CHAPTER –I
INTRODUCTION

1.1 Background

Nepal is second richest country of the water resources in the world after Brazil. Most of the rivers origin is in Himalayas part which are flowing continuously throughout the year. These rivers are divided in three groups on the basis of regions they flow i.e. Saptakoshi, Saptagandaki and Karnali. Each of them includes seven more rivers. But more than 2000 other rivers and streams are flowing all over Nepal. It means each and every region have enough water resources. On the purpose of hydropower electricity, irrigation and many other water based program can be operated here sufficiently. But as the proverbs suggests “Dark beneath the lamp" neither each Nepali get electricity nor are there enough irrigation. Not only that, each Nepali does not get pure drinking water as well. The reasons behind these are due to bad economy. Basic things of economic policy is to allocate the resources and utilize as required, increments of productivity, creation of jobs, reduction of poverty as well. The foreign aid is another weakness of the nation. Of course, the situation is better, expectation will fulfill by the donors’ countries but situation is getting worse day by day and most importantly, still dependency is increasing.

Developed countries are looking for different investment sectors and finding different resources. We, the people of Nepal have enough natural resources, and bio-diversity. Nepal is second richest country in the water resources as mentioned above and it can generate about 83,000 M.W. electricity; however, the actual production of electricity is about to 292,583 KW only, and about 40% family are consuming electricity in very high cost. Being high cost of electricity may have different reasons, because to generate the electricity is not an easy task for Nepal. Infrastructure, capital, manpower are main things for generation of electricity. Here Nepal Electricity Authority (NEA) is bearing another part of expenses i.e. interest and consultancy charges to the external investor due to their investment and manpower. Cost of electricity being high is common, but how it is happening and affecting to customers and in different level of production or generation of

electricity are very curious and important matter to the Nepalese people and one of them a researcher as well.

During the process of investment, net cash outlay, payback period, internal rate of return, annual cash flow, depreciation of assets, net present value and total present value of the project must be studied. However, most of the investments are looking for single benefit and no consideration about the long term effect of the project. But most important thing in the above mentioned statement i.e. NCO, IRR, ACF, Dep, NPV, TPV everything are related in terms of investment and should be considered to find out the cost effectiveness. Investment's feature is to achieve high benefit in low investment. For proper investment one should be concerned on:-What is net cash outlay? How long one should wait for the return? Is there positive return or negative return? Cost effectiveness is closely related with these factors and if the cost is effective, return will be positive in comparison to investment. Though to identify the negative or positive return of investment are main concern for the investment, one must be sure of that project is providing good services to the society. Whether they are able to justify their services as required to society or concerned people is to be noted. In case of Nepal, investment in hydropower electricity is especially public services investment due to main investment of the government. In recent years, private sectors are also encouraged to invest over the hydropower, though it could not be effective to reduction of cost and increment of competition as expected level. In order to find some new clauses and measures or ratios in-between cost, output and sales etc. are concerned matter to study the cost effectiveness.

Since the study is focusing to analyze the cost effectiveness of hydropower electricity taking with the certain sample under NEA i.e. Kulekhani-I and Marshyangadi Hydropower projects, it may raise the questions in different views. Effectiveness of cost is main part of the investment but due to lack of proper study in this topic it becomes shaded. Different investors are investing in various part of business and earning as required, however, are they able to earn as comparison to their investment, are they able to sustain as their labor, time etc. will be main focusing point in this

study. That means profitability of the investment, cost benefit analyses are considered under the study.

1.2 Historical Background of Electricity Development in Nepal

The development of electricity in Nepal has been basically based on the development of hydropower. The development of this infrastructure has been initially carried out by the government but the private sector has been recently also contributed and set qualitatively important footing in this sector. There is several government organization through which the electricity development has been coordinated.

The first pioneering projects Pharping (500 w) which was built in 1968 B.S. Followed by Sundarijal (1350 KW) in 1935 were isolated projects established upon the particular government aid agreements and were operated to supply domestic load to very limited areas without any significant planning.

On Terai, some industries produced their own energy supply sources and companies were formed to supply electricity to the developing industries. In 1940, small utilities with capacities an around 100 KW began isolated operation; the Morang Hydropower company was established. It was followed by the Birgunj Electric Supply Co. & the Dharan Electric Power Company.

After the Rana regime and it was during the Panchayat system that the government started formally planning for the first time a development policy. It targeted development in different sectors and among the instruments implemented established specific organizations to develop basic utilities and infrastructures. Here beings actual institutionalize development of electricity. In the first steps of the institutional development within the ministry of water resources, the development of electricity was organized with the specific role to develop electricity. In the second 3 year plan (1962-1965), the Nepal Electricity Corporation was established on August 16, 1962 as public enterprises to undertake marketing and development of electricity as well.

In 1975 the small hydropower electricity development board was established to cover the specific sub sector of hydro power in the remote and rural areas. The aim was to develop hydro power

within the range of 100-5000 KW in isolated rural areas promoting their electrification while overcoming the difficulties linked to electricity transmission to remote and difficult localities. The water and energy commission (WEC) was constituted with direct dependence from the Minister of Water Resources in 1976. This body had an advisory function toward the government in policy matters for the coordinated development of water and energy resources. Power development boards were established to develop specific parts and projects in the growing electrical system. An executive board was created in 1981, the Water and Energy Commission Secretariat (WECS) to workout the policy recommendations for the water and energy commission.

Load shedding is common for us due to low power production, but the demand of power is high. Therefore, Nepal Government has focused on new generation of electricity by encouraging private as well as public limited companies to generate electricity.

Butwal Power Company (BPC) Limited was established in 2022 B.S as a private Limited Company registered under Company Act 2021 of Nepal by the promoters – United Mission to Nepal , NG , NEA, and NIDC with an objective to develop the hydropower projects using appropriate training and technology transfer and human resources as well. The company is one of the pioneering hydropower developers in Nepal from private sector. It has developed 1 MW Tainu 5.1 M W Andhikhola and 12 MW Jhimruk hydropower project. BPC is one of the sponsors of 60 MW Khimti hydropower project.

The company was converted into limited company in 2049 B.S and privatized in 2059 resulting main shareholders Shangri-La Energy Limited and Interkraft AS, Norway. BPC is one of the companies listed in the Nepal Stock Exchange (NEPSE) Ltd.

Chilime Hydropower Company Limited (CHCL) was established in 2052 B.S as Public Limited Company. The main objective of CHCL is to promote the Nepalese Technology and Nepal Technological Manpower for self dependent on the electricity. The promoter of the Chilime Hydropower are, NEA 51%, Employee of NEA and company 25%, General Public 24%. The

authorized capital of the Company is 1000 Million and paid up capital of 492 Million. It has listed Employee share of NEA in Nepal Stock Exchange.

National Hydropower Company Limited (NHCL) was established in 2057 B.S. as public limited Company. The main objective of NHCL is to promote the Nepalese Technology and Nepal Technological Manpower for self dependent on the electricity and to promote the private investment in electricity. The Promoter of the National Hydropower are promoters share 60%, public share 27.857%,Pingshang Mining Administration Bbiuro , China 12.143%. The authorized capital of the company is 560 million NHCL is one of the company listed in Nepal Stock Exchange.

1.3 Statement of the Problem

Nepal is second richest country of water resources in the world. And of course water resources are most important factors to any country and utilization of these resources is another important part of the Nation. Not only a richest country for water resources these resources are belongs to natural and flowing over the each part of Himal Pahad and Tarai regions. However, utilization of these all resources is a great questions for those concerned people as investors, as consumers, as stakeholders of the nation.

Technical feasibility, accessibility in different levels of infrastructure technology, investments are major factors to develop and utilizes those available resources. Only to be rich in resources does not mean to way of solution (like availability of electricity, drinking water, irrigation etc.). Though having great extent of water resources like river, stream, mountains, lakes etc. nothing can be achieved without accessibility. Only 40% peoples have accessibility to use of electricity but not all through the hydropower, they include the diesel plant, solar power etc. Most of the plain lands are getting drought due to lack of proper irrigation. It means proper utilization of resources is high importance for all.

In case of Nepal, it should be accepted that available resources are not utilized as availability and as requirement of those concerned people. Having established as a prominent and pioneer Public

Limited Company in hydropower sector, Butwal Power Company is in generation of hydroelectricity, distribution of electricity and providing consultancy services relating to generation and distribution of electricity. Another Hydropower Company's are Chilime and National Hydropower Company Limited which is listed in Nepal Stock Exchange. We barely found that any researcher has attempted the study on the financial strength and weakness of hydropower company.These facts encourage making a study in this topic.

The study of Hydropower primarily focuses on the financial obligation, generating rate of return on capital investment and internal revenue generation. This study is confined to the problem of financial operation and management of Hydropower Companies. The present study will make a modest attempt to have an insight over the problem of financial management of Hydropower Companies as well as to recommend some concrete suggestions for the improvement in overall financial performance through financial analysis. The study tries to seek the answer of the following questions:

a) How is the financial performance of the Hydropower Companies listed in the Nepse?
b) Which company is performing among between the sampled companies?
c) How efficient have Hydropower companies been able to use their assets in optimal manner?

1.4 Objectives of the study

The study mainly intends to evaluate the financial strengths and weaknesses of Butwal Power Company, Chilime Hydropower Company Limited and National Hydropower Company Ltd. The objectives can be specified as follows:

- To analyze the profitability of Butwal Power Company, Chilime Hydropower Company Limited and National Hydropower Company Limited.
- To examine the leverage ratio of Butwal Power Company, Chilime Hydropower Company Limited and National Hydropower Company Limited.
- To examine the assets utilization of Butwal Power Company, Chilime Hydropower Company Limited and National Hydropower Company Limited.

- To identify the major strength and weakness of Butwal Power Company, Chilime Hydropower Company Limited and National Hydropower Company Limited.

1.5 Limitations of the Study

The study has some limitations. Basically the study is done for the partial fulfillment of Masters of Business Studies. However, this study may face the following limitation during the course of research.

1 Time constraints

2. Takes into account a few number of selected organization among the Hydropower Companies.

3. The resources are limited.

1.6 Organization of the Study

The study report is divided and organized in the following chapters in order to make the study easy to understand.

Chapter-I Introduction

It includes the introductory framework of the study that contains general background, statement of the problem, objective of the study and limitation of the study.

Chapter-II Review of Literature

This chapter deals with the review and analysis of available relevant published materials including thesis report, journals, books, dissertations and government publications.

Chapter -III Research Methodology

This chapter includes the research design, data collection procedure, tools for analysis and methods and procedure of data analysis and presentation.

Chapter -IV Data presentation and Analysis

This chapter deals with the application of defined research method on the collected data and information. The generated result then will be analyzed and interpreted in this chapter. This is very important part of the study.

Chapter -V Summary, Conclusions and Recommendations

This final chapter summarizes the findings in a ground of result obtained from data presentation and analysis and further presents the concluding remarks with a suggestive package as recommendation.

CHAPTER-II
REVIEW OF LITERATURE

The review of literature basically highlights the existing literature and research work related to the present research being conducted with the view of finding out what has already been explained by the authors and researchers and how the current research adds further benefits to the field of research. This review of literature had been classified into two subgroups theoretical review and review of related articles/journal/booklets.

2.1 Theoretical review

Finance is concerned with those activities related to money. Previously finance was limited for procurement of long term fund. Due to industrialization, technological innovations and intense competition, there has been a vast change in the philosophy of management. Likewise the discipline of financial management has undergone an unprecedented change. "Financial management is that managerial activity which is concerned with planning and controlling of the firm's financial resources (Pandey, 2004:31).

Evaluation of financial performance is a study of overall financial position of any organization. It is closely related to the decision making. In the modern context, it gives vital support for the investment decisions, financing decisions and dividend decisions. Financial performance analysis is undergone with the help of periodically made financial statements of the firm.

2.1.1 Financial statements

The Financial Statements are the means of presentation of a firm's financial condition and basically consist of two types of statements - The Balance Sheet & Income Statement. These are prepared to report the overall business activities as well as financial status of the firm for a specified period to its stakeholders. These contain summary of information regarding financial affairs that is organized systematically. The top management is responsible for preparing these statements. “The basic objective of financial statements is to assist in decision making. The analysis and interpretation of financial statements depend on the nature and type of information available there in” (Panday,2004: 31).

Hence financial statement refers to any formal and original statement that discloses the financial information related to any business concern during a period. The income statements and balance sheet usually prepared at the end of each financial year show the firm’s position.

A) Balance Sheet

Balance sheet is one of the basic financial statements of an enterprise. It is also called the fundamental accounting report. As the name suggests, the balance sheet provide information about financial standing or a position of a firm at a particular point of time usually end of the financial year. It can be visualized as a snapshot of the financial status of a company (Khan and Jain, 1993:13).

Balance sheet summarizes the assets, liabilities and owner’s equity of a business at a moment of time, usually at the end of the financial year. Balance sheet is a financial statement, which contains information regarding different capital expenditures made on purchase of assets on particular date and information regarding various sources of funds acquired by the business concern to finance these assets and also the different sources of capital and liabilities at that particular point of time.

B) Income Statement

Income statement is designed to portray the performance of the business firm for specific period of time i.e. for a year or month or quarter. The business revenues and expenses resulting from the accomplishment of the firms operation are shown in the income statements. It is the "Scoreboard" of the firm's performance during particular period of time. It shows the summary of revenues, expenses and net income or loss of a firm for a particular period of time. Income statement also serves as a true measure of the firm's profitability**.**

2.1.2 Financial Analysis

Financial analysis is the process of determining financial strengths and weaknesses of a company by establishing strategic relationship between the components of a balance sheet and profit and loss statement and other operative data (Pandey, 1999:96).

"Financial statement analysis is largely a study of relationship among the various financial factors in a business as disclosed by a single set of statements and a study of the trends of these factors as shown in a series of statement"(Myer, 1961:4).

Financial statement analysis involves the use of various financial statements. These statements perform several things. First, the balance sheet summarizes the assets, liabilities and owner's equity of a business at a moment in time, usually the end of a year or a quarter. Next, the income statement summarizes the revenues and expenses of the firm over a particular period of time, again usually a year or quarter. While the balance sheet represents a snapshot of the firm's financial position at a moment in time, the income statement depicts a summary of the firm's profitability over time. From these two statements certain derivate statements can be produced, such as statement of retained earnings, a sources and uses of funds statements and a statement of cash flows etc (Van Horne, 1996:56).

"Financial analysis is the process of identifying the financial strengths and weaknesses of the firm by properly establishing relationship between the items of the balance sheet and profit and loss account (Pandey, 2004-560). Analyzing financial statements is a process of evaluating relationship between component parts of financial statements to obtain a better understanding of a firm's position and performance (Metcalf, 1976:157).

"Financial statement analysis allows managers, investors and creditors as well as potential investors and creditors to teach conclusion about the recent and current status of a corporation" The checking of financial performance in a business deserves much attention in carrying out the financial position. It also requires to retrospective analysis for the purpose of evaluating the wisdom and efficiency of financial planning. Analyzing of what has happened should be of great value in improving the standards, techniques and procedures of financial control involved in carrying out finance function (Kuchhal, 1982:324).

The four basic statements contained in the annual report are the balance sheet, the income statement, the statement of the retained earnings and the statement of cash flows. Investors use the information contained in these statements to form expectations about the future levels of earnings and dividends and about the risks of these expected values. Financial statement analysis generally begins with the calculation of a set of a financial ratios designed to reveal the relative strength and weakness of a company as compared to other companies in the same industry, and to show whether the firm's position has been improving or deteriorating over time (Weston, 1996:306). Financial analysis is that sort of calculation which is done with the help of annual report. And the annual report would contain the essentials for such analysis. So the data retrieved from the annual report is indispensable for the financial analysis.

It is both an analytical and judgmental process that helps answer questions that have been properly posed. Therefore, it is means to end. Apart from the specific analytical answer, the solutions to financial problems and issues depend significantly on the views of the parties involved, the related importance of the issue and on the nature and reliability of the information available (Helfert, 1992:2).

Financial appraisal is a scientific evaluation of profitability and financial strength of any business concern. Financial appraisal is the process of scientifically making a proper, critical and comparative evaluation of the profitability and financial health of a given concern through the application of the techniques of financial statement analysis. A complete financial analysis and interpretation of financial statement involves the assessment of past business performance, an evaluation of the present condition of the business and the predictions about the future potential for achieving expected or desired results (Jain,1996:36- 37).

The analysis and interpretation of financial statement depicts the actual position of a firm regarding the objectives of that firm within a specified period of time. "Financial appraisal is a process of synthesis and summarization of financial and operative data with a view to get an insight into the operative activities of a business enterprise. It is a technique of X-raying the financial position as well as progress of a concern" as observed by Robert H. Wessel.

The main function of financial analysis is the pinpointing of the strengths and weakness of a business undertaking by regrouping and analysis of figures contained in financial statements by making comparison of various components and by examining their contents. This can be used by financial managers as the basis to plan future financial requirement by means of forecasting and budgeting procedures (Man Mohan, 1997:356).

"Financial statement analysis involves a comparison of firm’s performance with that of other firms in the same line of business which often is identified by the firm's industry classification. Generally speaking, the analysis is used to determine the firm's financial position in order to identify its current strengths and weakness and to suggest actions that might enable the firm to take advantage of the strengths and correct its weaknesses (Weston, 1996:78).

"Financial analysis is used primarily to gain insight into operating and financial problems confronting the firms with respect to these problems. We must be careful to distinguish between

the cause of problem and symptom of it. It is thus an attempt to direct the financial statements into their components on the basis of purpose in the one hand and establish relationships between these components and between individual components and totals of these items on the other. Along with this, a study of various important factors over the past several years is also undertaken to have clear understanding of changing profitability and financial condition of the business organization"(Hampton, 1998:99).

Thus, Jain says "Much can be learnt about business performance and financial position through appraisal of financial statements, the appraisal or analysis of financial statements spotlights the significant facts and relationship concerning managerial performance, corporate efficiency, financial strength and weakness and credit worthiness that would have otherwise been buried in a maze of details"(Jain, 1996:37).

2.1.3 Objectives of Financial Analysis

Financial analysis enables us to explore various facts related to the past performance of business and predicts about the future potentials for achieving expected results. Major objectives of analysis of financial statement are to assess various factors in relation to the business firm as presented below.

- The present and future earning capacity or profitability of the concern.
- The operational efficiency of the concern as a whole, and of its various parts or departments.
- The short-term and long-term solvency of the concern.
- The comparative study regarding to one firm with another firm.
- The possibility of developments in the future making future forecasts and preparing budgets.
- The financial stability of business concern,
- The rea1meaning and significance of financial data,
- The long term liquidity of its fund.

2.1.4 Need of Financial Analysis/ Financial Statement Analysis

The need for the analysis of financial statement arises in order to address the following questions (Pradhan,2000: 47-48).

- How was the firm doing in the past? Was there any problem? If so, in what Area?
- How it is doing at present? Is it doing better compared to the past performance, competitors and industry average? Is there any problem at present? If so, in what areas?
- What about the future? Is there any likely problem on the way in the future? What will its position be in the future?
- What corrective actions can be taken now to solve the problems and improve the performance? How will the recommendation of any course of actions or changes in the policy or practice help solve problems and improve the company's position?
- What are the expected results of recommendations? Are there any improvements?

2.1.5 Significance of Financial Analysis

Significance of analysis lies on the objectives of financial analysis of any firm. The facts discovered by the analysis are perceived differently by different groups associated with the concern. The facts and the relationships concerning managerial performance, corporate efficiency, financial strengths and weaknesses and credit worthiness are interpreted on the basis of objectives in the hand.

Such analysis leads management of an enterprise to take crucial decisions regarding operative policies, investment value of the firm, internal financial control system and bargaining strategy for funds from external sources (Agrawal, 1993:582).

The parties that are benefited by the results or conclusion drawn from the analysis of financial performance can be numerated as (Srivastava, 1993:58-59).

- Top Management
- Creditors
- Shareholders
- Economists
- Labor Unions

A) Top Management

The responsibility of the top management is to evaluate:

- Are the resources of the firm has been used effectively and efficiently?
- Is the financial condition of the firm sound enough?

On the basis of past facts, firms can anticipate their future. Hence, top management can measure the success or failure of a company's operations, determine the relative efficiency of various departments, process and products appraise the individual's performance and evaluate the system of internal audit.

B) Creditors

The creditors can find out the financial strength and capacity of the borrower to meet their claims. Trade creditors are interested in the firm's ability to meet their claims over a short span of time. The suppliers of long term debt focus upon the firm's long term solvency and survival. A lending bank through an analysis of these statements can decide whether the borrower retains the capacity of refunding the principal and paying interest in time or not.

C) Shareholders

The shareholders, who have invested their money in the firm's shares are most concerned about the firm's earning. They evaluate the efficiency of the management and determine about the necessity for the change. In large company the shareholder's interest is to decide whether to buy, sell or hold the shares. They wish to buy the shares in case of sound

performance of the firm where as they simply intend to hold the shares in the condition of satisfactory performance. But they are hurried to sell the shares in case of poor performance.

D. Economists

To diagnose the prevailing status of business and economy, economists analyze the financial statements (of any firm). The government agencies analyze them for the purpose of price regulation; rate setting and similar other purposes.

E. Labor Unions

Productivity is the synonym of well-motivated labors. Labor unions are interested in rights and benefits of labor to enhance the moral of labors. For further motivation they expect increase in wages, fringe benefits and so on. These benefits are affected by the company's profitability condition. Therefore, the union assesses the financial condition of the firm to determine whether the firm is in the situation or not to make such facilities available.

2.1.6 Process of Financial Analysis

Financial analysis, basically financial statement analysis is a technique of answering various questions regarding the performance of a firm in the past, present and the future on the basis of past performance. The analysis recommends the steps to be taken by financial managers while undergoing the assessment of financial position.

The questions, that as elucidated above create the need to follow certain steps such as first identification and analysis of problem in order to come up with appropriate recommendations, and then to project the expected results and examine them if there are improvements before implementing such recommendations. The following chart presents the process to be followed in the analysis of financial statements.

2.1.7 Types of Financial Analysis

"The nature of financial analysis differs according to the purpose of the analyst. " a distinction may be drawn between various types of financial analysis either on the basis of material used for the same or according to the modus operandi of the analysis."(Man Mohan, 1997-356).

A.)According to Material Used

1. External Analysis

It is made by those who do not have access to the detailed records of the company. This group, which has to depend almost entirely on published financial statements, includes investors, credit agencies and governmental agencies regulating a business in a nominal way.

2. Internal Analysis

The internal analysis is accomplished by those who have access to the books of accounts and all other information related to the business. While conducting this analysis, the analyst is a part of the enterprise he is analyzing. Analysis for managerial purpose is the internal type of analysis and is conducted by executives and employee of the enterprise as well as governmental and court agencies which may have major regulatory and other jurisdiction over the business.

B. According to Modus Operandi Analysis

1. Horizontal Analysis

When financial statements for a number of years are reviewed and analyzed, the analysis is called horizontal analysis. As it is based on data from year to year, rather than on one date or period of times as a whole, this is also known as dynamic analysis.

2. Vertical Analysis

It is frequently used for referring to ratios developed for one date or for one accounting period. It is also called static analysis.

