, the value of a firm rises up to a leverage rate consider prudent.

Haim Bahadur Sharma (Sharma; 1968: 95) conducted a study "The capital structure and the cost of capital". In this paper, the firm's capital structure was examined in terms of two parameters: the expected rate of return on the firm's capital structure and the efficient opportunity curve of yield versus risk were presented, and the range of efficient capital structure of the firm was derived.

The capital structure theorem was formulated; stating that the firm's cost of capital is constant along the range of efficient capital structure and rises at the inefficient range. Since, the range of efficient capital structure of interest rates, it followed that the shape of the cost of capital curve is determined by the interest rate and if it is constant, any capital structure is efficient and that the cost of capital is also constant.

Wipper (Wipper; 1990:61) conducted a study to test the empirical relationship between cost of capital and leverage. He tried to eliminate the principle problem of study on the leverage and attempted to offer what are hoped to be more fruitful alternatives in determining the relationship between leverage and cost of capital. He argued that the leverage either the ratio of debt to equity at book values, both of these measures contains important conceptual basis. He therefore used different measures of leverage, viz, I/E=25 where, I is the current level of fixed charges, E is the most recent year cash flow operating income determined from a logarithmic regression of income on time over ten years period, 25 is equal to two standard error around the regression line. He has assumed in the past

investigation that homogeneity of business risk could be achieved by comparing firm in the same industry classification.

Rao and Litznberges (Rao and Litznberges; 1970:82) conducted a study on effect of capital structure in the cost of capital in less developed and less efficient capital market (India) and in a highly developed and efficient capital market (United State). They used 28 Indian utilities and 77 American utilities. They conducted the study for five cross-section years; 1962-1966. They found that the results for the American utilities are constant to the MM proposition that except for the advantages of debt financing, the cost of capital is independent of capital structure and the result also supported that the MM hypothesis that investors are indifferent for the firm's dividend policy. In case of Indian utilities, the results are inconsistent to the MM approach and support the traditional belief, the judicious use of financial leverage will lower than the firm's cost of capital and investors have a preference for current dividends. In conclusions, they contended that the MM approach after allowing for the tax advantage of debt, the firm's cost of capital is independent of capital structure does not appear to be applicable in the case of a developing economy.

#### 2.3 Review of Previous Theses

Youba Nath Pant (1996) had submitted a thesis on the topic of "A study on capital structure and assets structure of NIDC". The main objective of that study is to analyze capital structure and assets structure of NIDC finds that debt equity ratio and the total debt to equity ratio are very higher that leads the corporate risk. So, it should maintain the appropriate ratio of debt equity and total debt to equity by increasing share capital and decreasing the borrowing. Similarly, the total expenditure trend is higher than the total income trend. This is very dangerous trend to any business. So, the

corporation should pay the attention to maintain the expenditure of the corporation by reducing bonus and other office expenses. He suggests the corporation maintains its liquidity ratio and investment, the total income will occur in increasing trend.

Ganesh Prasad Neupane (1997) had conducted a thesis on "A study on the assets and capital structure of Nepal Bank Limited". The study was made with the objective to analyze the assets and capital structure of Nepal Bank Limited finds that the amount of other assets is more than 3.5 times than the amount of net worth. It indicates that not only all the amount of net worth is used in unproductive assets but also other liabilities are used in fixed assets as land, furniture, stationery at hand. So, the total income of the bank could not increase along with the increasing rate of total liabilities.

Ramesh Raj Aryal (2001) had submitted a thesis study on "An evaluation of capital structure of Bottlers Nepal Limited". Objective of that study was to evaluate the capital structure of Bottlers Nepal Limited. Conclusion of that study was; all the calculations show the bad performance of the company due to the inefficient capital structure management. The company is regarded as highly geared up capital structured company. Thus, to design suitable pattern of capita structure for the company, the management must bring about a satisfactory compromising among these conflicting factors of cost, risk, control and timing. He recommended that the company to shift debt capital to equity capital when the company have high earning per share.

Deepak Khanal (2002) had presented his thesis on the topic of "Capital structure management of industrial public enterprises". Main objective of that study was to analyze the capital structure of industrial public enterprises. It was found that capital investment and earning were not co-

related and most of public enterprises in loss position. Debt equity ratio was not satisfactory, financial performance of these companies were not good, so he suggested that the management should reduced government subsidy and donation. They should improve their performance efficiency.

Rima Devi Shrestha (2003) had conducted a study on the topic of "Focus on capital structure (selected and listed companies)". Her objective of that study was to analyze the capital structure of selected and listed companies. She used data from 19 companies and study had covered different sectors like manufacturing finance, utility service and other allied area. She had found that the most of these companies have debt capital relatively very higher than equity capital. Consequently, most of them are operating at losses to the extent that payment of interest on loan has serious issues.

Most of these losses are after charging interest on loan. She has suggested that the government has to consider public enterprises is that of evaluating the relationship between use of debt and its impact on overall earning of public enterprises. So, government should be sure in knowing how using dept capital will minimize return. It should need to develop a suitable capital structure guideline to make public enterprises aware of the responsibility to repay the debt schedules. The other thing, which needs to be made publicity transparent that government money is not a lost less, found. Government has to analyze cost and risk return trade off. Thus, capital structure needs to be made more determinate by realistic analysis of cost.

R. L. Shrestha (2004) had conducted a thesis on the topic of "Capital adequacy of bank in Nepalese contest". His main objective is to study the capital adequacy of bank. It has suggested that bank should deal in highly risk transaction to maintain strong capital base.

However, the capital base should neither be too much leading to inefficient allocation of scarce resources not too weak as to expose to extreme risk. The study accepts that the operations of bank and the degree of risk associated with are subject to change country-wise, bank-wise and product-wise. Henceforth, the study suggests preparing standard capital adequacy ratios for each individual bank keeping in mind the various relevant factors.

Sarad Dungel (2007) had conducted a study on the topic of" Analysis of capital structure of Koshi Metal Crafts". His objective of the study was to examine the proportion of equity capital and debt capital for the balanced capital and debt capital for the balanced capital structure and to maximize the shareholder's wealth. And to analyze the relationship among the elements of the capital structure and characteristics.

Deepa Adhikari (2007) had presented her thesis on the topic of A comparative study of capital structure management of Joint venture banks in Nepal". She presented this thesis with the main objective to provide the proper guidelines to the potential investors. And the other objectives of this study are to evaluate the position of capital structure management and relationship between total debt and total equity of the three joint venture banks.

Guna Raj Dhakal (2008) had conducted a thesis on "comparative evaluation of capital structure between Dabur Nepal & Uniliver Company". Main objective of this thesis is to anticipate the aspirations of the customers and consumers and to respond creatively and comparatively with balanced products and services which raise the quality products.

Keshar Jung Baral (2009) had submitted a thesis on the topic of "Capital structure and cost of capital in public sector enterprises of Nepal". The main

objective of that study is to analyze the capital structure and cost of capital in public sector enterprises of Nepal. That study reached to the conclusion that performance of public enterprises are very poor and they are not adding the wealth of the society but diluting it, and hindering the development of the country. Further, the huge amounts of adjusted losses of manufacturing and trading enterprises is quite below its cost of capital and overall cost of capital in almost fiscal years of the study period. Thus, it can be concluded that capital structure of enterprises in public sector in Nepal more or less is the outcome of the deliberate decision of Government but not a product of market and public enterprises structures.

From the review of the studies conducted in different companies, it is transparent that the relationship between capital structure and cost of capital is almost non-existence. Thus, this study is conducted to analyze the capital structure of related banks (NABIL Bank, Kumari Bank and Nepal SBI Bank) with affecting that it will useful information for policy maker and the implementation of suggested findings.

# 2.4 Research Gap

After study the above thesis, I found that the previous researchers highly focused only the relationship between deposit and investment as well as return in ratio to capital employed but in study of capital structure there must be analyzed total liabilities not only deposit. Deposit is the part of total liabilities. And the above researches are studied in five years ago. That's why in the present scenario also it is not sufficient and Nabil Bank, Kumari Bank Limited, Nepal SBI Bank Limited are the leading banks in the Nepalese economy that's why their capital structure must be different than other manufacturing industries, trading industries and other banks.

#### **CAPTER THREE**

#### RESEARCH METHODOLOGY

## 3.1 Research Design

An appropriate research design has been conceived so as to answer to research questions. More specifically, the analysis of this study based on certain research design keeping in mind on the objectives of the study. The main objective of the study is to analyze the capital structure of listed commercial banks in Nepal, i.e. NABIL Bank Ltd, Kumari Bank Ltd & Nepal SBI Bank Ltd. It emphasizes on descriptive and analytical study of the collected data from profit & loss account and balance sheet (i.e. financial statements) over a period of time as well as personal & telephone interviews. Statistical & financial tools have been used to analyze the data.

