CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Economic development is the backbone of the development of a nation. The economic development of Nepal is backward in comparison to other developed and developing countries. For the purpose of development of the country many business houses and companies are being established rapidly under different acts. Economic development is a challenging task in Nepal not just due to lack of resources but it is due to lack of proper utilization of the available resources in efficient manner. This problem needs to be researched and requires proper planning and strategy development. Every development program needs capital however capital could not be collected easily. Due to the scarcity of capital it becomes necessary to collect the fund scattered among different individuals and groups. Capital collection and its mobilization is essential condition for the uplifting of the nation.

The collected capital may be big or small in amount which builds up the financial power. It would be worthy and productive if such amount is collected from various people and utilized in proper way.

Banks are essential financial institutions. They are the principal source of credit that provides short term working capital finance. They contribute to the economy in different manner. They collect money from savers and invest in lucrative sectors. They make profit by paying less for savings than what they charge to the borrowers. Therefore, banks could play a key role in reducing poverty through income distribution and by producing income opportunities.

Commercial banks are Business Corporations regulated and controlled by the central bank. They need to be studied constantly in comparison to other firms as they hold more importance than others. They hold saving of the regulators and the common people which determine the health of the economy, maximizing the value of shareholder’s wealth at an accepted level of risk.

The Nepalese economy is contributed in great number by the industrial and public sector. Nepal is in developing stage of industrialization featured by the lack of adequate human, physical and financial resource and even due to its geographical structure. Environment encouraging the industrial growth is missing in the picture.

Financial theory and practice continue to change rapidly. Not only have advances been made in valuation and in theory of finance, but the environment has changed as well. Finance has taken on even a greater strategic focus as manager cope with how to create value within a corporate setting. Proper utilization of resources, balancing various stakeholder claims, information effects and financial signaling, the globalization of finance, regulatory and tax law changes, and a host of other considerations now permeate the landscape of financial decision making.

Generally, study of financial management provides three things. First, by developing and understanding of rapidly evolving and exciting theory of finance, it enables one to evaluate how close the firm's investment, financial and dividend decisions come to an objective of maximizing shareholders wealth. Second, it familiarize with the ways of analytical techniques brought to bear on financial decision making. Third, it supplies the institutional material necessary for a solid understanding of the environment in which financial decision are made.

Hence, to make rational decisions in keeping with the objective of the firm, the financial manager must have analytical tools. Financial analysis is one important aspects of financial management. Financial investment and dividend decision of the firm are made on the basis of financial analysis. It is the process of identifying the financial strength and weakness of the firm properly establishing the relationship between the item of the balance sheet and the profit and loss account.

Financial analysis can be undertaken by management of the firm, or by parties outside the firm viz. owners, investors, creditors and others. The nature of analysis differs depending upon the purpose of analyst. Trade creditors are interested in the firm's ability to meet their claims over a very short period of time. Their analysis will, therefore, confine to evaluation of the firm's liquidity position. Suppliers of the long-term debt, on the other hand, are concerned with the firm's long term solvency and survival. They analyze the firm's profitability over time, its ability to generate cash to be able to pay interest and repay principle and the relationship between various sources of funds. Long-term creditors do analyze the historical financial statements to make analysis about its future solvency and

profitability. Investors, who have invested their money in the firm's share, are most concerned about the firm's earnings. They restore more confidence in those firms that show steady growth in earnings. As such, they concentrate on analysis of the firm's present and future profitability. They are also interested in the firm's earning ability and risk. Management of the firm would be interested in every aspect of the financial analysis. It is their overall responsibility to see the resources of the firms are used most effectively and efficiently, and that the firm's financial condition is sound.

Ratio analysis is a technique commonly employed by analysts examining a company's financial statements. Standing alone, the values of various financial statement items are difficult to interpret. They display more meaning when they are considered relative to one another.

Ratios may be used in several ways. Some analysts apply absolute standards, on the ground that a substandard ratio indicates a potential weakness that merits further analysis. Other analysts compare a company's ratio with those of the "average" firm in same industry in order to detect differences that may need further consideration. Others analyze trends in a company's ratio over time, perhaps in comparison with industry trends, hoping that these past data will help them predict future changes. Still others combine ratios with technical analysis in order to arrive at investment decisions.

Ratio analysis can be very sophisticated, but it can also be overly simplistic. Routine extrapolation of a ratio or its recent trend may produce a poor estimate of its future value. Moreover, a series of simple projections may produce inconsistent financial statements.

Financial ratio analysis is the process of identifying the financial strength and weaknesses of the firm by properly establishing relationship between items of the balance sheet and the profit and loss accounts through calculating ratios.

Ratio analysis is a powerful tool of financial analysis. A ratio analysis is defined as "the indicated quotient of two mathematical expressions" and as "the relationship between two or more things." in financial analysis, a ratio is used as benchmark for evaluating the financial position and performance of a firm. The absolute accounting figures reported in the financial statements do provide a meaningful understanding of the performance and financial position of the firm. An accounting figure conveys meaning when it is related to some other relevant

information. The relationship between two accounting figures, expressed mathematically, is known as financial ratio or simply as a ratio. Ratios help to summarize large quantities of financial data and to make qualitative judgment about the firm's financial performance.

1.1.1 Introduction of Sample Companies

Nabil Bank

Nabil Bank is rated as a successful commercial bank. It was established in 2041 B.S. as Nepal Arab Bank Limited with foreign investment. It was the first bank of Nepal to operate with the foreign investors. It was established in joint investment with Dubai Bank Limited, UAE. Nepali partners in investment were NIDC, RastriyaBeemaSansthan and Security Exchange Limited. Its 3% shares are issued to general public. It has been helping business communities and the government in different ways since the time of its establishment. It holds not only the capital but also millions of deposits and acts as a conducts its operations as a responsible body. Now it is not just a joint venture business as Dubai Bank Limited has withdrawn its investment from this bank.

It has an authorized capital of Rs. 500 million, issued capital of Rs.491.654 and paid up capital of Rs. 491.654 million, Par value: Rs 100; Listing Date: B.S. 08/09/2042 (1986 A.D.).

Nepal Investment Bank Limited (Indosuez Bank Ltd.)

Nepal Investment Bank Limited was established on January 21, 1986 as a third joint venture bank under the Company Act 1964. It is situated at DarbarMarg, Kathmandu. The bank is managed signed between it and Nepali Promoters. The main objective of the bank is to provide loans and advances to the agriculture, industries, commerce and deprived sectors as well and to provide modern banking services to the general people.

The proposal dated 25th April, 2002 to change the name of Indosuez Bank Ltd. to Nepal Investment Bank Ltd. has been approved by 15th Annual General Meeting held on May 2002. Nepal Rastra Bank approved on 12th June 2002. It has an authorized capital of Rs. 1,000 million, Issued capital: Rs. 801.352 million; Paid up capital: Rs. 801.352 million; Par value: Rs 100.00; Listing Date: B.S. 05/08/2044 (1987 A.D.).

Nepal Telecom (Nepal Doorsanchar Company Limited)

Telecommunication service in Nepal dates back to 94 years in B.S. 1970. But formally telecom service was provided mainly after the establishment of MOHAN AKASHWANI in B.S. 2005. Later as per the plan formulated in First National Five year plan (2012-2017); Telecommunication Department was established in B.S.2016. To modernize the telecommunications services and to expand the services, during third five-year plan (2023-2028), Telecommunication Department was converted into Telecommunications Development Board in B.S.2026. After the enactment of Communications Corporation Act 2028, it was formally established as fully owned Government Corporation called Nepal Telecommunications Corporation in B.S. 2032 for the purpose of providing telecommunications services to Nepalese People. After 29 years of its service, Nepal Telecommunication Corporation was transformed into NepalDoorsanchar Company Limited from Baisakh 1, 2061under the companies Act 2053. However the company is known to the general public by the brand name Nepal Telecom as registered trademark. Nepal Telecom has always put its endeavors in providing its valued customers a quality service since its inception. To achieve this goal, technologies best meeting the interest of its customers has always been selected. The nationwide reach of the organization, from urban areas to the economically non- viable most remote locations, is the result of all these efforts that makes this organization different from others. Nepal Telecom objects to assist in the socio-economic development of the urban as well as rural areas, as telecommunications is one of the most important infrastructures required for development. Accordingly in the era of globalization, it is felt that milestones and achievements of the past are not adequate enough to catch up with the global trend in the development of telecommunication sector and the growth of telecommunication services in the country will be guided by Technology, declining equipment prices, market growth due to increase in standard of life and finally by healthy competition.

It has an authorized capital of Rs.25 arab, Issued capital: Rs. 15 arab; Paid up capital: Rs. 15 arab; Par value: Rs 100.00; Listing Date: Shrawan 30, 2062.

Nepal Electricity Authority

Nepal Electricity Authority was establishedin August 16, 1985 (Bhadra 1, 2042) under the Nepal Electricity Authority Act. 1984, through the through the

merger of the Department of Electricity of Ministry of Water Resources, Nepal Electricity Corporation and related Development Boards.The reason behind the merger of these individual organizations was to remedy the inherent weakness associated with these fragmented electricity organizations with overlapping and duplication of works and to achieve efficiency and reliable service. The primary objective of NEA is to generate, transmit and distribute adequate, reliable and affordable power by planning, constructing, operating and maintaining all generation, transmission and distribution facilities in Nepal's power system both interconnected and isolated.

Himalayan General Insurance Company Limited

Himalayan General Insurance Co. Ltd. commenced operations in December 1993 to write Insurance Policies after obtaining license from the Insurance Board of Nepal to underwrite General Insurance (Non-life). It worked with Swire Blanch Asia Ltd., Singapore, through a technical service agreement for the initial five years in order to arrange reinsurance with the world's best reinsurers.

It has been providing its service since last 15 years through the customer-driven service packages, personalized service delivery, and technology-focused operations, their clients enjoy value and benefits that are unparalleled in the industry. While HGI is widely acknowledged for its market leadership in claims services, it services a large and diverse product range and client base. Their clients span all levels of society – business corporations, development organizations and individual customers. Their primary objective is to deliver progressive and superior customer value, uphold the interests of our human assets, provide sustained stakeholder returns, stay abreast of social responsibility initiatives, to deliver expert and innovative solutions in risk evaluation and risk mitigation alternatives.

It has share capital of Rs. 63 million as on 2007/08; Par value: Rs 100.00; Listing Date: 26/01/1994 .

1.2 Statement of Problems

The capital structure of any organization can be effective if evaluated on the basis of Balance Sheet, Profit and Loss Account, size and type of the organization. Every organization can benefit if optimal capital mix is maintained. Generally

higher the debt more is the risk to the company even though high debt has its own advantage. Under which it will try to analyze the following specific problem.

- What is the debt management ratio of the selected organizations?
- What is the profitability ratio of the selected organizations?
- What is the capital adequacy ratio of the selected organizations?
- What is the credit to deposit ratio of the Nabil, NIBL, NEA and NTC?

1.3 Objectives of the study

The specific objective of this study is to evaluate the capital structure of Nabil Bank Ltd., Nepal Investment Bank Ltd., Nepal Electricity Authority, Nepal Telecom and Himalayan General Insurance Company Limited. The study helps to improve and maintain or create the perfect situations. The specific objective of the study are:

- To analyze the debt management ratio of the selected organizations.
- To analyze the profitability ratio of the selected organizations.
- To measure the capital adequacy ratio of the selected organizations.
- To analyze the credit to deposit ratio of the Nabil, NIBL, NEA and NTC.

1.4 Significance of the Study

The organizations selected for the study hold a strong position in contributing to the uplifting of the economy. Therefore, their financial position is the matter of concern. This study will be beneficial to overview their capital structure management and to formulate future strategies to do much better in their horizon. Not only can the sampled organizations benefit from the study but also the other firms and the new researchers for the review of literature in the near future. Hence, I have chosen the study of capital structure management as the subject matter and also in the present context it seems relevant.

1.5 Limitation of the Study

The study is made for the partial requirement of Masters of degree in Business Studies (M.B.S.). This research is mainly concerned with the capital

structure of the selected organizations. However, some commonly attributed limitations are as follows:

- This study covers only a period of 5 years (i.e. FY 2063/64 - FY 2067/68)
- The whole study is confined to only two commercial banks, NEA, NTC and one insurance company.
- The time frame is limited therefore the study can not cover all the requirement of the subject matter.
- For quantitative analysis, SPPS software is used. Hence the limitations of this program are inherent.
- The study will be particularly based on secondary data. Therefore the accuracy of the calculation is fully depended on the accuracy of data provided by the concerned organizations.

1.6 Organization of the Study

This study includes five chapters i.e. introduction, review of literature, research methodology, data presentation and analysis and summary conclusion and recommendation.

Introduction, the first chapter includes background of the study, history of bank, overall industrial growth in Nepal, statement of problems, objective of the study, significance of the study, limitation of the study and organization of the study.

Review of literature, the second chapter deals with the conceptual framework and review of relevant research studies. It includes meaning of capital structure, theory of capital structure, determinants of capital structure, capital structure decision and review of related studies.

Research Methodology, the third chapter deals with interpretation and analysis of major findings. Its main scheme is to describe about the methods and procedures of the study.

Data Presentation and Analysis, the fourth chapter is the heart of the study in which all the relevant collected data are analyzed and interpreted. Mainly different financial and statistical tools are used for the analysis purpose.

Summary, Conclusion and Recommendation, the fifth chapter contains summary and conclusion in accordance of analysis and interpretation of data. After that all necessary recommendations for the concerned authorities and institutions is made.

CHAPTER TWO

REVIEW OF LITERATURE

Review of literature is the compilation of the research that has been published on a topic by recognized scholars and researchers. The review should describe, summarize, evaluate and clarify this literature. It should give a theoretical base for the research which helps to determine the nature of research.

Review of literature is the way to discover what other research area of problem has uncovered. A critical review of the literature helps the researcher to develop a thorough understanding and insight into previous research work that relates to present study. The literature review thus provides with the knowledge of the status of the field of research. the purpose of the literature review is, thus, to find out what research studies have been conducted in one's chosen field of study, and what remains to be done. It provides the foundation for developing a comprehensive theoretical framework from which hypothesis can be developed for testing.

Generally, literature is reviewed by two ways for any research purpose. They are:

- Conceptual framework
- Review of related studies

2.1 Conceptual Framework

A wide range of indicators is available for reporting by FIs. The most important are described in this section. It is important that the financial analyst (investment officer) only recommends indicators that the Financial Institution (FI) fully understands and is willing to use in their day-to-day management processes.

The most important criteria for determining the appropriateness of an FI to act as a financial intermediary are its solvency, profitability, and liquidity. In this respect, since 1988, the Basle Committee on Banking Supervision (BCBS) of the Bank of International Settlements (BIS) has recommended using **C**apital adequacy.

2.1.1 Capital Adequacy Ratio

Capital Adequacy is a measure of an FI's financial strength, in particular its ability to cushion operational and abnormal losses. An FI should have adequate capital to support its risk assets in accordance with the risk-weighted capital ratio framework. It has become recognized that capital adequacy more appropriately relates to asset structure than to the volume of liabilities. This is exemplified by central banks' efforts internationally to unify the capital requirements of commercial banks and to generate worldwide classification formulae such as the one proposed here. This indicator requires that assets be classified by reference to their demands on the equity (or capital) structure of the FI. The CAR indicator is derived by comparing the ratio of an entity's equity to its assets-at-risk. The covenant specifies that the borrower/FI should not make an advance to a sub borrower, if after making the advance, the ratio (the performance indicator) of its equity to its assets-at-risk would be greater than that specified in the covenant.

Table 2.1

Capital Adequacy Ratio

Capital Adequacy Ratio (%) =	[Paid in Capital + Reserve Funds + Net Profits] x 100	Risk-free assets should include: (i) Cash on hand; (ii) Due from Banks; (iii) Interbank loans; (iv) Government-guaranteed loans; and (v) Investments in government securities, etc.
	Total Assets - Loan loss Provision - Risk-free Assets	

Equity is defined as the total of: (i) unimpaired paid-up capital; (ii) retained earnings; (iii) reserves available to meet any losses that may be incurred through the non recovery of assets; and (iv)all other capital and revenue reserves, including provisions for bad and doubtful debts and provisions for loan and lease losses.

Assets-at-risk are defined as the total of the impaired values of assets at the date of making the advance to the sub-borrower. Assets are typically classified as: (i) risk-free; (ii) minimum risk; (iii) general risk; (iv) substandard; (v) "workout" (or minimal chance of recovery); and (vi) fixed assets, furniture and office equipment, computers, etc. To each of these classifications is awarded a percentage of their values for which an FI's capital is needed to cover risk of losses.

The BCBS of the BIS recommends a mandatory minimum CAR of 8% for banks in OECD countries. However, the emerging banking regulatory and supervision system in most ADB DMCs combined with an emphasis on directed

lending, results in poor portfolio quality. As such, these Guidelines recommend a minimum Capital Adequacy Ratio (CAR) of 12%.

2.1.2 Assessing Asset Quality

Asset quality has direct impact on the financial performance of an FI. The quality of assets particularly, loan assets and investments, would depend largely on the risk management system of the institution. The value of loan assets would depend on the realizable value of the collateral while investment assets would depend on the market value.