Besides, the types of financial analysis on the basis of material used and modus operandi, S.P Jain and K.L. Narang have categorized on the basis of objective of the study.

C) According to Objective

1. Long Term Analysis

This is made in order to study the long term financial stability, solvency and liquidity as well as profitability and earning capacity of a business concern. For the long run success of a business concern, this analysis helps in the long term financial planning.

2. Short Term-Analysis

This is made to determine the short-term solvency, stability and liquidity as well as earning capacity of the business. This analysis is helpful for short term financial planning.

2.1. 8 Techniques of Financial (Statement) Analysis

The fundament of the analytical technique is to simplify or reduce the data under review to the understandable terms. There are various tools and techniques of financial statement analysis, each of which is used according to the purpose for which the analysis is carried out. The widely used techniques are as follows:

a. Ratio Analysis

b. Du Pont System of Financial Statement Analysis

c. Common Size Analysis

d. Funds Flow Analysis

e. Cash Flow Analysis

a. Ratio Analysis

Ratio analysis has been used as a major tool in the interpretation and evaluation of financial analysis. The term ratio refers to the numerical quantitative relationship between the two items/variables. A ratio is calculated by dividing one item of the relationship with the other base. In financial analysis, a ratio is used as a yardstick for the evaluation of financial performance of the firm. "The analysis of financial ratio involves two types of comparison. First, the present ratio may be compared with the past and expected future ratios for the same company and second, the method of comparison involves comparing the ratios of one firm with those of similar firm or with industry averages at the same point, in time. Such comparison gives insight into the financial performance of the firm." Ratio analysis is widely in use. It may not give the entire picture of an enterprise. Ratios themselves are not conclusion. They are only the means. The Ratios are calculated from data available in the financial statement of an enterprise. The Ratio completed from the available data are numerical, there should not be the tendency to regard them as a precise portrayals of a firm true financial status. For some firms, accounting data may closely approximate economic reality, for others, it is necessary to go beyond the figures in order to obtain their financial condition of performance.

Types of Ratios

Different Ratios can be calculated from the available data in the financial statement. Broadly Ratios are classified in four groups. They are:

a) Liquidity Ratios
b) Capital Structure/Leverage Ratios
c) Activity Ratios
d) Profitability Ratios

a) Liquidity Ratios

Liquidity refers to the ability of enterprises to pay its current liabilities. Liquidity implies the utilization of such funds of the firm which are idle or in very little amount. A proper balance between the two contradictory requirements i.e. liquidity and profitability are required for the efficient financial management. The more current assets associated with high liquidity and low profitability and vice versa. The less current Ratio and quick Ratio are the most widely used ratios for the general purpose to measure the liquidity position of an enterprise.

b) Capital Structure/Leverage Ratios

The Capital Structure/Leverage Ratio is associated with the long -term solvency of an enterprise. The long -term creditors would judge the soundness of a firm on the basis of long term financial strength measured in terms its ability to pay the interest regularly as well as repay the installment of principal due to dates or in one lump sum at the time of maturity. Leverage Ratios show how much of an enterprise's fund are financed by debt & equity. These Ratios also show the prospects for future financing.

The Capital Structure Ratio indicates the soundness of capital structure of an enterprise. It can be calculated on two ways. The first approach is to examine what proportion of borrowed capital occupies the capital structure i.e. calculated the Debt to Total Capital Ratio. The second approach

is to examine the number of times the interest earned covered by earnings and to calculate the fixed charges covered by earnings.

c) Activity Ratios

An Activity Ratio may be defined as the test of relationship between sales and various types of Activity Ratios. Activity Ratios are employed to evaluate the efficiencies with which the firm manages and utilizes its assets. These Ratios are also called Turnover Ratios because they indicate the speed with which the assets are being covered or turned over into sales. So Activity Ratios presume that there exists an appropriate relationship between sales and various assets. The more important Activity Ratios for general -purpose analysis are Inventory Turnover Ratio, Total Assets Turnover Ratio, Fixed Assets Turnover Ratio, Capital Employed Turnover Ratio etc.

d) Profitability Ratios

Profitability is very important aspect of management of any enterprise. It shows the overall performance of an enterprise. The Profitability Ratios are calculated to measure the operative effectiveness of an enterprise. Besides management of the company, creditors and owners are interested in the Profitability Ratios of the firm. Profitability Ratios can be calculated on the basis of either sales or investment. The important Profitability Ratios, calculated in relation to sales are Net Profit Margin, Gross Profit Margin, and Operating Expenses Ratio etc. Similarly, the important Profitability Ratios, calculated in relation to investment are Return on Shareholders' Equity, Return on Capital Employed, and Return on Fixed Assets etc. Together these Ratios indicate the firm's efficiency of operation. (Panday, 1998:133).

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b. Du Pont System of Financial Statement Analysis

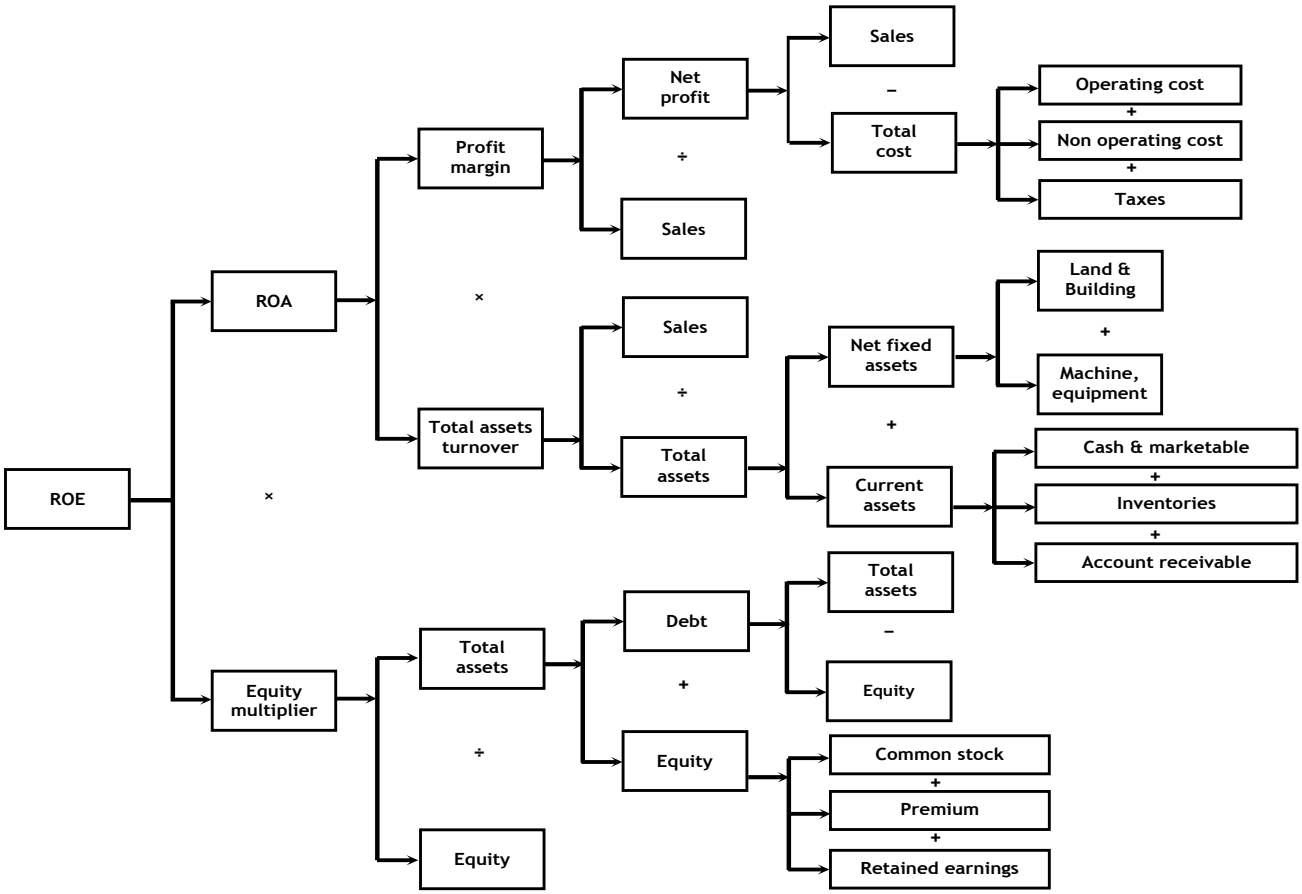
"The Du Pont system is designed to show how the profit margin on sales , the assets turn over ratio and the use of debt interact to determine the rate of return on equity."(Weston, 1996-307)

The Du Pont system of financial statement analysis is developed by the financial experts of the

Du Pont Company by putting together the effects of profitability, investment and the equity ratios. The approach is based on the relationship among the three basic areas of the firm such as (i) cost controlling area (ii) Assets management area and (iii) Financial leverage area. The directed to address the concern of the shareholders; hence its main focus is on the return on equity (ROE). The ROE is analyzed in terms of the factors that directly affect the ROE. The factors such as costs, assets utilization and leverage ratio are the grounds on which several test are made to see how the ROE is affected by such factors. The following modified Du Pont Chart presents the relationship among these factors and ROE.

Figure 2.2

Chart of Du Pont System of Financial Analysis



Source: F. Weston and E. F. Brigham. The Dryden Press. 9th Edition, P99.

For a business firm, the return on assets (ROA) is the rate of return on the total investment that includes both equity and debt capital. The ROA does not reflect the actual rate of return to equity holders. What reflects the return for stock holders is the return on their money (i.e. ROE), which is generally higher than the ROA. Thus ROA is an overall measure and reflects the overall performance of the company. The Du Pont system addresses the concerns of stockholder and focuses on ROE.

Du Pont equation defines ROE as a product of ROA and equity multiplier and ROA as a product of profit margin and total assets turnover.

The Du Pont equation is as follows:

ROE = ROA x equity multiplier

= profit margin x total assets turnover x equity multiplier

= Net profit/sales x sales/total assets x total assets/ equity

c. Common Size Analysis

The common size analysis is another technique of analyzing the items of financial statement on relative terms. Under this method, the percentage of every item in the income statements and balance sheets is carried out for past several years to determine the performance trend of each item during the period under analysis. After analyzing the rising, falling or constant trend of efficiency in the business operation one can make comparison with the industry average or competitors.

The common size analysis is carried out for a period of one or more. The income statement items are divided by sales and expressed as a percentage of sales. The balance sheets items are divided by total assets and expressed as percentage of total assets. These percentages for a company are compared with the standard measures such as percentages calculated in the same manner industry and the competitors.

Thus, the comparison shows the company's performance relative to competitors as well as compared to it own past record.

d. Funds Flow Analysis

Funds flow analysis is the statement of changes in financial position of any organization that determines only the sources and used of fund between two dates of balance sheet. It is prepared to uncover the information that financial statements fail to describe clearly. It describes the sources from which funds were derived and used to which these funds were put.

The statement is prepared to summarize the changes in assets and liabilities resulting from financial and investment transactions during the period as well as those changes occurred due to the changes in owner’s equity. It also uncovers the way of using financial resources during the period by the firm.

Method of preparing funds flow statement depends essentially upon the sense in which the term 'fund" is used. There are three concept of fund: cash concept, total resources concept and working capital concept. According to cash concept, the word fund is synonymous with cash. Total resources concept refers total assets and resources as fund. The term' fund" represents only to working capital on the stated last concept However, working capital concept of fund has gained wide acceptance as compared to the other concepts. Therefore any transaction that increases the amount of working capital is taken as source of fund while conducting funds flow analysis. Any transaction that decreases working capital is treated as application. But, any transaction that affects current liabilities or current assets without resulting any changes in working capital is not taken as sources or use.

e. Cash Flow Analysis

This statement is carried out to know clearly the various items of inflow outflow of cash. It is different from funds flow analysis in the sense, the analysis relates to the movement of cash rather than the inflow and outflow of working capital.

It deals the causes of changes in cash position for the period of two balance sheets date in brief. At the time of preparing cash flow statement, only cash receipt from debtors against credit deals are considered as the source of cash. Similarly, cash purchases and cash payments to suppliers for credit purpose are regarded as the uses of cash. The same holds true for expenses and incomes outstanding and prepaid expenses are not to be considered under this analysis.

2.1.8 Limitations of Financial Analysis

Financial performance analysis is of great significance for investor, creditor, management, economist, and other parties having interest in business. It helps management to evaluate its efficiency in past performance and takes decision relating to the future. (Jain, 1989-33) However, it is not free from drawbacks. Its limitations are listed below.

(a) Historical nature of financial statements:

The basic nature of statements is historical. Past can never be a precise and can never be perfectly helpful for the future forecast and planning.

(b) No subject for judgment:

Financial analysis is a tool to be used by experts, analysts etc. to evaluate the financial performance of firm. That's why it may lead to faulty conclusion if used by unskilled analyst.

(c) Reliability of figures:

Reliability of analysis depends on reliability of the figures of the financial statements under scrutiny. The entire working of analysis will be vitiated by manipulation in the income statement, window dressing in the balance sheet, questionable procedures adopted by the accountant for the valuation of fixed assets and such other facts.

(d) Single year analysis is not much valuable:

The analysis of these statements relating to single year only will have limited use and value. From this, one can not draw meaningful conclusion.

(e) Result may have different interpretation:

Different users may differently interpret the result derived from the analysis. For example, a high current ratio may suit the banker but it may be the cause of inefficiency of the management due to under-utilization of fund.

(f) Change in accounting methods:

Analysis will be effective if the figures derived from the financial statements are comparable. Due to change in accounting methods the figures of current period may have no comparable base, and then the whole exercise of analysis will become futile.

(g) Pitfall in inter-firm comparison:

When different firms are adopting different procedures, records, objectives, policies and different items under similar heading, comparison will be more difficult. If done, it will not provide reliable basis to assess the performance, efficiency, profitability and financial condition of the firm as compared to the whole industry.

(h) Price level change reduces the validity of analysis:

In present days the continuous and rapid changes in the value of money also reduces the validity. Acquisition of assets at different level of prices make comparison useless as no meaningful conclusion can be drawn from a comparative analysis of such items relating to several accounting periods.

(i) Selection of appropriate tool

There are different tools of analysis available to the analyst. The tools to be used in a particular situation depend on skill, training, intelligence and expertise of the analyst. If wrong tool is used, it may lead to wrong conclusion. This may be harmful to the interest of business.

Review of past studies

In this section, the previous work done about the performance of some listed companies has been reviewed. The conclusions drawn on such thesis work will be relevant to justify my study, the review of some previous thesis have been made and presented in this section.

Manandhar (2002) studied on "A Comparative Study on Financial Performance of Financial Companies ". He made comparative study on the financial performance of Lumbini finance and Leasing Company (LFLC), Universal Finance & Capital markets Ltd. (UF&CM), Nepal Housing & Merchant finance Ltd. (NHMF) and Himalayan Securities & Finance Ltd. (HSFL). The major findings of his study were:-

- The average mean current ratio over the study period maintained by all FC's is higher than the desired current ratio of 2:1.
- Highly levered capital structure is found in all institutions. The debt financing within the capital structure of NHMF, LUFL & HISEF are found to be more than 8 times of their

corresponding equity capital.

- The debt equity ratio is found to be very high & unusual due to inclusion of deposit in the debt capital.
- LUFL is observed as more capable among these institutions on the ground of average gross profit margin. HISEF is remarked as the worst performer in this regard because of its high interest expenses.
- LUFL has paid comparatively the highest dividend out of the available earning per share.
- LUFL has been observed as the worst one as it has nearly 33% of income as interest receivable. However NHMF has the lowest such ratio being 7%.
- The accumulation of non-banking assets is found to be high in case of UNFC which is inferred as critically worst financial situations as directed by NRB.
- Out of that loans & advances, NHMF is comparatively found to be capable in maintaining good quality loan than the others.

On the basis of these findings, following suggestions have been recommended:-

- It is suggested to maintain a reasonable credit investment in the area of consumer durable through Hire-Purchase & Housing Loan.
- UFCL & LFCLS' growing amount of interest suspense account clearly reveals the deteriorating collection ability of the company. So it should initiate a dynamic action plan immediately in order to expedite the collection of account receivable.
- A violation of NRB directive by LFCL in respect of resource/deposit collection is observed. Since inefficient mobilization of excessive resources adversely affects the company's financial position, the company should think about minimizing the collecting deposit.
- The companies are suggested to adopt a specific dividend policy.
- HS & FL is suggested to utilize its current assets more efficiently in productive sectors like agriculture and industry.

Karki (2004) studied on "A comparative study on the financial performance of finance companies in Nepal". His study is primarily based on the two finance companies i.e. Universal Finance &

Capital Market Ltd (UFCM) and Nepal Housing & Merchant Finance Ltd (NH&MF). His main objective is to find out comparatively the actual financial position of the finance companies & to suggest the necessary corrective action for the improvement of their performance. In this regard he has tried to focus on the major problems of finance companies at growth level. The problems of finance companies are financial problem, unfavorable economic situation, lack of investment opportunities and counseling services as well. The major findings of the study are:-

- The mean current ratio of both finance companies is found to be below the standard ratio of 2:1 while the quick ratio is satisfactory.
- The activity ratio indicates that cash management and utilization of deposit of NH & MF is better than UFCM.
- The overall profitability of NH&MF is better than that of UFCM rather it is not found to be satisfactory. Debt equity ratio of UFCM is in better position than NH&MF as debt equity ratio of NH&MF is found to be very high.
- Return on investment of NH&MF is in better position which means it has efficiently generated more profit from investment.
- NH&MF has contributed more than UFCM to the government for the development of nation.
- Major source of income for both companies is interest and operating expenses & interest expenses seems to be the major expenses of the companies.

Finally on the basis of findings he has put forward some guidelines for further improvement of finance companies. These companies are recommended to use the fund in new productive sectors to generate more profit and to utilize their resources more efficiently as well. They have to keep reasonable amount of liquidity to maintain their short term solvency position. He recommended the finance companies to actively participate on the social matters and program in which today's finance companies are far behind. As well as he revealed the paramount field like agriculture for the involvement of the finance companies by opening up operating different branches and to raise the rural economy by making investment in the minimum possible low interest rate. In future companies should explore the areas by expanding their business like leasing, bridge financing and venture capital financing.

Ghimire (2005) conducted a study titled "A study on financial performance of finance companies in the context of Nepal". This study was conducted basically to provide a detailed analysis on the financial performance of some listed financial companies namely NHDFCO, NSMCO, KFC, NFCO & AFCO. The financial performance of these companies was examined in terms of liquidity, activity, profitability, leverage, and capital adequacy and growth ratios. On the same ground he has tried to highlight on possible guidelines to improve the financial performance of finance companies.

Major findings of the study:

- Liquidity position of AFCO is comparatively better than that of other finance companies but is highly fluctuation liquidity position shows that the company has not formulated any stable policies.
- Regarding activity ratio NSMCO & AFCO are below the standard than that of other finance companies. It predicts that they have to tackle new techniques in coming days so that they can earn maximum return.
- Profitability position of NSMCO is comparatively not better than of others. NSMCO must maintain its high profit margin in future.
- Leverage ratio of NH&MF is not adequate than that of other. Also not more risky and vice versa in AFCO, NSMCO & NFCO. Capital adequacy ratio of NSMCO seems to have unable to keep adequate capital fund.
- Growth ratio of NSMCO has not been more successful to increase its net profit, earning per share and dividend per share in comparison to other finance companies so that NSMCO hasn't any effective strategy to win confidences of shareholders, depositors and all of its customers.

On the basis of findings, he has recommended some of his views for improvement of these companies

- Finance companies have to canalize funds by gradually shifting priorities from hire purchase to trading and industry to help in the capital formation within the country.
- Legal and procedural improvement like unrestricted entry into the financial market and

on-site supervision should be effective.

- Further statement improvement like joint promotion of finance companies, matching of assets and liabilities conducting trading seriously and positively impacting to public confidence.

Amatya (2005) conducted a study on "Financial Performance of Lalitpur Finance Company" and found the company being run successfully for several years. The various financial indicators like liquidity ratio, leverage ratio, profitability ratio, return on equity capital, return on net worth, return on total assets and EPS were calculated and the financial position of the company was measured. These financial indicators show the company's position is satisfactory except some mismatches in investment activities.

The profitability ratio of LFC is not satisfactory. The profit ratios are not up to the expected level showing the company doing just average in terms of the profit earned. It might be due to the unstable political and economic condition of nation. High positive relationship between deposit and loans and advances and net worth and total assets have been found. With every increase in deposit, company is able to invest in different items of loans and advances viz. hire purchase, housing loans, term loan and other loans.

On the basis of these findings and many other facts following points of recommendations have been suggested:-

- The company has been suggested to maintain its consistency liquidity position around the normal standard of 2:1 and so as its turnover ratio like loans and advances to total deposit, loans and advances to total fixed assets etc.
- The company has been found to have investment of 103.70% of its paid up capital amount in the stock of Lumbini Bank which is not according to the guideline issued by NRB, mentioned in direction No. 8. The company is suggested to keep a careful watch on every investment made and follow the NRB guideline.
- The company is recommended to make appropriate mix of debt and owner's equity which in turn will increase the value of the firm.
- The company is suggested to formulate marketing strategies carefully to serve the

customers. It is suggested to introduce ATM facilities, Credit Card facilities and many more.

Karmacharya (2007) studied on " Financial Performance of Finance Companies in Nepal; a study in Kathmandu valley" has included Nepal Housing Development Finance Company Ltd(NHDFCO), National Finance Company Ltd.(NFCO) and Nepal Housing & Merchant Finance Ltd.(NH&MF) under study. The major findings of the study are:-

- The average current ratio of NHDFCO is higher, that of NFCO and NH&MF seem to be similar. All are far below the standard norms of 2:1.
- NHDFCO and NH&MF are utilizing the total deposit highly in lending activities while NFCO in investing activities.
- Profitability position of NFCO is comparatively not better than that of other FC's except of its return on net worth.
- Use of debt is comparatively lower in NHDFCO. NFCO and NH&MF are following aggressive policy and utilizing higher debt.
- PE ratio of NH&MF is comparatively higher than that of other two FC's. Dividend pay ratio of NHDFCO is higher than others. It is paying higher amount of its income as dividend.

On the basis of these findings he has put forward following points of recommendations:-

- The current ratio of all these companies does not meet the standard level of 2:1. So FC's must identify the quality of current assets and current liabilities to develop their own standard current ratio.
- The FC's are suggested to employ their major source of fund i.e. deposit in more profitable sector so as to maximize the return and increase the net profit.
- NHDFCO and NH&MF seem to be unable in generating sufficient profit from its net worth. So management should use it more wisely.
- Return on investment of NFCO and NH&MF seem to be unsatisfactory, hence they must shift their investment from low income generating investment to the higher ones.
- NFCO and NH&MF seems to be highly leveraged which is symbol of risk and
- Inflexibility in the operation. Excessive use of debt capital by these FC's may cause to

lower the return of equity holders. High leverage cost of capital can be considered as positive development if the increased debt can be invested on income generating performing assets. Failure of advancing loans and advances, these high cost bearing debt may lead ultimately to liquidity or bankruptcy. So it is recommended to increase their equity capital by issue of shares, expanding general reserve and retaining more earning.