#### 3.2 Population and Sample

Here, all the Nepalese commercial banks are taken as population and the number of sample are just three. The sampling method is convenience sampling method. This research report is based on comparative analysis of:-

- a. NABIL Bank Limited
- b. Kumari Bank Limited
- c. Nepal SBI Bank Limited

#### 3.3 Sources of Data

The main sources of data are secondary extracted from the annual report published by banks & publication of NRB. Balance sheet and profit and loss account of last six years are taken for the secondary means. At times of

necessity the primary sources of information are collected through discussion and enquiries made from concerned bank.

#### 3.4 Methods of analysis and presentation of data:

For the collection of data several places have been visited. In this processes of data collection I have visited library of PN College, Pokhara, branch of Kumari Bank, NABIL Bank and SBI Bank.

The data collected for this analysis are mostly secondary data provided by the banks for different fiscal year's Income Statement, Balance Sheet, P/L A/c and Annual Reports are taken from secondary data.

#### 3.5 Tools of Analysis

Capital structure ratio and some other major ratio are used in this study. The capital structure ratio is defined as financial ratios which throw light on the long-term solvency of a firm as reflected in its ability to assure the long-term creditors with regard to periodic payment of interest during the period of the loan and repayment of principal of maturity.

The major ratios used in this research are:

## a) Leverage

Leverage tools prove to be best acquired and managed study of leverage helps to maintain good capital structure. Leverage helps to analyze the effect of capital collection form certain sources to decide the composition of capital structure. It guides to the optimum use of debt capital with as low interest rate as possible thereby increasing the profit of shareholders.

James and Waller "Leverage may be defined as percentage return on equity to percentage return on total capitalization."

Lawrence J. Gitman- "The term leverage is quite commonly used to describe the firm's ability to use fixed cost assets or funds to magnify the return on its owners."

From above we may conclude that a practice of using debt capital at low interest rate thereby increasing equity holder's rate of return is leverage. It helps for choosing best alternative for capital collection.

Leverage can be classified into three categories.

## i. Degree of operating leverage

The relationship between the rate of change that takes place in sales and the resulting rate of change in net operating income is known as operating leverage. A firm has high degree of operating leverage if it is using higher percentage of fixed cost out of the total cost.

## ii. Degree of financial leverage

The relationship between the rate of change that takes place in sales and the resulting rate of change in net operating income is known as operating leverage. A firm has high degree of operating leverage if it is using higher percentage of fixed cost out of the total cost.

## iii. Degree of combined leverage

The combination between operating and financial leverage is known as combined leverage which shows the potential use of fixed cost, both operating and financial magnify the effect of changes in sales on the firm's earnings per share. Thus, it shows the total impact of fixed cost in the firm's operating and financial structure.

# b) Capital structure/ leverage/ solvency ratio

Leverage ratio analysis is the long term solvency of the firm. Solvency is the Bank's ability to pay its debt when they become due. This ratio also shows the manner by which the capital structure is formed. That is why it is called capital structure ratio.

#### Leverage Ratio includes:

#### i. Debt equity ratio

Debt equity ratio indicates the extent to which debt financing is used relative to equity financing. Debt equity ratio is a vital tool used to analyze the long term solvency of a firm. Here the debt can be defined as total debt or as long term debt. Long term creditors generally prefer to see a modest debt equity ratio since it means greater protection and a greater stake in company's future for equity holders. Total debt includes current accounts saving accounts, calls and short deposits, overdrafts, fixed deposits, loan and advance borrowing from other banks. Shareholders equity or net worth includes paid-up capital reserve and surplus. It is computed as:

#### ii. Debt to assets ratio

Debt to Assets Ratio shows what portions of the capital assets are financed by outside funds. When successfully employed this ratio benefits the shareholders by raising their expected return earning per share. A high ratio shows Bank's success in exploiting debt to be more profitable as well as it also indicates that it is a riskier capital structure and vice-versa. It is computed as:

# iii. Interest coverage/ time interest earned/ debt service ratio/ debt competency ratio

The interest coverage ratio also named as the time interest earned ratio is designed to relate the financial changes of a firm to its ability to service to cover them. Interest coverage ratio reflects the firm's ability to pay interest out of earnings. This ratio is simply the ratio of earnings before interest and tax (EBIT) for a particular reporting period to the amount of interest charges for the period. Too high or too low ratio is unfavorable to the banks. Too high ratio implies unused debt capacity at 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.

## iv. Capital Sufficiency Ratio/ Capital Adequacy Ratio

Capital sufficiency or capital adequacy is a recent term in financial structure. Capital sufficiency ratio is based on the capital adequacy framework of Nepal Rastra Bank which itself is the proposed guidelines of the revised international coverage of capital measurement and capital standard or popularity known as Basel 2. It is used in case of bank to assess the strength of the capital, the sufficiency of the capital. Appropriate capital sufficiency ratio has always been a controversial issue for the commercial bank. However very high or lower capital sufficiency ratio is considered to be unfavorable in terms of lowered return or lowered solvency respectively. The capital sufficiency ratio emphasis that for every kind of assets there must be some amount of capital back-ups.

Capital sufficiency Ratio is calculated as under:

Capital Sufficiency/Adequacy Ratio (CSR):

= <u>Total capital fund</u>
Total risk weighted assets

#### **CHAPTER-FOUR**

#### PRESENTATAION AND ANALYSIS OF DATA

#### 4.1 Introduction

The major objectives of this study are to analyze the comparative case study of three commercial banks namely NABIL, Kumari and Nepal SBI Bank Limited respectively. This chapter has been prepared to present, analyze and interpret the results systematically. In the course of analysis, various financial reports have been used. A single promoter can't judge the efficiency and effectiveness of the performance of the relevant banks so different parameters are used. To evaluate the capital structure of related banks various ratios, trend analysis are used.

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

The data used for the analysis are Profit and Loss Account, Balance Sheet, ownership's equity, deposits, main index, etc. These data are based on annual report. Descriptive analysis is used to analyze the sources of capital. Other tools are used for analysis are the tools of leverage as DOL, DFL and DCL. Tools concerning ratio analysis are also calculated for checking long term solvency.

## 4.2 Descriptive Analysis of Ratio

This section of the study explores the capital structure with respect to the capital, reserves, deposits, current liability and borrowing. The table 4.1 shows the latest paid-up capital, Reserves, Borrowing and deposits of above mentioned banks for the year 2066/67B.S.

Table No. 4.1

Paid up Capital, Reserves, Borrowings & Deposits of NABIL, KBL & NSBIL for the year 2066/67

(In 000)

Banks	Paid up	Reserves	Borrowing	Deposits
NABIL	2028774	1805981	74900	46410701
KBL	1306016	479743	429740	17432253
NSBIL	1861324	589230		34896424

(Sources: annual report of NABIL, KBL & NSBL.)

## 1. Share Capital Trend:

Share capital is the fully paid up or issued capital of the concerned bank. The table that follows the deposits of the share capital trend of the commercial banks for six consecutive fiscal year.

Table No. 4.2
Share Capital Trend of NABIL

Year	Paid- up capital	<b>Index trend</b>	Yearly change
	(In'000' <u>)</u>		
2061/62	491654	100%	-
2062/63	491654	100%	0
2063/64	491654	100%	0
2064/65	689216	140.18%	40.18%
2065/66	1448621	294.64%	110.19%
2066/67	2028774	421.64%	43.10%

(Sources: annual report of NABIL)

Share capital of NABIL has adopted a constant trend in the first half of the study period and has adopted an increasing trend in the second half of the study period.

Figure No. 4.1
Share Capital Trend of NABIL

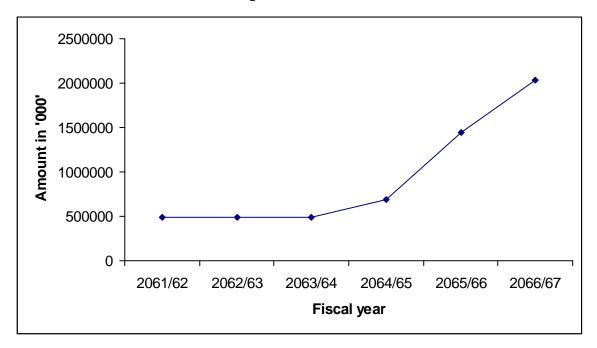


Table No. 4.3
Share Capital Trend of KBL

Year	Paid- up capital(In'000')	Index trend	Yearly change
2061/62	500000	100%	-
2062/63	625000	125%	25%
2063/64	750000	150%	20%
2064/65	1070000	214%	42.67%
2065/66	1304936	260.99%	21.96%
2066/67	1306016	261.20%	0%

(Sources: annual report of KBL)

Share capital of KBL has adopted a constantly increasing trend during the study period. It has almost tripled during the 5 years' time.