Table 2.2

Assessing Asset Quality

Ratios or Other Measures	Computation Method	Significance and Notes
1. Loan Concentration Tables	Concentration of Loans by: Industry Region Borrower Portfolio Quality	Indicates concentration of exposure. The analyst should review whether the FI has a policy regarding the ceiling or maximum exposure to any company or group.
2. Related Party Policies and Exposure	Loans outstanding to related parties. Current approval process for these loans. Checks and balances for such loans.	
3. Loan Loss Provision Ratio (%)	Loan Loss Provision / Average Performing Assets	Indicates provisioning requirements on loan portfolio for the current period. The Loan Loss Provision is the current period allocation to the loan loss reserve. Performing assets currently pay interest or are not more than 60 days past due. Average performing assets: beginning balance and ending balance are averaged for the period (including loans, investment and advances).
4. Portfolio in Arrears (%)	Balance of Loans in Arrears x 100 / Value of Loans Outstanding	Measures amount of default in the portfolio.
5. Loan Loss Ratio (%)	Amounts Written Off x 100 / Average Loans Outstanding	Indicates extent of uncollectible loans over the last period. Any loan more than one year past due should automatically be considered uncollectible. The Amount Written Off is the loss recognized on a loan during the period.
6. Reserve Ratio (%)	Loan Loss Reserve x 100 / Value of Loans Outstanding	Indicates the adequacy of reserves in relation to the portfolio. The Loan loss reserve is a reserve maintained to cover potential loan losses.

2.1.3 Assessing Management Quality

The financial performance will depend on the vision, capability, agility, professionalism, integrity, and competence of the FI's management. As sound management is crucial for the success of any institution, management quality.

Table 2.3

Assessing Management Quality

Ratios or Other Measures	Computation Method	Significance and Notes
1. Cost per Unit of Money Lent	Operating Costs / Total Amt disbursed	Indicates efficiency in distributing loans (in monetary terms).

2.1.4 Assessing Earning Performance

The quality and trend of earnings of an institution depend largely on how well the management manages the assets and liabilities of the institution. An FI must earn reasonable profit to support asset growth, build up adequate reserves and enhance shareholders' value. Good earnings performance would inspire the confidence of depositors, investors, creditors, and the public at large.

Table 2.4

Assessing Earning Performance

Ratios or Other Measures	Computation Method	Significance and Notes
1. Return on Assets (%)	Net Income After Tax x 100 / Average Total Assets	
2. Return on Equity (%)	Net Income After Tax x 100 / Average Total Equity Funds	
3. Interest-Spread Ratio (%)	Income from Loan Portfolio x 100 (a) / Average Loan Portfolio (b) - Interest Expenses and Other Financial Charges x 100 (c) / Average Borrowings (d)	(a) Sum of interest on the loan portfolio plus interest received from other FIs. It also includes discount and commission earned and other charges (front-end fees) levied on customers. (b) Average of customer loans, interbank loans and due from banks. (c) Includes commission and discount paid, brokerage, charges levied by correspondent banks, etc. (d) Comprises deposits and other borrowings.
4. Earnings-Spread Ratio (%)	Total Income - Non-Operating Income x 100 / Average Total Portfolio (e) - Interest Expenses and Other Financial Charges x 100 / Average Total Resources (f)	(e) Loan portfolio, cash, Due from Banks, Interbank loans, Investments in Government securities and other investments. (f) Equity + Deposits + Borrowings.
5. Intermediation Cost Ratio (%)	[Total Expenses - (Interest expenses + fees and commissions and commitment charges)] x 100 / Average Total Assets	

2.1.5 Assessing Liquidity

An FI must always be liquid to meet depositors' and creditors' demand to maintain public confidence. There needs to be an effective asset and liability management system to minimize maturity mismatches between assets and liabilities and to optimize returns. As liquidity has inverse relationship with profitability, an FI must strike a balance between liquidity and profitability.

Current and quick ratios are inappropriate for measuring FI liquidity. A loan-to-deposit ratio is more relevant. However, an FI's liquidity and solvency are directly affected by portfolio quality. Consequently, financial analysts (investment officers) should carefully analyze the FI's portfolio quality on the basis of collectability and loan-loss provisioning.

Table 2. 5

Assessing Liquidity

Ratios or Other Measures	**Computation Method**
1. Loan to Deposit Ratio (%)	[Loans (excluding short-term loans and marketable securities) / Customer Deposits] x 100
2. Loan to Deposit Ratio (Medium and Long-term) (%)	(Long and Medium-term Loans / Long and Medium term Deposit) x 100

2.2 Review of Previous Study

Financial analysis techniques are tools that help managers make sound financial decisions that contribute to general corporate objectives. A literature review reveals that the most commonly used financial analysis techniques are payback time, average rate of return, present value or present worth, and internal rate of return. Despite the success of several experiments using financial analysis techniques in training and development, only a few financial analysis studies and models have been published. Financial ratios are widely used for modeling purposes both by practitioners and researchers. The firm involves many interested parties, like the owners, management, personnel, customers, suppliers, competitors, regulatory agencies, and academics, each having their views in applying financial statement analysis in their evaluations. Practitioners use financial ratios, for instance, to forecast the future success of companies, while the researchers' main interest has been to develop models exploiting these ratios. Many distinct areas of research involving financial ratios can be discerned. Historically, one can observe several major themes in the financial analysis literature. There is overlapping in the observable themes, and they do not necessarily coincide with what theoretically might be the best founded areas, ex post. The existing themes include

- the functional form of the financial ratios, i.e. the proportionality discussion,
- distributional characteristics of financial ratios,
- classification of financial ratios,
- comparability of ratios across industries, and industry effects,
- time-series properties of individual financial ratios,
- bankruptcy prediction models,
- explaining (other) firm characteristics with financial ratios,
- stock markets and financial ratios,
- forecasting ability of financial analysts vs financial models,
- Estimation of internal rate of return from financial statements.

The history of financial statement analysis dates far back to the end of the previous century (see Horrigan, 1968). However, the modern, quantitative analysis has developed into its various segments during the last two decades with the advent of the electronic data processing techniques. The empiricist emphasis in the research has given rise to several, often only loosely related research trends in quantitative financial statement analysis. Theoretical approaches have also been developed, but not always in close interaction with the empirical research.

Technically, financial ratios can be divided into several, sometimes overlapping categories. A financial ratio is of the form X/Y, where X and Y are figures derived from the financial statements or other sources of financial information. One way of categorizing the ratios is on the basis where X and Y come from (see Foster, 1978, pp. 36-37, and Salmi, Virtanen and Yli-Olli, 1990, pp. 10-11). In traditional financial ratio analysis both the X and the Y are based on financial statements. If both or one of them comes from the income statement the ratio can be called dynamic, while if both come from the balance sheet it can be called static. The concept of financial ratios can be extended by using other than financial statement information as X or Y in the X/Y ratio. For example, financial statement items and market based figures can be combined to constitute the ratio.

In this paper we review the existing trends in financial statement analysis literature by focusing primarily on the theoretical and empirical basis of financial ratio analysis. This is an important task to carry out since the ratios are often used intuitively, without sufficient consideration to their theoretical meaning and statistical properties. In doing this it is our purpose to pinpoint the different

directions taken in quantitative ratio based research. By critically considering financial ratio literature, we also aim to help the decision makers to use ratios in an efficient way.

2.3 Basic Properties of Ratios

The basic properties of ratios have been discussed in the following paragraphs:

2.3.1 Functional Form of Financial Ratios

The traditionally stated major purpose of using financial data in the ratio form is making the results comparable across firms and over time by controlling for size. This basic assertion gives rise to one of the fundamental trends in financial ratio analysis (or FRA). The usually stated requirement in controlling for size is that the numerator and the denominator of a financial ratio are proportional.

The seminal paper is this field is Lev and Sunder (1979). They point out, using theoretical deduction, that in order to control for the size effect, the financial ratios must fulfill very restrictive proportionality assumptions (about the error term, existence of the intercept, linearity, and dependence on other variables in the basic financial variables relationship models $Y = bX + e$ and its ratio format $Y/X = b + e/X$). It is shown that the choice of the size deflator (the ratio denominator) is a critical issue. Furthermore, Lev and Sunder bring up the problems caused in multiple regression models where the explaining variables are ratios with the same denominator. This is a fact that has been discussed earlier in statistics oriented literature like in Kuh and Meyer (1955).

Two interrelated trends are evident. Theoretical discussions about the ratio format in FRA and empirical testing of the ratio model. While mostly tackling the former Whittington (1980) independently presents illustrative results finding the ratio specification inappropriate in a sample of U.K. firms. Whittington also discusses the usage of a quadratic form in FRA. Significant instability in the results was reported.

The proportionality considerations have implications on various facets of FRA. Barnes (1982) shows how the non-normality of financial ratios can result from the underlying relationships of the constituents of the financial ratios. He is thus able to tie in the ratio format aspects with the distributional properties of financial ratios.

In the discussion on Barnes's paper (Horrigan, 1983, Barnes, 1983), Horrigan puts forward that financial ratio research should be more interested in the role of the financial ratios themselves than in "the nature of the ratios' components or to the ratios' incidental role as data size deflators".

To extrapolate from Horrigan's critique, in our own interpretation the validity of financial ratio analysis should be determined by its usefulness to the decision making process of the different interested parties (owners, management, personnel,...). To illustrate, consider the potential impact of economics of scale. To assess the efficiency of management a direct comparison of financial ratios of small and big firms would have to be adjusted for the size effect. On the other hand, an investor evaluating different investment targets might be more interested in the level of profitability regardless whether or not it is a result of the size effect.

McDonald and Morris (1984, 1985) present the first extensive empirical studies of the statistical validity of the financial ratio method. The authors use three models with two samples, one with a single industry the other with one randomly selected firm from each (four-digit SIC) industry branch to investigate the implications of homogeneity on proportionality. The first model is the traditional model for replacement of financial ratios by bivariate regression, with intercept $Y(i) = a + bX(i) + e(i)$.

The above model is central in this area. It is characteristic that the testing for proportionality is considered in terms of testing the hypothesis H0: $a = 0$. Barnes (1986) points out for statistical testing that the residual is typically heteroscedastic. For a discussion also see Garcia-Ayuso (1994). The second model in McDonald and Morris is: $Y(i) = b'X(i) + e'(i)$ that is without the intercept to tackle heteroscedasticity. Dropping the intercept from the model is not always enough to treat the heteroscedasticity (see Berry and Nix, 1991). The third model applies a (Box-Cox) transformation on the first model to tackle non-linearities. While they find support for financial ratio analysis for comparisons within industry branches, in inter-industry comparisons proportionality of financial ratios is not supported.

Berry and Nix (1991), however, cast doubt on the generality of McDonald and Morris results over time, over ratios and over industries. Similar results was obtained for Finnish data in Perttunen and Martikainen (1989) and for Spanish data by Garcia-Ayuso (1994). By comparing value and equal weighted aggregate financial ratios McLeay and Fieldsend (1987) find evidence based on samples of

French firms that "the departure from proportionality varies from ratio to ratio, from size class to size class and from sector to sector".

Research on financial ratio proportionality has close connections to distributional questions. Testing the statistical significance of the parameters of the previous models involves, at least implicitly, assumptions of normality (see Ezzamel, Mar-Molinero and Beecher, 1987, p. 467). Fieldsend, Longford and McLeay (1987) draw on the fact that a number of accounting variables are expected to be lognormally distributed because of technical zero lower bounds. Consequently they test empirically a lognormal regression model $\ln Y(ij) = a + b\ln X(ij) + g(j) + e(ij)$ where the industry effect g(j) is explicitly specified in the model. Their empirical results on a single financial ratio (the current ratio) are in line with the earlier results supporting proportionality only if industry effects are included.

As was discussed in Introduction financial ratios can be extended to include market based data. We concentrate mainly on "pure" financial ratios with both the numerator and the denominator originating from the income statement and/or the balance sheet. Nevertheless, concomitant research has been presented with market based ratios.

2.3.2 Distributional Characteristics of Financial Ratios

It is typical of FRA research that there are several distinct lines with research traditions of their own. In some cases there is little link to the other FRA fields. The distributional characteristics of financial ratios have induced a research line of their own, but part of this research is intertwined with the proportionality research discussed above. In fact some of the papers reviewed tackle both the areas either separately or within the same framework.

The recurring motivation for looking into the distributional properties of financial ratios is that the normal distribution of the financial ratios is often assumed in FRA. This is because the significance tests in parametric methods prevalent in FRA research, such as regression analysis and discriminant analysis, rely on the normality assumption.

In the history of FRA it is common that professional journals and academic papers do not recognize each other. An early paper on financial ratio distributions was published in Management Accounting by Mecimore (1968). It is interesting to recognize that all ingredients of modern distribution analysis already appear

incumbent in Mecimore's paper. Using descriptive statistical measures (average and relative deviations from the median) he observes cross-sectional non-normality and positive skewness for twenty ratios in a sample of randomly selected forty-four Fortune-500 firms.

The paper most often referred to in literature as the seminal paper in this field is, however, the much later published article by Deakin (1976). His chi-square findings reject (with one exception) the normality of eleven financial ratios in a sample of 1114 Compustat companies for 1954-72. Less extreme deviations from normality were observed when square-root and logarithmic transformations were applied, but normality was still not supported. Likewise, while not statistically significantly, industry grouping made the distributions less non-normal. Concomitant results are obtained by Lee (1985) using a stronger test (Kolmogorov-Smirnov) for a different set of data.

Bird and McHugh (1977) adopt an efficient Shapiro-Wilk small-sample test for the normality of financial ratios for an Australian sample of five ratios over six years. Like Deakin they find in their independent study that normality is transient across financial ratios and time. They also study the adjustment of the financial ratios towards industry means which is a different area of FRA research. Bougen and Drury (1980) also suggest non-normality based on a cross-section of 700 UK firms.

The results indicating non-normality of financial ratio distributions have led researchers into looking for methods of restoring normality to warrant standard parametric statistical analyses. Frecka and Hopwood (1983) observe that removing outliers and applying transformations in a large Compustat sample covering 1950-79 restored normality in the same financial ratios as tackled by Deakin (1976). They point out that if the ratios follow the gamma distribution, the square root transformation makes the distribution approximately normal. The gamma distribution is compatible with ratios having a technical lower limit of zero. There is, however, a certain degree of circularity in their approach, since instead of identifying the underlying causes of the outliers they employ a mechanistic statistical approach to identify and remove the outliers from the tails of the financial ratio distributions.

A varying and often a considerable number of outliers has to be removed for different financial ratios in order to achieve normality. The empirical results are

supported by later papers such as So (1987). Ezzamel, Mar-Molinero and Beecher (1987) and Ezzamel and Mar-Molinero (1990) review and replicate the earlier analyses on UK firms with a particular emphasis on small samples and outliers, respectively. One of the avenues taken is to study new industries. Kolari, McInish and Saniga (1989) take on the distribution of financial ratios in banking. Buckmaster and Saniga (1990) report on the shape of the distributions for 41 financial ratios in a Compustat sample of more than a quarter million observations.

Foster (1978) points out the outlier problem in FRA. Later, he presented in Foster (1986) a list of alternatives for handling outliers in FRA. The list includes deleting true outliers, retaining the outlier, adjusting the underlying financial data, winsorizing that is equating the outliers to less extreme values, and trimming by dropping the tails. Foster also puts forward accounting, economic and technical reasons for the emergence of outliers in FRA. While improving the statistical results trimming and transformations can pose a problem for the theoretical rigor in FRA research. Instead of deleting or adjusting the observations McLeay (1986a) proposes using a better fitting distribution with fat tails for making statistical inferences in FRA. He seeks for a best fitting t-distribution for a cross-section of 1634 UK and Irish firms. Also his empirical results confirm non-normality. The best-fitting (in the maximum-likelihood sense) t-distribution varies across financial ratios (the t-distribution can be considered a family of distributions defined by its degrees of freedom). McLeay (1986b) also tackles the choice between equally weighted and value weighted aggregated financial ratios in terms of ratio distributions on a sample of French firms. Also the results by Martikainen (1991) demonstrate that normality can be approached by other procedures than removing outliers. In a sample of 35 Finnish firms, four ratios and fifteen years about half of the non-normal distributions became normal if economy-wide effects were first controlled for using the so-called accounting-index model. Martikainen (1992) uses a time-series approach to 35 Finnish firms in turn observing that controlling for the economy factor improves normality.

Typically, many later papers tackle the same basic question of ratio distributions using different samples and expanding on the methodologies. Buijink and Jegers (1986) study the financial ratio distributions from year to year from 1977 to 1981 for 11 ratios in Belgian firms corroborating the results of the earlier papers in the field. Refined industry classification brings less extreme deviation from

normality. They also point to the need of studying the temporal persistence of cross-sectional financial ratio distributions and suggest a symmetry index for measuring it. Virtanen and Yli-Olli (1989) studying the temporal behavior of financial ratio distributions observe in Finnish financial data that the business cycles affect the cross-sectional financial ratio distributions.