KC (2004) studied on "Financial Performance of Paschimanchal Finance Company Ltd." has disclosed following major facts:-

- Liquidity ratio of the company is higher than the normal standard.
- The capital structure of the company is extremely leveraged. Total debt to assets ratio is remained always higher indicating excessive use of debt in financing assets.
- The fund for the capitalization of the company by outsiders is favourable to the other finance companies because interest payable to long term debt is very less than earning from shareholders.
- The company always wants to have high return by investing its assets in productive sectors. However, the return on assets ration of the company is very low as the company has not been able to utilize its resources in more efficient way. The major portion of the assets is blocked in cash and bank balance and fixed assets which do not generate income.

He has put forward following points of recommendations:-

- The company is suggested to work together for building up the public confidence and enhancing their image in the minds of public at large.
- The company has to now think about consolidating the finance companies in some way or the other. By being very small it is very difficult to serve in the market.
- The credit monitoring wings should be made strong enough to ensure timely cash inflows from credit granted.
- The company should be alert enough to avoid imperfect practices inherited from the past mistake.

CHAPTER - III

RESEARCH METHODOLOGY

3.1 Introduction

The basic objective of the study is to appraise the true picture of the financial performance of listed hydro power companies in Nepal.

The study requires an appropriate research methodology so as to achieve its objectives. Research methodology is the way to solve systematically about the research problem. (Kothari, 1990:39). The purposeful methodology has been followed for the fulfillment of the stated objectives. The methodology consists of research design, nature and sources of data, data collection procedure, data processing, sample and population and tabulation and analytical tools used.

3.1 Research Design

Research design is the plan structure and strategy of investigation conceived so as to obtain answer to research questions. The research is based on historical data as well as primary source of information. The study will explore the financial position of listed hydro power companies. To conduct the study both descriptive and analytical research approaches has been adopted.

3.2 Population and sample

All the listed hydropower companies in Nepal Stock Exchange (NEPSE) are the population of the study and the population has been taken as sample for the study.

3.3 Sources and Collection of data

The main source of data for the purpose of this study is the published financial statements of hydro power companies. So, secondary sources of data are used to fulfill the objectives of the study. It constitutes mostly the annual reports, which comprises balance sheet and profit and loss account statement. Information has also been supplemented from various publications of hydropower companies. All other available published and unpublished material concerning the study as well as some journal abstracts will also be used in the study.

3.4 Analytical Tools Used in the Study

Since the study is concentrated on Financial Performance of hydropower, some important financial as well as statistical tools and techniques are used for the analysis. The major tool employed for the analysis of this study is the ratio analysis that establishes the quantitative relationship of two variables of the financial statements. Ratio Analysis is the basic tool used for the study and is considered to be the powerful tool of financial analysis. Beside ratio analysis, various other financial tools and statistical tools have been studied.

3.5 Financial Tools

The financial tool is one of the most important tools, which includes ratio analysis. Financial ratio analysis is also made for assessing the strength and weakness of a firm. This ratio based on financial statement and data presented in those statements. It provides the benchmarking of performance either by comparing its own past experience or by comparing the experience with industrial norms. The comparison of financial activities further helps to overcome the limitation and energize the best strength. The types of financial tools are as follows:

3.5.1 Ratio Analysis

Ratio may be classified in number of ways keeping in view of the particular purpose. There are different views about classification of ratio analysis. According to James C Van Horne," Different types of ratios namely liquidity ratio, leverage ratio, turnover ratio and profitability ratios are used in analysis of the financial position of a company." The study considers only those ratios, which are essential for decision making of capital structure. Following ratios are used to know the financial performance of hydropower company.

A) Profitability Ratio
B) Assets Utilization Ratio
C) Market Value Ratio
D) Debt Management Ratio

3.5.1.1 Profitability Ratio

Profitability reflects the final result of the business operation. This is a group of ratios that show the combined effects of liquidity, assets management, and debt on operating results. There are two types of profitability ratios showing profitability in relation to sales and those showing profitability in relation to investment.

Profitability Ratio is the main concern of the owners and the management of the firm. The management of the firm always wants to know how efficient the operation of the firm is. Likewise the owners of the company always expect a reasonable return for their investment in the firm. For this reason, profitability Ratio can be a good measurement of the operating efficiency and profitability of the firm. By the help of the Profitability Ratios, one can make a quick and clear view towards the firm's Profitability, Return on Assets, and Return on Equity and Earnings per Share etc. In general, Profitability Ratios can be determined by two different factors of the financial statements. One is related to the income statement i.e. sales, expenses etc. and the other one is related to the balance sheet i.e. the investments, capital etc.

Net Profit Margin

Net profit is the residue of revenue over total costs. The costs include operating & selling expenses, interests, and taxes. The Net Profit Margin Ratio measures the relationship between Net Profit and sales of the firm. It indicates the ability of the management in running the business efficiently in terms of revenue generation, costs of producing goods & services, operating & selling expenses, costs of borrowed capital and making a reasonable return for its owners. It is computed by dividing net profit after tax by sales.

$$\text{Net Profit Margin} = \frac{\text{Net Profit After Tax (NPAT)}}{\text{Sales}}$$

Some Scholars does not consider interest charges as the expenses of the firm in computing Net Profit Margin. To exclude the effect of financing charges on profitability, they used the following alternative formula for computing Net Profit Margin Ratio:

$$\text{Net Profit Margin} = \frac{(\text{NPAT + Interest After Taxes})}{\text{Sales}}$$

Return on Assets (ROA)

Here, the Profitability Ratio is measured in terms of the relationship between net profits and the assets of the firm. Different approaches are applied to define Net profit and assets for calculating ROA. But we will apply net profit after tax (NPAT) plus interest and total closing assets for this study. It is computed as:

$$\text{Return on Assets} = \frac{(\text{NPAT + Interest After Taxes})}{\text{Total Assets}}$$

Return on Equity (ROE)

Common or ordinary shareholders are entitled to the residual profits. "While the ROE expresses the profitability of a firm in relation to the funds supplied by the creditors and owners taken together, the Return on Shareholders' Equity measures exclusively the return on the owners' fund."(Khan, 3Ed: 4). A Return on Shareholders' Equity is calculated to see the profitability of owners' investment. The shareholders' equity or net worth will include paid - up share capital, share premium and reserves and surplus less accumulated losses. Net worth can also be found by subtracting total liabilities from total assets. It is computed as net profit after taxes divided by shareholders' equity.

$$\text{Return on Equity} = \frac{\text{Net Profit After Taxes (NPAT)}}{\text{Net Worth (NW)}}$$

Gross Profit Margins

The gross profit margin reflects the efficiency with which management produces each unit of product. This ratio indicates the average spread between the cost of good sold and the sales revenue. A high gross profit margin relative to the firm average implies that the firm is able to produce at relatively lower cost. A low gross profit margin ratio should be carefully investigated. It may reflect a higher cost of good sold. Due to the firm's in ability to purchase at favorable term, efficient utilization of plant and machinery, or investment in plant and machinery, resulting higher cost of production. It is computed as follows

$$\text{Gross profit margin} = \frac{\text{Sales} - \text{Cost of good sold}}{\text{Sales}}$$

Basic Earning Power

Basic earning power indicates the ability of the firm's assets to generate operating income. It provides the opportunity of comparing tax situations and leverage positions and their effects in net income.

$$\textbf{Basic Earning Power} = \frac{\text{EBIT}}{\text{Total assets}}$$

Operating profit margin

Operating profit margin measures the operating profit per rupees of sales.

$$\text{Operating profit margin} = \frac{\text{Operating profit}}{\text{Sales}}$$

Total Expenses to Total Income

This ratio measures the expenses from its total income. Lower the ratio better the firm's performance.It is computed as follows.

$$\text{Total expense to total income} = \frac{\text{Total expense}}{\text{Total income}}$$

3.5.1.2 Asset Utilization Ratio

Asset utilization ratio measures how effectively the firm is managing its assets. It helps to point out whether any of the items is too high or too low in the asset side of balance sheet in regard to the sales of the firm or not.

Assets Turnover Ratios

Assets Turnover Ratio is simply the relationship between sales and assets. Several Assets Turnover Ratios can be calculated. But only four types of Assets Turnover Ratios are calculated in this research.

Total Asset Turnover Ratio

Total assets turnover ratio is the proportion of sales to total assets. It indicates the efficiency of the company in terms of utilization of total resources. Total assets are the aggregate value of fixed assets as well as current assets. Although fixed assets are directly concerned with the generation of the sales, but other assets also contribute to the production and sales activities of the company. It is calculated by dividing sales by total assets.

$$\text{Total Assets Turnover Ratio} = \frac{\text{Sales}}{\text{Total assets}}$$

Net Fixed Asset Turnover Ratio

The fixed assets turnover ratio measures the efficiency which the company is utilizing its investment in fixed assets. It also indicates the adequacy of sales in relation to the investment in fixed assets. Fixed assets turnover ratio is the proportion of sales to net fixed assets. It is calculated as follows.

$$\text{Net Fixed Assets Turnover Ratio} = \frac{\text{Sales}}{\text{Net fixed assets}}$$

3.5.1.3 Market Value Ratio

A set of ratios that relate the firm's stock price to its earnings, cash flows, and book value per share. Since market value of equity reflects the combined influence of risk and return, valuation ratios are the most comprehensive measures of a firm's performance. There are different kinds of market value ratios such as P/E ratio, EPS, MPS, market to net worth ratio, Net worth per share, earning yield ratio, DPS.

P/E Ratio

The ratio of the price per share to earnings per share; shows the rupees amount investor will pay for Re1 of current earnings. Higher the ratio, the more the value of the stock that is being ascribed to future earnings as opposed to present earnings

$$\text{P/E Ratio} = \frac{\text{Market price of stock}}{\text{Earning per share}}$$

Earning Per Share (EPS)

Earning per share measures the profit available to the common shareholders as per share basis i.e. the amount they get from every share. A company can decide whether to increase or reduce the number of shares on issue. The earning per share is obtained by dividing the profit available after tax to the shareholders by the number of outstanding shares.

$$\text{Earning per Share} = \frac{\text{Net Profit Available to the Equity}}{\text{Number of share outstanding}}$$

Market Prices per Share (MPS)

This shows the market price of the each share. Higher the ratio higher will be the market value of each share. It is computed as follows.

Market price per share = Earning per share × Price/ Earning Ratio

Market to Net Worth

This ratio helps to measure whether the market value of a firm's equity is worthier than its actual worth or not. This ratio also reflects the contribution of a firm to the wealth of a firm to the wealth of society.

$$\text{Market to Net worth} = \frac{\text{Market price per share}}{\text{Shareholder's equity (Net worth)}}$$

Net Worth per Share

It is computed as follows.

$$\text{Net worth per share} = \frac{\text{Net Worth}}{\text{Number of share outstanding}}$$

Earning Yield Ratio

It is the reverse of P/E ratio. This reciprocal ratio is also an important measure of the earning made by a company. It examines the extent of the company's earning in regards to the market price. A higher earning yield satisfies both the market and the equity shareholders. It is computed as follows.

$$\text{Earning yield ratio} = \frac{\text{Earning price per share}}{\text{Market price per share}}$$

Dividend per Share (DPS)

Dividend per share is the amount which pays as a dividend to its stockholders. This measures the attractiveness of the firms. It is computed as follows.

$$\text{Dividend per share} = \frac{\text{Dividend}}{\text{No. of share outstanding}}$$

3.5.1.4 Financial Leverage (debt) Management Ratios

Leverage Ratios measure the firm's ability to meet its long - term obligations. These also indicate how much levered the firm is. In other words, from Leverage Ratios, one can easily know, how much long - term debt is being used in the company and whether the company will be able to pay the debt or not when due. The Leverage Ratios are the main concern of long - term outside

creditors such as debenture holders, banks, and financial institutions etc. "The short term creditors like bankers and suppliers of raw materials are more concerned with the firm's current debt paying ability. On the other hand, long term creditors, like debenture holders, financial institutions, etc. are more concerned with the firm's long term financial strength."(Pandey, 7Ed: 211) So Leverage Ratios are calculated to judge the long-term financial position of the firm. Some basic types of Leverage Ratios are:

Debt Ratio

The Ratio of total debt to total assets, generally called the Debt Ratio, measures the percentage of funds provided by creditors. In other words, this Ratio shows the proportion of interest bearing debt in the capital structure. Debt Ratio is calculated by dividing the total debt by total assets (net). Total debts include both current and long - term debts and total assets (net) include net fixed assets plus current assets. In the outside creditors' view, low Debt Ratios are preferred because the lower the Ratio, the greater the probability against their losses in the event of liquidation while in the stockholders' view, the reverse is preferred because the high leverage will increase the probability of expected earnings. But there should be an appropriate mix of debt & equity financing for better health of the company. It is computed as follows.

$$\text{Debt Ratio} = \frac{\text{Total debt}}{\text{Total assets}}$$

Debt Equity Ratio

Debt to equity ratio indicates to what extent the firm depends upon outsiders for its existence. For the creditors, this ratio provides a margin of safety, for the owners it is useful to measure the extent to which they can gain the benefits by maintaining control over the firm with the limited investments.

This ratio is very important for the creditors, owners and the company itself. It provides a margin of safety to creditors, and measure the extend to which they can gain the benefits by maintaining control over the firm with a limited investment to owners and find out the long term solvency position of the company itself. A high debt to equity ratio shows that the claims of creditors are greater than those of owners. A low debt equity ratio implies a grater claim of owners than creditors. In other words, the high ratio is unfavorable to the company point of view. It is computed as follows.

$$\text{Debt Equity Ratio} = \frac{\text{Total Debt}}{\text{Net Worth}}$$

Interest Coverage Ratio:

It is also known as 'Time-Interest-Earned Ratio'. This Ratio measures the debt servicing capacity of a firm insofar as fixed interest on long term debt is concerned. Higher Ratio is preferable both from the view point of lenders as well as from the view point of the owners. This Ratio, as the name suggests, shows how many times the interest charges are covered by the EBIT out of which they will be paid. In other words, it indicates the extent to which a fall in EBIT is tolerable in the sense that the ability of the firm to service its interest payments would not be affected. It is determined by dividing by dividing the operating profits or earning before interest and taxes (EBIT) by fixed interest charges on debts. It is computed as follows.

$$\text{Interest Coverage Ratio} = \frac{\text{Earning before interest and tax (EBIT)}}{\text{Interest charges}}$$

3.6 Statistical Analysis

Facts and figures about any phenomenon whether it relates to population, production, sales, profit or any other matters are called 'statistics'. In this sense, the term statistics is considered

synonymous with figure. To the layman, the term statistics usually carries only the nebulous and too often distasteful connections of figures. "The word statistics refer either to quantitative information or to a method of dealing with quantitative information." (Gupta, 1983:1). This Research applies the following statistical tools for the required financial analysis.

- Arithmetic Mean

3.6.1 Arithmetic Mean

The Arithmetic Mean is the most popular and commonly used measures of central tendency, which represents the entire data by a single value. The Arithmetic Mean of values of variable in a given set of observation is the summation of all the values of the variables divided by the number of observations. In general, X1, X2, X3....., X^n are given observations up to N^{th} term, then their Arithmetic Mean (X bar) is given by:

X bar = (X1 + X2 + X3 + ... X^n) / N

Where, X bar = Mean, X1, X2, X3... X^n are the given set of observations and N = numbers of item observed.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

This chapter highlights the financial position of selected hydropower companies. The tools used for the purpose of analysis have been discussed in detail in research methodology. The measure variables like sales, expenses, assets, liabilities, debt, equity, market price are taken for the analysis. Moreover the variables affecting to the financial performance are also considered in the study.

4.1 Financial Ratio Analysis

4.1.1 Profitability Ratio

Profitability reflects the final result of the business operation. This is a group of ratios that show the combined effects of liquidity, assets management, and debt on operating results. There are two types of profitability ratios showing profitability in relation to sales and those showing profitability in relation to investment.

4.1.1.1 Return on Equity (ROE)

Rate of return on equity measures rate of return on common stockholders investment. The ROE of the Butwal Power, Chilime and National hydropower are presented in Table 4.1. The industry average is also presented in table.

Table 4.1
Return on equity and industry average

Name the company	ROE (%)	Industry Average (%)
BUTWAL	18.00	16.33
CHILIME	36.87	16.33
NATIONAL	0.95	16.33

Table 4.1 reveals that Chilime has the highest (36.87%) ROE than Butwal power and National hydropower. National has the lowest (0.95%) ROE than others. Butwal has medium ROE. This clearly shows that Chilime has strong investment opportunities & effective expenses management whereas National is weak. It also indicates Chilime can provide highest (36.87%) return to their common

stockholder. Butwal can provide medium (18%) return whereas National has lowest return (0.95%) to their common stockholder. The table also shows that Chilime has highest productivity of the ownership (or risks) capital employed in the firm but National has the lowest.

Figure 4.1

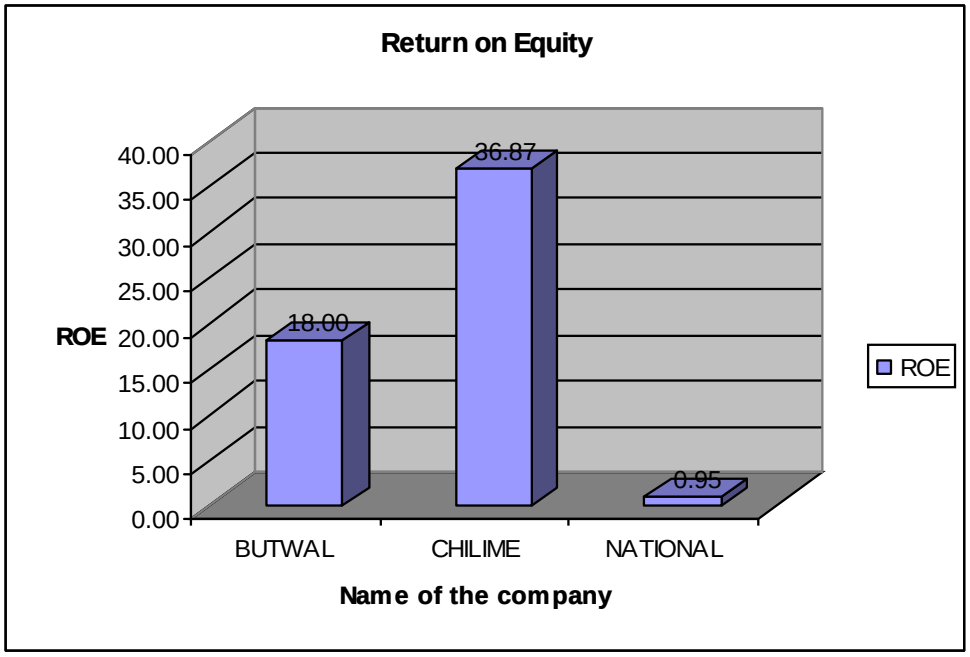


Figure 4.2

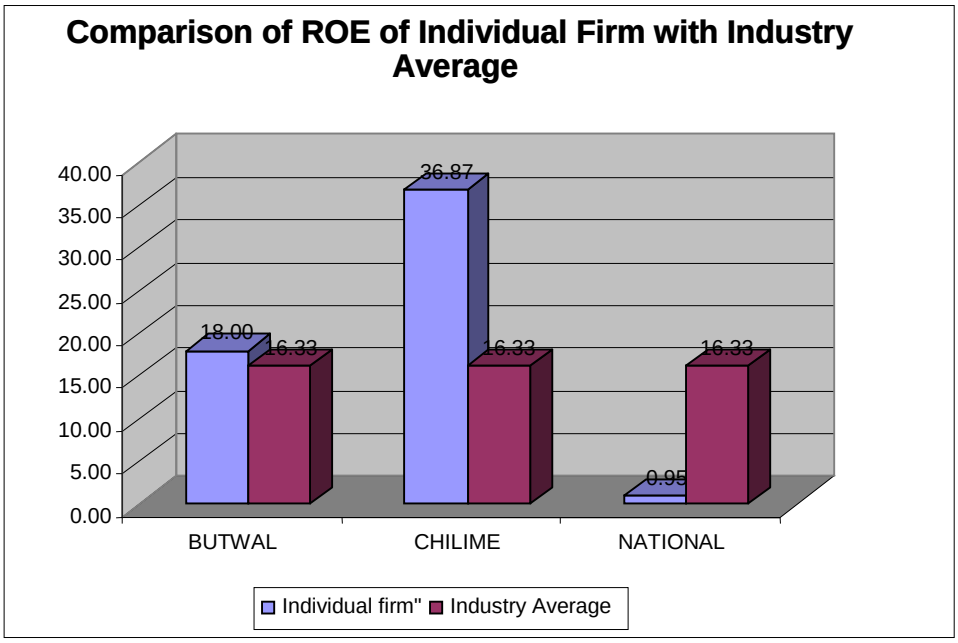


Figure 4.2 shows comparison of return of the equity of firms with the industry average. Chilime has about double ROE than industry average, Butwal has also higher ROE than industry average but National has far below than industry average. So, Chilime has strong investment opportunities and it can provide higher return to their common stockholder than its competitor. Butwal has also well in investment opportunities and can distribute sound return than average industry. National has weaker in investment opportunities and reward to their common stock holder than average industry.

4.1.1.2 Return on Assets (ROA)

ROA measures the efficiency of financial resources invested in a firm's assets to create profitability. A higher ratio conveys the message of an efficient use of the total assets in generating profit. ROA of different firms is presented in table below.