Figure No. 4.2
Share Capital Trend of KBL

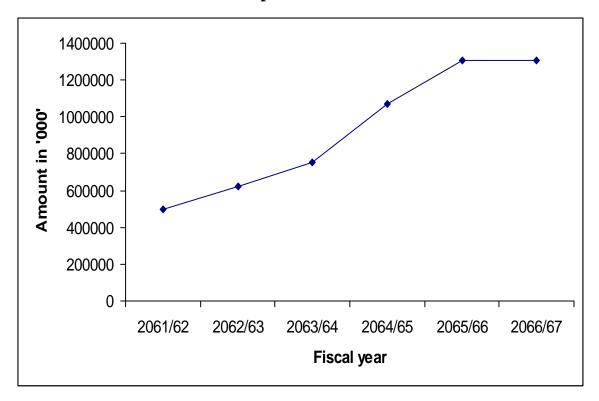


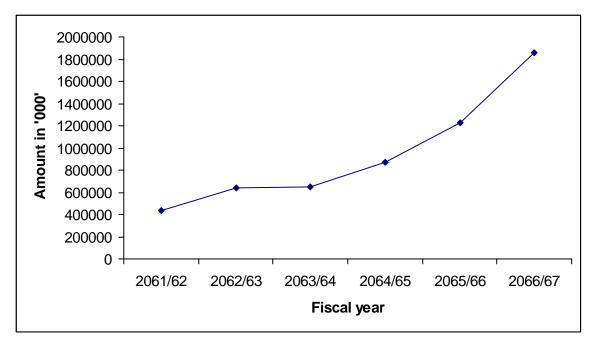
Table No. 4.4
Share Capital Trend of NSBL

Year	Paid- up capital(In'000')	Index trend	Yearly change
2061/62	431866	100%	-
2062/63	640236	148.25%	48.25%
2063/64	647798	150%	1.18%
2064/65	874528	202.50%	35%
2065/66	1224339	283.50%	40%
2066/67	1861324	431%	52.03%

(Sources: annual report of NSBL)

Paid-up capital of NSBL is in increasing trend. It is Rs. 431866 thousand in FY 2061/62 and Rs. 1861324 which is 431% in FY 2066/67. It is in increasing trend.

Figure No. 4.3
Share Capital Trend of NSBL



The share capital of NABIL remains at Rs. 491654 in three consecutive year's .In the fiscal year 2064/65, 2065/66 & 2066/67 it increased to Rs. 689216, Rs. 1448621 & Rs. 2028774. However, the trend of increasing of NABIL is unexpectedly high in the fiscal year 2065/66 & 2066/67. The share capital of KBL in the fiscal year 2061/62 is Rs. 500000 and it has increased to Rs. 625000 in 2062/63, similarly Rs. 750000, Rs. 1070000, Rs. 1304936 & Rs. 1306016 in fiscal year 2063/64, 2064/65, 2065/66 & 2066/67 accordingly. But in fiscal year 2066/67 it increased very low rate then previous increasing rate. And the share capital of NSBL in fiscal year 2061/62 is Rs. 431866. After the fiscal year 2062/63 the share capital of NSBL is increasing each year as Rs. 640236, Rs. 647798, Rs. 874528, Rs. 1224339 & Rs. 1861324 in the fiscal year 2062/63, 2063/64, 2064/65,

2065/66 & 2066/67 accordingly. But the last two fiscal year increasing trend is high then previous year.

## 2. Reserves and Surplus Trend:

It refers to the total capital of the concerned bank and includes general reserve, share premium and other reserves. The following table shows the reserve and surplus of the mentioned bank for 6 consecutive years.

Table No. 4.5

R/S Trend of NABIL

Year	Reserve & Surplus(In'000')	Index trend	Yearly change
2062/62	1165984	100%	-
2062/63	1383340	118.64%	18.64%
2063/64	1565395	134.26%	13.17%
2064/65	1747983	149.91%	11.66%
2065/66	1681620	144.22%	-3.80%
2066/67	1805981	154.89%	7.40%

(Sources: annual report of NABIL)

Figure No. 4.4

R/S Trend of NABIL

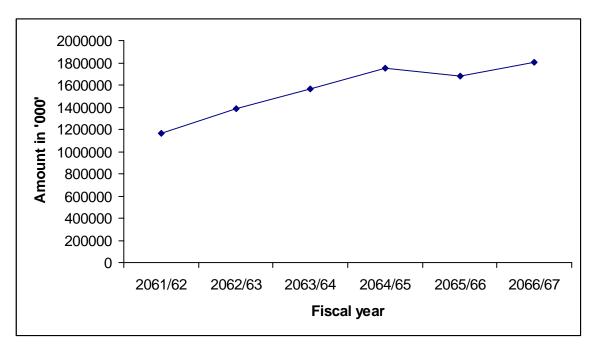


Table No. 4.6

R/S Trend of KBL

Year	Reserve & Surplus(In'000')	Index trend	Yearly change
2061/62	141763	100%	-
2062/63	238851	168.49%	68.49%
2063/64	275630	194.43%	15.40%
2064/65	294885	208.01%	6.98%
2065/66	320017	225.74%	8.52%
2066/67	479743	338.41%	49.91%

(Sources: annual report of KBL)

Figure No. 4.5 R/S Trend of KBL

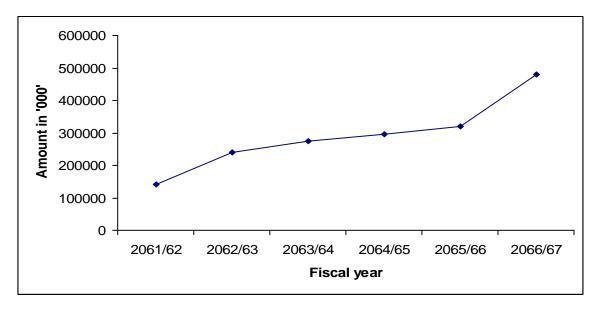


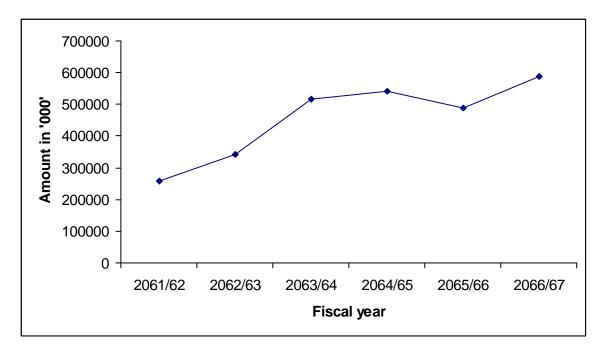
Table No. 4.7

R/S Trend of NSBL

Year	Reserve & Surplus(In'000')	Index trend	Yearly change
2061/62	257147	100%	-
2062/63	342138	133.05%	33.05%
2063/64	515492	200.47%	50.67%
2064/65	540117	210.04%	4.77%
2065/66	488268	189.88%	-9.60%
2066/67	589230	229.14%	20.68%

(Sources: annual report of NSBL)

Figure No. 4.6 R/S Trend of NSBL



The reserve and surplus of NABIL is in increasing trend but in the fiscal year 2065/66 it slightly decrease after that in the fiscal year 2066/67 it again increase, the reserve & surplus of KBL is in the increasing trend. The increasing trend of reserve and surplus is very high in each fiscal year. Similarly the reserve & surplus of NSBL is increasing trend but in the fiscal year 2065/66 is quit low. In the fiscal year 2066/67 it again increases as before trend. Increasing reserve and surplus will reduce the shareholder's profit.

# 3. Borrowing Trend:

It is an amount taken by the commercial bank from different lenders. It includes both the local and foreign borrowing. Borrowing trend of the commercial bank is shown in the table placed below:

Table No. 4.8
Borrowing Trend of NABIL

Year	Borrowing (In'000')	Index trend	Yearly change
2061/62	17063	100%	-
2062/63	173202	1015.07%	915.07%
2063/64	882573	5172.44%	409.56%
2064/65	1360000	7970.46%	54.09%
2065/66	1681305	9853.51%	23.63%
2066/67	74900	438.96%	-95.55%

(Sources: annual report of NABIL)

Figure No. 4.7
Borrowing Trend of NABIL

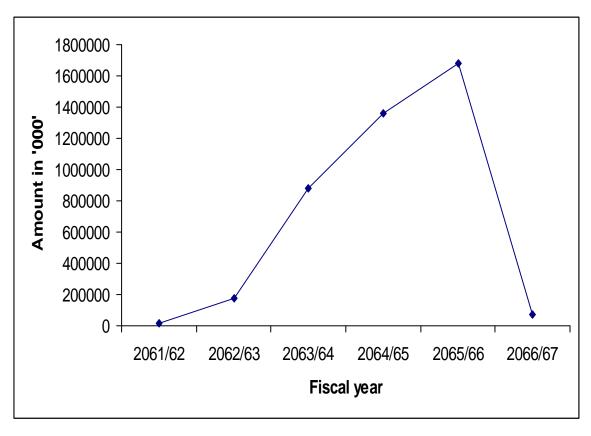


Table No. 4.9
Borrowing Trend of KBL

Year	Borrowing (In'000')	Index trend	Yearly change
2061/62	401761	100%	-
2062/63	251400	62.58%	-37.42%
2063/64	212970	53.01%	-15.29%
2064/65	100000	24.89%	-53.05%
2065/66	293420	73.03%	193.41%
2066/67	429740	106.96%	46.46%