The question of the distribution of a ratio format variable (financial ratio) has been tackled mathematically as well as empirically. Barnes (1982) shows why the ratio of two normally distributed financial variables does not follow the normal distribution (being actually skewed) when ratio proportionality does not hold. Tippett (1990) models financial ratios in terms of stochastic processes. The interpretation in terms of implications to financial ratio distributions are not, however, immediately evident, but the general inference is that "normality will be the exception rather than the rule".

Because of these results bringing forward the significance of the distributional properties of financial ratios many later papers report routinely about the distributions of financial ratios in connection with some other main theme. Often these themes are related to homogeneity and industry studies such as Ledford and Sugrue (1983). The distributional properties of the financial ratios also have a bearing in testing proportionality as can be seen, for instance, in McDonald and Morris (1984). In a bankruptcy study Karels and Prakash (1987) put forward that in applying the multivariate methods (like discriminant analysis) the multivariate normality is more relevant than the (univariate) normality of individual financial ratios. They observe that deviations from the multivariate normality is not as pronounced as the deviations in the earlier univariate studies.

Watson (1990) examines the multivariate distributional properties of four financial ratios from a sample of approximately 400 Compustat manufacturing firms for cross-sections of 1982, 1983 and 1984. Multivariate normality is rejected for all the four financial ratios. Multivariate normality is still rejected after applying Box's and Cox's modified power transformations. However, when multivariate outliers are removed, normality is confirmed. Multivariate normality has particular bearing on research using multivariate methods, for example on bankruptcy prediction. It also has implications on univariate research, since while univariate normality does not imply multivariate normality, the opposite is true.

2.3.3 Classification of Financial Ratios

A central question both in FRA research and practice is finding a parsimonious set of financial ratios to cover the activities of the firm. The main approaches in this area are fairly clearcut. They are pragmatical empiricism (a term coined by Horrigan 1968), a data oriented classification approach, a deductive approach, and lately, the combination of the last two. An interesting early paper on financial ratios which has many of the later issues in a embroynic form can be seen in Horrigan (1965).

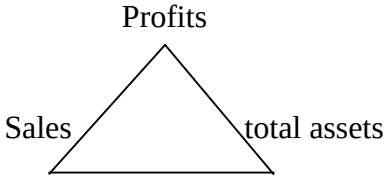
❖ **Pragmatical Empiricism**

Several accounting and finance text-books present a subjective classification of financial ratios based on the practical experience or views of the authors. It is common that the classifications and the ratios in the different categories differ between the authors as pointed out in a tabulation by Courtis (1978, p. 376). In very general terms three categories of financial ratios are more or less common: profitability, long-term solvency (capital structure) and short-term solvency (liquidity). Beyond that there is no clear consensus. Pragmatical empiricism is exemplified by the text-books of Weston and Brigham (1972), Lev (1974a), Foster (1978, 1986), Tamari (1978), Morley (1984), Bernstein (1989), White, Sondhi and Fried (1994), Brealey and Myers (1988, Ch. 27), and handbook chapters such as Beaver (1977), and Holmes and Sugden (1990, Ch 24).

Official bodies also can give recommendations. For example, in Finland the Committee for corporate analysis (1990) guidelines influences Finnish reporting practices. More generally security exchange commission stipulations influence reporting of financial ratios in many countries.

❖ **Deductive Approach**

The classic of deductive approach goes back to 1919 to the du Pont triangle system (profits/total assets), (profits/sales), (sales/total assets):



Courtis (1978) returns to the theme. He presents a diagram for a financial ratios framework based on financial ratios used in earlier studies, textbooks, "other sources", deliberation, and visual approximation of relationships in a sample of 79 ratios. Laitinen (1983) presents a model of the financial relationships in the firm with attached financial ratios. The model is based on Laitinen (1980). For the most part empirical evidence based on 43 publicly traded Finnish firms supports the structure of the model. Bayldon, Woods, and Zafiris (1984) evaluate a pyramid scheme of financial ratios. In a case study the pyramid scheme does not function as expected. The deductive approach to establish relevant financial ratio categories has more or less stalled, and this approach has become intermixed with confirmatory approach discussed later.

❖ **Inductive Approach**

The emphasis on data and statistical methods is characteristic of the inductive approach to financial ratio classification like it is in the proportionality and distribution studies discussed earlier. The empirical rather than the theoretical foundations for grouping the financial ratios are central in this approach.

❖ **Confirmatory Approach**

It seems that despite the initial optimism the inductive studies have been unable to agree on a consistent classification of financial ratio factors, at least beyond three to five factors. Consequently a number of later studies hypothesize an a priori classification and then try to confirm the classification with empirical evidence.

A tentative emergence of this idea can be detected in Laurent (1979). As noted earlier Courtis (1978) presents a pyramid scheme of financial ratios based on a mix of experience, deduction and visual approximation of data. This can be considered an a priori classification. Laurent performs a standard principal component factorization for a set of 45 financial ratios presumably for a single year of 63 Hong Kong companies. He compares his results with the deductive classification by Courtis (1978) and finds a good correspondence. With the exception of administration Laurent identifies and locates each of his ten empirical factors in Courtis's framework. Such a comparison has the hallmarks of the basic idea of the confirmatory approach.

2.4 Research Gap

Research gap is the difference between previous work done and the present research work. The research works are concerned with ratio analysis. In most the studies, the samples are taken from same sector which may not represent different sectors. The studies also observed some defects in ratio analysis. The tools used for analysis have been limited to ratio analysis.

So, this study tries to explore the determinants of ratio analysis and pattern in three different sectors of Nepalese organization with current year's data. Furthermore this study will be helpful to the interested groups. At last this study will be different from the above in terms of sample companies, data presentation as well as statistical tools used for interpretation and analysis of data.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Research Design

A research design is a set of instructions to the investigator to gather and analyze his/ her data in a certain way. Research design is a plan that shows how to fulfill the goal of purposed study.

In this study, we have tried to make comparison and to establish relationship between two or more variables. So the research is termed as analytical and descriptive. So as to facilitate the assessment, researcher collected five years data of selected organizations and site of those organizations and have tabulated them with the graph presentation as well. Different financial tools have been used to analyze and find out needed result. This study is concerned with the detail analysis of ratios of different selected organizations and their complete study. The adopted method of research design is case study method. It is intensive study of different organizations.

3.2 Population and Sample

The population of the study consists of all the commercial banks of Nepal. Hence, 31 commercial banks which are operated now in Nepal Comprise the population where as a two bank NABIL and NIBL are taken for the study unit as it is a case study. 17 insurance company which are operated in Nepal comprise the population where as a one insurance HGICL is select as study unit. Nepal Electricity Authority was established in August16, 1985 under the Nepal Electricity Authority Act. 1984. Telecommunication service in Nepal dates back to 94 years in B.S.1970.But formally telecom service was provided mainly after the establishment of MOHAN AKASHWANI in B.S.2005.After the enactment of communications corporation Act 2028, it was formally established as fully owned Government Corporation called Nepal Telecommunications Corporation in B.S. 2032 for the purpose of providing telecommunications services to Nepalese People.

3.3 Sampling Procedures

The study are considered on capital structure decision of organizations from various sectors in the same study. The main drawback of private companies is that they do not want to show off their debt capital in composition of capital structure. In other words, most of the companies and enterprises are unlevered or use of debt capital is negligible in amount. By reviewing these difficulties, the researcher focused on Nepal Investment Bank Ltd. and Nabil Bank Ltd, one of the leading commercial banks whereas Nepal Electicity Authority and Nepal Telecom in their respective fields and Himalayan General Insurance Company Limited among insurance companies.

3.4 Types and Sources of Data

The authenticity of a research depends upon the data it collects. Data collected for any kind of research study can be either primary or secondary or both. This study is related to the capital structure management; therefore the sources of data used in this study are basically of secondary nature. All the study analysis and evaluation have been based on the available annual report (P/L A/C and B/S) and progress reports of the concerned companies. The other sources were Unpublished Thesis, Research Study, Several Books, Journals, Magazines and Newspapers in different libraries. Internet was also an important source. The use of primary source was negligible.

3.5 Data Gathering Procedure

The study is basically based on the secondary data. The data are collected in crude form in the initial stage and then properly synthesized, arranged, tabulated and calculated to serve the objective of the study.

3.6 Data Presentation and Method of Analysis

Method of analysis is an important part in research work. The careful study of available facts for proper understanding of data and extraction of the conclusion from them on the basis of established principles and sound logic is Analysis.

The analysis of data requires a number of closely related operations such as establishment of categories, the application of these categories to raw data through

collecting, tabulation and then drawing statistical interlays. On the basis of research problem and objectives of the study data and information needed is identified and collected. The collected data are properly processed and arranged in the form of the table for simplicity. Financial and statistical tools have been used for analysis and interpretation of arranged data. For this purpose, statistical tools such as Karl Pearson's coefficient of correlation and regression analysis have been calculated to see the relationship between various variables. Likewise, some financial tools such as ratio analysis and trend analysis have been used.

For quantitative analysis and calculation of correlation and regression SPPS software is used.

3.6.1 Financial Analysis Tools

To evaluate the performance of any organization financial tools are very useful to determine the strengths and weakness of a firm as well as its historical performance and current financial condition. Ratio is an important analytical tool to summarize the large quantities of data and to make quantitative judgments about organization. The financial tools employed in this study basically represent ratio analysis, leverage analysis and EBIT-EPS analysis and others.

a. Ratio Analysis

Ratio Analysis is a useful tool for financial analysis. A ratio is defined as the indicated quotient of two mathematical expressions and as relationship between two or more things. Therefore, it is used as an index or yards stick for evaluating the financial position and performance of a firm.

In the view of the various analysts of ratios, we may classify them into the following four categories:

i. Liquidity ratios
ii. Leverage or Capital Structure ratio
iii. Activity ratios
iv. Profitability ratio

- Liquidity ratios measure the firm's ability to meet current obligations.
- Leverage ratios show the proportions of debt and equity in financing the firm's assets. This ratio is also known as debt management ratio.

- Activity ratios also known as assets management ratios measures how effectively the firm is managing its assets.
- Profitability ratios measure the overall performance and effectiveness of the firm. It is the net result of a large number of policies and decisions. These ratios show the combined effects of liquidity, asset management (activity ratio), and leverage ratios on operating results.

b. Debt to Equity Ratio

The relationship between borrowed fund and owner's capital is a popular measure of long term solvency of a firm. This ratio is intended to address the firm's ability to meet its obligation. The following structures of ratios are presented under this ratio:

c. Long term debt to shareholders fund ratio

Long-term debt to equity ratio reflects the relative claims of creditors and shareholders against the assets of the firm. In other words, this ratio indicates the relative proportion of debt and equity in financing the assets of the firm. This ratio is also known as external internal equity ratio and is calculated as follow:

$$\text{D/E ratio} = \frac{Long\ Term\ Debt}{Shareholder's\ Equity}$$

Where, long term debt includes debentures and loan not maturing with one year. Shareholder's equity or net worth includes Equity share, preference share, reserve and surplus, P/L A/C, retained earnings. Past accumulated loss and deferred expenditures are deducted from shareholder's equity to determine the denominator i.e. net worth.

d. Total debt to shareholders fund ratio

$$\text{D/E ratio} = \frac{Total\ Debt}{Shareholder's\ Equity}$$

Where,

Total debt = Long term debt + Current Liabilities

Shareholder's equity = Common stock + Preference capital + Retained Earning

e. Total debt to Total Assets Ratio

This ratio is also known as debt ratio. It measures the percentage of total funds provided by creditors. Debt includes current liabilities and all bonds. Creditors

prefer moderate debt ratios. Since, lower the ratio, greater the cushion against creditor's losses in the event of liquidation. In contracts to the creditor's preference to a low debt ratio, the owners may seek high leverage to magnify earnings or because raising new equity means giving up some degree of control. If the debt ratio is too high, there is a danger of encouraging responsibility on part of the owners. The owner's stake can become so small that speculative activity, if it is successful, however, they will incur only a moderate loss because their investment is small.

$$\text{Debt ratio} = \frac{Total\ Debt}{Total\ Assets} \times 100$$

f. Interest Coverage Ratio (Debt Capacity Ratio)

This ratio is called "Time Interest Earned Ratio." This ratio measures the debt servicing capacity of a firm in so far as the fixed interest on the total loan is concerned. It is determined by dividing the operating profit or Earning before Interest and Taxes (EBIT) by the fixed interest (I) change on loan. Thus, in the calculation of Interest Coverage Ratio, IC-Ratio in times is expresses as.

$$\text{IC Ratio (in Times)} = \frac{EBIT}{Inerest\ Charge\ fIA}$$

This ratio is very useful in determining whether a borrower is going to be able to service interest payment on a loan. In other words, the ratio is designed to relate the financial charges of a firm to its ability to service them. This ratio is also known to determine whether a firm has the ability to meet its long-term obligations. From the creditors point of view the larger the coverage the greater the ability the firm to handle charges.

g. Financial Leverage

Financial leverage refers to the use of fixed income securities - debt and preferred stock- and financial risk is the additional risk placed on the common stockholders as a result of using financial leverage. Conceptually, the firm has a certain amount of risk inherent in is operation; this is business risk, which is defined as an uncertainty inherent in projection of future ROE. By using debt and preferred stock (financial leverage) the firm concentrates its business risk on common stockholders. Therefore financial risk can be defined as the portion of stockholder's

risk over and above the basic business risk, resulting from the use of financial leverage.

Financial leverage affects the earning per share. When the economic conditions are good and firm's EBIT is increasing, its EPS increase faster with more debt in the financial structure. The degree of financial leverage is defined as the percentage change in earning per share that is associated with given percentage change in earning before interest and taxes (EBIT). DFL may be calculated by using any one of the following formulas:

$$\text{DFL} = \frac{\textit{Percentage change in EPS}}{\textit{Percentage Change in EBIT}}$$

Or

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

DFL shows that to what extent the firm is able to bear its fixed charges. DFL of unlevered firm will be 1 and it will be greater than 1 in case of levered firm.

h. Capital Adequacy Ratio

Capital adequacy is evaluated by compliance with the requirement stipulated by NRB. The capital adequacy ratio of banks is regularly monitored through their returns to submit to NRB. Before the ratio is breached the bank will be directed to direct fresh capital within a certain period and will be recommended to submit plans for capital increase. Appropriate capital adequacy ratio has always been a controversial issue, however extremely higher or lower capital adequacy ratio is considered to be unfavorable in terms of lowered return or lowered solvency respectively. Some of the ratios taken for analysis are:

- Capital fund to total deposit ratio
- Core capital to risk asset ratio

i. Return on Capital Employed (ROCE)

Return on Capital Employed is similar to return on assets except in one respect. Here the profits are related to total capital employed. The capital employed basis provides a test of profitability related to the source of long term funds. A

comparison of this ratio with similar firms, with the companies' average and over time and would provide sufficient insight into how efficiently the long term funds of owners and creditors are being used. In the calculation of return on capital employed, ROCE in percentage is expressed as

$$\text{ROCE (\%)} = \frac{EAT \ \Gamma \ Interest}{Capital \ Employed} \mid 100\%$$

The higher ratio indicates more efficiency of firm in capital utilization.

j. Return on shareholders equity (ROSE)

The ratio reveals how profitability the owner comparison of the ratio with that of similar firms, as also with the industry average, will through light on the relative performance and strength of the firm. Without external financing, the source of divided growth is the retention of earnings and the return on this retention, namely the Return on Shareholder's Equity (ROSE). The ratio tells us the earning power on shareholder s book investment and is frequently used in comparing two or more firms in a company. In the calculation of Return on Shareholder's Equity, ROSE in percentage is expressed as:

$$\text{ROSE (\%)} = \frac{EAT}{Shareholder's \ Equity} \mid 100\%$$

The higher ratio indicates more efficiency of firm.

k. Return on Risky assets

This ratio measures the profitability of a bank, which shows the percentage of net profit against risky assets (i.e. loan and advances plus bills purchased and discounted). It can be computed by dividing net profit by risky assets.

$$\text{Return on Risky Assets} = \frac{Net \ \text{Pr}ofit}{Risky \ Assets}$$

l. Credit deposit ratio (C/D ratio)

Credit deposit ratio is supposedly used to measure the relation of total loan and advance to total deposit. Thus:

$$\text{Credit deposit ratio (\%)} = \frac{Total\ Loan\ and\ Advance}{Total\ Deposit}$$

3.6.2 Statistical Analysis Tools

Many statistical stools are often employed in the analysis and interpretation of data as an aid to management and to meet the objectives of the study. Following statistical tools are used more systematically in this chapter:-

- Coefficient of correlation
- Regression Analysis
- Trend analysis

To avoid ambiguity, confusion and misunderstanding the key terms used in this study have been defined as follows:

a. Coefficient of correlation

The term correlation indicates the relationship between two such variables in which with changes in the values of one variable the values of other variable also change.