Table 4.2

Return on Assets and Industry Average

Name of the company	ROA (%)	Industry Average
BUTWAL	15.06	9.65
CHILIME	18.61	9.65
NATIONAL	0.35	9.65

Table 4.2 shows return on assets of the firms and industry average. Chilime has the highest (18.61%) ROA. Butwal has medium (15.06%) and National has the lowest ROA. This reveals that Chilime is sound in generating profit with available assets, whereas National is weak to generate profit with available assets. This can also be explained by figure 4.3

Figure 4.3

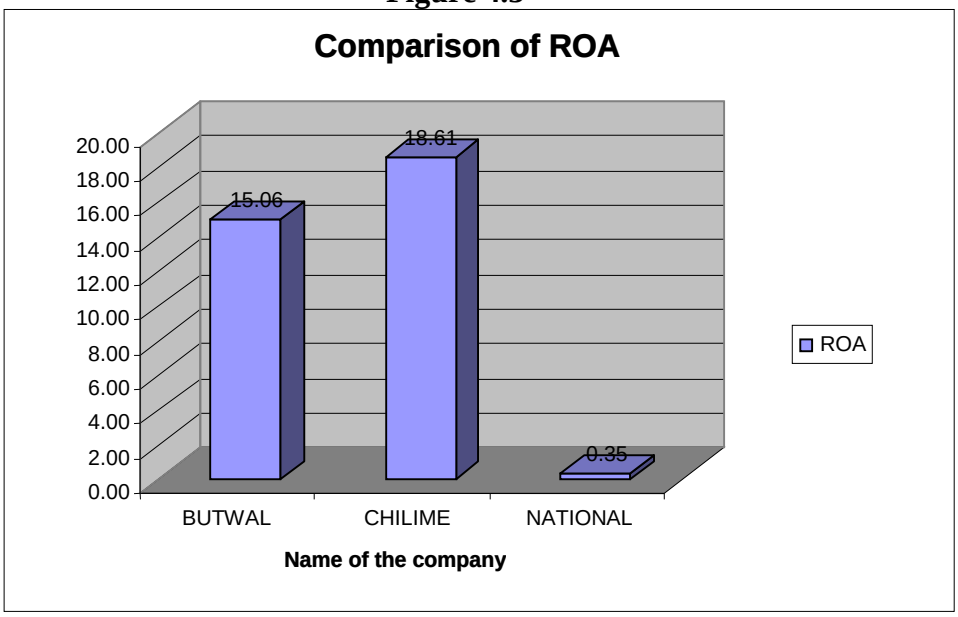


Figure 4.4

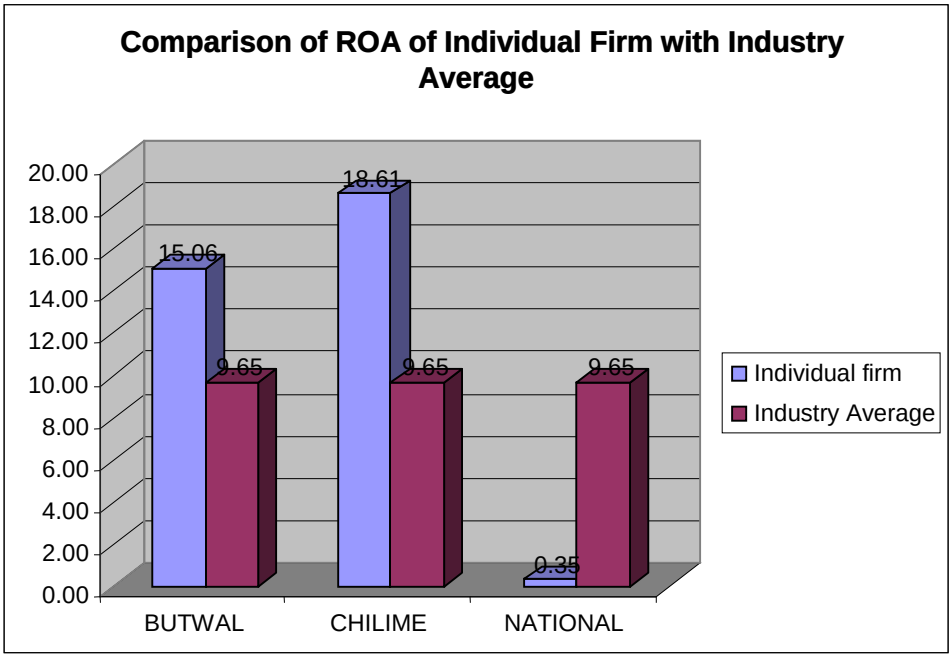


Figure 4.4 shows that Chilime and Butwal have higher ROA than industry average but National has extremely below than industry average. Hence, Chilime and Butwal are sound in generating profit with available assets than industry average. But National is so week to generate profit with available assets than industry average.

4.1.1.3 Gross Profit Margins

Gross profit margin measures the efficiency of production as well as pricing. Higher the gross profit margin a greater the production efficiency. The gross profit margins of the firms are given in table 4.3.

Table 4.3
Gross Profit Margins and IndustryAverage

Name of the company	Gross Profit Margin (%)	Industry Average (%)
BUTWAL	216.70	125.66
CHILIME	95.93	125.66
NATIONAL	64.35	125.66

Table 4.3 shows gross profit margins of the firms and industry average. Butwal has the highest (216.70%) gross profit margin, Chilime has medium (95.93%) whereas National has the lowest (64.35%). Hence, this reveals Butwal is sound in efficiency of production as well as pricing. But National is not so efficient in production and pricing. This is also explained by figure 4.5

Figure 4.5

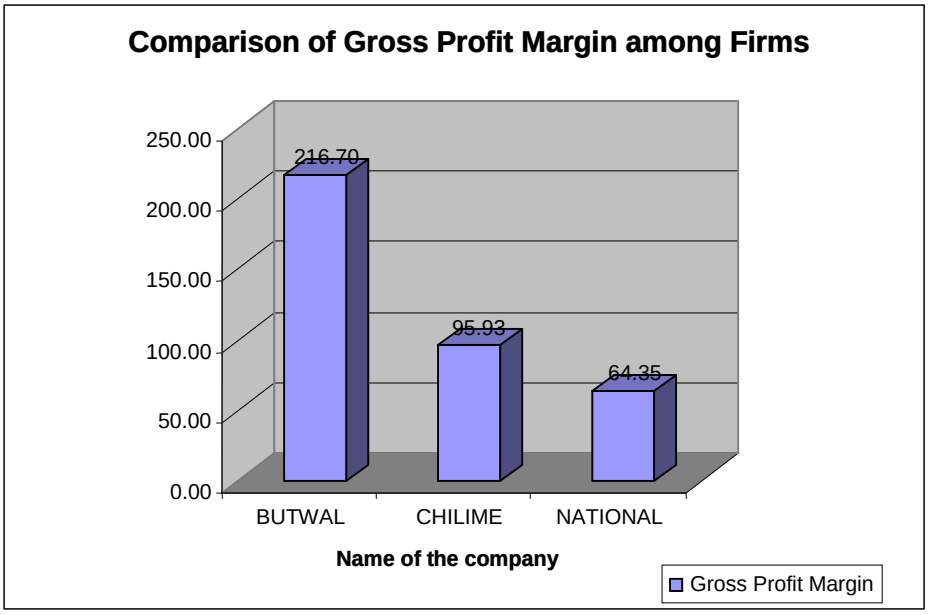


Figure 4.6

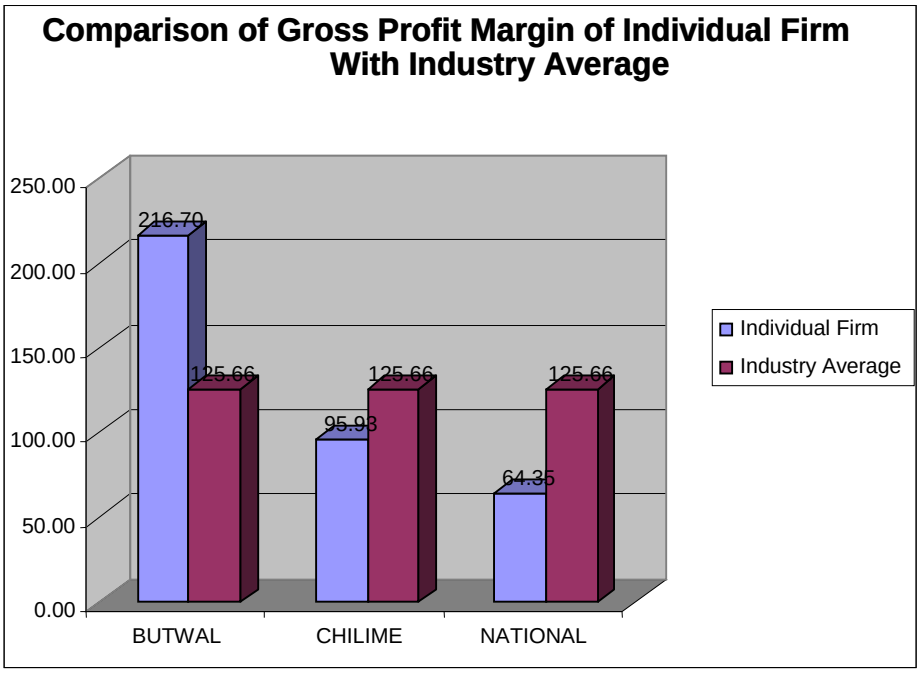


Figure 4.6 reveals that, Butwal has higher gross profit margin than industry average. Chilime and National has lower gross profit margin than industry average. So Butwal is more efficient in operation as well as price than industry average. But Chilime and National are less efficient in operation and price than industry average.

4.1.1.4 Profit Margin

Profit Margin measures net income per rupees of sales. The profit margin is a measure of the firm's profitability of sales after taking account of all expenses and income taxes. This ratio shows earnings left for shareholder (both equity and preference) as a percentage of net sales. The profit margins of the firms are presented in table 4.4. This ratio provides considerable insight into the overall efficiency of the business and better utilization of resources.

Table 4.4
Profit Margin and Industry average

Name of the company	Profit Margin (%)	Industry Average (%)
BUTWAL	50.89	36.47
CHILIME	55.52	36.47
NATIONAL	3.00	36.47

Tables 4.4 shows profit margin of the firms and industry. Chilime has the highest (55.52%) profit margin, followed by Butwal (50.89%) and lowest (3%) of National. Hence Chilime can earn 55.52 paisa on per rupees of sales; 50.89 paisa by Butwal where as 3 paisa by national. This can also be explained by the figure 4.7

Figure 4.7

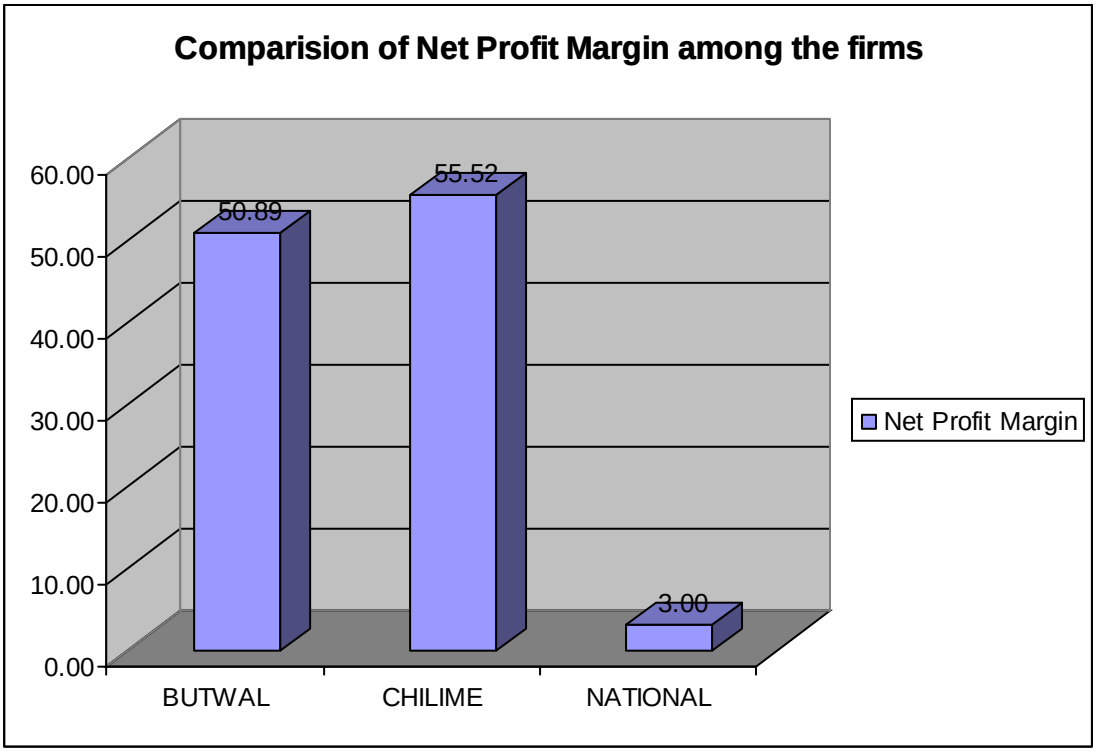
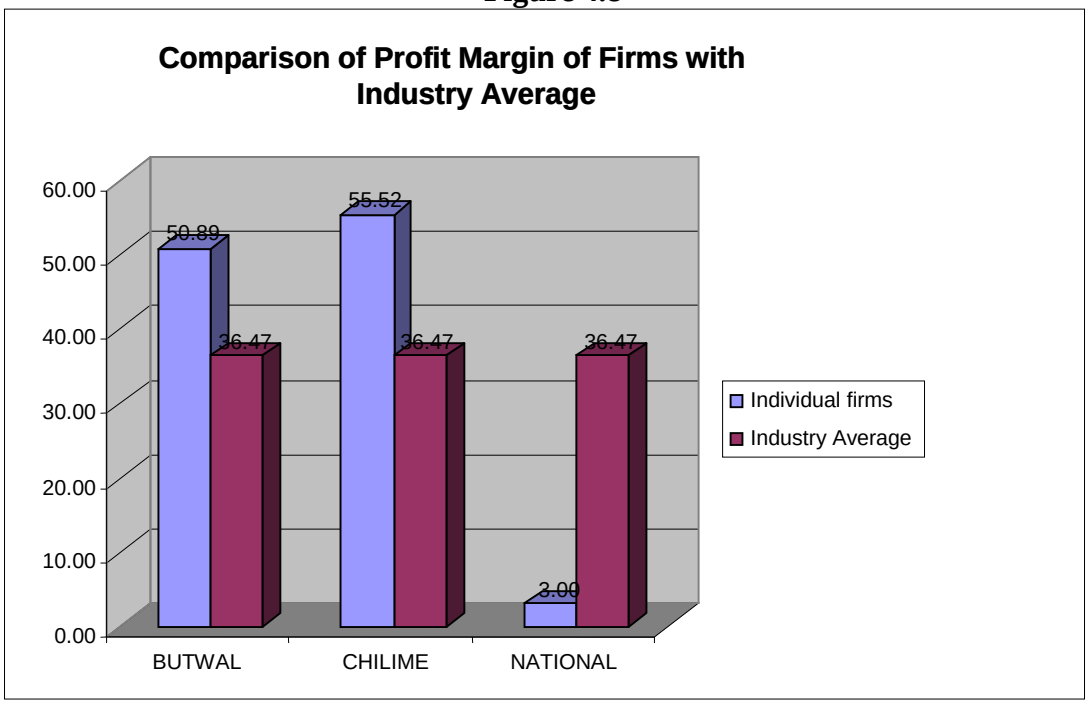


Figure 4.8



Ffigure 4.8 shows profit margin of the Chilime and National have higher than industrial average .National has lower profit margin than industry average. So, Chilime and Butwal are sound in generating profit per rupees of sales than industry average whereas national is so poor in generating profit per rupees of sales.

4.1.1.5 Basic Earning Power

Basic earning power indicates the ability of the firm's assets to generate operating income. Basic earning power of the firms is tabulated in table 4.5.

Table 4.5
Basic Earning Power and Industry Average

Name of the company	Basic earning power (%)	Industry average (%)
BUTWAL	21.16	18.79
CHILIME	28.05	18.79
NATIONAL	7.15	18.79

Table 4.5 shows basic earning power ratio of selected firms and industry. Chilime has the highest earning power (28.05%), Butwal has medium (21.16%) and National has the lowest (7.15%) earning power. This tells Chilime is sound in making raw earning than Butwal & National. This can also be clarified from the figure 4.9.

Figure 4.9

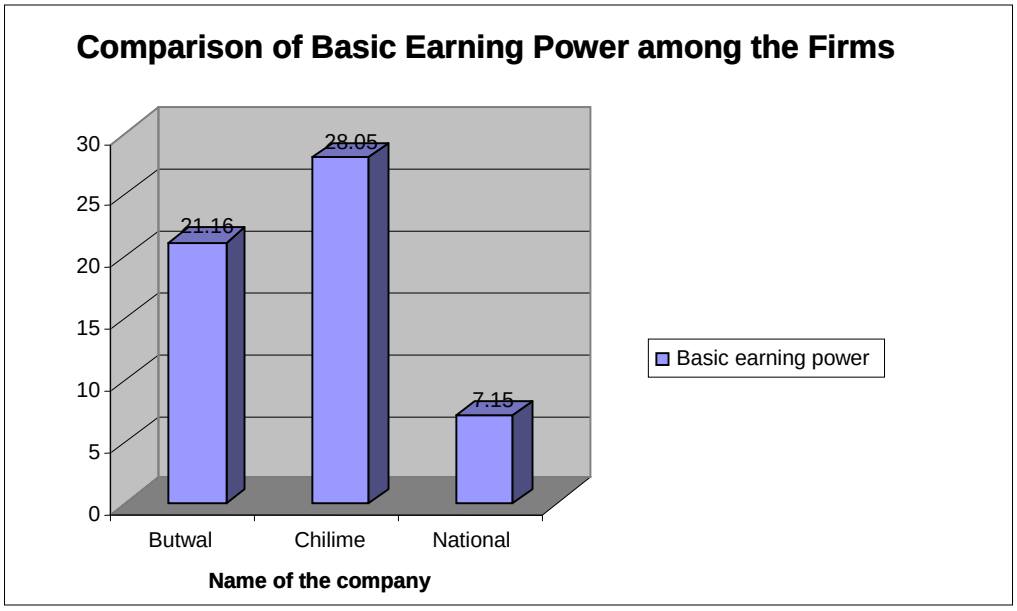


Figure 4.10

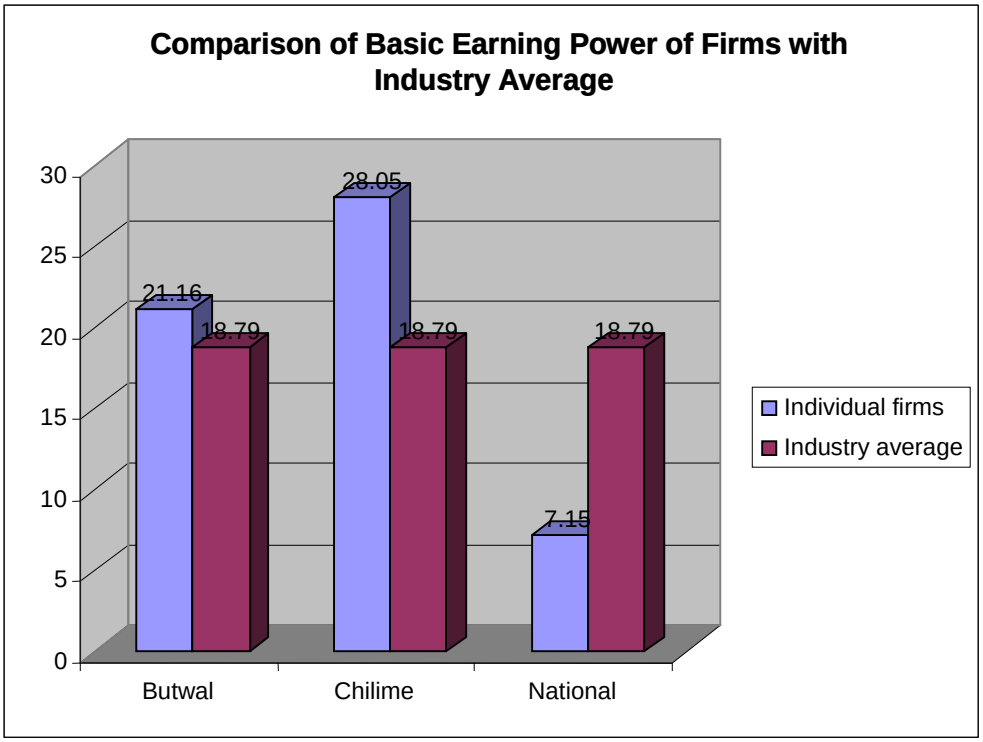


Figure 4.10 shows Chilime and Butwal have higher basic earning power than industry average. National has lower basic earning power than industry average. Hence Chilime and Butwal are good enough raw earning power of the assets than Industry average, but National is far below than industry average.

4.1.1.6 Operating Profit Margin

Operating profit margin measures the operating profit per rupees of sales. The operating profit margins of the firms are presented in table 4.6.

Table 4.6
Operating Profit Margin and Industry Average

Name of the company	Operating profit margin (%)	Industry average (%)
BUTWAL	72.09	73.56
CHILIME	84.25	73.56
NATIONAL	64.35	73.56

Table 4.6 shows operating profit margin of selected firms and industry. It tells that Chilime has the highest (84.25%) operating profit per rupees of sales followed by Butwal (72.09%) and National has lowest (64.35%).this is also explains from the figure 4.11.

Figure 4.11

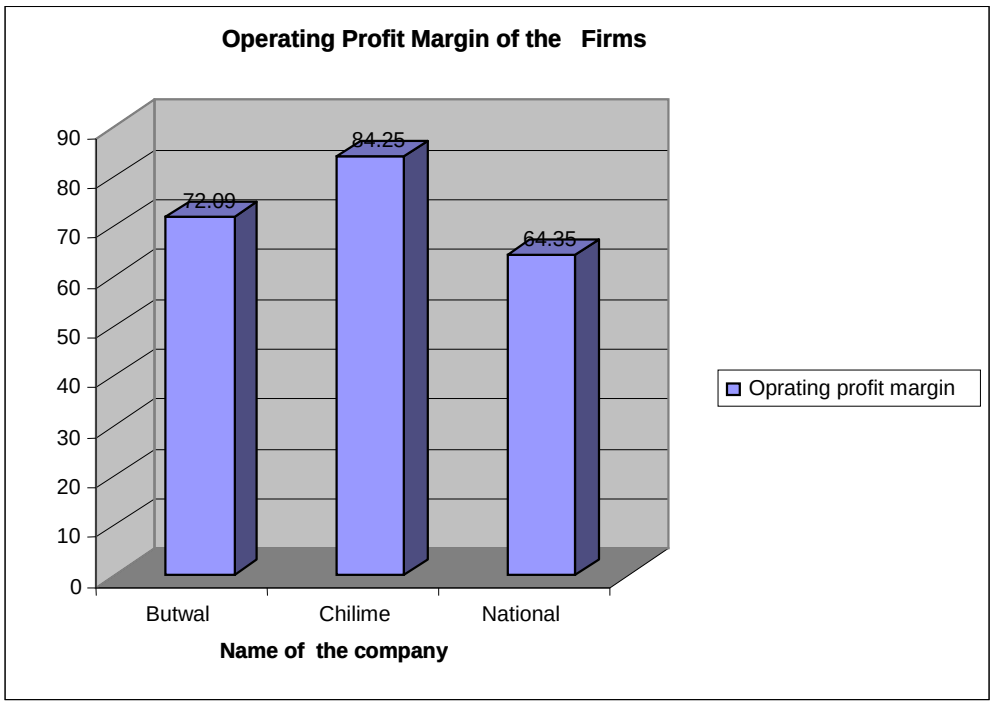


Figure 4.12

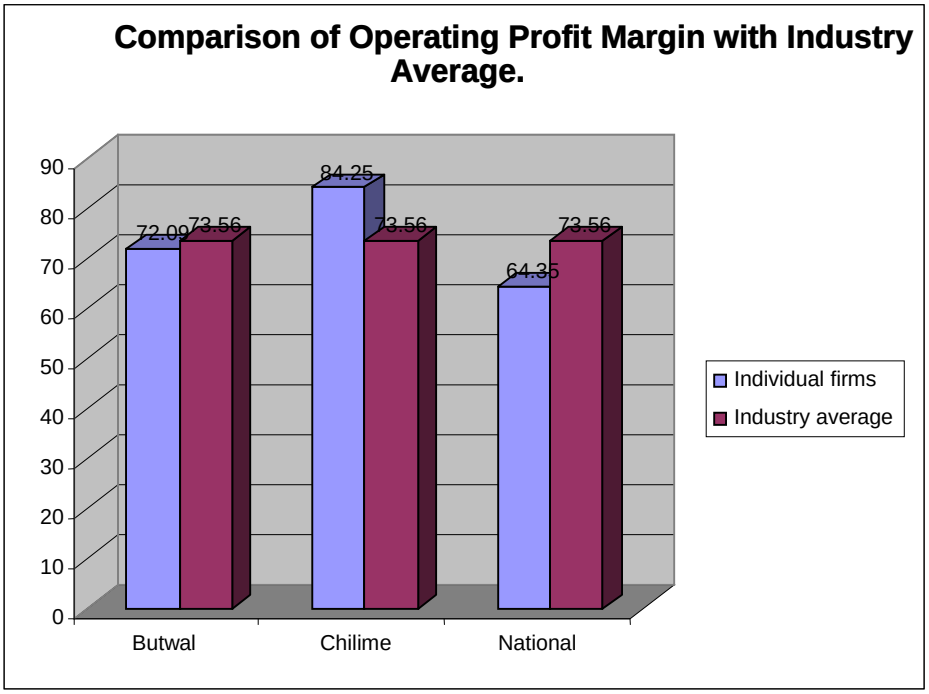


Figure 4.12 shows Chilime is good in operating profit margin than industry average whereas Butwal & National are below than industry average.