(Sources: annual report of KBL)

Figure No. 4.8
Borrowing Trend of KBL

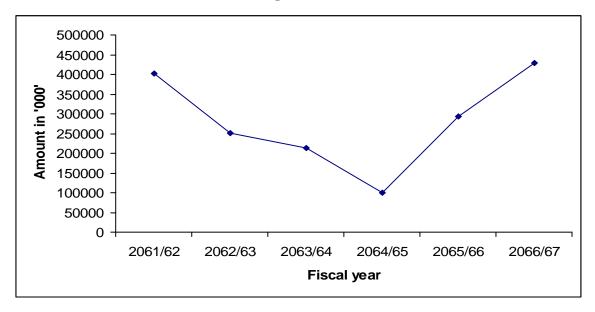
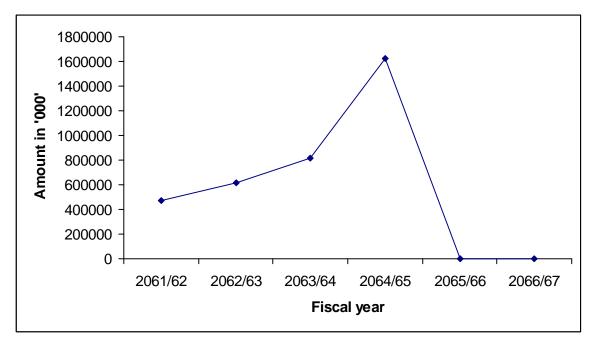


Table No. 4.10
Borrowing Trend of NSBL

Year	Borrowing (In'000')	Index trend	Yearly change
2061/62	469629	100%	-
2062/63	612429	130.41%	30.41%
2063/64	815365	173.62%	33.14%
2064/65	1627480	346.55%	99.60%
2065/66			
2066/67			

(Sources: annual report of NSBL)





NABIL and NSBL had borrowed from the local and foreign institutions. The trend of total borrowing of NABIL is very fluctuating and it reached at low level in the last fiscal year. However, the trend of total borrowing of NSBL is increasing each year but in the fiscal year 2065/66 it repay all its borrowing and reached a zero level. The borrowing trend of KBL is decreasing first four fiscal year, but in the fiscal year 2065/66 & 2066/66 the borrowing is highly increasing trend.

# 4. Deposit Trend:

Deposit refers to the money collected in the bank having an account as current, saving and fixed deposits of the commercial banks.

The table below shows the deposit trend of the sample banks.

Table No. 4.11

Deposit Trend of NABIL

Year	Deposit (In'000')	Index trend	Yearly change
2061/62	14586609	100%	-
2062/63	19347399	132.64%	32.64%
2063/64	23342285	160.03%	20.65%
2064/65	31915047	218.80%	36.73%
2065/66	37348256	256.05%	17.02%
2066/67	46410701	318.17%	24.26%

(Sources: annual report of NABIL)

Figure No. 4.10

Deposit Trend of NABIL

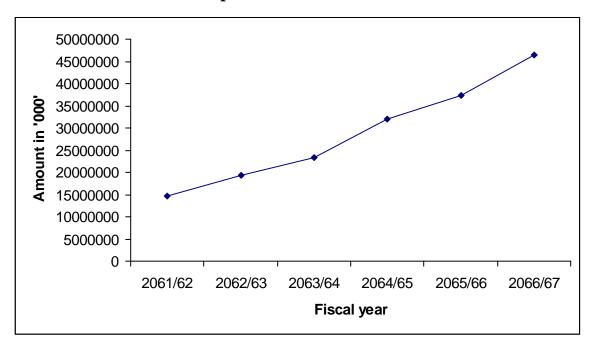


Table No. 4.12

Deposit Trend of KBL

Year	Deposit (In'000')	Index trend	Yearly change
2061/62	6268954	100%	-
2062/63	7768957	123.93%	23.93%
2063/64	10557091	168.40%	35.88%
2064/65	12774281	203.77%	21%
2065/66	15710396	250.61%	22.99%
2066/67	17432253	278.07%	10.96%

(Sources: annual report of KBL)

Figure No. 4.11

Deposit Trend of KBL

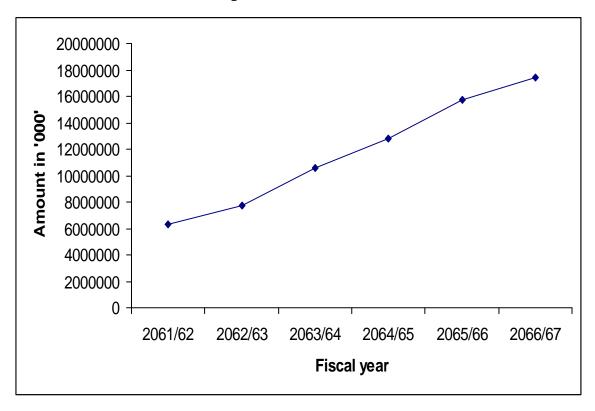


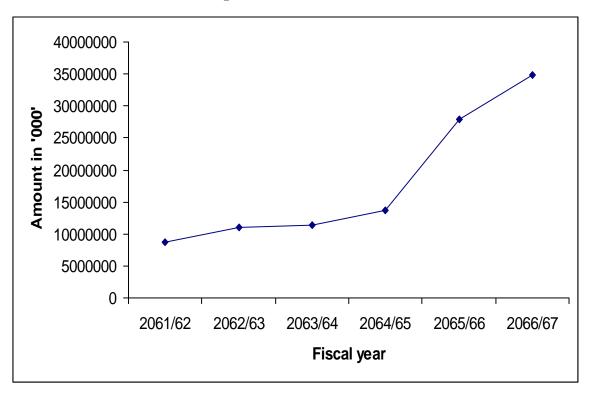
Table No. 4.13

Deposit Trend of NSBL

Year	Deposit (In'000' <u>)</u>	Index trend	Yearly change
2061/62	8654774	100%	-
2062/63	11002041	127.12%	27.12%
2063/64	11445286	132.24%	4.03%
2064/65	13715395	158.47%	19.84%
2065/66	27957221	323.03%	103.84%
2066/67	34896424	403.20%	24.82%

(Sources: annual report of NSBL)

Figure No. 4.12
Deposit Trend of NSBL



The deposit trend of NABIL, KBL and NSBL also seem to be increasing over the last six years. In the capital structure of any financial institutions deposit play the vital role because it is very essential for any financial organizations.

#### 5. Total Liabilities Trend:

It is the total capital of commercial banks. It includes share capital (paid-up), R/S, Deposits, current liabilities of the sample bank. Total liabilities trend of the commercial bank has been shown below in the table for six consecutive fiscal years.

Table No. 4.14
Total Liabilities Trend of NABIL

Year	Total liabilities (In'000')	Index trend	Yearly change
2061/62	17064082	100%	-
2062/63	22329971	130.86%	30.86%
2063/64	27253393	159.71%	22.05%
2064/65	37132759	217.61%	36.25%
2065/66	43867398	257.07%	18.13%
2066/67	52150237	305.61%	18.88%

(Sources: annual report of NABIL)

Figure No. 4.13
Total Liabilities Trend of NABIL

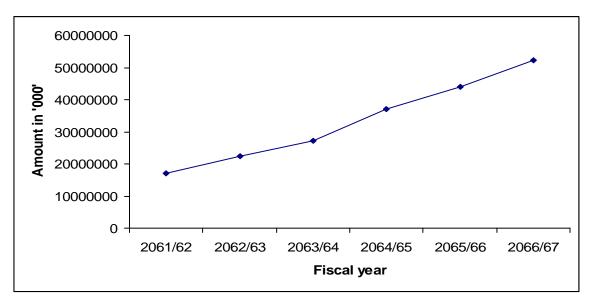


Table No. 4.15
Total Liabilities Trend of KBL

Year	Total liabilities (In'000')	Index trend	Yearly change
2061/62	7428303	100%	-
2062/63	9010276	121.30%	21.30%
2063/64	11918311	160.44%	32.27%
2064/65	15026599	202.29%	26.08%
2065/66	18538565	249.57%	23.37%
2066/67	20522475	276.27%	10.70%

(Sources: annual report of KBL)