In this study, correlation coefficient is used to measure the relationship between the two variables of each types of companies. Here, the financial ratios are used to show their general relationship between them. The correlation coefficient is denoted by 'r' and can be calculated by using following formula:

$$r = \frac{N\ \Sigma XY\ -(\Sigma X).(\Sigma Y)}{\sqrt{\{N\Sigma X^2-(\Sigma X)^2\}\{N\Sigma Y^2-(\Sigma Y)^2\}}}$$

Where, N = No. of observations of X and Y

ΣX = Sum of the observations in series X

ΣY = Sum of the observations in series Y

ΣX^2 = Square of the sum of the observations in series X

ΣY^2 = Square of the sum of the observations in series Y

ΣXY = Sum of the product of the observations in series X and Y.

b. Regression Analysis

Regression analysis is used to develop an estimating equation that is mathematical formula that relates the known variable to the unknown variable. It is a statistical tool used to determine the statistical relationship between two or more variables and to make estimation of one variable on the basis of other variable. It is to understand here that 'a' constant indicates the mean or average effect on dependent variable of all the variables omitted from the model. Averages are the measures, which condense a huge unwieldy data into single value which represents the entire data. It's value lies between two extreme observations, i.e. the largest and the smallest items. Similarly, the regression coefficient 'b' of each independent variable indicates the marginal relationship between variables and value of dependent variable, holding constant the effect of all other independent variables in the regression model. In other words, the coefficient describes how changes in independent variable affect the values of dependent variable estimate. In this study, regression coefficient is calculated for selected dependent and independent variable specified in the model. The formula for regression coefficient can be calculated as follows:

$$b = \frac{n \sum XY - \left(\sum X\right)\left(\sum Y\right)}{n \sum X^2 - \left(\sum X\right)^2}$$

$$a = \frac{\sum Y - b\left(\sum X\right)}{n}$$

The equation of regression line is Y= a + bX

Where,

Y	=	Dependent variable
X	=	Independent variable
b	=	Slope of regression or Regression co-efficient
a	=	Regression constant

c. Trend Analysis

Ratio analysis is not able to show the fluctuation of the financial position of the companies with time. The financial position is improving or deteriorating over the years show by the use of trend analysis. The significance of a trend analysis or ratios lies in the fact that the analysis can know the direction of movement, i.e.

whether the movement is favorable or unfavorable. For example, the ratio may be low as compared to the norms and standard but the trend may be upward. On the other hand, though the present level may be satisfactory, the trend may be a declining one. Thus, trend analysis is of great significance to the study.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 Data Presentation and Analysis

This chapter deals with the presentation, analysis and interpretation of relevant data of Nepal Telecom, Nabil Bank, Nepal Electricity Authority, Himalayan General Insurance Company Limited and Nepal Investment Bank Ltd. in order to fulfill the objectives of this study. To obtain best result, the data have been analyzed according to the research methodology as mentioned in third chapter. The purpose of this chapter is to introduce the mechanics of data analysis and interpretation. With the help of this analysis, efforts have been made to highlight the comparative financial strength of selected organizations. For analysis, different types of analytical methods and tools such as financial ratio analysis as well as statistical analysis are used.

4.1.1 Debt Management Ratio

a. Long Term debt to Shareholders Fund Ratio

Long-term debt to equity ratio reflects the relative claims of creditors and shareholders against the assets of the firm. In other words, this ratio indicates the relative proportion of debt and equity in financing the assets of the firm. In other word long term debt is a source of long term financing having fixed obligation to made regular payment to the respective holder and shareholder's fund is a heading of source having no obligation to make regular payment. So, this ratio measures the relationship between the long term debt and shareholder's fund. If high volume of debt is used in capital structure, it would cause to lower the tax liability and higher earning per share but also cause to make the organization failure. Similarly higher equity volume cause to make higher tax liability, lower the earning per share but doesn't consider regular fixed payment so don't directly cause to liquidate the organization.

Table 4.1

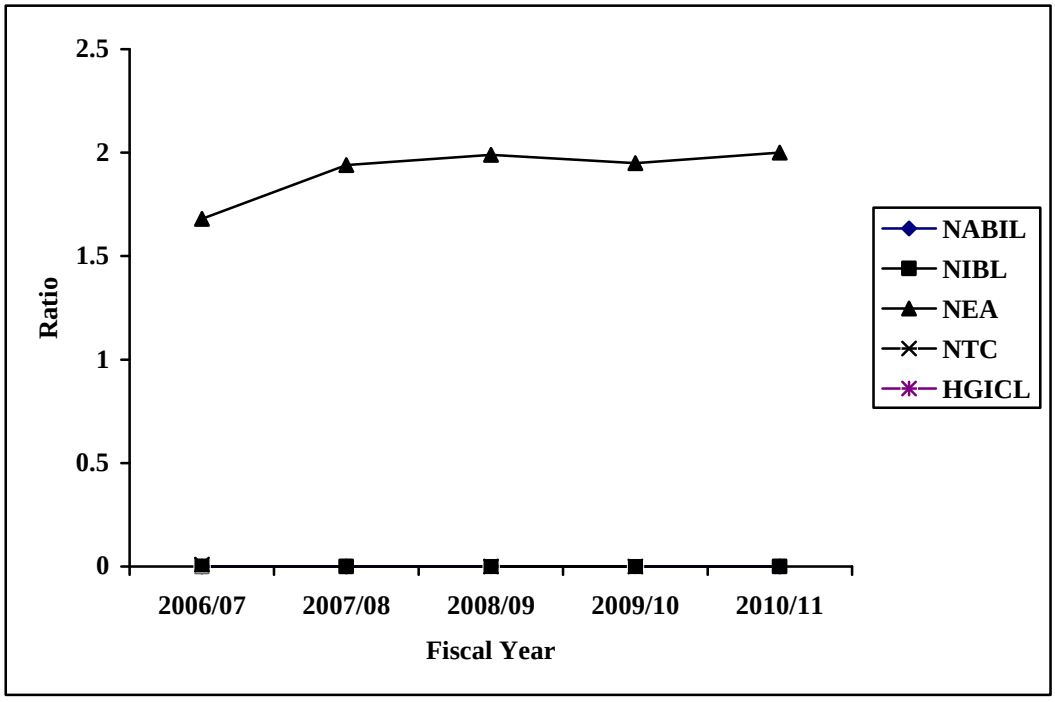
Long term Debt to Shareholders Fund Ratio

Year	Ratio				
	NABIL	NIBL	NEA	NTC	HGICL
2006/07	0	0	1.68	0.01	-
2007/08	0	0	1.94	-	-
2008/09	0	0	1.99	00	-
2009/10	0	0	1.95	00	-
2010/11	0	0	2	-	-

Source: Annex-1

Figure 4.1

Presentation of Long term Debt to Total Shareholders Fund Ratio



Since the practices of various debts related securities are limited to very few organizations. So the trend to collect the fund from the debt security is nominal in banking sector and other sector, however the trend seems some better than the past. Looking at the above figure, debt ratio of NEA is around twice it means NEA is collecting the fund from the debt twice than the equity of the organization which is very aggressive combination and may not show the financial soundness. Being the pioneer of power sector NEA is reaping the benefit of trust of lender; if lender found

other better opptunities than NEA definitely they stop to lend the resource the fund to NEA. Similarly very few volume of debt is used in the capital structure of NTC during the period of 2007 but than after there is no notable debt gearing on capital structure of NTC. Being big financial houses NTC and NEA dominates other in volume related issue so; the gearing of other organization is not seen in the figure. Other than these houses don't have debt transaction during the sampled period too.

b. Total Debt to Shareholders Fund Ratio

Total debt is the summation of long them debt liabilities (bond, debenture) and current liabilities (all such heading of liabilities which are matured with in the period of one year i.e. bills payable; tax payable, outstanding salaries and wages etc.). Similarly shareholder' fund consists the paid up capital, reserves and surplus, retained earning/profit etc. Higher the ratio causes to higher the earning per share and vice-versa.

Table 4.2

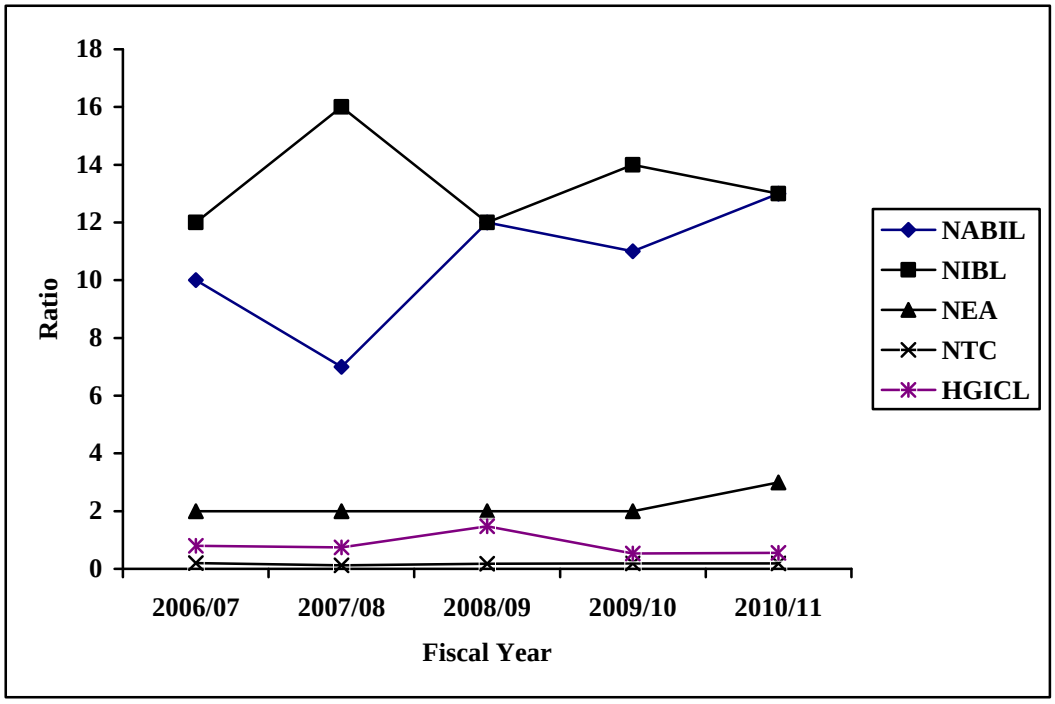
Total Debt to Shareholders Fund Ratio

Year	Ratio				
	NABIL	NIBL	NEA	NTC	HGICL
2006/07	10	12	2	0.20	0.80
2007/08	7	16	2	0.12	0.74
2008/09	12	12	2	0.18	1.47
2009/10	11	14	2	0.19	0.53
2010/11	13	13	3	0.19	0.55

Source: Annex-2

Figure 4.2

Presentation of Total Loan Liabilities to Total Shareholders Fund Ratio



Movement of NABIL and NIBL seems in inverse trend. During the period of 2007 gap between the NABIL and NIBL seems lower as the time passes to 2008, gap seems maximum but then for the period of 2009 both have more or less same ratio. After the period of 2009 movement again seems in inverse trend and again they are met in 2011. Movements lead to the conclusion that, NABIL and NIBL have just inverse strategy in the concern of total loan liability deployment. At present NABIL has slightly lower ratio but NIBL is in increasing trend. Ratio of total liability of NEA seems more or less same during 2007 to 2011. Similarly, NTC is in almost unvarying trend. So, NEA and NTC have practiced same strategy in the concern of total loan liabilities. However ratio of NTC is lower than NEA. Ratio of HGICL seems in fluctuating trend which is almost fluctuating between the ratio of NEA and NTC. Comparatively, total loan liabilities to shareholders fund ratio of NIBL are highest, ratio of NABIL is higher, NEA is in third position, HGICL is in fourth position and NTC is in fifth position.

c. Total Debt to Total Assets Ratio

This ratio is also known as debt ratio. It measures the percentage of total funds provided by creditors. Debt includes current liabilities and all types of long term

debt. Creditors prefer moderate debt ratios. Since, lower the ratio, greater the cushion against creditor's losses in the event of liquidation. In contracts to the creditor's preference to a low debt ratio, the owners may seek high leverage to magnify earnings or because raising new equity means giving up some degree of control. If the debt ratio is too high, there is a danger of encouraging responsibility on part of the owners.

Table 4.3

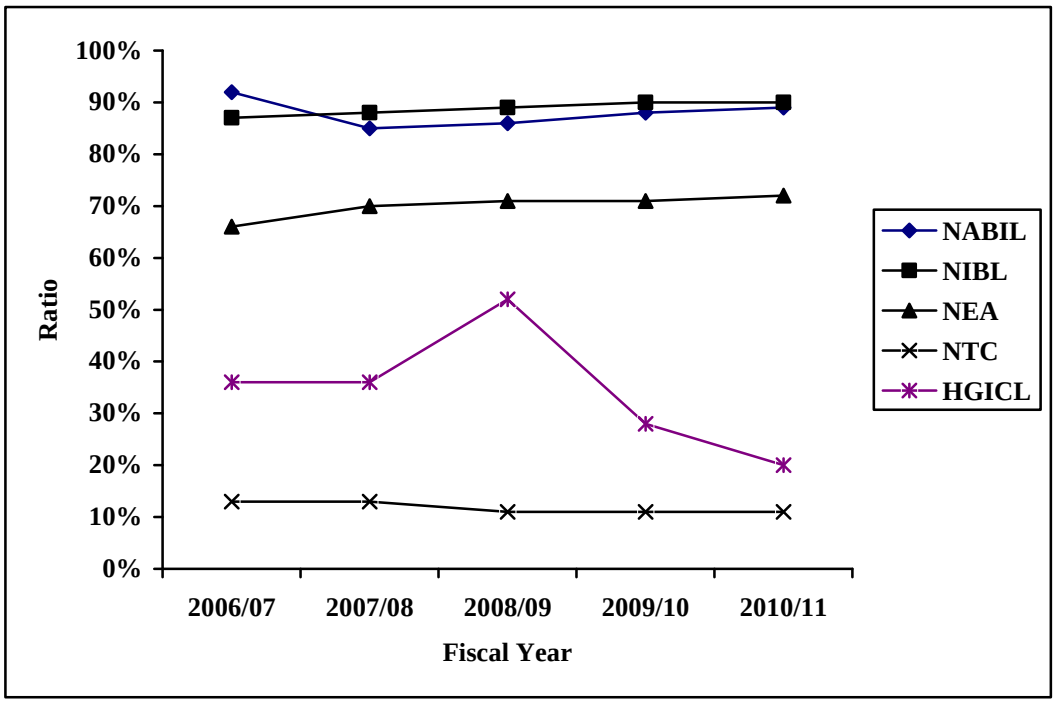
Total Deb to Total Assets Ratio

Year	Ratio				
	NABIL	NIBL	NEA	NTC	HGICL
2006/07	92%	87%	66%	13%	36%
2007/08	85%	88%	70%	13%	36%
2008/09	86%	89 %	71%	11%	52%
2009/10	88%	90 %	71%	11%	28%
2010/11	89%	90 %	72%	11%	20%

Source: Annex-3

Figure 4.3

Presentation relationship between Total Debt and Total Asset



Looking at the above figure, ratio of NABIL is in peak during the period of 2007 but than after it is in declining trend however after the period of 2008 ratio seems more or less same for NIBL. Similarly NIBL is in almost unvarying trend or NIBL is using stability in total loan and total ratio. In the case of NEA, ratio seems in the trend of up warding slowly. Fluctuation of HGICL is astonishing because the movement of respective line in graph. HGICL is declining the ratio than the past. Similarly NTC is in declining its ratio slowly than past. Comparatively, total debt to total ratio of NIBL is highest, ratio of NABIL is higher, NEA is in third position, HGICL is in fourth position and NTC is in fifth position.

d. Interest Coverage Ratio (Debt Capacity Ratio)

This ratio is also known as time interest earned (TIE) ratio which measures the debt servicing capacity of a firm in so far as the fixed interest on the total loan is concerned. Higher the ratio indicates higher capacity to bear the high volume of interest charge and vice versa.