4.1.1.7 Total expenses to Total income

This ratio measures the expenses from its total income. Lower the ratio better the firm's performance. Total expenses to total income of the firms are presented in table 4.7.

Table 4.7
Total Expenses to Total Income and Industry |Average

Name of the company	Total expenses to total income	Industry average
BUTWAL	0.48	0.63
CHILIME	0.43	0.63
NATIONAL	0.97	0.63

Table 4.7 shows total expense to total income of the firms and industry average. National has the highest (0.97) ratio, and then Butwal (0.48) and Chilime has the lowest (0.43) ratio. This means Chilime can give more return to the investor than Butwal & National, hence it is more attractive to the investor. But National is not attractive as compared to others. This can also be explained from the figure 4.13

Figure 4.13

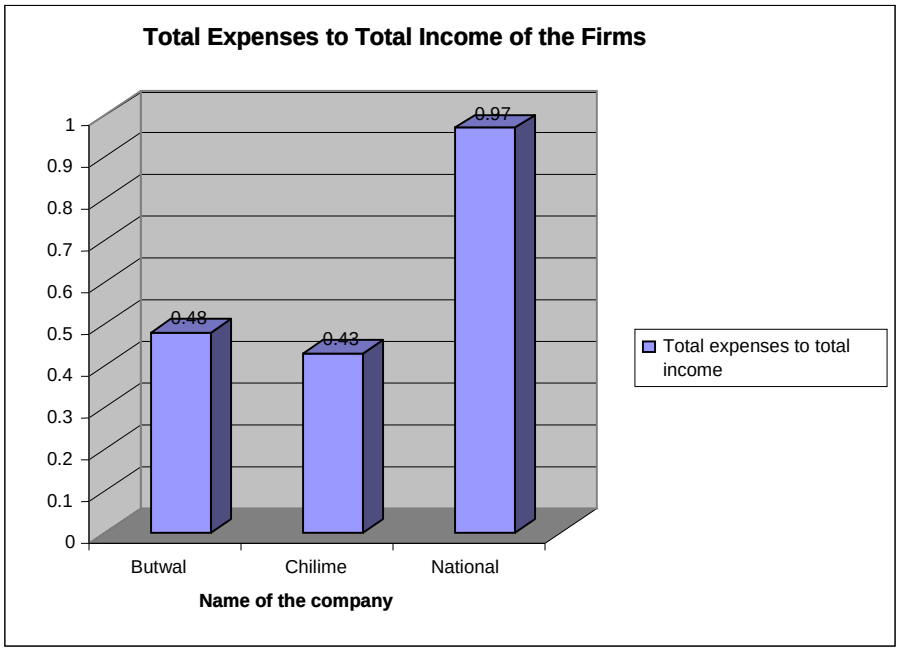


Figure 4.14

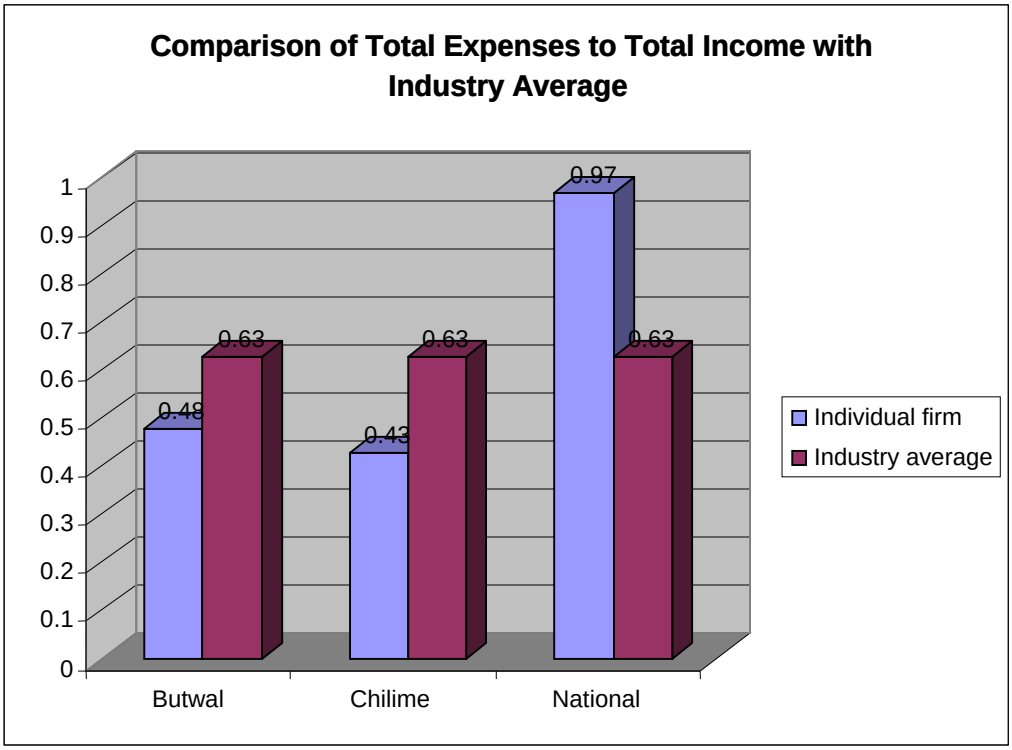


Figure 4.14 indicates Chilime and Butwal have lower total expenses to total income than industry but National has higher total expense to total income than industry average.

4.1.2 Asset Utilization Ratio

Asset utilization ratio measures how effectively the firm is managing its assets. It helps to point out whether any of the items is too high or too low in the asset side of balance sheet in regard to the sales of the firm or not.

4.1.2.1 Total Asset Turnover Ratio

The ratio is supposed to measure the efficiency with which total assets are employed. A high ratio indicates a high degree of efficiency in asset utilization and low ratio reflects inefficient use of assets. The total asset turnover ratios of the firms are presented in table.

Table 4.8
Total Asset Turnover Ratio and Industry Average

Name of the company	Total asset turnover ratio	Industry average
BUTWAL	0.30	0.25
CHILIME	0.34	0.25
NATIONAL	0.11	0.25

Table 4.8 shows total asset turnover ratio of the firms and industry average. Chilime has highest (0.34) ratio, and then Butwal (0.30) and National has lowest (0.11) ratio. This means Butwal is more efficient in the utilization of total assets than others. National is weaker in the utilization of total assets than others. This can also be explained from figure 4.15

Figure 4.15

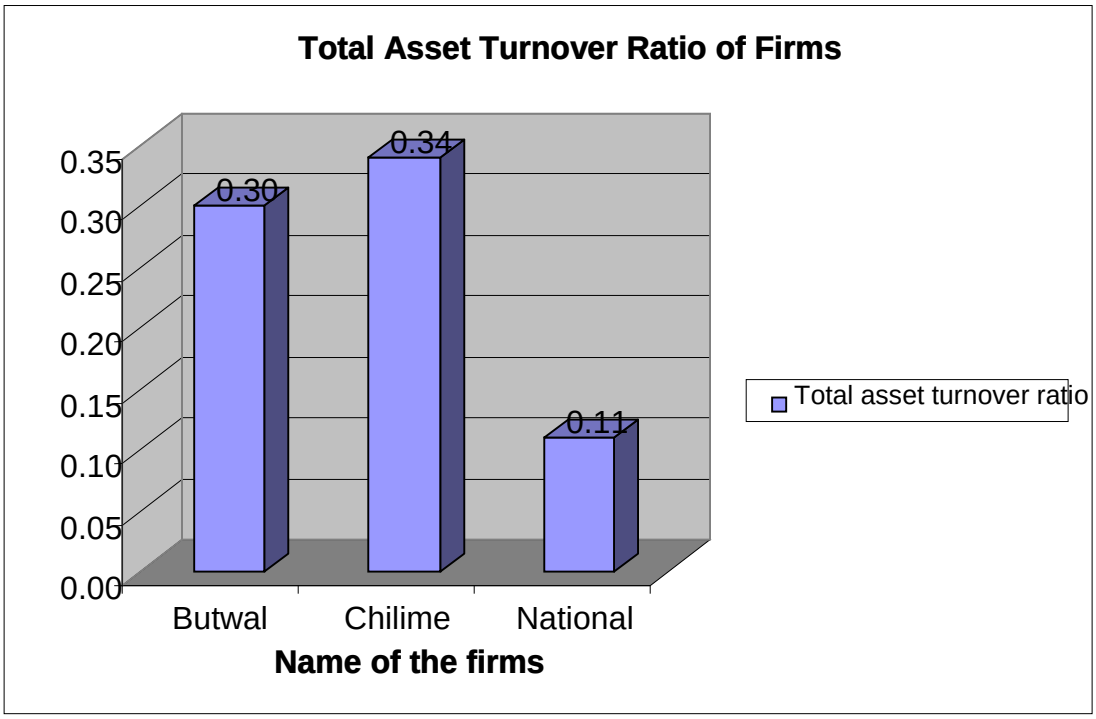


Figure 4.16

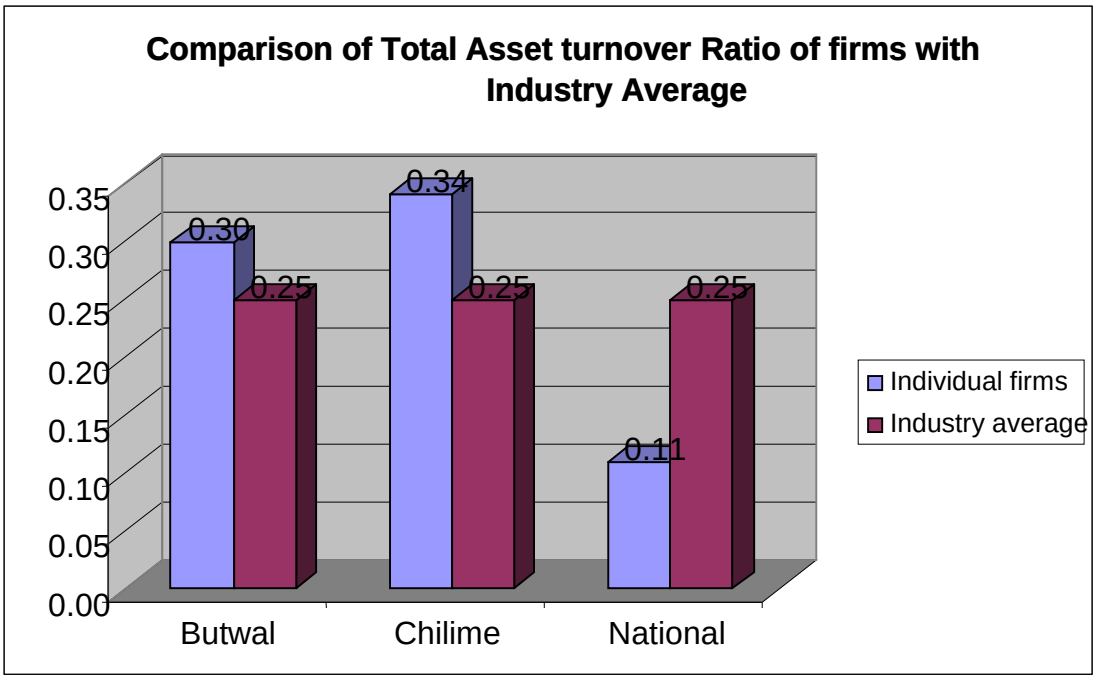


Figure 4.16 indicates Butwal and Chilime have higher total asset turnover ratio than industry average. National has lower total asset turnover ratio than industry average. Hence Butwal and Chilime are generating a sufficient volume of business given its total assets than industry average but National is not generating a sufficient volume of business given its total assets

4.1.2.2 Net Fixed Asset Turnover Ratio

The net fixed asset turnover ratio measures how effectively the firm is using its plant and equipment to help generate sales. Net fixed asset turnover ratios of the firms are presented in table 4.9.

Table 4.9
Net Fixed Asset Turnover Ratio and Industry Average

Name of the company	Net fixed asset turnover ratio	Industry average
BUTWAL	0.65	0.67
CHILIME	0.31	0.67
NATIONAL	1.06	0.67

Table 4.9 shows net fixed asset turnover ratio of the firms and industry. National has highest (1.06) ratio, and then Butwal (0.65) and Chilime has the lowest (0.31) ratio. This means National is more efficient in utilization of total assets than others. Chilime is weaker in the utilization of total assets than others. This can also be explained from the figure 4.17

Figure 4.17

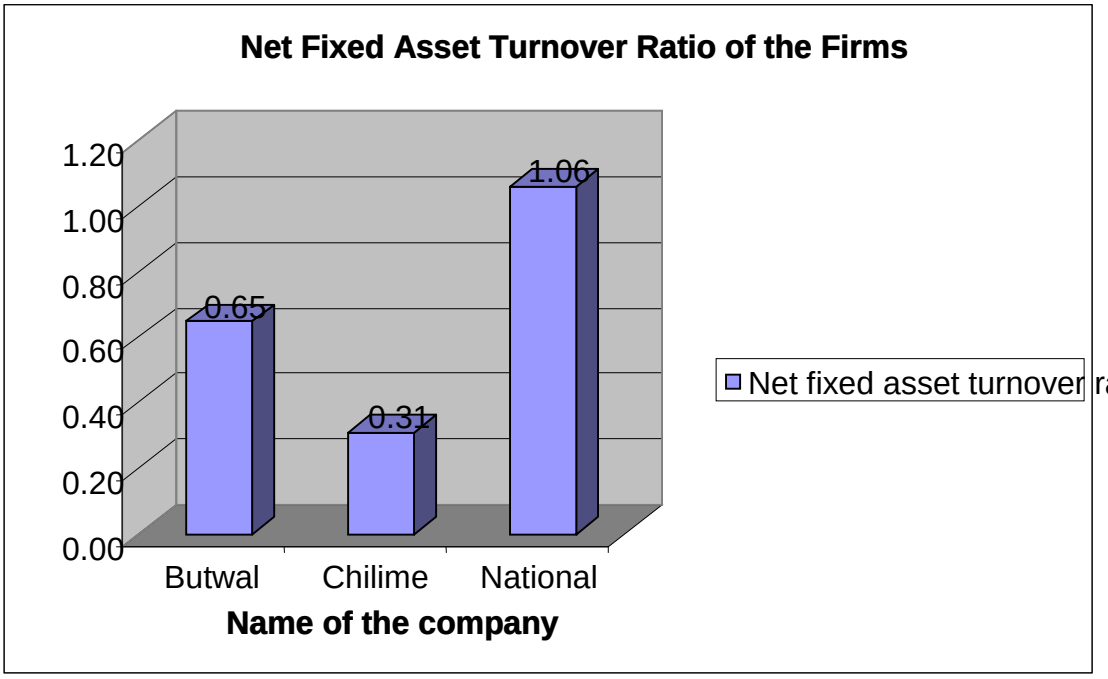


Figure 4.18

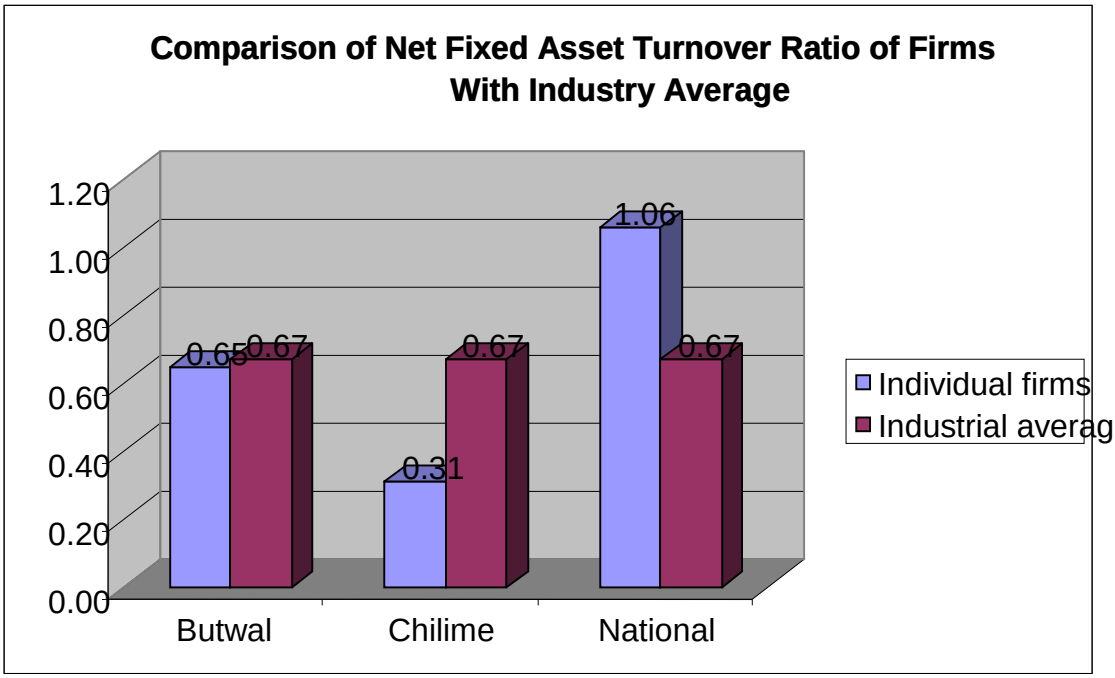


Figure 4.18 shows national has higher net fixed assets turnover ratio than industry average but Butwal and Chilime have lower net fixed assets turnover ratio than industry average. This indicates that National is efficient to utilize the total assets but Butwal and Chilime are not efficient to utilize its total assets than its industry competitors.

4.1.3 Market Value Ratio

A set of ratios that relate the firm's stock price to its earnings, cash flows, and book value per share. Since market value of equity reflects the combined influence of risk and return, valuation ratios are the most comprehensive measures of a firm's performance. There are different kinds of market value ratios such as P/E ratio, EPS, MPS, market to net worth ratio, Net worth per share, earning yield ratio, DPS.

4.1.3.1 P/E Ratio

The ratio of the price per share to earnings per share; shows the rupees amount investor will pay for Re1 of current earnings. Higher the ratio, the more the value of the stock that is being ascribed to future earnings as opposed to present earnings. The P/E ratios of different firms are given below in table.

Table 4.10
P/E Ratio and Industry Average

in times

Name of the company	P/E Ratio	Industry average
BUTWAL	17.64	6.27
CHILIME	5.65	6.27
NATIONAL	(-4.49)0	6.27

Table 4.10 shows P/E ratios of the firms and industry average. Butwal has the highest P/E ratio (17.64), followed by Chilime (5.65) and National has the lowest (0) P/E ratio. This reveals Butwal is in sound growth prospects and less risky firms but National is in risky position and not in growth prospects. This can also be explained by figure 4.19

Figure 4.19

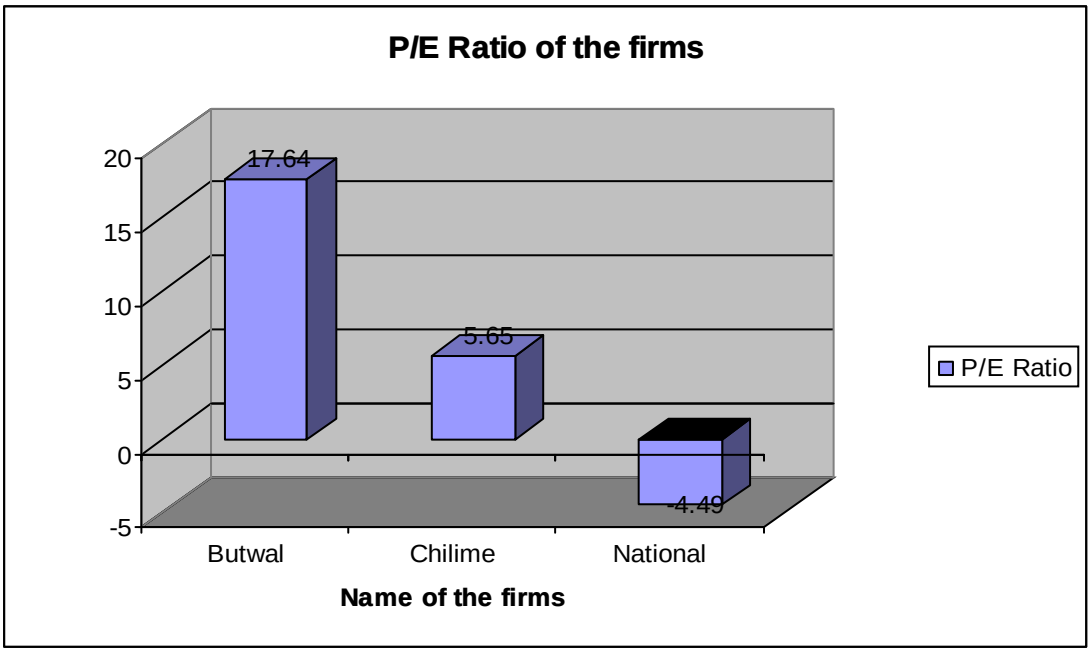


Figure 4.20

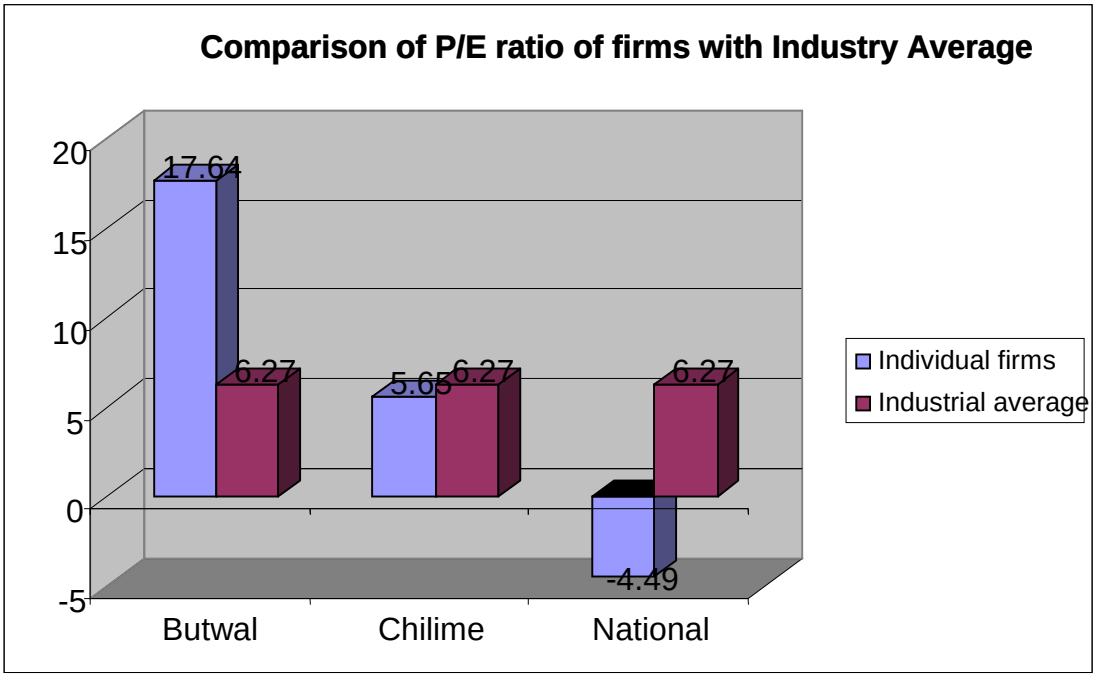


Figure 4.20 shows comparison of P/E ratio of firms with the industry average. This tells that Butwal has higher P/E ratio than industry average but Chilime and National has lower than industry average. Since Butwal's P/E ratio is above than industry average, this suggests that the company is regarded as less risky as well as strong growth prospects than average industry. But Chilime and National are riskier as well as poor growth prospects than average industry.