Figure No. 4.14
Total Liabilities Trend of KBL

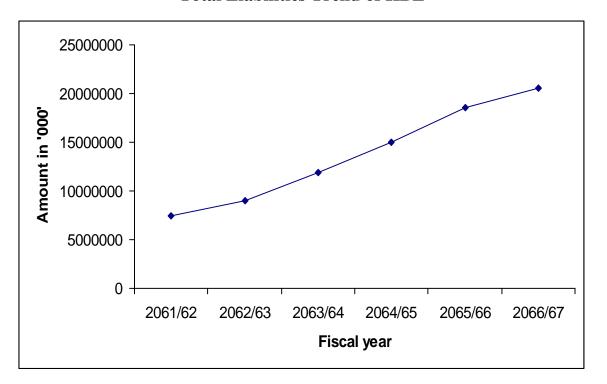


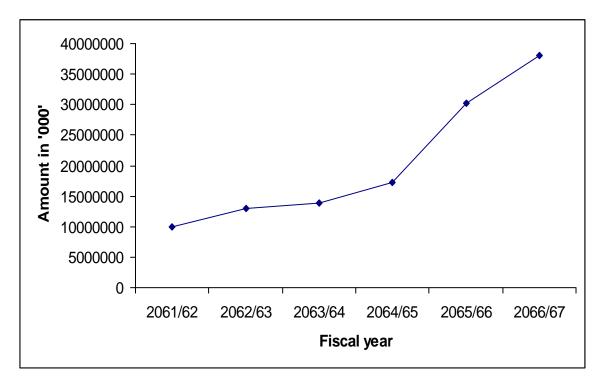
Table No. 4.16

Total Liabilities Trend of NSBL

Year	Total liabilities (In'000')	Index trend	Yearly change
2061/62	9963021	100%	-
2062/63	13035839	130.84%	30.84%
2063/64	13901201	139.53%	6.64%
2064/65	17187446	172.51%	23.64%
2065/66	30166440	302.78%	75.51%
2066/67	38047679	381.89%	26.13%

(Sources: annual report of NSBL)

Figure No. 4.15
Total Liabilities Trend of NSBL



The total liabilities of NABIL, KBL and NSBL also seem to be increasing over the last six years.

# 6. Leverage:

In simple word leverage is power and relationship between two interrelated variables. These variables may be output, sale, cost and profit. Finance manager calculates these leverage by apply formula and then uses them for taking decision in favour of company's shareholder. Main aim of leverage testing is maximize the earning of shareholder and reduce the risk of company.

Leverage can be classified into three categories.

## **6.1 Degree of operating leverage (DOL)**

Operating leverage is % change in earnings before interest and tax divided by % change in sale. If company is charging fixed cost, the operating leverage tells the EBIT will greater than sale because due to increasing sale of fixed cost per unit will decrease and it will increase EBIT higher than sale. It is calculated as under:

# **6.2 Degree of Financial Leverage (DFL)**

Financial leverage is known as trading on equity. If any company's finance manager knows that company's return on investment is more than interest on loan or borrowing obligation. At this time, if company needs more money, then finance manager gets its loan and bought the asset from same loan. So, any technique in which any asset is purchased with loan and trying to increase EPS, then this is called financial leverage.

# **6.3 Degree of Combined Leverage**

The combination between operating and financial leverage is known as combined leverage which shows the potential use of fixed cost, both operating and financial magnify the effect of changes in sales on the firm's earnings per share. Thus, it shows the total impact of fixed cost in the firm's operating and financial structure.

DCL = % change in EPS % change in sales Or, DCL = DOL x DFL

Table No. 4.17

Calculation of DOL, DFL and DCL of NABIL

Year	C/M(In'000')	EBIT(In'000')	EBT(In'000')	DOL	DFL	DCL
2061/62	918558	579405	563763	1.59	1.03	1.63
2062/63	1056046	699848	688654	1.51	1.02	1.53
2063/64	1158736	776893	754313	1.49	1.03	1.54
2064/65	1394262	963109	892837	1.45	1.08	1.56
2065/66	1860554	1311450	1219843	1.42	1.08	1.53
2066/67	2336705	1702535	1601973	1.37	1.06	1.46

(Source:-Appendix no I)

Figure No. 4.16
Graphical Presentation of C/M, EBIT & EBT of NABIL

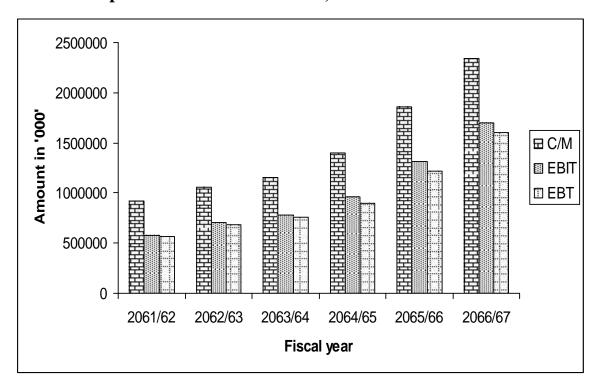


Table No. 4.18
Calculation of DOL, DFL and DCL of KBL

Year	C/M(In'000')	EBIT(In'000')	EBT(In'000')	DOL	DFL	DCL
2061/62	270167	173918	168664	1.55	1.03	1.60
2062/63	277797	152988	146249	1.82	1.05	1.90
2063/64	419088	264429	256672	1.58	1.03	1.63
2064/65	512781	304653	269293	1.68	1.13	1.90
2065/66	655365	408543	352844	1.60	1.16	1.86
2066/67	843361	522191	421601	1.62	1.24	2.00

(Source:-Appendix no. II)

Figure No. 4.17
Graphical Presentation of C/M, EBIT & EBT of KBL

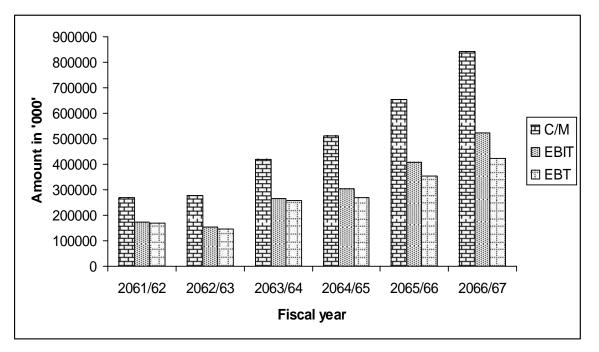
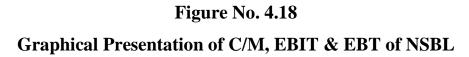
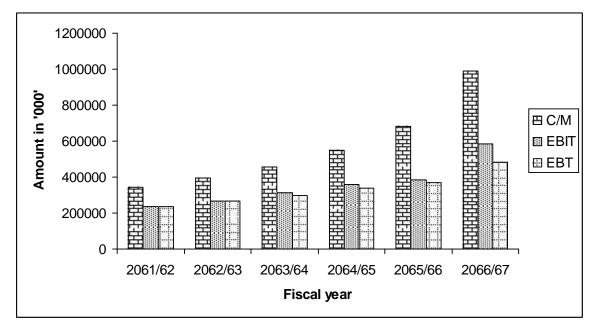


Table No. 4.19
Calculation of DOL, DFL and DCL of NSBL

Year	C/M(In'000')	EBIT(In'000')	EBT(In'000')	DOL	DFL	DCL
2061/62	341785	236498	234299	1.45	0.99	1.43
2062/63	392747	267600	264949	1.47	0.99	1.45
2063/64	457132	312632	298103	1.46	0.95	1.39
2064/65	549765	356521	339243	1.54	0.95	1.47
2065/66	681238	384528	368627	1.77	0.96	1.70
2066/67	987572	586954	483516	1.68	0.82	1.39

(Source:-Appendix no. III)





DOL, DFL and DCL must be above 1. The result below 1 show that the capital structure is not suitable and cannot earn more as the firm should have.

According to DOL the result is positive because DOL of above bank of each year is above 1. However the trend is slightly fluctuating.

According to DFL also the result is above 1 of NABIL & KBL, It suggests the use of debt capital is maximum. If the result is equal to 1, it means the firm has not used debt capital. But the NSBL DFL is less then or near to 1, because not using of borrowing, in last two fiscal year. The trend of DFL in the five consecutive years is decreasing.

According to DCL, the result seems satisfying. It shows the change is EPS with 1 % change in sales or income. However the trend is slightly fluctuating.

### 7. Capital structure/Leverage/Solvency Ratio:

Leverage ratio analysis is the long term solvency of the firm. Solvency is the Bank's ability to pay its debt when they become due. This ratio also shows the manner by which the capital structure is formed. That is why it is called capital structure ratio.

### Leverage Ratio includes:

- > Debt equity ratio
- > Debt to total assets ratio
- ➤ Interest coverage ratio/time interest Earned/Debt competence ratio
- ➤ Capital sufficiency/ capital adequacy ratio

## 7.1 Debt Equity Ratio

The two basic components of debt to equity ratio are outsider's funds i.e. external equities and share holders' funds, i.e., internal equities. The outsider's funds include all debts / liabilities to outsiders, whether long term or short term or whether in the form of debentures, bonds, mortgages or bills. The shareholders funds consist of equity share capital, preference share capital, capital reserves, revenue reserves, and reserves representing accumulated profits and surpluses like reserves for contingencies, sinking funds, etc. The accumulated losses and deferred expenses, if any, should be deducted from the total to find out shareholder's funds

Some writers are of the view that current liabilities do not reflect long term commitments and they should be excluded from outsider's funds. There are some other writers who suggest that current liabilities should also be included in the outsider's funds to calculate debt equity ratio for the reason that like long term borrowings, current liabilities also represents firm's obligations to outsiders and they are an important determinant of risk. However, we advise that to calculate debt equity ratio current liabilities should be included in outsider's funds. The ratio calculated on the basis outsider's funds excluding liabilities may be termed as ratio of long-term debt to share holders funds.