Table 4.4

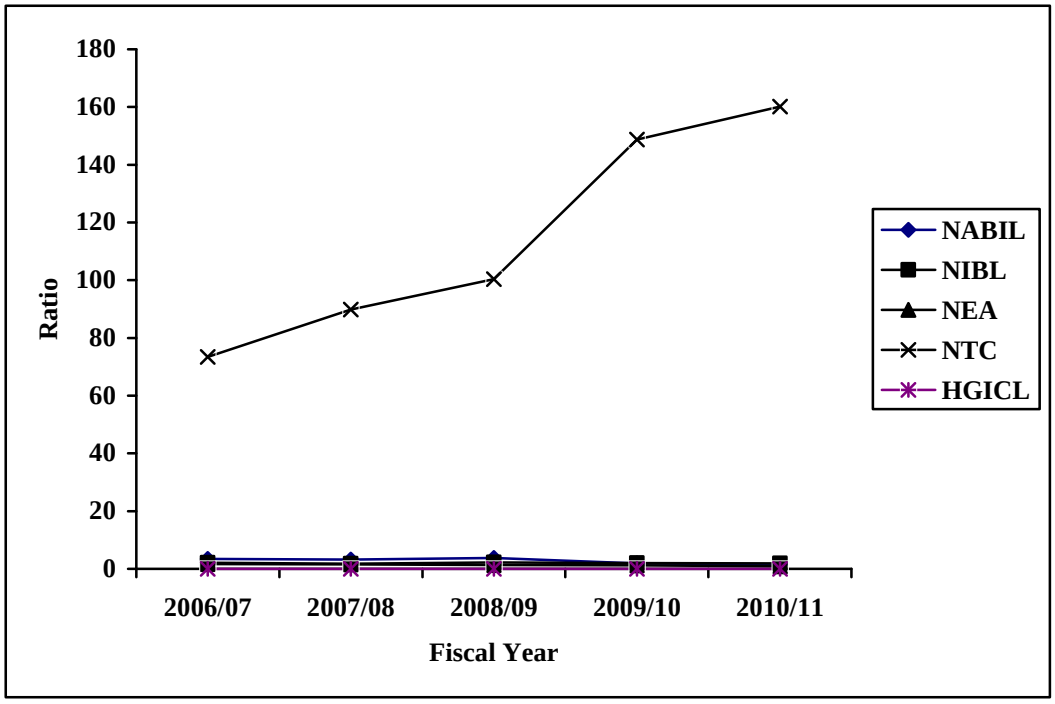
Interest Coverage Ratio

Year	Ratio				
	NABIL	NIBL	NEA	NTC	HGICL
2006/07	3.4	2.1	1.7	73.4	0
2007/08	3.2	1.8	1.5	89.8	0
2008/09	3.8	2.2	1.3	100.4	0
2009/10	1.9	2.0	1.2	148.7	0
2010/11	1.5	1.9	0.9	160.1	0

Source: Annex-4

Figure 4.4

Presentation Interest Coverage Ratio



Looking at the above figure, TIE of NEA is in massively up warding trend. TIE of NEA is increasing significantly during the period of 2007 to 2011. TIE of HGICL is fluctuating below 20 and seems more or less same during the period of 2007 to 2011. Similarly NIBL, NABIL and NEA has more or less same ratio during the period of 2007 to 2011. Comparatively, TIE of NTC is highest, ratio of HGICL is higher, and NABIL, NEA and NIBL are in almost same position. So, interest bearing capacity of NTC is higher than other organization and HGICL is in moderate capacity to bear the load of interest expenses and other organization are seems very weak in the concern of interest expenses bearing.

4.1.2 Profitability Ratio

a. Return on Shareholders Equity (ROSE)

Shareholders equity consist share capital, general reserves, profit/retained earnings etc. ROSE evaluated the relationship between shareholders' equity and profit that is garnered through the business operation. Higher ROSE is the symbol of good business and vice versa.

Table 4.5

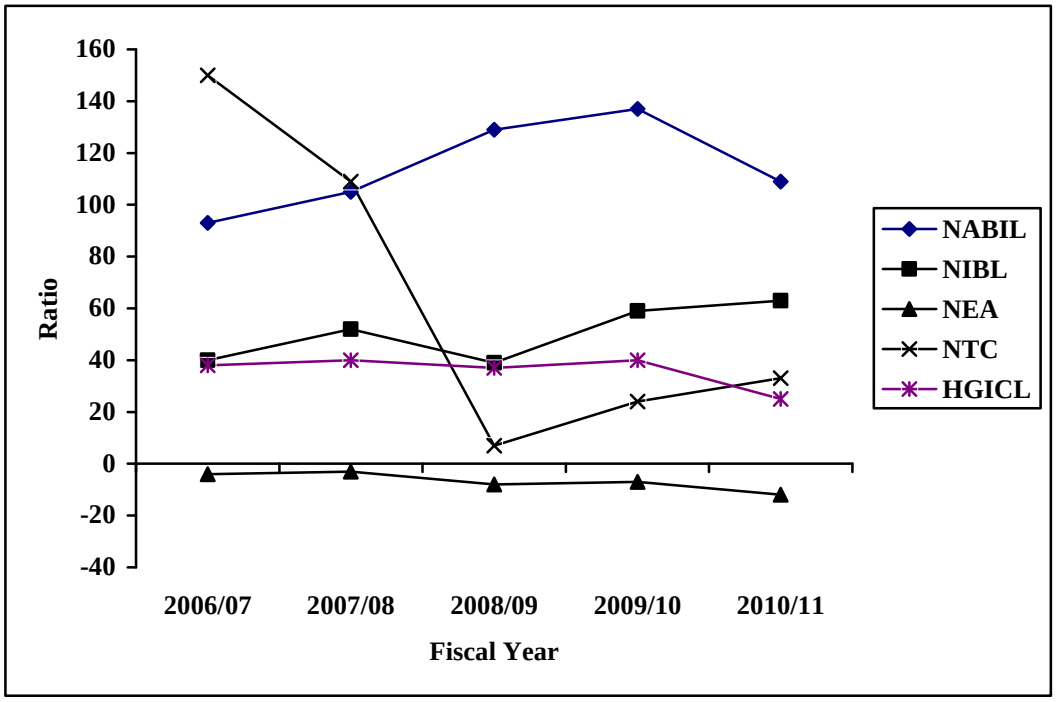
ROSE Analysis

Year	Ratio				
	NABIL	NIBL	NEA	NTC	HGICL
2006/07	93%	40%	- 4%	150%	38%
2007/08	105%	52%	-3%	109%	40%
2008/09	129%	39 %	-8%	7%	37%
2009/10	137%	59 %	-7%	24%	40%
2010/11	109%	63 %	-12%	33%	25%

Source: Annex-11

Figure 4.5

Presentation of ROSE



Looking at the graph Rose of NTC is declined significantly which seems at peak during the period of 2007 but after the period of 2009 it is increasing slowly. Similarly Rose of NABIL is in increasing trend however it shows some downward pattern after the year 2010. NIBL seems less fluctuating because it's curve have very few up and down movement however ROSE of NIBL is also increasing significantly. In the concern of HGICL, ROSE seems more or less same till the period of 2010 but than after it is in down trend. NEA has negative profit so it's ROSE is in negative form, respective curve of NEA show slow down trend which is

the meaning of the more negative return. So, Rose of NABIL is highest, NIBL is in second position, NTC is in third position, HGICL is in fourth position and NEA is in last position in above concern.

b. Return on Capital Employed (ROCE)

ROCE is an indicator which helps to describe the relation between seeded money (invested money) and the return form the investment. As we know every feasible projects requires amount to be invested for the shake of expected return of project. in the decision making process higher ROCE is highly acceptable and vice versa.

Table 4.6

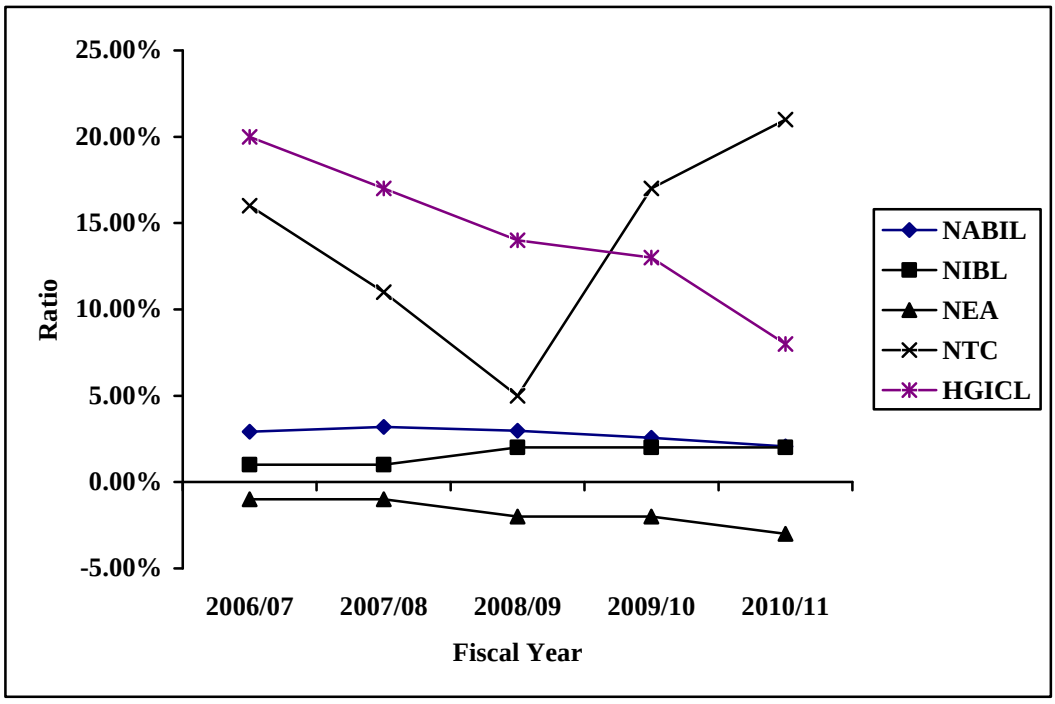
ROCE Analysis

Year	Ratio				
	NABIL	NIBL	NEA	NTC	HGICL
2006/07	2.91%	1%	-1%	16%	20%
2007/08	3.19%	1%	-1%	11%	17%
2008/09	2.97%	2 %	-2%	5%	14%
2009/10	2.56%	2 %	-2%	17%	13%
2010/11	2.07%	2 %	-3%	21%	8%

Source: Annex-10

Figure 4.6

Presentation of ROCE



Looking at the graph, ROCE of HGICL is higher till the year 2009 than after it is in declining trend but which is still higher than NIBL, NABIL and NEA. However ROCE of HGICL is declined significantly during the period of 2007 to 2011. Similarly ROCE of NTC is in declining trend till the period of 2009 than after it is in increasing trend. In the case of NABIL ROCE seems more or less same during the period however some down pattern has appeared after the period of 2009. ROCE of NIBL is also seems more or less same but some up ward movement have seen after 2008. ROCE of NEA is seems stable during the period of 2007-2008 but than after it is in more worse trend or declining trend. So, ROCE of NTC is highest, HGICL is in second position, NABIL is in third position, NIBL is in fourth position and NEA is in last position in the concern of ROCE.

c. Return on Assets (ROA)

This ratio measures the profitability of a bank, which shows the percentage of net profit against risky assets (i.e. loan and advances plus bills purchased and discounted). Higher ROA is the indication of better utilization of asset and vice versa.

Table 4.7

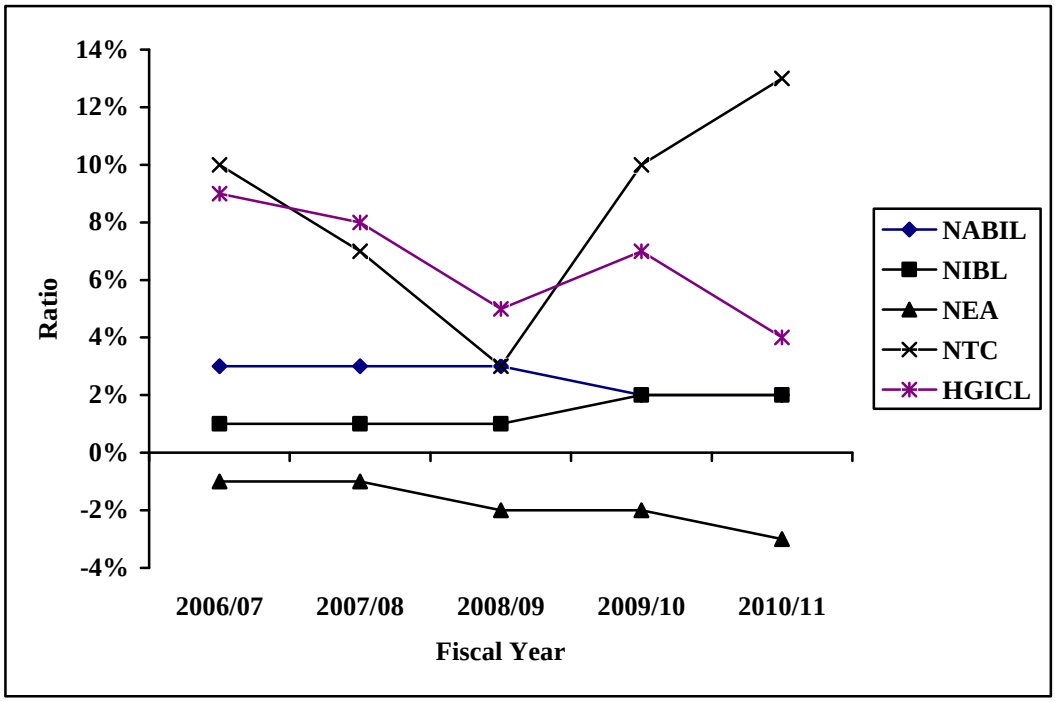
ROA Analysis

Year	Ratio				
	NABIL	**NIBL**	**NEA**	**NTC**	**HGICL**
2006/07	3%	1%	- 1%	10%	9%
2007/08	3%	1%	-1%	7%	8%
2008/09	3%	1 %	-2%	3%	5%
2009/10	2%	2 %	-2%	10%	7%
2010/11	2%	2 %	-3%	13%	4%

Source: Annex-12

Figure 4.7

Presentation of Return on Asset



Looking at the above graph, ROA of NTC seems more fluctuating because of more ups and down movement of curve. ROA of NTC seems in declining form till the period of 2009 than after it is in increasing trend. Similarly ROA of HGICL seems down trend with low fluctuating patterns. ROA of NABIL is seems more or less same patterns however ROA of NABIL is in declining form in slow motion. Patterns of NIBL show slow upward movement. Similarly ROA of NEA is declining regularly. So, ROA of NTC is highest, HGICL is in second position, NABIL is in third position, NABIL is in fourth position and NEA is in last position in above concern.

d. Earning Per Share (EPS)

Analysis of EPS shows the relationship between total no. of outstanding shares and earning of respective year. Higher ratio is the symbol of organizational soundness and prosperity. For the exploration of organization soundness study has tried to show the comparative EPS analysis of selected organization. Study has not incorporated the respective analysis of NEA because of regular losses.

Table 4.8

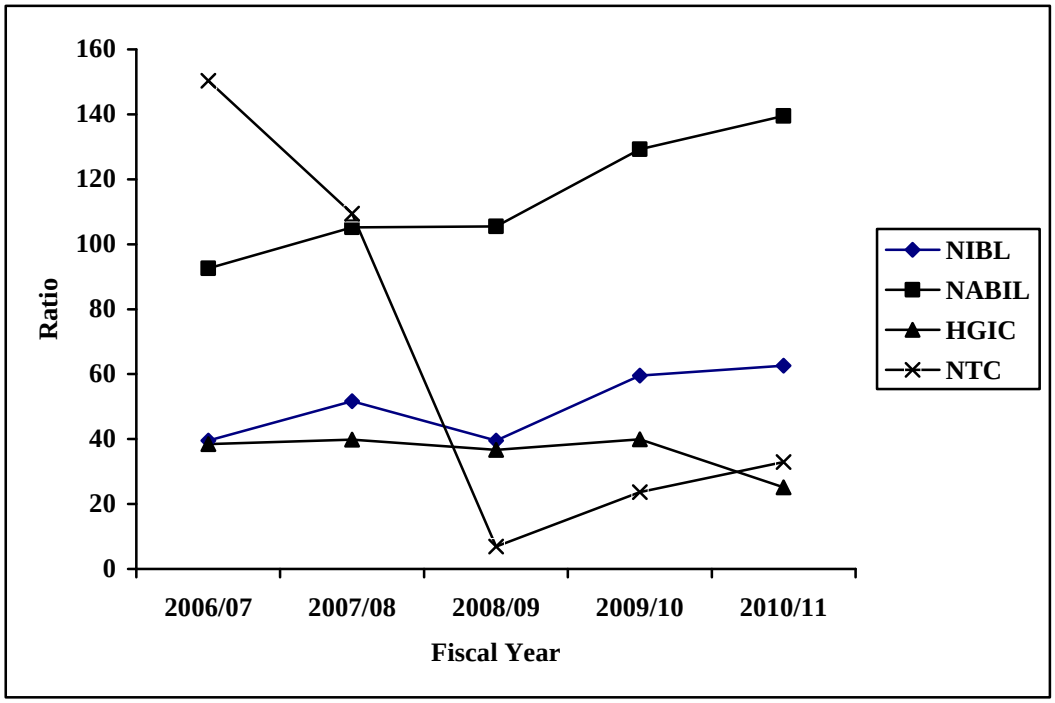
EPS of Selected Organizations

Year	EPS			
	NIBL	NABIL	HGIC	NTC
2063/64	39.56	92.54	38.41	150.34
2064/65	51.70	105.16	39.86	109.42
2065/66	39.5	105.49	36.7	6.95
2066/67	59.5	129.21	39.9	23.62
2067/68	62.57	139.45	25.1	32.91

Source: Annex-5 & 6

Figure 4.8

Presentation of EPS



Looking at the graphs, NABIL is regularly improving it's earning capacity during the study period. So NABIL is in good condition. Similarly EPS of NTC is in highest form during the starting period of sampled data but than after it is in sharply declining form after crossing the period of 2065/66 is again in steady growing trend. So it seems good trend for NTC. HGIC and NIBL has more or less same pattern during the period of first four years but the trend of NIBL is growing significantly after 2065/66.

e. Financial Leverage Ratio

Financial Leverage helps to explain the factors associating between net profits and operating profit. In the same direction study has presented the relationship of said variables within the sampled organizations i.e NIBL, NABIL, HGICL and NTC.