4.1.3.2 Earning Per Share (EPS)

Earning per share is a ratio which measures earning available in a company to its stockholders. EPS of the different firms are presented in table 4.11.

Table 4. 11
Earning Per Share and Industry Average

In Rs

Name of the company	EPS	Industry average
BUTWAL	28.67	32.49
CHILIME	67.85	32.49
NATIONAL	0.95	32.49

Table 4.11 shows EPS of the firms and industry. Chilime has the highest EPS (67.85), followed by Butwal (28.67) and National has the lowest (0.95) EPS. This reveals Chilime is more attractive firms for the stockholder but National is less attractive to than its competitors. This can also be explained by the figure 4.21

Figure 4.21

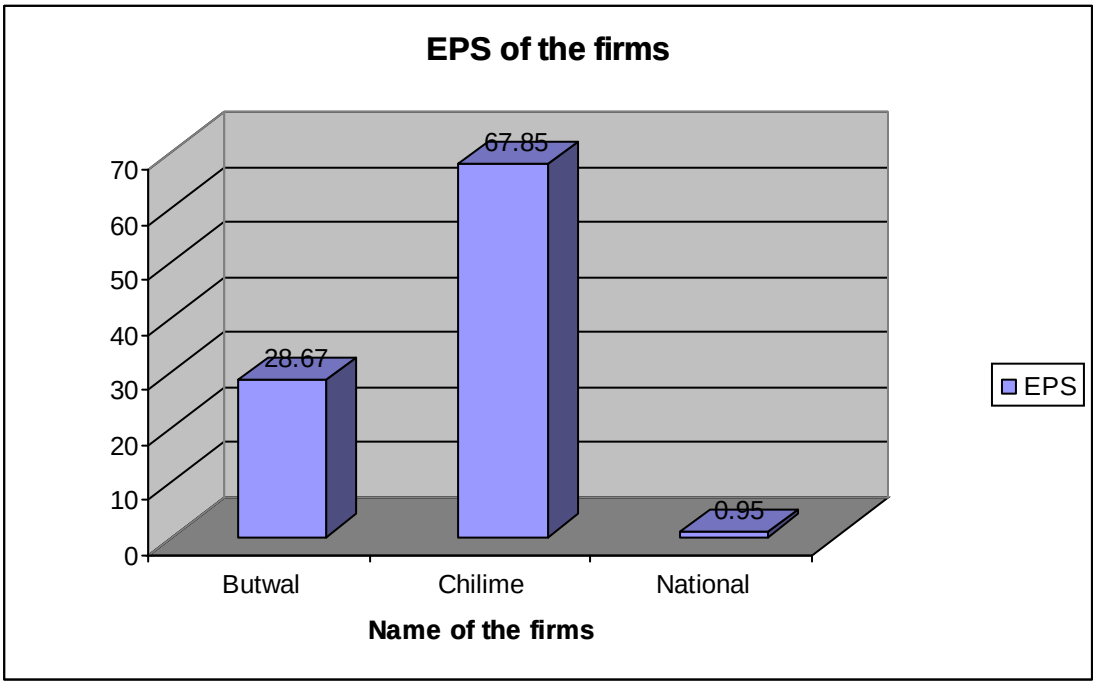


Figure 4.22

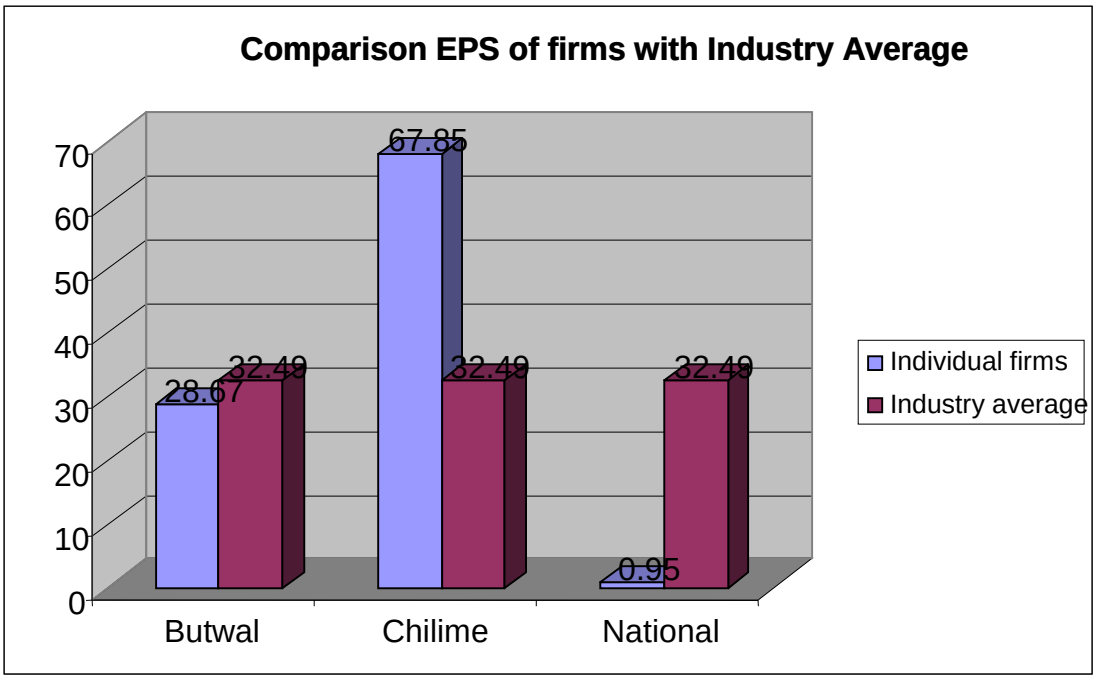


Figure 4.22 shows comparison of EPS of firms with the industry average. This tells that Chilime has higher EPS than industry average but Butwal and National has lower EPS than industry average. Since Chilime's EPS is above than industry average, this suggests that the company is regarded as more attractive than average industry competitors. But Butwal and National are less attractive than average industry competitors.

4.1.3.3 Market Prices per Share (MPS)

This shows the market price of the each share. Higher the ratio higher will be the market value of each share. MPS of the different firms are presented in table.

Table 4.12
Market Prices per Share and Industry Average

in Rs

Name of the company	MPS	Industry average
BUTWAL	500	324.67
CHILIME	383.33	324.67
NATIONAL	90.67	324.67

Table 4.12 shows MPS of the firms and industry average. Butwal has the highest MPS (500), followed by Chilime (383.33) and National has the lowest (90.67) MPS. This reveals Butwal is more attractive firms for the stockholder but National is less attractive to than its competitors. This can also be explained by the figure 4.23

Figure 4.23

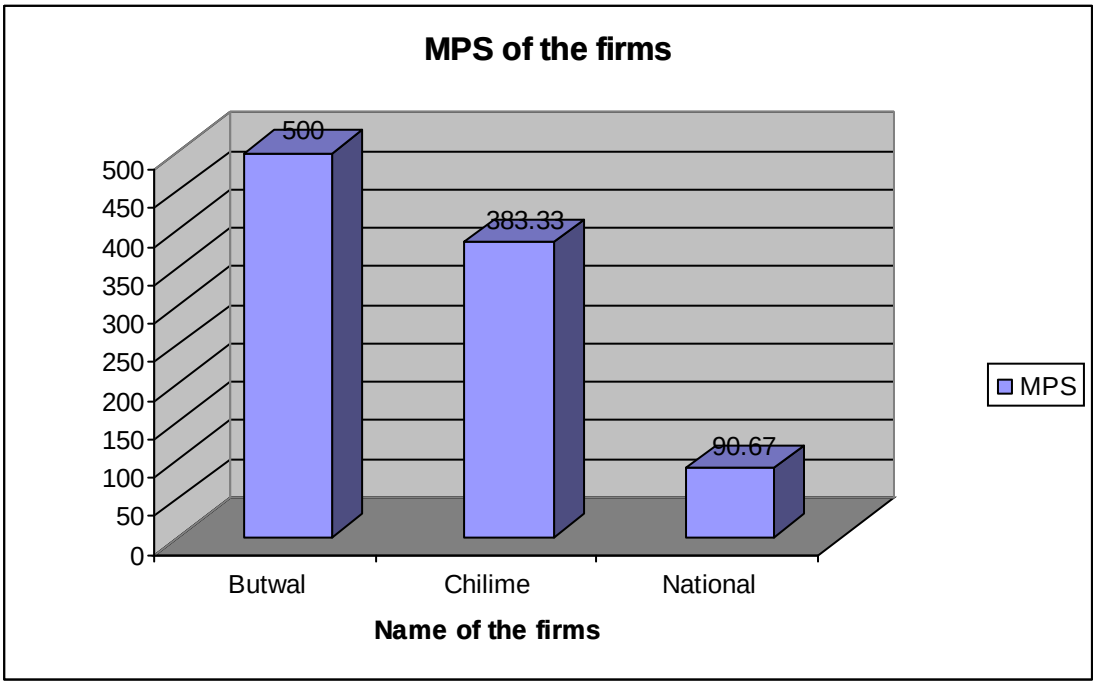


Figure 4.24

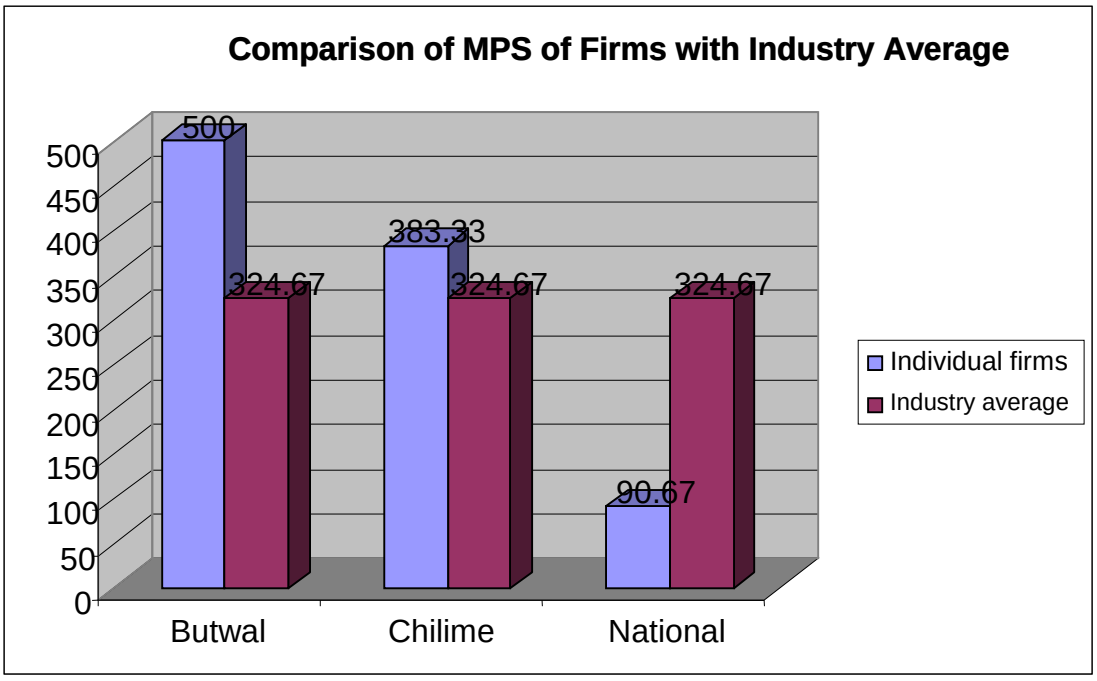


Figure 4.24 shows comparison of MPS of firms with the industry average. This tells that Butwal and Chilime have higher MPS than industry average but National has lower MPS than industry average. Since Chilime's and Butwal's MPS is above than industry average, this suggests that these companies are regarded as more attractive than average industry competitors. But National is less attractive than average industry competitors.

4.1.3.4 Market to Net Worth

This ratio helps to measure whether the market value of a firm's equity is worthier than its actual worth or not. This ratio also reflects the contribution of a firm to the wealth of a firm to the wealth of society. The market to net worth of the firm's are presented in table.

Table 4.13
Market to Net Worth and Industry Average

in times

Name of the company	Market to net worth	Industry average
BUTWAL	3.13	2.04
CHILIME	2.07	2.04
NATIONAL	0.92	2.04

Table 4.13 shows Market to net worth of the firms and industry average. Butwal has highest market to net worth (3.13), followed by Chilime (2.07) and National has the lowest (0.92) market to net worth. This reveals Butwal has more contributed to the creation of wealth in the society than other firms whereas other's contribution is less to the creation of wealth. This can also be explained by the figure 4.25

Figure 4.25

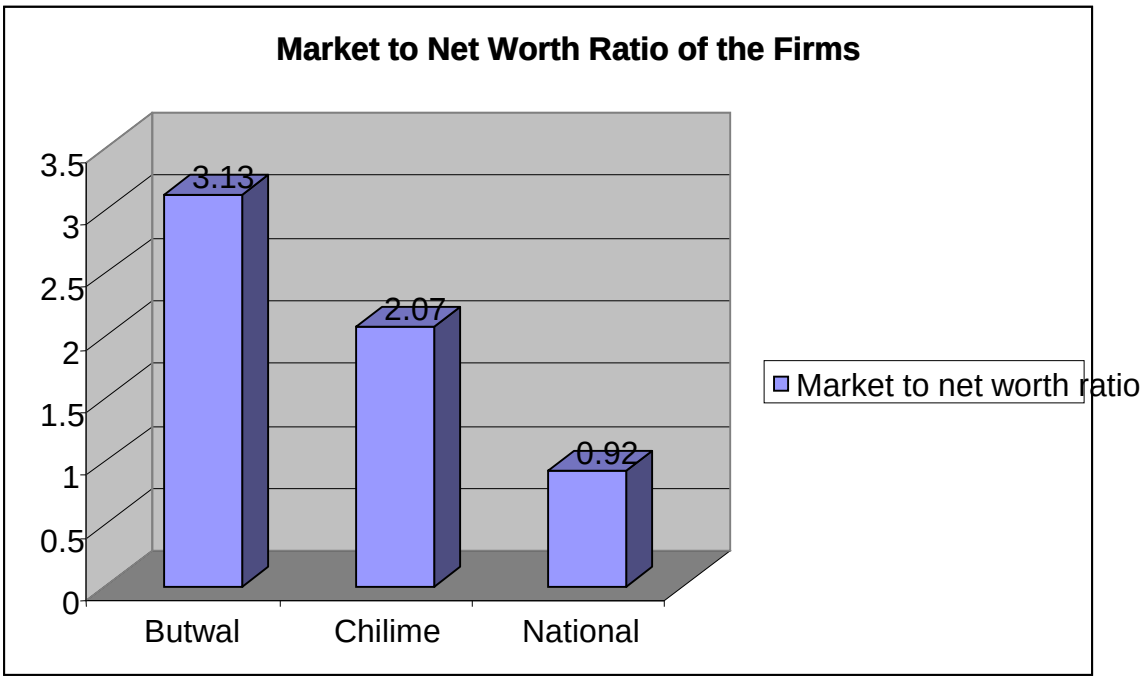


Figure 4.26

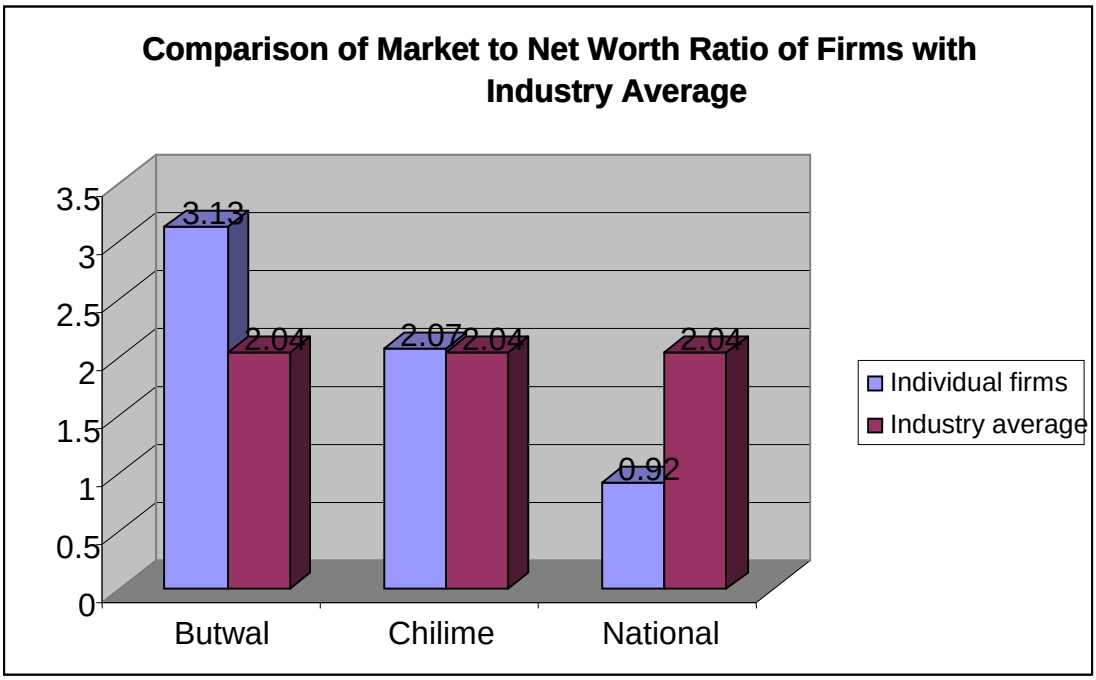


Figure 4.26 shows comparison of market to net worth of firms with the industry average. This tells that Butwal has higher market to net worth than industry average, Chilime has slightly higher than industry average but National has lower market to net worth than industry average. The investors are willing to pay more for a rupee of Butwal's share than for one of average in an industry. National is not attractive for such condition.

4.1.3.4 Net Worth per Share

Table 4.14
Net Worth per Share and Industry Average

in Rs

Name of the company	Net worth per share	Industry average
BUTWAL	159.98	147.68
CHILIME	184.78	147.68
NATIONAL	98.30	147.68

Table 4.14 shows net worth per share of the firms and industry average. Chilime has the highest net worth per share (184.78), followed by Butwal (159.98) and National has the lowest (98.30) net worth per share. This indicates that Chilime has sound growth prospect as well as more attractive. But National has not well enough for growth prospects as well as attractiveness. This can also be seen in the figure 4.27

Figure 4.27

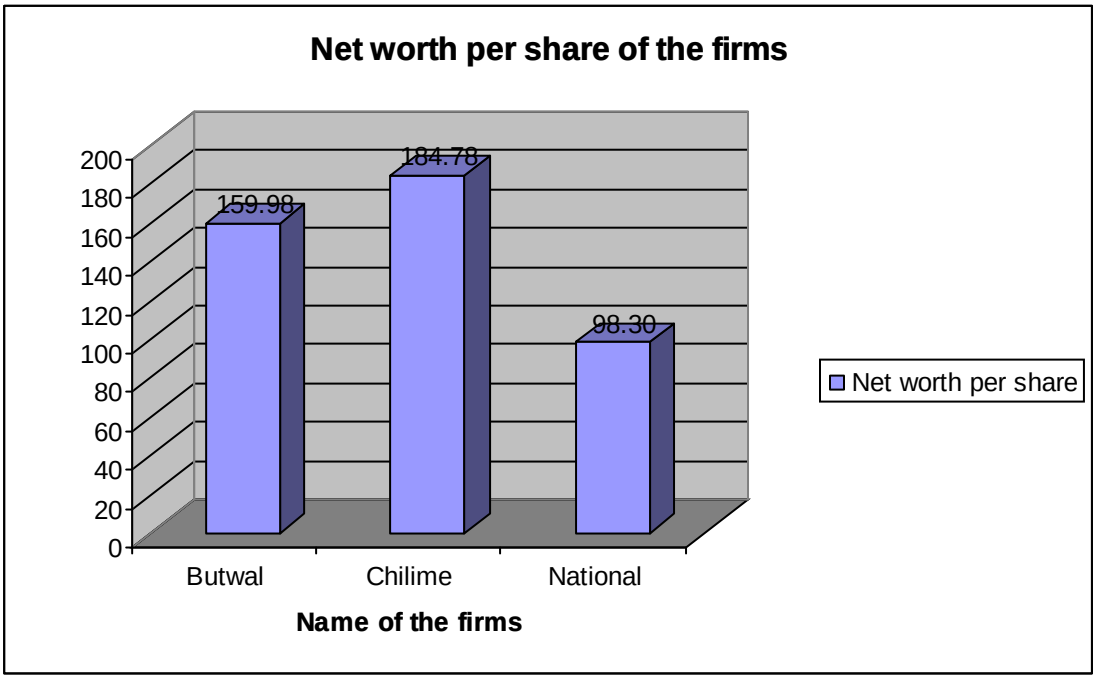


Figure 4.28

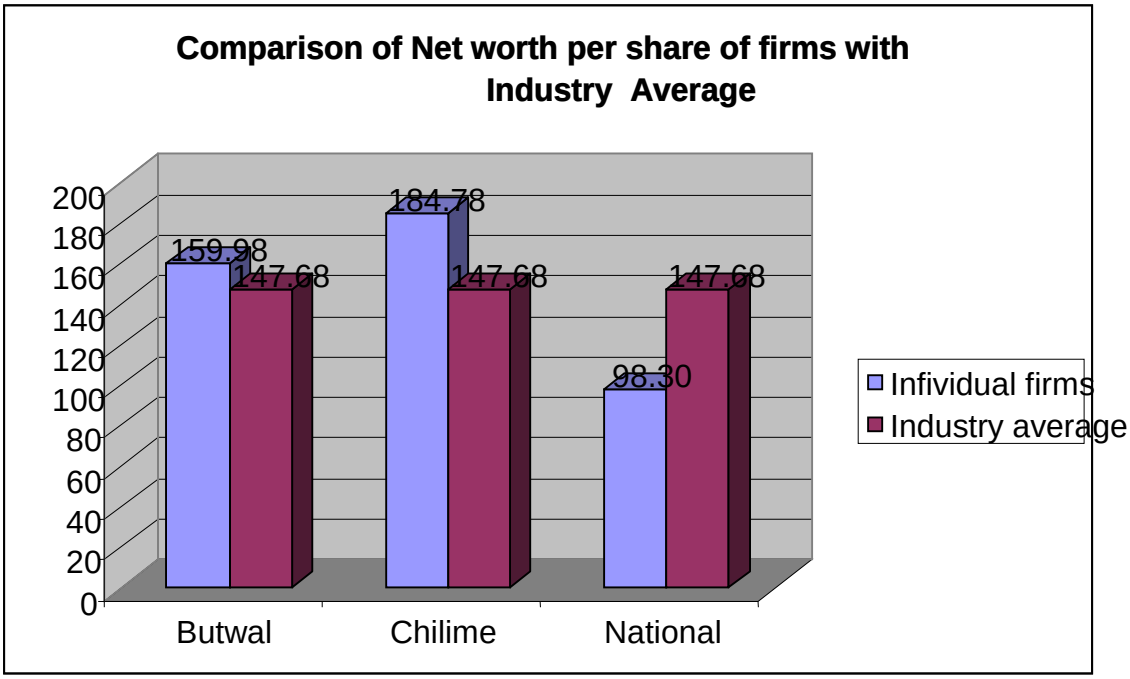


Figure 4.28 shows comparison of net worth per share of firms with the industry average. This tells that Butwal and Chilime have higher net worth per share than industry average. National has lower net worth

per share than industry average. Hence Chilime and Butwal have sound growth prospects than average industry. National is weak in growth prospects than average industry.