It is computed as:

#### 7.2 Debt to Assets Ratio

A ratio that indicates what proportion of debt a company has relative to its assets. The measure gives an idea to the leverage of the company along with the potential risks the company faces in terms of its debt-load.

A debt ratio of greater than 1 indicates that a company has more debt than assets; meanwhile, a debt ratio of less than 1 indicates that a company has more assets than debt. Used in conjunction with other measures of financial health, the debt ratio can help investors determine a company's level of risk. It is computed as:

Table No. 4.20
Calculation of Debt/Equity Ratio and Debt Assets Ratio of NABIL

Year	Total	Total	Total	Debt/Equity	Debt
	Debt(In'000' <u>)</u>	Equity(In'000')	Assets(In'000')	Ratio	assets
					Ratio
2061/62	15406444	1657638	17064082	9.30	90.29%
2062/63	20454977	1874994	22329971	10.91	91.60%
2063/64	25196343	2057050	27253393	12.25	92.45%
2064/65	34695560	2437199	37132759	14.24	93.44%
2065/66	40737157	3130241	43867398	13.01	92.86%
2066/67	48315482	3834755	52150237	12.60	92.65%

(Source:-annual report of NABIL)

Figure No. 4.19
Graphical Presentation of Total Debt, Equity& Assets of NABIL

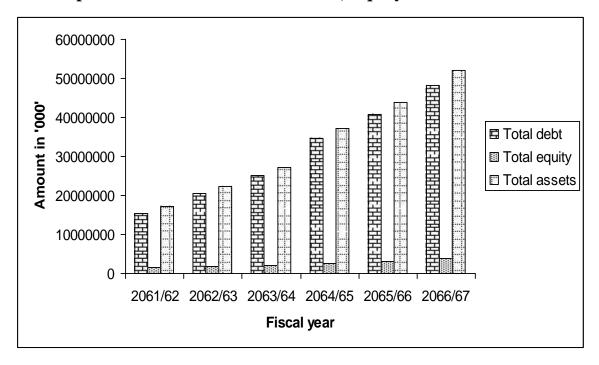


Table No. 4.21
Calculation of Debt/Equity Ratio and Debt Assets ratio of KBL

Year	Total	Total	Total	Debt/Equity	Debt
	Debt(In'000')	Equity(In'000')	Assets(In'000')	Ratio	assets
					Ratio
2061/62	6786540	641763	7428303	10.57	91.36%
2062/63	8146425	863851	9010276	9.43	90.41%
2063/64	10892681	1025630	11918311	10.62	91.39%
2064/65	13661714	1364885	15026599	10.00	90.92%
2065/66	16913612	1624953	18538565	10.41	91.23%
2066/67	18736716	1785759	20522475	10.49	91.30%

(Source:-annual report of KBL)

Figure No. 4.20
Graphical Presentation of Total Debt, Equity & Assets of KBL

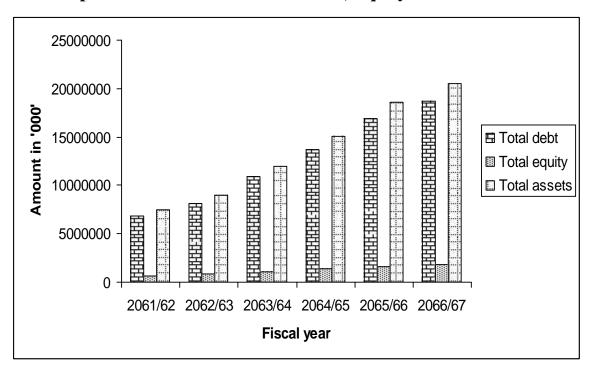
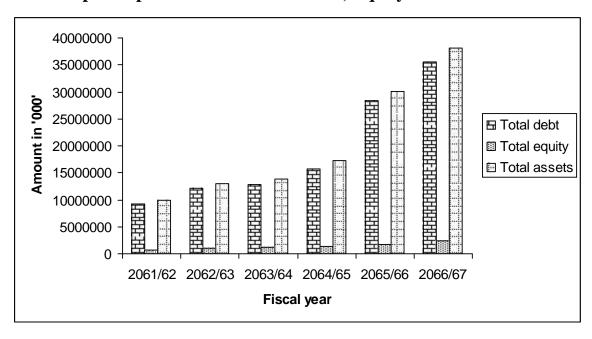


Table No. 4.22
Calculation of Debt/Equity Ratio and Debt Assets ratio of NSBL

Year	Total	Total	Total	Debt/Equity	Debt
	Debt(In'000')	Equity(In'000')	Assets(In'000')	Ratio	assets
					Ratio
2061/62	9274008	689013	9963021	13.46	93.08%
2062/63	12053465	982374	13035839	12.27	92.46%
2063/64	12737911	1163291	13901201	10.95	91.63%
2064/65	15772801	1414645	17187446	11.15	91.77%
2065/66	28453833	1712607	30166440	16.61	94.32%
2066/67	35597125	2450554	38047679	14.53	93.56%

(Source:-annual report of NSBL)

Figure No. 4.21
Graphical presentation of Total debt, Equity& assets of NSBL



Debt-equity ratio is the relationship between borrowed funds and owner's capital. The debt equity ratio of NABIL is 9.30 times, 10.91 times, 12.25 times, 14.25 times, 13.01 times and 12.60 times respectively in the fiscal

year 2061/62, 2062/63, 2063/64, 2064/65, 2065/66 and 2066/67. This ratio is increasing trend first four fiscal year and decreasing trend in last two fiscal year. Similarly, D/E Ratio of KBL is 10.57 times, 9.43 times, 10.62 times, 10.00 times, 10.41 times and 10.49 times respectively for six consecutive years. The D/E Ratio of NSBL is 13.46 times, 12.27 times, 10.95 times 11.15 times, 16.61 times and 14.53 times respectively in the fiscal year 2061/62, 2062/63, 2063/64, 2064/65, 2065/66 and 2066/67. The NSBL trend is fluctuating up and down.

Hence, the result shows that the total debt of each bank is increasing in each year as compared to shareholder's fund. It is quite not good for financial institutions.

Combination of debt assets ratio is in terms of total debt to total assets reveals that the commercial banks are highly leveraged on six years time horizon. It means the assets of selected banks have been financed more funds collected from creditors.

The trend of debt assets ratio of NABIL, KBL and NSBL is fluctuating over the study period of six years.

Debt ratio of concerned bank shows the value of assets is a bit greater than total debt. And its increasing trend refers to increasing financial risk and decreasing trend refers to decreasing financial risk.

# 7.3 Interest Coverage/Time Interest Earned/Debt Competence Ratio

A ratio used to determine how easily a company can pay interest on outstanding debt. The interest coverage ratio is calculated by dividing a company's earnings before interest and taxes (EBIT) of one period by the company's interest expenses of the same period. The lower the ratio, the more the company is burdened by debt expense. When a company's interest coverage ratio is 1.5 or lower, its ability to meet interest expenses may be questionable. An interest coverage ratio below 1 indicates the company is not generating sufficient revenues to satisfy interest expenses.

Interest coverage Ratio = <u>EBIT</u> Interest Expenses

Table No. 4.23

Computation of Interest Coverage Ratio of NABIL

Year	EBIT(In'000')	Interest(In'000')	T/E Ratio
2061/62	579405	243545	2.38
2062/63	699848	357161	1.96
2063/64	776893	555710	1.40
2064/65	963109	758436	1.27
2065/66	1311450	1153280	1.14
2066/67	1702535	1960108	0.87

(Source:-Appendix no. I)

Figure No. 4.22
Graphical Presentation of EBIT & Interest of NABIL

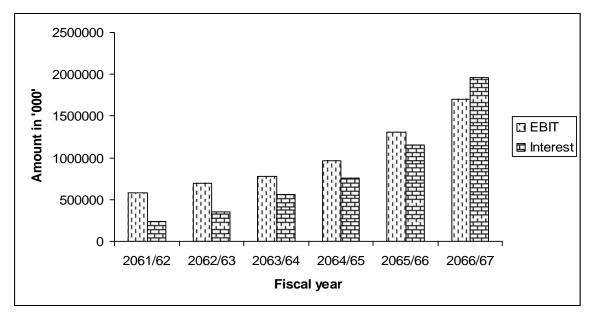


Table No. 4.24

Computation of Interest Coverage Ratio of KBL

Year	EBIT(In'000')	Interest(In'000')	T/E Ratio
2061/62	173918	240130	0.72
2062/63	152988	337056	0.45
2063/64	264429	397053	0.67
2064/65	304653	498734	0.61
2065/66	408543	816203	0.50
2066/67	522191	1188918	0.44

(Source:-Appendix no. II)