Table 4.9

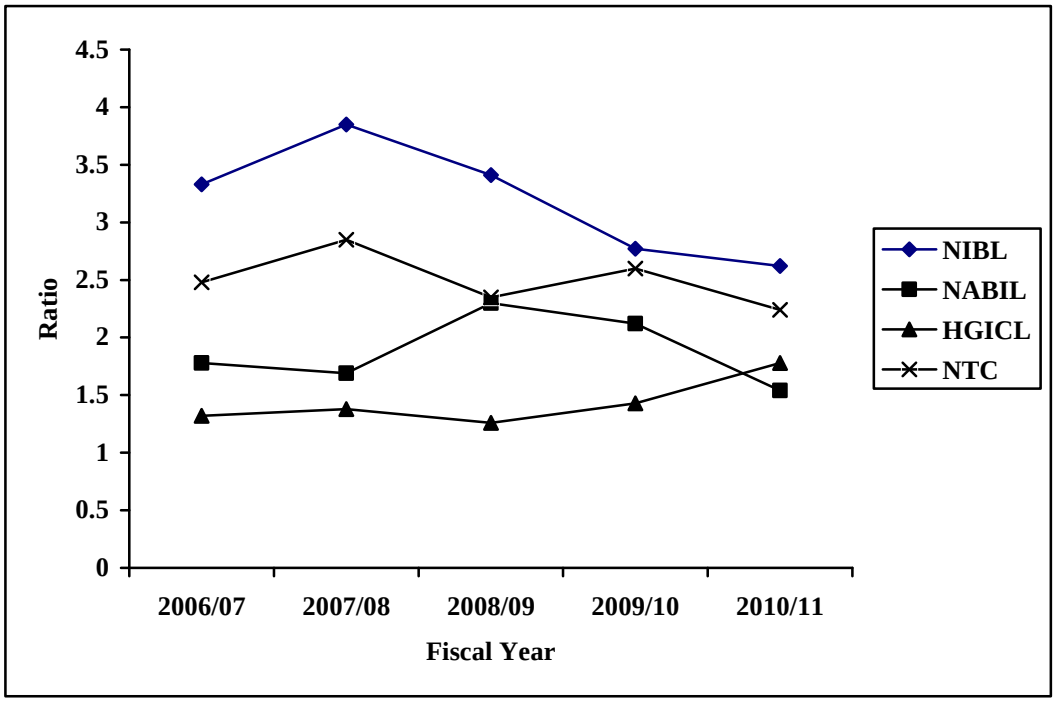
Financial Leverage of Selected Organizations

Year	Financial Leverage			
	NIBL	NABIL	HGICL	NTC
2063/64	3.33	1.78	1.32	2.48
2064/65	3.85	1.69	1.38	2.85
2065/66	3.41	2.3	1.26	2.35
2066/67	2.77	2.12	1.43	2.6
2067/68	2.62	1.54	1.78	2.24

Source: Annex-6 & 7

Figure 4.9

Presentation of FL



Looking at the figure, FL ratio of NIBL seems higher than all other sampled organizations. This informs that NIBL is investing more fund on administration issues or other headings which are not directly connected with operation (like as

fund mobilization and collection), but scenario is in improving trend because of down ward sloping curve. NTC has more or less same level of FL during the whole study period. NABIL is also maintaining same level of FL however it was increased during the period of 2065/66. Being the small organization between the total selected organizations, curve relating with HGICL is in small form but it seems moving up ward in recent time.

4.1.3 Capital Adequacy Ratio

Capital adequacy is evaluated by compliance with the requirement stipulated by NRB. The capital adequacy ratio of banks is regularly monitored through their returns to submit to NRB. Before the ratio is breached the bank will be directed to direct fresh capital within a certain period and will be recommended to submit plans for capital increase. Appropriate capital adequacy ratio has always been a controversial issue, however extremely higher or lower capital adequacy ratio is considered to be unfavorable in terms of lowered return or lowered solvency respectively. Some of the ratios taken for analysis are:

a. Capital fund to Total other Collected Liability (as deposit, loan etc) Ratio.

Capital (paid up capital) is the fund invested by the owner' and other collected liabilities are subjected to the fund which are collected form the other sources like as deposit, premiums, loans etc. So this ratio is useful to know about to know the fund management capacity of selected organization or use of owner money and lenders money of selected organizations are measured by this ratio. Gearing of such resource depends up the attitude of the organization toward the risk. If ratio is 1, organization is using owner' and other liability equally, if ratio is more than 1 capital is more than other liabilities and if ratio is lower than 1 organization are using more other liabilities. As the development and expansion of the business owner' capital become deficit than organization starts to depend on other capital too. Excessive usages of other resources may lead to the organization toward the financial crisis and vice versa.

Table 4.10

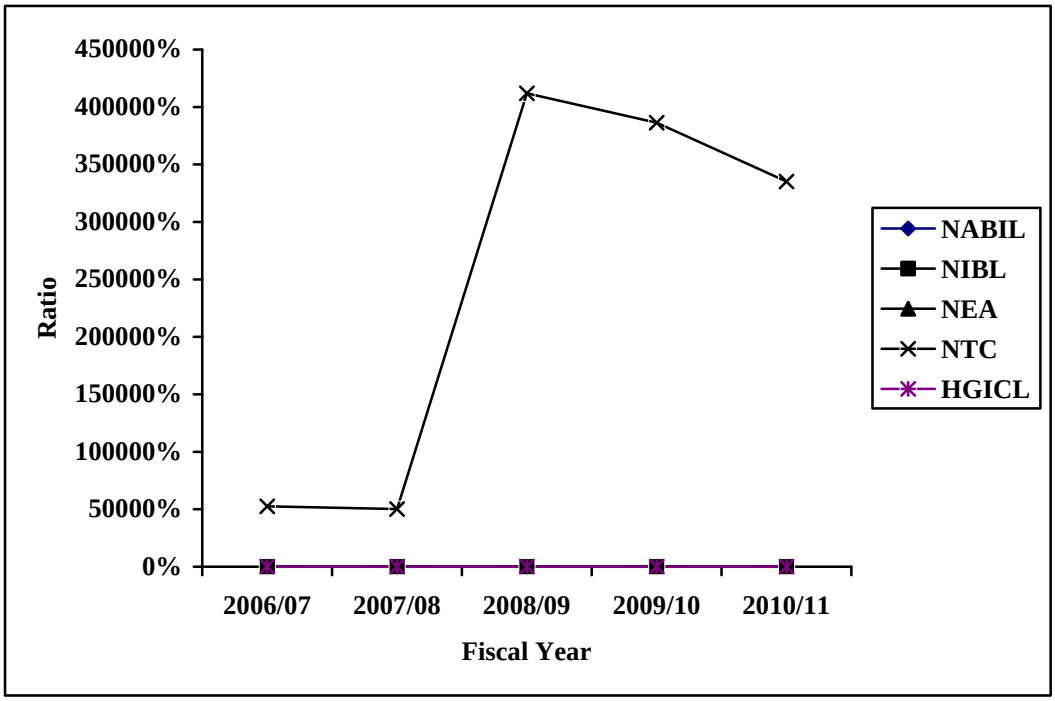
Capital Fund to Deposit

Year	Ratio				
	NABIL	NIBL	NEA	NTC	HGICL
2006/07	3%	4%	40%	52539%	180%
2007/08	3%	3%	39%	50212%	156%
2008/09	3%	4 %	40%	411849%	130%
2009/10	2%	3 %	41%	386327%	105%
2010/11	2%	3 %	41%	335139%	84%

Source: Annex-8

Figure 4.10

Presentation of Capital to Other Collected Liability ratio



NIBL has lower capital to other liability ratio which indicated NIBL is mobilizing excessive deposit than its capital or deposit is in significantly higher side. Similarly NEA is using more or less unvarying gearing or NEA is also depending other collected liabilities than owner' capital. Trend of HGICL is seems more fluctuating because it has shown down trend. In the past HGICL is mobilizing owner's capital only but after the period of 2010 HCICL is mobilizing other capital significantly. Similarly Ratio of NTC is mobilizing owner's capital significantly or NTC has it' own un-mobilized capital so NTC is not depended on other liabilities. Comparatively, capital to other liability ratio of NIBL and NABIL is lowest, ratio of

NEA is lower, HGICL has higher ratio and ratio of NTC is in highest position. So NTC is the organization having own sufficient fund, HGICL has moderate level of own fund, NEA has poor in the concern of self fund and NIBL and NABIL are poorest in the concern.

b. Core capital to Risky Assets Ratio

Core capital incorporates the heading of share capital fund and risk asset are the subject to the investment which are invested on the various headings like as manufacturing some thing, credit relating the various heading, work in progress, investment it self etc. credit is the source of the fund and asset is utilization of fund so proper mechanism should be develop to get better result from the process.

Table 4.11

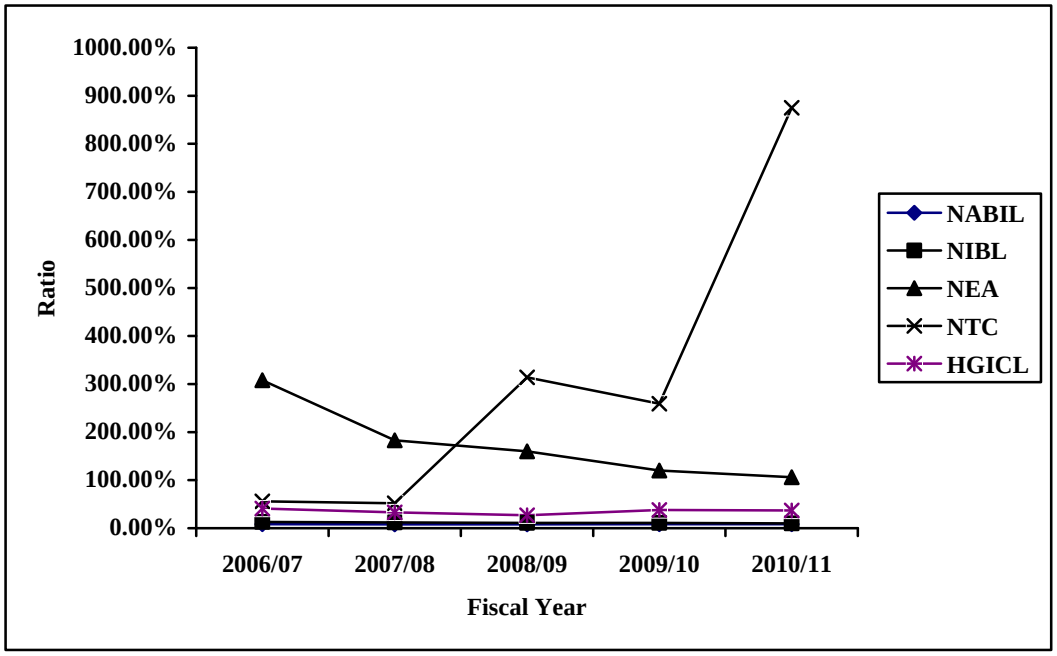
Core capital to Risky Assets Ratio

Year	Ratio				
	NABIL	NIBL	NEA	NTC	HGICL
2006/07	8.34%	13%	308%	56%	41%
2007/08	8.04%	12%	183%	52%	33%
2008/09	8.13%	11 %	160%	314%	27%
2009/10	8.31%	11 %	120%	259%	38%
2010/11	8.24%	10 %	106%	875%	37%

Source: Annex-9

Figure 4.11

Presentation of Relationship between Risky Assets to Capital Ratio



Looking at the graph, ratio of NEA is in declining during the period of 2007 to 2011 which is the symbol of higher investment on work in progress and other investment. Similarly ratio of NEA is in increasing significantly in step jump manner which is the indication of lower investment on work in progress and other investments. Similarly HGICL is investing also investing capital to risky asset because line is shifted below the slab of 100%. Similarly NABIL and NIBL has invested massively on risky asset because the line is shifted almost on zero level which is the indication of 0% weight of capital asset on total risky asset of respective organization. Comparatively, NIBL and NABIL are massively investing in risky asset than other organization; HGICL is also deploying the capital on risky asset which is also aggressive investment. Similarly NEA is trying to invest on risky asset as the capital of the organization. NTC is either increasing the capital or reducing the volume of investment on risky asset so the ratio is very high than 100%

4.1.4 Credit to Deposit Ratio

Credit and deposit are two opposite transactions of accounting under the banking service. Credit stands on the assets side as the use of resources and deposit stands on the liabilities side as the source of resources. So, proper management of such resources mobilization and deployment plays significant role in and institution.

Since the all sample organizations are not financial institution so, the terms deposit and credit are not found in the transaction of other organization. To make the work simple and understandable the term deposit is assumed as the summation long term liabilities and current liabilities and credit is assumed as the summation of investment and work in progress (assets) for the organization other than bank.

Higher the C/D ratio cause to raise the profit for the organization and cause to lower the liquidity for the bank. Similarly higher the fund investment on work in progress would cause to garner the extra profit for the organization but would cause to additional risk to the organization on failure of investment.

Table 4.12

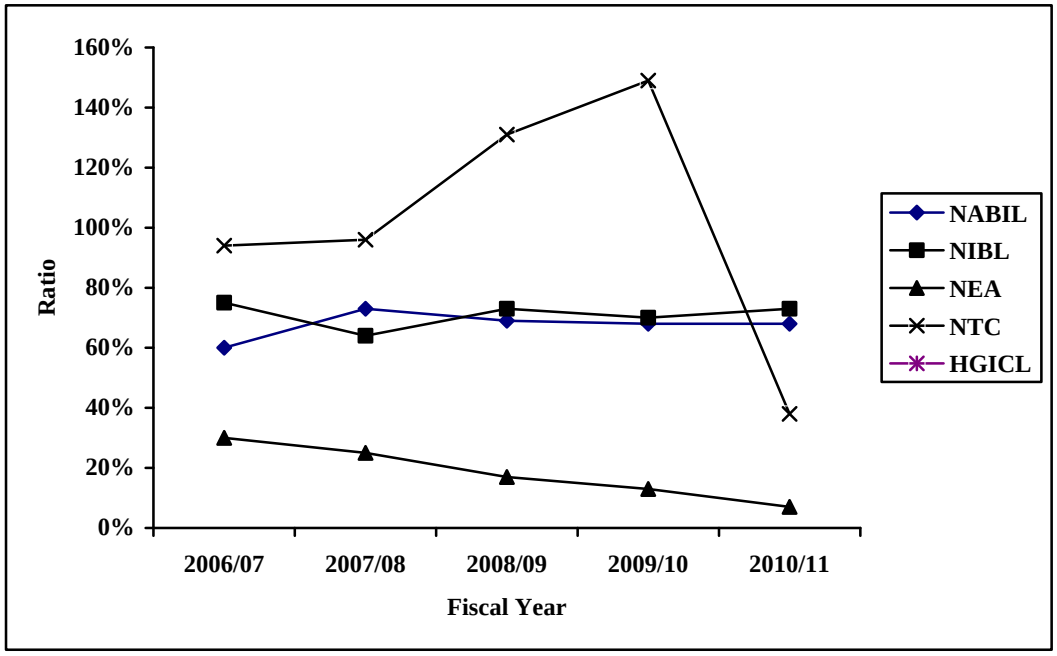
C/D Ratio

Year	Ratio				
	NABIL	NIBL	NEA	NTC	HGICL
2006/07	60%	75%	30%	94%	-
2007/08	73%	64%	25%	96%	-
2008/09	69%	73 %	17%	131%	-
2009/10	68%	70%	13%	149%	-
2010/11	68%	73%	7%	38%	-

Source: Annex-13

Figure 4.12

Presentation of Credit (investment & Work in Progress) to Deposit (Liability) Ratio



Looking at the above graph, C/D ratio of NTC seems up ward sloping till the period of 2010 but after this point C/D ratio of NTC has declined significantly. C/D ratio of NIBL and NABIL seems more or less same during the period of 2007 to 2011. C/D ratio of both banks is scattered between 60 percent and 80 percent which is assumed as good liquidity management. C/D ratio of NEA seems very low it means NEA has extra fund on hand which is waiting to be invested. Study has not included the ratio of HGICL because of no meaning full matter for C/D ratio. So, C/D ratio of NIBL is highest, NABIL is in second position, NTC is in third position, NEA is in fourth position.

4.2 Major Findings

4.2.1 Being big financial houses NTC and NEA dominates other organizations in volume related issue so; the gearing of other organization is not seen in the figure. Other than these houses don't have debt transaction during the sampled period too.

4.2.2 Comparatively, total loan liabilities to shareholders fund ratio of NIBL is highest, ratio of NABIL is in second position, NEA is in third position, HGICL is in fourth position and NTC is in fifth position.