4.1.3.5 Earning Yield Ratio

It is the reverse of P/E ratio. This reciprocal ratio is also an important measure of the earning made by a company. It examines the extent of the company's earning in regards to the market price. A higher earning yield satisfies both the market and the equity shareholders.

Table 4.15
Earning Yield Ratio and Industry Average

in ratio

Name of the company	Earning yield ratio	Industry average
BUTWAL	0.06	0.08
CHILIME	0.18	0.08
NATIONAL	0.01	0.08

Table 4.15 shows earning yield ratio of the firms and industry average. Chilime has the highest earning yield ratio (0.18), followed by Butwal (0.06) and National has the lowest (0.01) earning yield ratio. This indicates that Chilime satisfies both the market and equity shareholders than Butwal and National. But National is not good to satisfy both market and shareholders. This can also be seen in the figure 4.29

Figure 4.29

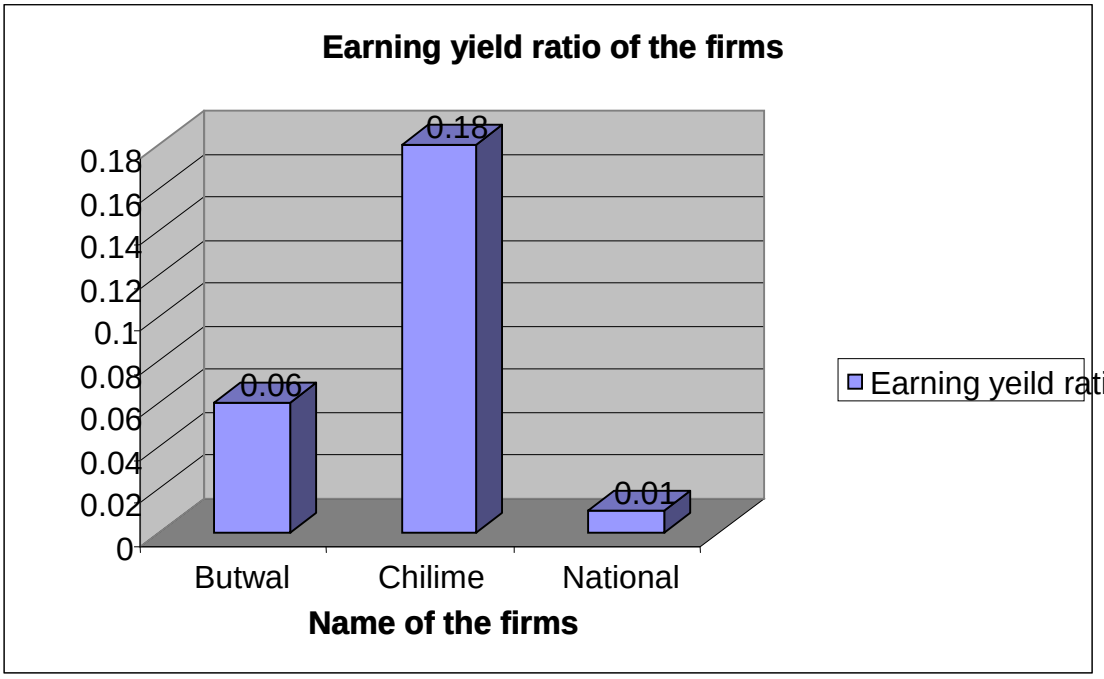


Figure 4.30

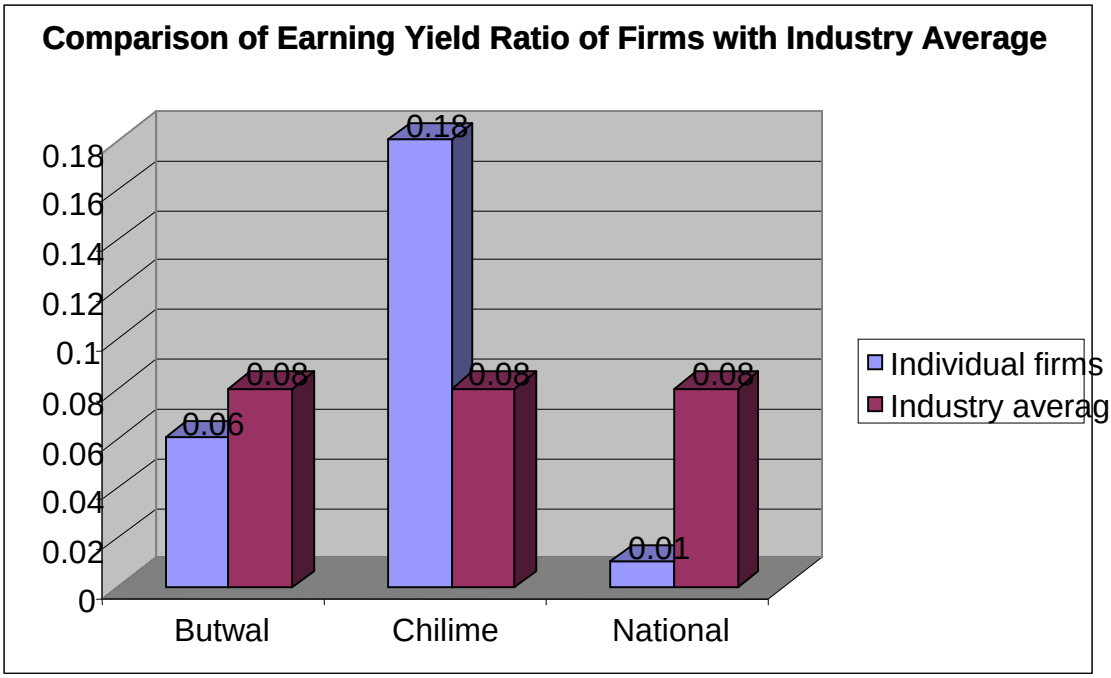


Figure 4.30 shows comparison of earning yield ratio of firms with the industry average. This tells that Chilime has higher earning yield ratio than industry average. Butwal and National have lower earning yield than industry average. Hence Chilime can highly satisfy both market and shareholders than industry average and Butwal and National are not able to satisfy market and shareholders than average industry.

4.1.3.6 Dividend per Share (DPS)

Dividend per share is the amount which pays as a dividend to its stockholders. This measures the attractiveness of the firms. DPS of the different firms are given in table.

Table 4.16

Dividend per Share and Industry Average

in Rs

Name of the company	DPS	Industry average
BUTWAL	35	15
CHILIME	10	15
NATIONAL	0	15

Table 4.16 shows dividend per share of the firms and industry average. Butwal has paid the highest (Rs 35) dividend, and then Chilime pays second highest (Rs 10) and National had not paid any dividend at all. This indicates that Butwal is more attractive firms than Chilime and National. National is least attractive firm among its competitors. This can also be seen in the figure 4.31

Figure 4.31

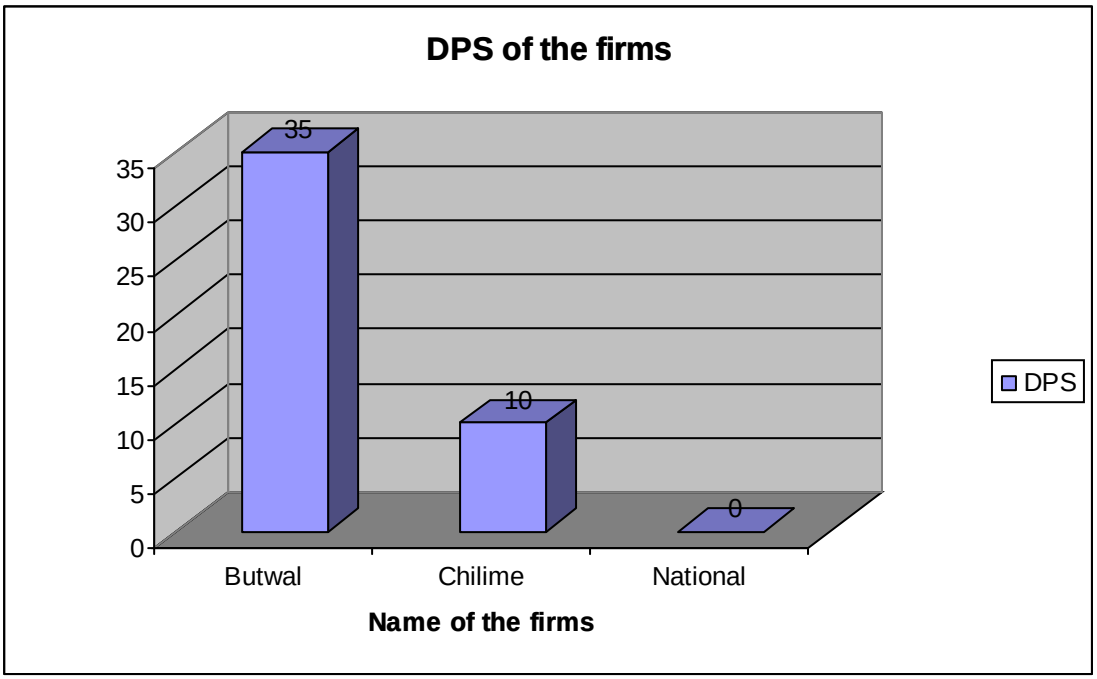


Figure 4.32

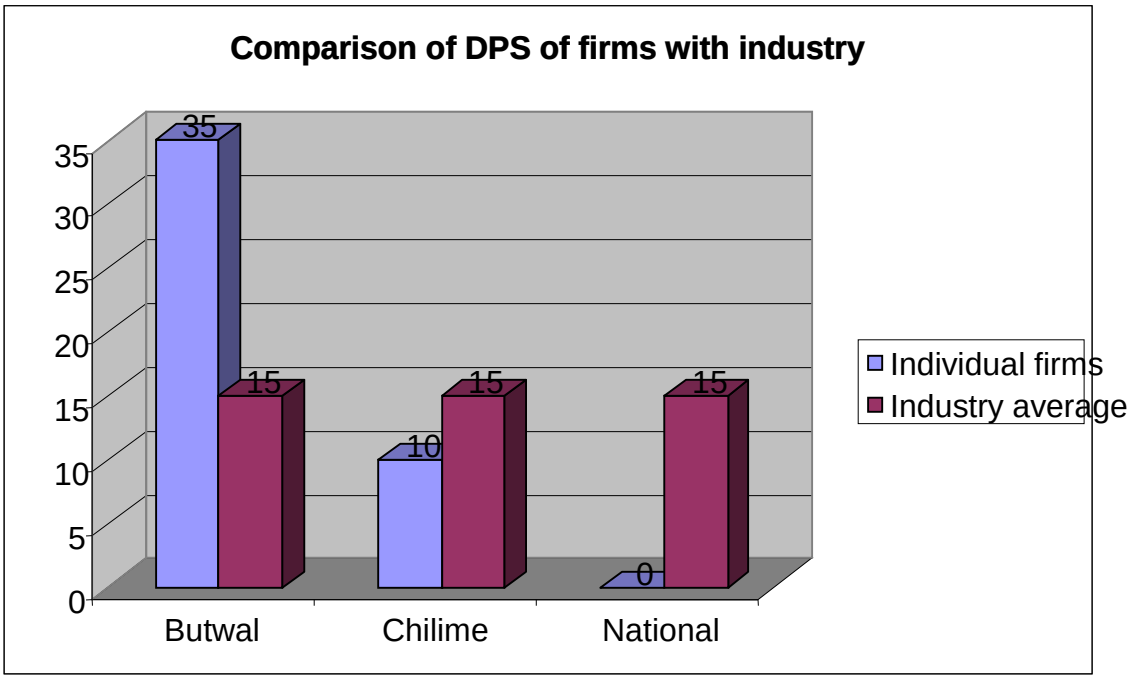


Figure 4.32 shows comparison of dividend per share of firms with the industry average. This tells that Butwal pays higher dividend to its shareholders than industry average. Chilime and National pays lower dividends than industry average. Hence Butwal is highly attractive firms than its competitors. Chilime and National are not attractive firms than its competitor firms.

4.1.4 Debt Management Ratio

Debt management ratio measures ability to meet long term as well as current obligation in using long term debt.

4.1.4.1 Debt to Equity

The debt equity ratio shows the relative contribution of creditors and owners. Lower the debt equity ratio, the higher the degree the protection enjoyed by the creditors. The debt – equity ratio of the firms are presented in table below.

Table 4.17
Debt to Equity and Industry Average

in ratio

Name of the company	Debt to Equity	Industry average
BUTWAL	0.29	1.62
CHILIME	2.66	1.62
NATIONAL	1.92	1.62

Table 4.17 shows debt equity ratio of the firms and industry average. Chilime has the highest (2.66) ratio then National (1.92) and Butwal has the lowest (0.29) ratio. This means Chilime has the lowest degree of protection to the creditors. Butwal has highest degree of protection to its creditors. This can also be explained from the figure 4.33

Figure 4.33

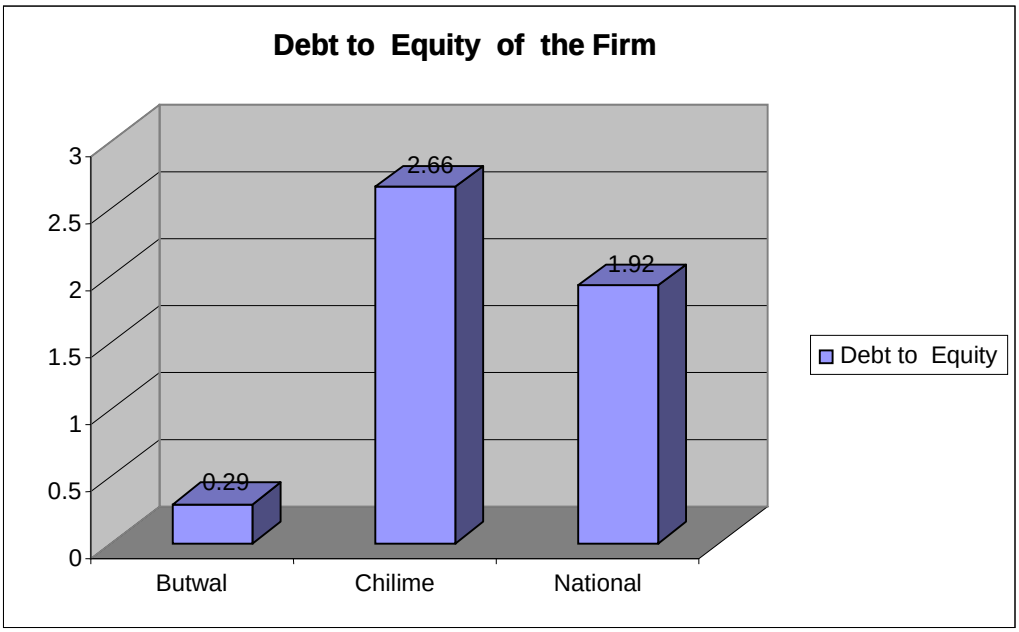


Figure 4.34

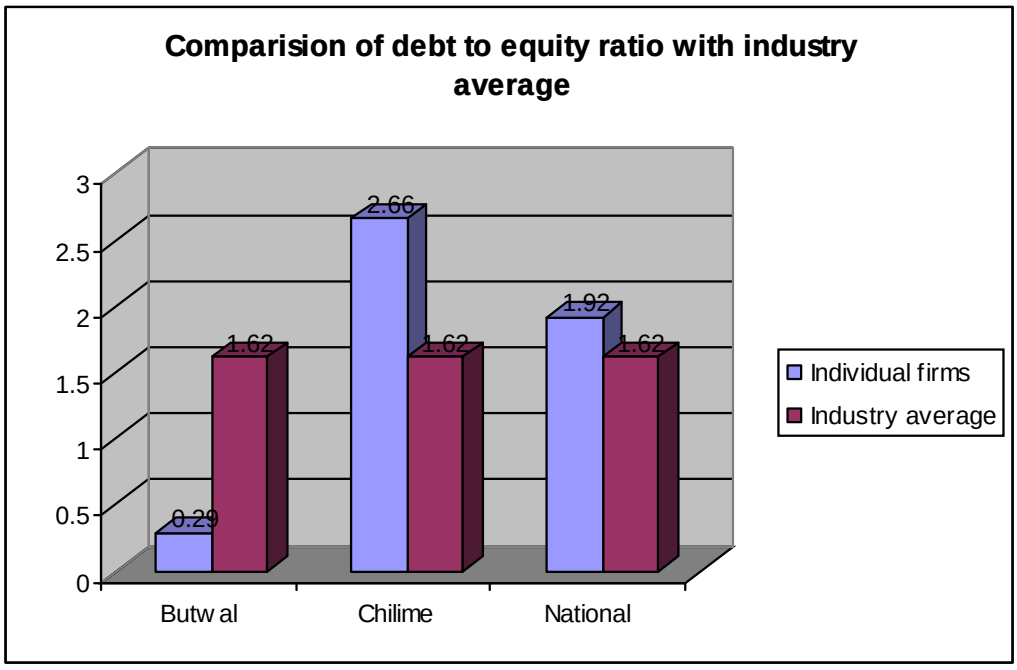


Figure 4.34 shows Chilime and National have higher debt to equity ratio than industry but Butwal has lower debt to equity ratio than industry. This indicates that Butwal is well in position to protect to its creditors.

4.1.4.2 Debt to Total assets

This ratio measures the extent to which borrowed fund support the firm's assets. A higher the debt ratio creates lower credit worthiness in the debt market. The debt ratio of the firms are presented in table below.

Table 4.18
Debt to Total Assets and Industry Average

in ratio

Name of the company	Debt to Total assets	Industry average
BUTWAL	0.15	0.49
CHILIME	0.68	0.49
NATIONAL	0.66	0.49

Table 4.18 shows debt to total assets of the firms and industry average. Chilime has the highest (0.68) ratio, and then National (0.66) and Butwal has lowest (0.15) ratio. This means Chilime has the lowest degree of Credit worthiness. Butwal has highest degree of credit worthiness. This can also be explained from the figure 4.35

Figure 4.35

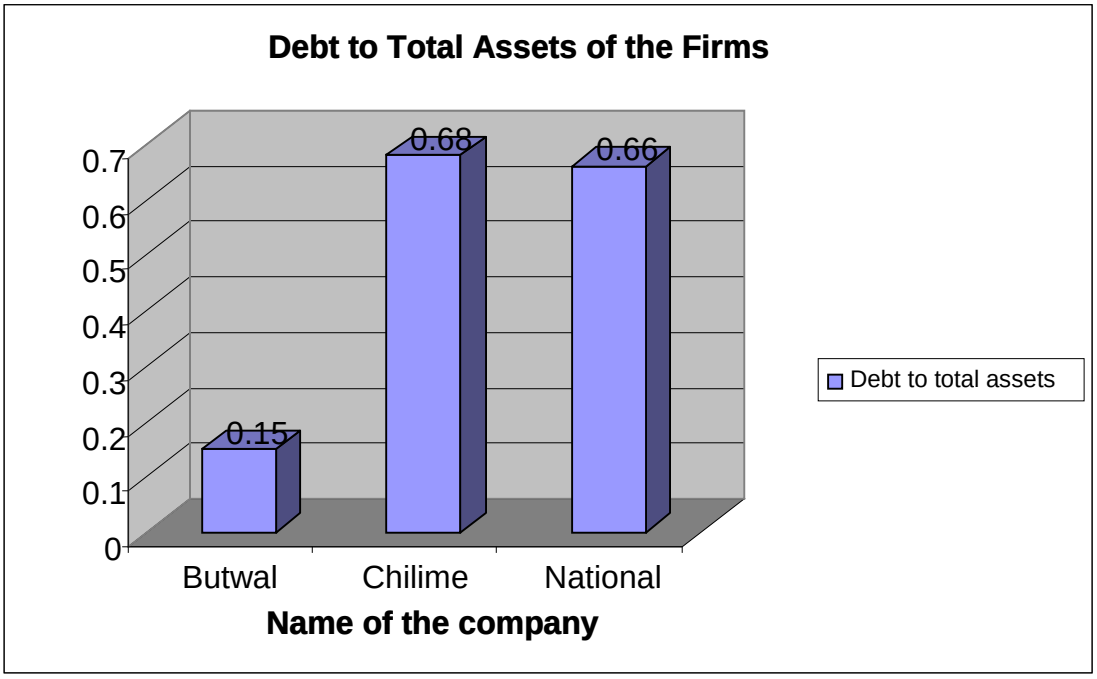


Figure 4.36

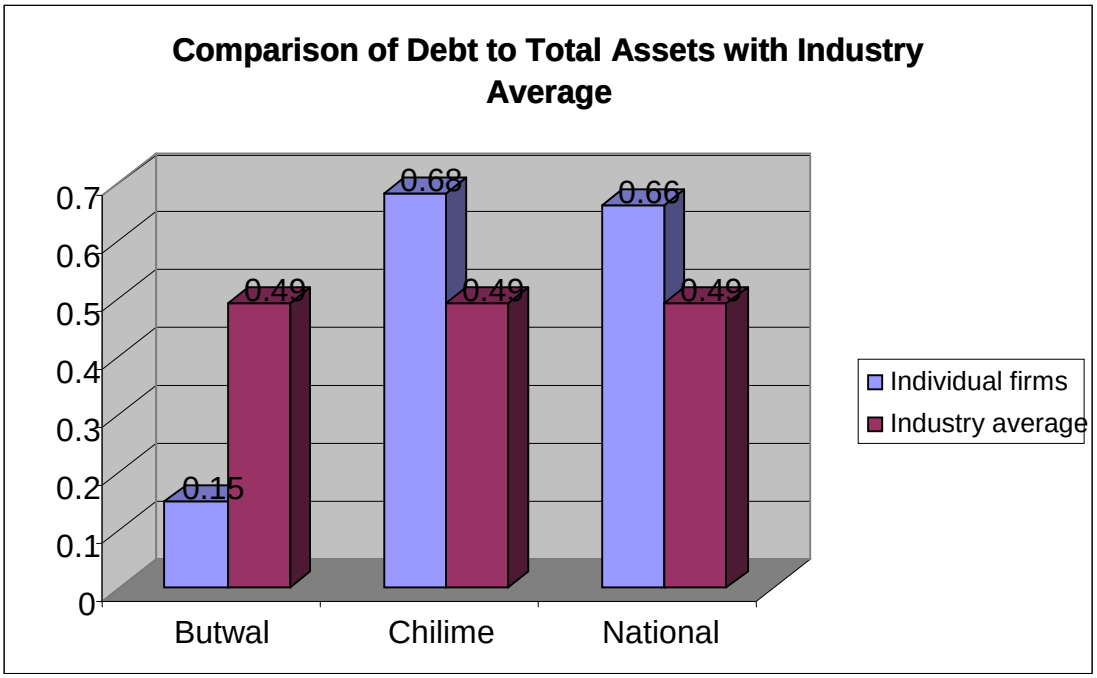


Figure 4.36 indicates Chilime and National have higher debt to assets ratio than industry but Butwal has lower debt to assets ratio than industry. This indicates that Butwal is well in the position of credit worthiness than industry. Chilime and National are weak in the credit worthiness.