Figure No. 4.23
Graphical Presentation of EBIT & Interest of KBL

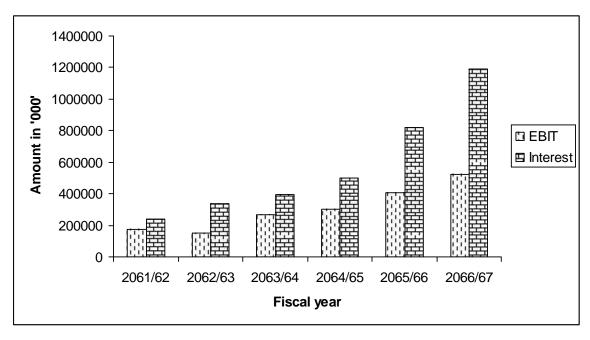
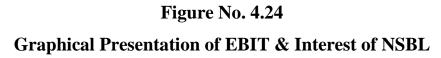


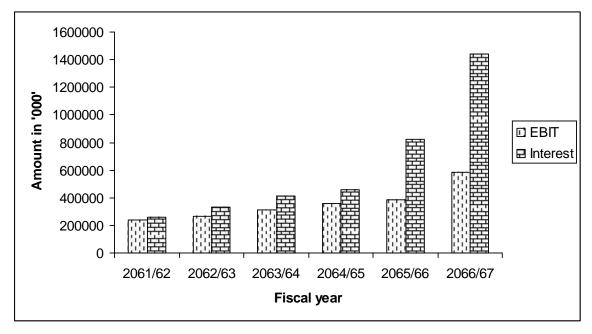
Table No. 4.25

Computation of Interest Coverage Ratio of NSBL

Year	EBIT(In'000')	Interest(In'000')	T/E Ratio
2061/62	236498	258430	0.92
2062/63	267600	334770	0.8
2063/64	312632	412262	0.76
2064/65	356521	454918	0.78
2065/66	384528	824700	0.47
2066/67	586954	1443694	0.41

(Source:-Appendix no. III)





Interest coverage ratio is the firm's ability to cover the interest coverage ratio of NABIL is quite satisfactory for first, five fiscal year but it is low in last fiscal year; similarly the interest coverage ratio of both KBL & NSBL is very low.

The computed interest coverage ratio of all three banks in above tables shows how many times the interest changes are covered by profits.

# 7.4 Capital Sufficiency/ Capital Adequacy Ratio

Capital is the life blood of any organization. So, is it, the case of banks too .CAR measures whether the firm has maintained sufficient capital or not. In other words, it helps to decide whether the existing capital is adequate of there is a need to reform.

The ratio is tested to insure the safety and stability of the firm in long run. CAR protects the interest of both depositors and creditors. Over capitalization and under capitalization both have adverse effect on the profitability of the firm. If the capital is excess, it remains idle (unused), and if the capital is insufficient, the firm may not be able to grab the opportunity from the potential profitable sector. Therefore, the commercial bank has been directed to maintain the sufficient ratio by the Central Bank. In addition, the commercial banks declare and distribute the dividend until they meet the directed CAR.

The minimum capital reserve required for the commercial banks as per the directives of NBR is as follows.

Capital sufficiency Ratio is calculated as under:

Capital Sufficiency/Adequacy Ratio (CSR):

Total capital fund
 Total risk weighted assets

Under capital adequacy framework, for the purpose of calculation of capital fund, commercial banks are required to classify their capital into two parts as follows:

# A. Core capital (Tier 1 capital):

In order to rank as Tier 1, capital must be fully paid up, have no fixed servicing or dividend costs attached to it, and be freely available to absorb losses ahead of general creditors. Capital also needed to have a very high degree of permanence if it is to be treated as tiers 1.

### Tier 1 capital consists of:

- a. Paid up capital
- b. Share premium
- c. Non- redeemable preference share
- d. General reserve fund
- e. Cumulative profit/loss( up to previous FV)
- f. Capital Adjustment fund
- g. Current year's profit and loss (as per balance sheet)
- h. Retained earning
- i. Dividend equalization reserve
- j. Other reserve

### B. Supplementary Capital (Tier 2 capital) consists of:

- a. Loan loss provision
- b. Exchange equalization reserve
- c. Assets revaluation reserve
- d. Hybrid revaluation reserve
- e. Unsecured subordinate term debt
- f. Interest rate fluctuation fund
- g. Investments adjustment reserve

The capital adequacy ratio is calculated by dividing eligible regulatory capital by total risk weighted exposure. In order to calculate capital adequate ratio banks are required to calculate their risk weighted exposure in respect to credit risk, market risk and operational risk. The methodology to calculate risk weighted exposure (RWE) for each of these risk categories is various. However Nepal Rastra Bank has the flexibility of choosing any of the

approach and according to NRB the following approaches are decided to adopt initially.

- 1. Simplified standardized approach for credit risk
- 2. Basic indicator Approach for operational risk
- 3. Net open position approach for market risk

In the below tables we have calculated the capital sufficiency/adequacy ratio of the sample commercial bank for the five consecutive year.

Table No. 4.26
Capital Sufficiency Ratio of NABIL

Year	Total Fund(In'000')	Total Risk Weighted Assets(In'000')	CSR
2061/62	1766073	14193072	12.44%
2062/63	2089324	16976369	12.31%
2063/64	2307632	19166766	12.04%
2064/65	2998730	27010564	11.10%
2065/66	3727083	34816501	10.71%
2066/67	4390229	41822660	10.50%

(Source: annual report of NABIL)

Figure No. 4.25

Graphical Presentation of Total Fund & Total Risk Weighted Assets of NABIL

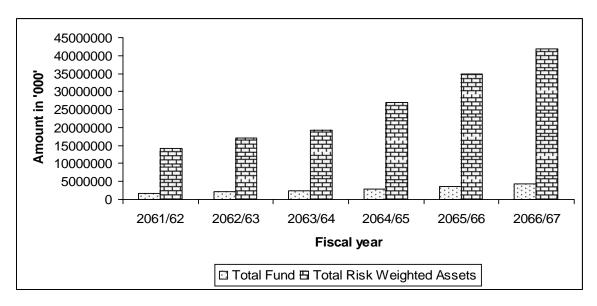


Table No. 4.27
Capital Sufficiency Ratio of KBL

Year	Total Fund(In'000')	Total Risk Weighted Assets(In'000')	CSR
2061/62	701850	6291844	11.15%
2062/63	940979	7625050	12.34%
2063/64	1115207	9959911	11.20%
2064/65	1882926	13070379	14.41%
2065/66	2050908	17743239	11.56%
2066/67	2124625	17220685	12.34%

(Source: annual report of KBL)

Figure No. 4.26

Graphical Presentation of Total Fund & Total Risk Weighted Assets of KBL

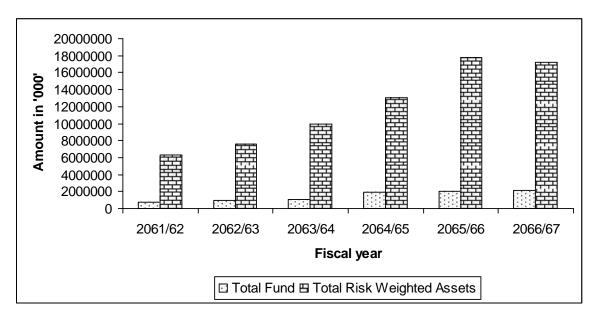


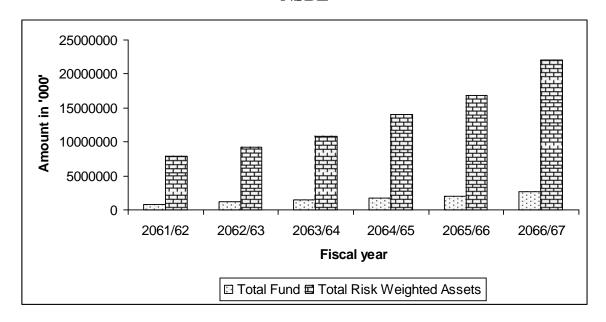
Table No. 4.28
Capital Sufficiency Ratio of NSBL

Year	Total Fund(In'000')	Total Risk Weighted Assets(In'000')	CSR
2061/62	744876	7887662	9.44%
2062/63	1242570	9159271	13.57%
2063/64	1444800	10873279	13.29%
2064/65	1722187	13975708	12.32%
2065/66	2012038	16872717	11.92%
2066/67	2734447	22099363	12.37%

(Source: annual report of NSBL)

Figure No. 4.27

Graphical Presentation of Total Fund & Total Risk Weighted assets of NSBL



Capital sufficiency ratio shows the excess of capital over its risk weighted assets. Appropriate capital sufficiency ratio has always been an issue for commercial banks. Because of very high Capital sufficiency ratio is unfavorable in terms of lowered return, whereas very low ratio is also unfavorable in terms of lowered solvency. However, according to Basel 2 framework the standard capital sufficiency ratio is 11%.

The capital sufficiency ratio of NABIL for six consecutive year is 12.44%, 12.31%, 12.04%, 11.10%, 10.71% and 10.50% respectively it implies that the capital sufficiency ratio of first four years are above the standard and last two year are lower the standard.