4.2.3 Comparatively, total debt to total assets ratio of NIBL is highest, ratio of NABIL is higher, NEA is in third position, HGICL is in fourth position and NTC is in fifth position.

4.2.4 Interest bearing capacity of NTC is higher than other organization and HGICL is in moderate capacity to bear the load of interest expenses and other organization are seems very weak in the concern of interest expenses bearing.

4.2.5 In case of EPS, NABIL is in good condition as it regularly improving its earning capacity during the study period. EPS of NTC is in highest form during the starting period of sampled data but than after it is in sharply declining form after crossing the period of 2065/66 is again in steady growing trend. So, it seems good trend for NTC. HGICL and NIBL has more or less same pattern during the period of first four years but the trend of NIBL is growing significantly after 2065/66. NEA is not taken into account because of its regular losses.

4.2.6 FL of NIBL seems higher than all other sampled organizations. This informs that NIBL is investing more fund on administration issues or other headings which are not directly connected with operation (like as fund mobilization and collection), but scenario is in improving trend because of down ward sloping curve. NTC has more or less same level of FL during the whole study period. NABIL has been maintaining same level of FL however it was increased during the period of 2065/66. HGICL, being a small organization among the total selected organizations, the curve is in small form but it seems moving up ward in recent time.

4.2.7 NTC is the organization having own sufficient fund, HGICL has moderate level of own fund, NEA has poor in the concern of self fund and NIBL and NABIL are poorest in the concern.

4.2.8 Comparatively, NIBL and NABIL are massively investing in risky assets than other organization; HGICL is also deploying the capital on risky asset which is also aggressive investment. Similarly NEA is trying to invest on risky asset as the capital of the organization. NTC is either increasing the capital or reducing the volume of investment on risky asset so the ratio is very high than 100%.

4.2.9 ROCE of NTC is highest, HGICL is in second position, NABIL is in third position, NIBL is in fourth position and NEA is in last position in the concern of ROCE.

4.2.10 ROSE of NABIL is highest, NIBL is in second position, NTC is in third position, HGICL is in fourth position and NEA is in last position in above concern.

4.2.11 ROA of NTC is highest, HGICL is in second position, NABIL is in third position, NABIL is in fourth position and NEA is in last position in above concern.

4.2.12 C/D Ratio of NIBL is highest, NABIL is in second position, NTC is in third position and NEA is in fourth position.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary

This chapter includes the aggregate summary of the previous chapter and recommends for the betterment to the respective organization. For simplicity this section has divided in to two subheadings named summary and conclusion & recommendation section.

Being chapter of introduction, chapter I deals with the overall introduction of the study which have included general background of the research topic, objectives, limitation, statements of problems etc. The first chapter is also known as the main guide line for the entire study.

Existing studies which are conducted by other authors are reviewed in second chapter to get the in depth information and leakages of existing studies.
Similarly the third chapter consists the briefing and mechanism of analytical tools and methodologies which are used to draw meaningful conclusion from the scattered and random data.

Being the main chapter of the study, chapter four consists of various analysis and data presentation procedures, which is directly related with the achievements of objectives of the study. General summary of chapter four is as follows; Being big financial houses NTC and NEA dominates other organizations in volume related issue so; the gearing of other organization is not seen in the figure. Other than these houses don't have debt transaction during the sampled period too.

5.2 Conclusion

5.2.1 Total loan liabilities to shareholders fund ratio of NIBL is highest, ratio of NABIL is in second position, NEA is in third position, HGICL is in fourth position and NTC is in fourth position.

5.2.2 Total debt to total ratio of NIBL is highest, ratio of NABIL is higher, NEA is in third position, HGICL is in fourth position and NTC is in fifth position.

Interest bearing capacity of NTC is higher than other organization and HGICL is in moderate capacity to bear the load of interest expenses and other organization seem to be very weak in the concern of interest expenses bearing.

5.2.3 In case of EPS, NABIL is in good condition as it regularly improving its earning capacity during the study period. EPS of NTC is in highest form during the starting period of sampled data but than after it is in sharply declining form after crossing the period of 2065/66 is again in steady growing trend. So, it seems good trend for NTC.

5.2.4 HGICL and NIBL has more or less same pattern during the period of first four years but the trend of NIBL is growing significantly after 2065/66. NEA is not taken into account because of its regular losses. FL of NIBL seems higher than all other sampled organizations. This informs that NIBL is investing more fund on administration issues or other headings which are not directly connected with operation (like as fund mobilization and collection), but scenario is in improving trend because of down ward sloping curve. NTC has more or less same level of FL during the whole study period. NABIL has been maintaining same level of FL however it was increased during the period of 2065/66. HGICL, being a small organization among the total selected organizations, the curve is in small form but it seems moving up ward in recent time.

5.2.5 NTC is the organization having own sufficient fund, HGICL has moderate level of own fund, NEA has poor in the concern of self fund and NIBL and NABIL are poorest in the concern.

5.2.6 NIBL and NABIL are massively investing in risky asset than other organization; HGICL is also deploying the capital on risky asset which is also aggressive investment. Similarly NEA is trying to invest on risky asset as the capital of the organization. NTC is either increasing the capital or reducing the volume of investment on risky asset so the ratio is higher than 100%. ROCE of NTC is highest, HGICL is in second position, NABIL is in third position, NIBL is in fourth position and NEA is in last position in the concern of ROCE. ROSE of NABIL is highest, NIBL is in second position, NTC is in third position, HGICL is in fourth position and NEA is in last position in above concern. ROA of NTC is highest, HGICL is in second

position, NABIL is in third position, NABIL is in forth position and NEA is in last position in above concern.

5.2.7 Credit Deposit Ratio of NIBL is highest, NABIL is in second position, NTC is in third position and NEA is in fourth position. The study has not included the ratio of HGICL because of no meaningful matter for C/D ratio.

5.3 Recommendations

Based on the research work, the following recommendations are made on the above findings and conclusion. Certain recommendations can be made here so that the concerned authorities can benefit from them.

5.3.1 It is found that DFL of NIBL & NTC is high, NABIL is constant with it and HGICL seems to have been doing fairly well as it is small compared to others. NEA has negative DFL as it has been running in loss. It is the fixed cost, which ultimately affects the profit; all the companies should maintain optimal level of interest cost in business. NEA which is suffering from losses is suggested to decrease it's interest cost. NTC should focus to the unutilized capital to generate extra income.

5.3.2 NEA should focus on profit for sustainability and effectiveness. So, NEA is recommended to review the statistics and should prepare the sound financial plan.

5.3.3 NABIL and NIBL are seems in satisfactory trend so, they should try to maintain at least same pattern to stabilize the condition. HGICL is seems in down trend pattern in the concern of profit so, it should think about the innovating gearing and operation for betterment.

5.3.4 It is recommended that cost and benefit should be analyzed before raising fund from different source of capital. Although debt creates tax benefit and increase ROE.

BIBLIOGRAPHY

Books

Agrawal, G.R. (2005). *Dyanamics of business environment in Nepal*. Kathmandu: M.K. Publishers and Distributors.

Brigham, E.F., Gapenski, L.C. and Ehrhardt, M. C. (1999*). Financial management*. Singapore: Harcourt Asia.

Khan, M.Y. and Jain, P.K. (1978), *Financial Management*, New Delhi, Mc-Graw, Hill Publishing Co.Ltd.

Kothari, C. R. (1994). *Quantitative techniques.* New Delhi: Vikas Publishing House Pvt. Ltd.

Pandey, I. M. (1995). *Financial management.* New Delhi: Vikas Publishing House Pvt. Ltd.

Prasanna, C. (1985). *Managers guide to finance and accounting.* New Delhi: Tata McGraw Hill Publishing Co. Ltd.

Shrestha, M.K., *Financial management*, Theory and Practice, Kathmandu, Curriculum Organization.

Soloman, E. (1963). *The theory of financial management.* New York: Columbia University Press.

Solomon, E.(1963), *The theory of financial management*, USA., Columbia Univesity Press.

Triqueiros, D. (1992), "The cross-sectional characterization of accounting Data", *Working Paper*, ISCTE.

Van Horne, James C.(1983), *Financial management of po*licy, New Delhi, Prentice Hall Of India Pvt. Ltd.

Van Horne, James C.(1985), *Fundamental of financial management*, USA. Prentice Hall Inc. Englewood Cliffs.

Vanhorne, J. C. (1994). *Financial management and policy.* New Delhi: Prentice Hall of India Pvt. Ltd.

Weston, J. Fred Copeland(1986), *Managerial finance*, The Dryden Press.

Whittington, G. (1980), "Some basic properties of accounting ratios", **Journal Of** *Business Finance and Accounting* 7/2, 219-232**.**

Thesis:

Shrestha, R. L. (2004). “Capital adequacy of banks in nepalese context.” Unpublished Masters Degree Thesis, Shanker Dev Campus, Tribhuvan University.

Journals and Articles

Graham J. R. and Harvey, C. R. (2001). The theory and practice of corporate finance: evidence from the field. *journal of financial economics.* Vol. 60.

Marsh, P. (1982).The Choice between equity and debt. *The journal of finance*. Vol.17, No. 1.

Modigliani, F. and Miller, M. H. (1958). The cost of capital corporation finance and theory of investment. *American economy review.*

Myers, S. C. (1977). determinants of corporate borrowing. *journal of financial economics*. Vol. 15 .

Shrestha, M. K. (1985). Analysis of capital structure in selected enterprises. *prashasan nepalese journal of public administration.* 42nd Issue, Yr 16.

Banking Information And Data, annual reports of selected banks, newspaper, websites and library.

Berry, R.H., and Nix, S. (1991), "Regression analysis v. Ratios in the cross-Section analysis of financial statements", **Accounting and business research** 21/82, 107-117.

Ezzamel, M., Mar-Molinero, C., and Beecher, A. (1987), "on the distributional properties of financial ratios", **Journal of business finance and accounting** 14/4, 463-481.

Fieldsend, S., Longford, N., and McLeay, S. (1987), "industry effects and the proportionality assumption in ratio analysis: a variance component analysis", **Journal of business finance and accounting** 14/4, 497-517.

Garcia-Ayuso, M. (1994), "The functional form of financial ratios: further Empirical evidence", **paper presented at the XVII annual meeting of the European Accounting Association,** April 1994, Venice.

Kuh, E., Meyer, J.R. (1955), "Correlation and regression estimates when the Data are ratios", **Econometrica** 23/4, 400-416.

Lee, C.-W.J. (1985), "Stochastic properties of cross-sectional financial data", **Journal of Accounting Research** 23/1, 213-227.

Lev, B., and Sunder, S. (1979), "Methodological issues in the use of financial Ratios", **Journal of Accounting and Economics** 1/3, 187-210.

McDonald, B., and Morris, M.H. (1984), "The statistical validity of the ratio Method in financial analysis: an empirical examination", **Journal of Business Finance and Accounting**

McDonald, B., and Morris, M.H. (1985), "The functional specification of Financial ratios: an empirical examination", **Accounting and Business Research** 15/59, 223-228.

McDonald, B., and Morris, M.H. (1986), "The statistical validity of the ratio Method in financial analysis: an empirical examination: a reply", **Journal of Business Finance and Accounting** 13/4, 633-635

McLeay, S., and Fieldsend, S. (1987), "Sector and size effects in ratio Analysis: an indirect tests of a ratio proportionality", **Accounting and Business Research** 17/66, 133-140**.**

Perttunen, J., and Martikainen, T. (1989), "On the proportionality assumption Of financial ratios", **Finnish Journal of Business Economics** 38/4, 343-359.

APPENDIX-1

Long Term Debt to Shareholders Fund Ratio

Fig. in NPR mio.

Year	NABIL		
	Long term Debt	**Shareholders Fund**	**Ratio**
2006/07	0	1,482.00	0
2007/08	0	1,999.00	0
2008/09	0	1,657.00	0
2009/10	0	2,287.00	0
2010/11	0	2,560.00	0

Year	NIBL		
	Long Term Debt	**Shareholders Fund**	**Ratio**
2006/07	0	638.54	0
2007/08	0	729.05	0
2008/09	0	1,180.17	0
2009/10	0	1,415.44	0
2010/11	0	1,878.12	0

Year	NEA		
	Long Term Debt	**Shareholders Fund**	**Ratio**
2006/07	41,474.50	24,755.10	1.68
2007/08	43,786.00	22,560.40	1.94
2008/09	45,252.00	22,766.50	1.99
2009/10	48,686.40	24,987.90	1.95
2010/11	51,955.50	26,003.90	2.00

Year	NTC		
	Long Term Debt	**Shareholders Fund**	**Ratio**
2006/07	233.78	19,521.87	0.01
2007/08	0	33,703.24	-
2008/09	11.249	20,580.39	0.00
2009/10	24.239	20,825.86	0.00
2010/11	0	23,686.03	-

Year	HGICL		
	Long Term Debt	**Shareholders Fund**	**Ratio**
2006/07	0	58.51	-
2007/08	0	70.47	-
2008/09	0	81.48	-
2009/10	0	93.33	-
2010/11	0	65.56	-

APPENDIX -2

Total debt to shareholders fund ratio

Fig. in NPR mio.

Year	NABIL		
	Total Debt	**Shareholder's Fund**	**Ratio**
2006/07	14,349.00	1,482.00	10
2007/08	14,603.67	1,999.00	7
2008/09	19,520.60	1,657.00	12
2009/10	24,224.85	2,287.00	11
2010/11	33,275.05	2,560.00	13

Year	NIBL		
	Total Debt	**Shareholder's Fund**	**Ratio**
2006/07	7929.595	638.542	12
2007/08	11886.18	729.05	16
2008/09	14604.574	1,180.17	12
2009/10	19477.306	1,415.44	14
2010/11	25288.856	1,878.12	13

Year	NEA		
	Total Debt	**Shareholder's Fund**	**Ratio**
2006/07	47422.6	24,755.10	2
2007/08	51984.1	22,560.40	2
2008/09	55641.2	22,766.50	2
2009/10	62003.9	24,987.90	2
2010/11	65621.3	26,003.90	3

Year	NTC		
	Total Debt	**Shareholder's Fund**	**Ratio**
2006/07	3909.192	19,521.87	0.20
2007/08	4090.353	33,703.24	0.12
2008/09	3642.112	20,580.39	0.18
2009/10	3882.723	20,825.86	0.19
2010/11	4475.753	23,686.03	0.19

Year	HGICL		
	Total Debt	**Shareholder's Fund**	**Ratio**
2006/07	46.933	58.51	0.80
2007/08	52.256	70.47	0.74
2008/09	119.38	81.48	1.47
2009/10	49.897	93.33	0.53
2010/11	36.113	65.56	0.55

APPENDIX -3

Total Debt to Total Assets Ratio

Fig. in NPR mio.

Year	NABIL		
	Total Debt	**Total asset**	**Ratio**
2006/07	14,349.00	15,626.00	92%
2007/08	14,603.67	17,186.33	85%
2008/09	19,520.60	22,686.21	86%
2009/10	24,224.85	27,610.64	88%
2010/11	33,275.05	37,487.67	89%

Year	NIBL		
	Total Debt	**Total asset**	**Ratio**
2006/07	7929.595	9163.895	87%
2007/08	11886.18	13463.937	88%
2008/09	14604.574	16390.652	89%
2009/10	19477.306	21732.081	90%
2010/11	25288.856	28073.517	90%

Year	NEA		
	Total Debt	**Total asset**	**Ratio**
2006/07	47422.6	72177.7	66%
2007/08	51984.1	74545.3	70%
2008/09	55641.2	78407.7	71%
2009/10	62003.9	86991.8	71%
2010/11	65621.3	91625.2	72%

Year	NTC		
	Total Debt	**Shareholder's Fund**	**Ratio**
2006/07	3909.192	29892.993	13%
2007/08	4090.353	32652.787	13%
2008/09	3642.112	33221.352	11%
2009/10	3882.723	35572.772	11%
2010/11	4475.753	39351.406	11%

Year	HGICL		
	Total Debt	**Shareholder's Fund**	**Ratio**
2006/07	46.933	130.065	36%
2007/08	52.256	146.512	36%
2008/09	119.38	227.705	52%
2009/10	49.897	176.788	28%
2010/11	36.113	180.763	20%

APPENDIX -4
Interest Coverage Ratio

Fig. in NPR mio.