4.1.4.3 Interest Coverage Ratio

This ratio explains the ability of a firm to meet its obligations on the basis of operating income. A high interest coverage ratio means that the firm can easily meet its interest burden even if profit before interest and taxes suffer a considerable decline. The interest coverage ratio of the firms is presented below in table.

Table 4.19
Interest Coverage Ratio and Industry Average

Name of the company	Interest Coverage Ratio	Industry average
BUTWAL	infinite	3.15
CHILIME	5.2	3.15
NATIONAL	1.1	3.15

Table 4.19 shows interest coverage ratio of the firms and industry average. Chilime has the highest (5.2) ratio, and then National (1.1) and Butwal has the lowest (infinite) ratio. This means Chilime has strong ability to meet the fixed charges (interests). Butwal has no ability to meet the fixed charges. This can also be explained from the figure 4.37

Figure 4.37

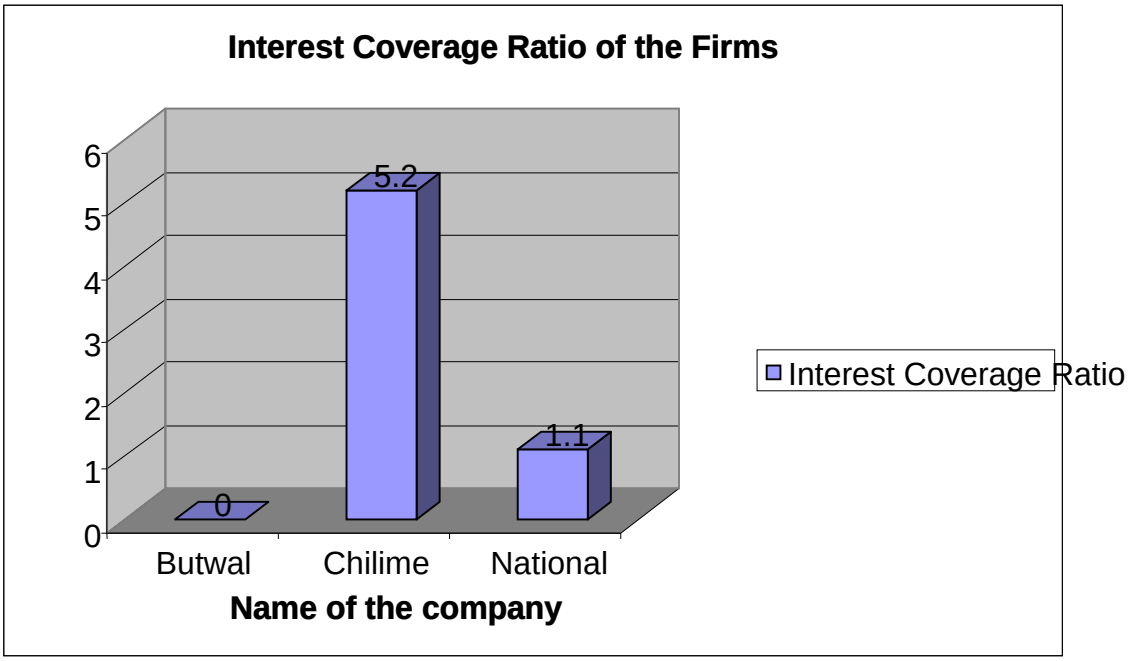


Figure 4.38

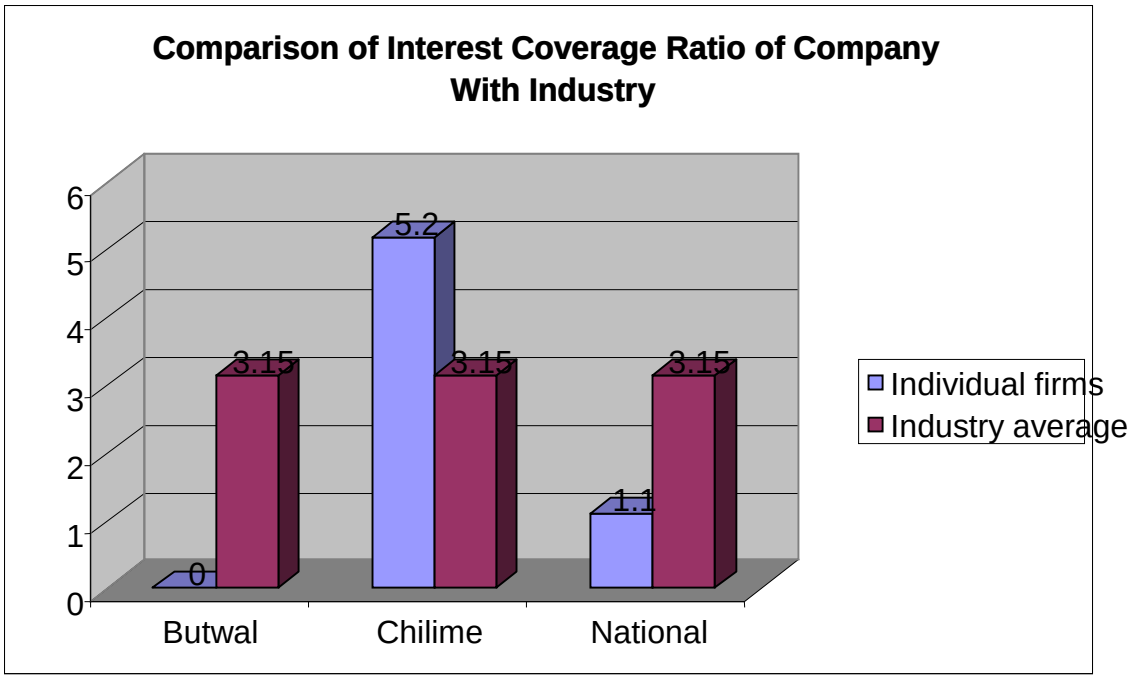


Figure 4.38 indicates Chilime has higher interest coverage ratio than industry but Butwal and National have lower interest coverage ratio than industry. This indicates that Chilime can meet to its all fixed charges among its competitors. Butwal and National can not able to meet its interests as its industry average can do.

Major Findings

- Butwal power company has the highest P/E ratio (17.64), followed by Chilime hydropower (5.65) and National has lowest (-4.49=0) P/E ratio. This reveals Butwal is in the sound growth prospects and less risky firms but National is in risky position and not in growth prospects. Butwal has higher P/E ratio than industry average but Chilime and National has lower than industry average (6.27). Since Butwal's P/E ratio is above than industry average, this suggests that the company is regarded as less risky as well as strong growth prospects than average industry. But Chilime and National are riskier as well as poor growth prospects than average industry.

- Chilime hydropower has the highest EPS (Rs 67.85), followed by Butwal power company (Rs28.67) and National has the lowest (Rs0.95) EPS. This reveals Chilime is more attractive firms for the stockholder but National is less attractive to than its competitors. Chilime has higher EPS than industry average (Rs32.49) but Butwal and National has lower EPS than industry average. Since Chilime's EPS is above than industry average, this suggests that the company is regarded as more attractive than average industry competitors. But Butwal and National are less attractive than average industry competitors.

- Butwal power has highest MPS (Rs500), followed by Chilime (Rs383.33) and National has the lowest (Rs90.67) MPS. This reveals Butwal is more attractive firm for the stockholder but National is less attractive to than its competitors Butwal and Chilime have higher MPS than industry average (Rs324.67) but National has lower MPS than industry average. Since Chilime's and Butwal's MPS is above than industry average, this suggests that these companies are regarded as more attractive than average industry competitors. But National is less attractive than average industry competitors.

- Butwal power has the highest market to net worth (3.13), followed by Chilime (2.07) and National has lowest (0.92) market to net worth. This reveals Butwal has more contributed to the creation of wealth in the society than other firms whereas other's contribution is less to the creation of wealth. Butwal has higher market to net worth than industry average (2.04), Chilime has also slight higher than industry average but National has lower market to net worth than industry average. The investors are willing to pay more for a rupee of Butwal's share than for one of average in an industry. National is not attractive for such condition.

- Chilime hydropower has the highest net worth per share (Rs184.78), followed by Butwal (Rs159.98) and National has the lowest (Rs98.30) net worth per share. This indicates that Chilime has sound growth prospect as well as more attractive. But National has not well enough for growth prospects as well as attractiveness. Butwal and Chilime have higher net worth per share than industry average (Rs147.68). National has lower net worth per share than industry average. Hence Chilime and Butwal have sound growth prospects than average industry. National is weak in growth prospects than average industry.

- Chilime hydropower has the highest earning yield ratio (0.18), followed by Butwal (0.06) and National has the lowest (0.01) earning yield ratio. This indicates that Chilime satisfies both the market and equity shareholders than Butwal and National. But National is not good to satisfy both market and shareholders Chilime has higher earning yield ratio than industry average (0.08). Butwal and National have lower earning yield than industry average. Hence Chilime can highly satisfy both market and shareholders than industry average and Butwal and National are not able to satisfy market and shareholders than average industry.

- Butwal power pays the highest (Rs 35) dividend then Chilime has paid the second highest (Rs 10) and National does not pay any dividend at all. This indicates that Butwal is more attractive firms than Chilime and National. National is least attractive firm among its competitors. Butwal pays higher dividend to its shareholders than industry average (Rs15). Chilime and National pays lower dividends than industry average. Hence Butwal is highly attractive firms than its competitors. Chilime and National are not attractive firms than its competitor firms.

- Chilime hydropower has the highest (36.87%) ROE than Butwal and National. National has the lowest (.95%) ROE than others. Butwal has medium ROE. This clearly shows that chilime has strong investment opportunities &effective expense management whereas National is weak.It also indicates that Chilime can provide highest (36.87%) return to their common stockholder. Butwal can provide medium (18%) return whereas National has lowest return (0.95%) to their common stockholder. The table shows that Chilime has highest productivity of the ownership (or risks) capital employed in the firm but National has lowest. Chilime has about double ROE than industry average (18.60%), Butwal has also higher ROE than industry average but National has far below than industry average. So Chilime has strong investment opportunities and it can provide higher return to their common stockholder than its competitor. Butwal has also well in investment opportunities and can distribute sound return than average industry. National has weaker in investment opportunities and reward to their common stock holder than average industry.

- Chilime hydropower has the highest (18.61%) ROA than others. Butwal has medium (15.06%) but National has the lowest ROA than others. This reveals that Chilime is sound in generating profit with available assets, whereas National is week to generate profit with available assets. Chilime and Butwal have higher ROA than industry average (11.34%) but National has extremely below than industry average. Hence Chilime and Butwal are sound in generating profit with available assets than industry average. But National is so week to generate profit with available assets than industry average.

- Butwal power has the highest (216.70%) gross profit margin than Chilime & National, Chilime has medium (95.93%) whereas National has lowest (64.35%). Hence this reveals Butwal is in sound in efficiency of production as well as pricing. But National is not so efficient in production and pricing. Chilime and National has lower gross profit margin than industry average (125.66%). So Butwal is more efficient in operation as well as price than industry average. But Chilime and National are less efficient in operation and price than industry average

- Chilime has the highest (55.52%) profit margin, followed by Butwal (50.89%) and lowest (3%) of National. Hence Chilime can earn 55.52 paisa on per rupees of sales; 50.89 paisa by Butwal where

as 3 paisa by National. Profit margin of the Chilime and National have higher than industrial average (36.47%). National has lower profit margin than industry average. So Chilime and Butwal are sound in generating profit per rupees of sales than industry average whereas national is so poor in generating profit per rupees of sales.

- Chilime hydropower has the highest earning power (28.05%), Butwal has medium (21.16%) and National has lowest (7.15%) earning power. This tells Chilime is sound in making raw earning than Butwal & National. Chilime and Butwal have higher basic earning power than industry average (18.79%) National has lower basic earning power than industry average. Hence Chilime and Butwal are good enough raw earning power of the assets than Industry average, but National is far below than industry average.

- Chilime hydropower has the highest (84.25%) operating profit per rupees of sales followed by Butwal (72.09%) and National has lowest (64.35%). Chilime is good in operating profit margin than industry average (73.56%) whereas Butwal & National are below than industry average

- National has the highest (0.97) total expense to total income ratio, and then Butwal (0.48) and Chilime has the lowest (.43) ratio. This means Chilime can give more return to the investor than Butwal & National, hence it is more attractive to the investor. But Nation is not attractive as compared to others. Chilime and Butwal have lower total expenses to total income than industry average (0.63) but National has higher total expense to total income than industry average.

- Chilime hydropower has the highest (2.66) debt to equity ratio, and then National (1.92) and Butwal has lowest (0.29) ratio. This means Chilime has lowest degree of protection to the creditors. Butwal has highest degree of protection to its creditors. Chilime and National have higher debt to equity ratio than industry average (1.62) but Butwal has lower debt to equity ratio than industry. This indicates that Butwal is well in position to protect to its creditors.

- Chilime hydropower has the highest (0.68) debt to assets ratio, and then National (0.66) and Butwal has lowest (0.15) ratio. This means Chilime has lowest degree of Credit worthiness. Butwal has highest degree of credit worthiness. Chilime and National have higher debt to assets

ratio than industry (0.49) but Butwal has lower debt to assets ratio than industry. This indicates that Butwal is well in the position of credit worthiness than industry. Chilime and National are weak in the credit worthiness.

- Chilime hydropower has the highest (5.2) ratio, and then National (1.1) and Butwal has the lowest (0) ratio. This means Chilime has strong ability to meet the fixed charges (interests). Butwal has no ability to meet the fixed charges. Chilime has higher interst coverage ratio than industry average (3.15) but Butwal and National have lower interest coverage ratio than industry. This indicates that Chilime can meet to its all fixed charges among its competitors. Butwal and National can not able to meet its interests as its industry average can do.

- Butwal power has the highest (7.33%) dividend yield ratio, and then Chilime (2.31%) and National has lowest (0) ratio. This means Butwal highly satisfies its stockholders but it has low amount to investment. National can not satisfy its stockholder. Butwal has higher dividend yield ratio than industry average (3.22) but Chilime and National have lower dividend yield ratio than industry. This indicates that Butwal can highly satisfy to its stockholders than average industry competitors. Chillime and National can not able to satisfy to its stockholders as its industry average can do.

- Butwal power has the highest (122.09%) dividend payout ratio and then Chilime (13.83%) and National has the lowest (0) rate. This means Butwal can attract more to investors. National can not able to attracts to investors. Butwal has higher dividend payout rate than industry average (45.31%) but Chilime and National have lower dividend payout rate than industry. This indicates that Butwal can highly attract to investors than average industry competitors. Chillime and National can not able to attract to investors than its industry competitors.

- Chilime hydropower has the highest (0.34) total assets turnover ratio, and then Butwal (0.30) and National has lowest (0.11) ratio. This means Butwal is more efficient in the utilization of total assets than others. National is weaker in the utilization of total assets than others. Butwal and Chilime have higher total asset turnover ratio than industry average (0.25). National has lower total asset turnover ratio than industry average. Hence Butwal and Chilime are generating a sufficient

volume of business given its total assets than industry average but National is not generating a sufficient volume of business given its total assets

- National has the highest (1.06) fixed assets turnover ratio, and then Butwal (0.65) and Chilime has the lowest (0.31) ratio. This means National is more efficient in the utilization of total assets than others. Chilime is weaker in the utilization of total assets than others. National has higher net fixed assets turnover ratio than industry average (0.67) but Butwal and Chilime have lower net fixed assets turnover ratio than industry average. This indicates that National is efficient to utilize the total assets but Butwal and Chilime are not efficient to utilize its total assets than its industry competitors

CHAPTER V

SUMMARY CONCLUSIONS AND RECCOMMENDATIONS

5.1 Summary

Nepal is a land locked and developing country of south Asia. India and China are big and developed countries of the south Asia which are neighbors to Nepal. Economic strength and technology development of these countries are growing rapidly. Under such situation Nepal is still walking in snail pace on the process of strengthening economy and technology even as about 81% people are depending in agriculture. Among these, most of these agro-based people most (38.45%) live below the poverty line. Above 39.45% GDP recovered by the agriculture but still there is no satisfactory result of agriculture in comparison to the dependency of the people due to lack of proper utilization of land and resources. Until the optimum use of available resources, the country may not sustain agriculture industry. Agriculture and industrial development is fundamental base of our nation. Unemployment and poverty may be reduced by development of agriculture and industrial sectors. However, agriculture is suffering through the traditional concept and technology. Similarly, the industries are suffering due to improper policy and inefficient management. Moreover, Nepal is getting down in overall sectors of economy. It seems that reduction of poverty and economic development of Nepalese people are still far-fetched dreams.

Nepal is second richest country of the water resources in the world after the Brazil. Most of the rivers' origins are in the Himalays which are flowing continuously throughout the year. These rivers are divided in three groups on the basis of region they flow i.e. Saptakoshi, Sapta gandaki and Karnali. Each of them includes seven more rivers. But other more than 2000 rivers and streams are flowing over Nepal. It means each and every region have enough water resources. On the purpose of hydropower electricity, Irrigation and many other water based program can be operated here sufficiently. But as the proverbs suggests "Dark beneath the lamp", neither each Nepali get electricity nor are there enough irrigation. Not only that, each Nepali does not get pure drinking water as well. The reasons behind these are due to bad economy. Basic function of economic policy is to allocate the resources and utilize as required, increments of productivity,

creation of jobs, and reduction of poverty as well. The foreign aid is another weakness of the nation. Annual budget is also affected by the aid and donation of the foreign countries. Of course, the situation is better, expectation will be fulfilled by the donors countries but situation is getting worse day by day and most importantly, still dependency is increasing.

The present study mainly intends to evaluate the financial strength and weakness of Butwal Power Company, Chilime Hydropower Company Limited and National Hydropower Company and make suggestions regarding concerned questions. The objectives of the study are also to analyze the financial performance of hydropower companies (Butwal Power Company, Chilime hydropower company Limited and national hydropower company) through financial analysis, considering relevant variables, to discover the major strengths and weaknesses of hydropower companies at present and in future, to find out the opportunities & challenges Hydropower companies is now facing or will face in future in finance and to provide some suggestions based on the outcomes of the study for improvement of the financial position / performance of Hydropower companies.

The main source of data for the purpose of this study is the published financial statements of hydro power companies. So, secondary sources of data are used to fulfill the objectives of the study. It constitutes mostly the annual reports, which comprises balance sheet and profit and loss account statement. Information has also been supplemented from various publications of hydropower companies. All other available published and unpublished material concerning the study as well as some journal abstracts will also be used in the study.

Since the study is concentrated on Financial Performance of hydropower some important financial tools and techniques are used for the analysis. The major tool employed for the analysis of this study is the ratio analysis that establishes the quantitative relationship of two variables of the financial statements. Ratio Analysis is the basic tool used for the study and is considered to be the powerful tool of financial analysis. Beside ratio analysis, various other financial tools have been studied.

5.2 Conclusions:

The finding of the study shows that Butwal's P/E ratio is above than industry average, this suggests that the company is regarded as less risky as well as strong growth prospects than average industry. But Chilime and National are riskier as well as poor growth prospects than average industry. Chilime's and Butwal's MPS is above than industry average, this suggests that these companies are regarded as more attractive than average industry competitors. But National is less attractive than average industry competitors. Chilime can highly satisfy both market and shareholders than industry average and Butwal and National are not able to satisfy market and shareholders than average industry. Chilime has strong investment opportunities and it can provide higher return to their common stockholder than its competitor. Butwal has also well in investment opportunities and can distribute sound return than average industry. National has weaker in investment opportunities and reward to their common stock holder than average industry.

Chilime and Butwal are sound in generating profit with available assets than industry average. But National is so week to generate profit with available assets than industry average. Butwal is more efficient in operation as well as price than industry average. But Chilime and National are less efficient in operation and price than industry average. Butwal is well in position to protect to its creditors. Butwal is well in the position of credit worthiness than industry. Chilime and National are weak in the credit worthiness. Chilime can meet to its all fixed charges among its competitors. Butwal and National can not able to meet its interests as its industry average can do. Butwal and Chilime are generating a sufficient volume of business given its total assets than industry average but National is not generating a sufficient volume of business given its total assets. National is efficient to utilize the total assets but Butwal and Chilime are not efficient to utilize its total assets than its industry competitors

5.3 Recommendation

Findings of the study reflect both positive and negative results with respect to the financial performance of the sampled hydropower companies. Following recommendation have been presented for the improvement of the hydropower companies.

- Butwal Power Company has not used leverage in its capital structure so it is recommended to use debt in its capital structure to maximize ROE. Butwal Power Company has the highest market to net worth. This reveals that Butwal has more contributed to the creation of wealth in the society than other firms. The investors are willing to pay more for a rupee of Butwal's share than other firms. Since most of the financial indicators are strong, Butwal Power Company is less riskier than other hydropower company to invest in.

- Chilime Hydropower has the highest net worth per share which indicates that it has sound growth prospect as well as more attractive. It has used comparatively more debt in its capital structure than other firms so it has higher financial risk. This company is recommended to lower debt to minimize financial risk and also it has to increase P/E ratio so as to minimize risk and have sound growth prospect.

- National hydropower has weak interest coverage ratio so it is recommended to lower debt and increase equity or to minimize operating expenses. It has lower market to net worth than industry average so is not attractive for such condition. National has weak financial performance so it is strongly recommended that it should improve all its financial indicators.

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