The capital sufficiency ratio of KBL for six consecutive year is 11.15%, 12.34%, 11.20%, 14.41%, 11.56% and 12.34% respectively it also implies

the capital sufficiency ratio exceeds the standard. Similarly, the capital sufficiency ratio of NSBL for six consecutive years is 9.44%, 13.57%, 13.29%, 12.32%, 11.92% and 12.37% respectively. Which it implies that in the year 2061/62 it is under the standard and in the last five year is exceeds the standards.

Among the three Banks, the capital sufficiency ratio of KBL seems good as it above the standard level all the six years period.

### 4.3 Major Findings

From the above analysis following major findings have been drawn:

- The share capital of NABIL remains at same level in three consecutive years after that it is in increasing trend. The share capital of KBL & NSBL is also an increasing trend.
- The reserve and surplus of NABIL is in increasing trend but in the fiscal year 2065/66 it slightly decrease after that in the fiscal year 2066/67 it again increase, the reserve & surplus of KBL is in the increasing trend. The increasing trend of reserve and surplus is very high in each fiscal year. Similarly the reserve & surplus of NSBL is increasing trend but in the fiscal year 2065/66 is quit low. In the fiscal year 2066/67 it again increases as before trend. Increasing reserve and surplus will reduce the shareholder's profit.
- The trend of total borrowing of NABIL is very fluctuating and it reached at low level in the last fiscal year. However, the trend of total borrowing of NSBL is increasing each year but in the fiscal year 2065/66 it repay all its borrowing and reached a zero level. The borrowing trend of KBL is decreasing first four fiscal year, but in the

fiscal year 2065/66 & 2066/66 the borrowing is highly increasing trend.

- The deposit trend of NABIL, KBL and NSBL also seem to be increasing over the last six years. In the capital structure of any financial institutions deposit play the vital role because it is very essential for any financial organizations.
- The total liabilities of NABIL, KBL and NSBL also seem to be increasing over the last six years.
- From the study of DOL, we seem that percentage of change in profit of shareholders is greater than the income. It is good for firm to have such result. The trend of DOL of NABIL is in the decreasing trend. However, the trend of DOL of NSBL and KBL is quite fluctuating.
- According to study of DFL, we can see that NSBL have lesser degree of financial leverage. But, the DFL of NABIL & KBL is satisfactory. All three banks DFL are quite fluctuating in each year. If, the DFL is increasing trend, it implies that the firms have used greater amount of debt capital in their financial structure. This directly affects the EPS and reduces the EPS. So, the maximum use of debt is not suitable. But, if the trend of DFL is decreasing, it implies that the firm is trying to reduce the debt amount. If the result comes to 1, it means the firm has not used debt capital.
- DCL shows the ratio between EPS and income. It shows the effect of change in income due to the change in EPS. It is the combination of DOL and DFL and that is why it is called degree of combined leverage. DCL trend of NABIL, KBL and NSBL is quite fluctuating.

This result shows that the positions of banks are not bad and not satisfactory.

- Capital structure (Leverage) ratio has been used to analyze the longterm solvency of the mentioned Banks. This ratio also shows the manner by which capital structure is formed.
- Debt-equity ratio is the relationship between borrowed funds and owner's capital. The debt equity ratio of NABIL is increasing trend in first four fiscal years and decreasing trend in last two fiscal year. The debt equity ratio of KBL is nearly the same level; similarly the debt equity ratio of NSBL is fluctuating up and down.
- The trend of debt assets ratio of NABIL, KBL and NSBL is fluctuating over the study period of six years. Its increasing trend refers to increasing financial risk and decreasing trend refers to decreasing financial risk.
- Interest coverage ratio is the firm's ability to cover the interest. Interest coverage ratio of NABIL is quite satisfactory for previous five fiscal years but it is low in last fiscal year; similarly the interest coverage ratio of both KBL & NSBL is very low.
- Capital sufficiency ratio of NABIL is first four years are above the standard and last two year are lower the standard. The Capital sufficiency ratio of KBL is exceeds the standard, similarly the capital sufficiency ratio of NSBL in the year 2061/62 it is under the standard and in the last five year is exceeds the standards.

#### **CHAPTER-FIVE**

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

### **5.1 Summary**

This study deals with the capital structure of NABIL Bank Ltd, Kumari Bank Ltd., and Nepal SBI Bank Ltd. So the basic objective of the study is to analyze the composition of component part of capital structure of the above mentioned banks. The study has been divided into five chapters.

The first chapter consists of framework of the study as well as profile of selected commercial banks. This chapter also speaks out about the focus of the study. The study is based on some assumption and it has its own limitations.

Similarly, second chapter is good review of the issues related with abstracts of capital structure.

Third chapter includes design methods and procedures of the thesis report. Sources of data and method of data collection are also mentioned. It also explains the tools and techniques used for the analysis of required data.

Fourth chapter deals with presentation and analysis of data. In this chapter some of the financial tools such as leverage, capital structure ratio, index of the components of capital structure as well as graph have been used to analyze the facts. This chapter is considered as the most important part revealing the performance of the selected Banks.

Finally the fifth chapter is about summary conclusions and recommendations. Facts and findings from the study are recalled in this

chapter. This chapter also recommends some suggestions for the financial betterment of the commercial banks.

#### **5.2 Conclusions**

Share capital of NABIL remains at same level in three consecutive years after that it is in increasing trend. The share capital of KBL & NSBL is also an increasing trend. The reserve and surplus of NABIL is in increasing trend but in the fiscal year 2065/66 it slightly decrease after that in the fiscal year 2066/67 it again increase, the reserve & surplus of KBL is in the increasing trend. The trend of total borrowing of NABIL is very fluctuating and it reached at low level in the last fiscal year. However, the trend of total borrowing of NSBL is increasing each year but in the fiscal year 2065/66 it repay all its borrowing and reached a zero level. The borrowing trend of KBL is decreasing first four fiscal year, but in the fiscal year 2065/66 & 2066/66 the borrowing is highly increasing trend.

Trend of deposit of NABIL, KBL and NSBL also seem to be increasing over the last six years. In the capital structure of any financial institutions deposit play the vital role because it is very essential for any financial organizations. The total liabilities of NABIL, KBL and NSBL also seem to be increasing over the last six years. From the study of DOL, we seem that percentage of change in profit of shareholders is greater than the income. It is good for firm to have such result. The trend of DOL of NABIL is in the decreasing trend. However, the trend of DOL of NSBL and KBL is quite fluctuating. DFL of NABIL & KBL is satisfactory. All three banks DFL are quite fluctuating in each year. If, the DFL is increasing trend, it implies that the firms have used greater amount of debt capital in their financial structure.

This directly affects the EPS and reduces the EPS. So, the maximum use of debt is not suitable. But, if the trend of DFL is decreasing, it implies that the firm is trying to reduce the debt amount. If the result comes to 1, it means the firm has not used debt capital.

DCL trend of NABIL, KBL and NSBL is quite fluctuating. This result shows that the positions of banks are not bad and not satisfactory. Capital structure (Leverage) ratio also shows the manner by which capital structure is formed. The debt equity ratio of NABIL is increasing trend in first four fiscal years and decreasing trend in last two fiscal year. The debt equity ratio of KBL is nearly the same level; similarly the debt equity ratio of NSBL is fluctuating up and down. Interest coverage ratio is the firm's ability to cover the interest. The Capital sufficiency ratio of KBL is exceeds the standard, similarly the capital sufficiency ratio of NSBL in the year 2061/62 it is under the standard and in the last five year is exceeds the standards.

#### **5.3 Recommendations:**

A clear financial picture can be viewed from all above presentation. Now some valuable and timely suggestions and recommendation are put forwarded on the basics of finding and conciliation or literally their financial pictures in order to revitalize and improve financial position of NABIL, KBL and NSBL.

The capital structure of selected bank is highly leveraged. The proportion of debt and equity capital should be decided keeping in mind the efforts of tax advantage and financial distress. The bank when in difficult to pay interest and principal, ultimately lead to liquidation or bankruptcy. For such the bank should reduce the high use of debt capital.

- Debt Assets ratio also suggests to reduce the outsider's fund as for as possible because there is low difference between debt and total assets. DFL and DCL refer that EPS of the sample Bank is greatly affected by interest expenses. So interest paid out should be reduced to increase EPS and to reduce interest expenses bank loan as a whole should be reduced.
- The fluctuating trend of capital sufficiency ratio suggests that Bank's are not meeting the standard ratios. Sometimes they have very highly reserve of capital and sometimes are suffered by under capitalization.
- Additionally banks are required and recommended to expand assets and branches which ultimately affect the banks capital structure and expected to increase the profitability more than the present.
- Similarly, commercial banks are not basically concentrated to mobilize their deposits funds in productive areas. So they are proposed to come forward to match government obligation by financing the priority sector development sectors.
- The profitability position of the firm is not much satisfactory. Deposits of the increasing trend of EAT each year; banks are not able to make enough money. Having geared up capital structure position and insufficient return indicates the resources to be put into more 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 any more.

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