Year	NABIL		
	Interest cost	**Operating Profit**	**Ratio**
2006/07	205.50	695.62	3.4
2007/08	243.55	769.74	3.2
2008/09	357.16	1,359.51	3.8
2009/10	555.71	1,037.61	1.9
2010/11	758.43	1,128.42	1.5

Year	NIBL		
	Interest cost	**Operating Profit**	**Ratio**
2006/07	189.214	388.72	2.1
2007/08	326.202	587.51	1.8
2008/09	354.549	791.08	2.2
2009/10	490.947	970.48	2.0
2010/11	685.53	1,314.23	1.9

Year	NEA		
	Interest cost	**Operating Profit**	**Ratio**
2006/07	1,395.50	2,427.30	1.7
2007/08	2,973.40	4,332.40	1.5
2008/09	2,991.50	3,915.50	1.3
2009/10	3,079.80	3,653.70	1.2
2010/11	3,281.50	3,098.70	0.9

Year	NTC		
	Interest cost	**Operating Profit**	**Ratio**
2006/07	98.204	7208.087	73.4
2007/08	67.619	6070.423	89.8
2008/09	22.323	2241.821	100.4
2009/10	57.732	8584.144	148.7
2010/11	65.046	10413.655	160.1

Year	HGICL		
	Interest cost	**Operating Profit**	**Ratio**
2006/07	0	15.2	0
2007/08	0	16.53	0
2008/09	0	13.972	0
2009/10	0	17.065	0
2010/11	0	13.38	0

APPENDIX- 5
Calculation of EPS

NABIL

Year	No. of Share	Net Profit	EPS
2006/07	4,916,540.00	455,000,000.00	92.54
2007/08	4,916,540.00	517,000,000.00	105.16
2008/09	4,916,540.00	518,636,000.00	105.49
2009/10	4,916,540.00	635,262,000.00	129.21
2010/11	4,916,540.00	685,626,000.00	139.45

NIBL

Year	No. of Shares	Net Profit	EPS
2006/07	2,952,930.00	116,817,000.00	39.56
2007/08	2,952,930.00	152,671,000.00	51.70
2008/09	5,877,390.00	232,147,000.00	39.50
2009/10	5,905,860.00	350,536,000.00	59.35
2010/11	8,013,530.00	501,399,000.00	62.57

NEA

Year	Equity	Net Profit	Ratio
2006/07	166,013.00	(717,400,000.00)	(4,321.35)
2007/08	169,769.00	(455,900,000.00)	(2,685.41)
2008/09	182,159.00	(1,486,100,000.00)	(8,158.26)
2009/10	201,618.00	(1,312,800,000.00)	(6,511.32)
2010/11	212,731.00	(2,472,600,000.00)	(11,623.13)

NTC

Year	Equity	Net Profit	Ratio
2006/07	20,538,640.00	3,087,782,000.00	150.34
2007/08	20,538,640.00	2,247,301,000.00	109.42
2008/09	150,000,000.00	1,042,816,000.00	6.95
2009/10	150,000,000.00	3,542,461,000.00	23.62
2010/11	150,000,000.00	4,936,647,000.00	32.91

HGICL

Year	Equity	Net Profit	Ratio
2006/07	300,000.00	11,523,000.00	38.41
2007/08	300,000.00	11,958,000.00	39.86
2008/09	300,000.00	11,011,000.00	36.70
2009/10	300,000.00	11,970,000.00	39.90
2010/11	300,000.00	7,530,000.00	25.10

APPENDIX -6
Earning Per Share (EPS) & Financial Leverage (FL)

NIBL

Year	2006/07	2007/08	2008/09	2009/10	2010/11
No. of Share	2,952,930.00	2,952,930.00	5,877,390.00	5,905,860.00	8,013,530.00
Net Profit	116,817,000.00	152,671,000.00	232,147,000.00	350,536,000.00	501,399,000.00
Operating Profit	388,715,000.00	587,512,000.00	791,079,000.00	970,482,000.00	1,314,233,000.00
EPS	**39.56**	**51.70**	**39.50**	**59.35**	**62.57**
Financial Leverage	**3.33**	**3.85**	**3.41**	**2.77**	**2.62**

NABIL

Year	2006/07	2007/08	2008/09	2009/10	2010/11
No. of Share	4,916,540.00	4,916,540.00	4,916,540.00	4,916,540.00	4,916,540.00
Net Profit	455,000,000.00	517,000,000.00	518,636,000.00	635,262,000.00	685,626,000.00
Operating Profit	812,000,000.00	873,000,000.00	1,194,898,000.00	1,346,130,000.00	1,053,807,000.00
EPS	**92.54**	**105.16**	**105.49**	**129.21**	**139.45**
Financial Leverage	**1.78**	**1.69**	**2.30**	**2.12**	**1.54**

HGICL

Year	2006/07	2007/08	2008/09	2009/10	2010/11
No. of Share	300,000.00	300,000.00	300,000.00	300,000.00	300,000.00
Net Profit	11,523,000.00	11,958,000.00	11,011,000.00	11,970,000.00	7,530,000.00
Operating Profit	15,200,000.00	16,530,000.00	13,927,000.00	17,065,000.00	13,380,000.00
EPS	**38.41**	**39.86**	**36.70**	**39.90**	**25.10**
Financial Leverage	**1.32**	**1.38**	**1.26**	**1.43**	**1.78**

NEA

Year	2006/07	2007/08	2008/09	2009/10	2010/11
No. of Share	166,013,000.00	169,769,000.00	182,159,000.00	201,618,000.00	212,731,000.00
Net Profit and Loss	(860,700,000.00)	(1,953,700,000.00)	(1,760,300,000.00)	(1,312,800,000.00)	(2,472,600,000.00)
Operating Profit	3,098,700,000.00	3,653,700,000.00	3,915,500,000.00	4,332,400,000.00	2,427,300,000.00
EPS	**(5.18)**	**(11.51)**	**(9.66)**	**(6.51)**	**(11.62)**
Financial Leverage	**(3.60)**	**(1.87)**	**(2.22)**	**(3.30)**	**(0.98)**

NTC

Year	2006/07	2007/08	2008/09	2009/10	2010/11
No. of Share	20,538,640.00	20,538,640.00	150,000,000.00	150,000,000.00	150,000,000.00
Net Profit and Loss	3,087,782,000.00	2,247,301,000.00	1,042,816,000.00	3,542,461,000.00	4,936,647,000.00
Operating Profit	7,669,284,000.00	6,404,615,000.00	2,450,419,000.00	9,194,297,000.00	11,058,915,000.00
EPS	**150.34**	**109.42**	**6.95**	**23.62**	**32.91**
Financial Leverage	**2.48**	**2.85**	**2.35**	**2.60**	**2.24**

APPENDIX -7
Graphical Presentation

Year	Financial Leverage			
	NIBL	**NABIL**	**HGIC**	**NTC**
2006/07	3.33	1.78	1.32	2.48
2007/08	3.85	1.69	1.38	2.85
2008/09	3.41	2.3	1.26	2.35
2009/10	2.77	2.12	**1.43**	**2.6**
2010/11	2.62	1.54	1.78	2.24

Year	EPS			
	NIBL	**NABIL**	**HGIC**	**NTC**
2006/07	39.56	92.54	38.41	150.34
2007/08	51.70	105.16	39.86	109.42
2008/09	39.5	105.49	36.7	6.95
2009/10	59.5	129.21	**39.9**	23.62
2010/11	62.57	139.45	25.1	32.91

APPENDIX -8
Capital Fund to Deposit

Fig. in NPR Thousand

Year	NABIL		
	Capital Fund	Deposit	Ratio
2006/07	491,654.00	14,349,000.00	3%
2007/08	491,654.00	14,586,609.00	3%
2008/09	491,654.00	19,347,396.00	3%
2009/10	491,654.00	23,342,275.00	2%
2010/11	689,216.00	31,915,047.00	2%

Year	NIBL		
	Capital Fund	Deposit	Ratio
2006/07	295,293.00	7,922,766.00	4%
2007/08	295,293.00	11,524,680.00	3%
2008/09	587,739.00	14,254,574.00	4%
2009/10	590,586.00	18,927,306.00	3%
2010/11	801,353.00	24,488,856.00	3%

Year	NEA		
	Capital Fund	Loan	Ratio
2006/07	16,601,300.00	41,474,500.00	40%
2007/08	16,976,900.00	43,786,000.00	39%
2008/09	18,215,900.00	45,252,000.00	40%
2009/10	20,161,800.00	48,686,400.00	41%
2010/11	21,273,100.00	51,955,500.00	41%

Year	NTC		
	Capital Fund	total loans	Ratio
2006/07	2,053,864.00	3,909.19	52539%
2007/08	2,053,864.00	4,090.35	50212%
2008/09	15,000,000.00	3,642.11	411849%
2009/10	15,000,000.00	3,882.72	386327%
2010/11	15,000,000.00	4,475.75	335139%

Year	HGICL		
	Capital Fund	Reserve-Statutory	Ratio
2006/07	30,000.00	16,645.00	180%
2007/08	30,000.00	19,220.00	156%
2008/09	30,000.00	23,035.00	130%
2009/10	30,000.00	28,439.00	105%
2010/11	30,000.00	35,560.00	84%

APPENDIX -9
Core Capital to Risky Assets Ratio

Fig. in NPR thousand

Year	NABIL		
	Core Capital	Risky Assets	Ratio
2006/07	491,654.00	5,894,931.46	8.34%
2007/08	491,654.00	6,116,175.76	8.04%
2008/09	491,654.00	6,047,344.20	8.13%
2009/10	491,654.00	5,919,514.16	8.31%
2010/11	689,216.00	8,360,190.08	8.24%

Year	NIBL		
	Core Capital	Risky Assets	Ratio
2006/07	295,293.00	2,362,344.00	13%
2007/08	295,293.00	2,527,708.08	12%
2008/09	587,739.00	5,436,585.75	11%
2009/10	590,586.00	5,380,238.46	11%
2010/11	801,353.00	8,021,543.53	10%

Year	NEA		
	Core Capital	*Risky Assets	Ratio
2006/07	16,601,300.00	5,390,800.00	308%
2007/08	16,976,900.00	9,268,500.00	183%
2008/09	18,215,900.00	11,396,600.00	160%
2009/10	20,161,800.00	16,773,400.00	120%
2010/11	21,273,100.00	20,155,600.00	106%

Year	NTC		
	Core Capital	*Risky Assets	Ratio
2006/07	2,053,864.00	3,692,871.00	56%
2007/08	2,053,864.00	3,918,134.00	52%
2008/09	15,000,000.00	4,771,796.00	314%
2009/10	15,000,000.00	5,791,312.00	259%
2010/11	15,000,000.00	1,713,887.00	875%

Year	HGICL		
	Core Capital	*Risky Assets	Ratio
2006/07	30,000.00	72,690.00	41%
2007/08	30,000.00	91,930.00	33%
2008/09	30,000.00	110,790.00	27%
2009/10	30,000.00	78,942.00	38%
2010/11	30,000.00	81,000.00	37%

***Risky Assets = Work in Progress + Investment**

APPENDIX -10
ROCE ANALYSIS

Fig. in NPR thousand

Year	NABIL		
	*Capital Employed	Net profit	Ratio
2006/07	15,653,150.00	455,000.00	2.91%
2007/08	16,261,310.00	518,636.00	3.19%
2008/09	21,395,596.00	635,262.00	2.97%
2009/10	26,281,907.00	673,960.00	2.56%
2010/11	36,322,398.00	750,354.00	2.07%

Year	NIBL		
	*Capital Employed	Net profit	Ratio
2006/07	7,929,601.00	116,817.00	1%
2007/08	11,886,179.00	152,671.00	1%
2008/09	11,604,575.00	232,147.00	2%
2009/10	19,477,306.00	350,536.00	2%
2010/11	25,288,855.00	501,399.00	2%

Year	NEA		
	*Capital Employed	Net profit/Loss	Ratio
2006/07	66,229,600.00	(717,400.00)	-1%
2007/08	66,347,200.00	(455,900.00)	-1%
2008/09	68,018,500.00	(1,486,100.00)	-2%
2009/10	73,674,300.00	(1,312,800.00)	-2%
2010/11	77,959,400.00	(2,472,600.00)	-3%

Year	NTC		
	*Capital Employed	Net profit/Loss	Ratio
2006/07	19,521,866.00	3,087,782.00	16%
2007/08	20,757,100.00	2,247,301.00	11%
2008/09	20,580,387.00	1,042,816.00	5%
2009/10	20,825,855.00	3,542,461.00	17%
2010/11	23,686,027.00	4,936,647.00	21%

Year	HGICL		
	*Capital Employed	Net profit/Loss	Ratio
2006/07	58,514.00	11,523.00	20%
2007/08	70,472.00	11,958.00	17%
2008/09	81,484.00	11,011.00	14%
2009/10	93,326.00	11,970.00	13%
2010/11	98,558.00	7,530.00	8%

*** Capital Employed= sum of Long Term of Financing**

APPENDIX -11
ROSE ANALYSIS

Fig. in NPR thousand

Year	NABIL		
	Equity	Net Profit	Ratio
2006/07	491,654.00	455,000.00	93%
2007/08	491,654.00	518,636.00	105%
2008/09	491,654.00	635,262.00	129%
2009/10	491,654.00	673,960.00	137%
2010/11	689,216.00	750,354.00	109%

Year	NIBL		
	Equity	Net Profit	Ratio
2006/07	295,293.00	116,817.00	40%
2007/08	295,293.00	152,671.00	52%
2008/09	587,739.00	232,147.00	39%
2009/10	590,586.00	350,536.00	59%
2010/11	801,353.00	501,399.00	63%

Year	NEA		
	Equity	Net Profit	Ratio
2006/07	16,601,300.00	(717,400.00)	-4%
2007/08	16,976,900.00	(455,900.00)	-3%
2008/09	18,215,900.00	(1,486,100.00)	-8%
2009/10	20,161,800.00	(1,312,800.00)	-7%
2010/11	21,273,100.00	(2,472,600.00)	-12%

Year	NTC		
	Equity	Net Profit	Ratio
2006/07	2,053,864.00	3,087,782.00	150%
2007/08	2,053,864.00	2,247,301.00	109%
2008/09	15,000,000.00	1,042,816.00	7%
2009/10	15,000,000.00	3,542,461.00	24%
2010/11	15,000,000.00	4,936,647.00	33%

Year	HGICL		
	Equity	Net Profit	Ratio
2006/07	30,000.00	11,523.00	38%
2007/08	30,000.00	11,958.00	40%
2008/09	30,000.00	11,011.00	37%
2009/10	30,000.00	11,970.00	40%
2010/11	30,000.00	7,530.00	25%

APPENDIX -12
Return on Assets

Fig. in NPR thousand

Year	NABIL		
	Assets	Net profit	Ratio
2006/07	15,626,000.00	455,000.00	3%
2007/08	17,186,331.00	518,636.00	3%
2008/09	22,686,210.00	635,262.00	3%
2009/10	27,610,638.00	673,960.00	2%
2010/11	37,487,666.00	750,354.00	2%

Year	NIBL		
	Assets	Net profit	Ratio
2006/07	9,163,895.00	116,817.00	1%
2007/08	13,463,937.00	152,671.00	1%
2008/09	16,390,652.00	232,147.00	1%
2009/10	21,732,081.00	350,536.00	2%
2010/11	28,073,517.00	501,399.00	2%

Year	NEA		
	Assets	Net profit	Ratio
2006/07	72,177,700.00	(717,400.00)	-1%
2007/08	74,545,300.00	(455,900.00)	-1%
2008/09	78,407,700.00	(1,486,100.00)	-2%
2009/10	86,991,800.00	(1,312,800.00)	-2%
2010/11	91,625,200.00	(2,472,600.00)	-3%

Year	NTC		
	Assets	Net profit	Ratio
2006/07	29,892,993.00	3,087,782.00	10%
2007/08	32,652,787.00	2,247,301.00	7%
2008/09	33,221,352.00	1,042,816.00	3%
2009/10	35,572,772.00	3,542,461.00	10%
2010/11	39,351,406.00	4,936,647.00	13%

Year	HGICL		
	Assets	Net profit	Ratio
2006/07	130,065.00	11,523.00	9%
2007/08	146,512.00	11,958.00	8%
2008/09	227,705.00	11,011.00	5%
2009/10	176,788.00	11,970.00	7%
2010/11	180,763.00	7,530.00	4%

APPENDIX -13
C/D Ratio

Fig. in NPR thousand

Year	NABIL		
	Credit	Deposit	Ratio
2006/07	8,549,000.00	14,349,000.00	60%
2007/08	10,586,170.00	14,586,609.00	73%
2008/09	13,278,782.00	19,347,396.00	69%
2009/10	15,903,024.00	23,342,275.00	68%
2010/11	21,769,771.00	31,915,047.00	68%

Year	NIBL		
	Credit	Deposit	Ratio
2006/07	5,921,788.00	7,922,766.00	75%
2007/08	7,338,566.00	11,524,680.00	64%
2008/09	10,453,164.00	14,254,574.00	73%
2009/10	13,178,152.00	18,927,306.00	70%
2010/11	17,769,100.00	24,488,856.00	73%

Year	NEA		
	Credit	Deposit	Ratio
2006/07	20,155,600.00	66,229,600.00	30%
2007/08	16,837,400.00	66,347,200.00	25%
2008/09	11,332,600.00	68,018,500.00	17%
2009/10	9,268,500.00	73,674,300.00	13%
2010/11	5,420,800.00	77,959,400.00	7%

Year	NTC		
	Credit	Deposit	Ratio
2006/07	3,692,871.00	3,909,192.00	94%
2007/08	3,918,134.00	4,090,353.00	96%
2008/09	4,771,796.00	3,642,112.00	131%
2009/10	5,791,312.00	3,882,723.00	149%
2010/11	1,713,887.00	4,475,753.00	38%