## A Research Proposal on Profitability

(Specific reference to profitability of Hetauda Cement Industry)

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#### Gugali Ram Mahato

## **ABBREVIATION**

HCIL : Hetauda Cement Industry Limited

UCIL : Udaypur Cement Industry Limited

FY : Fiscal Year

A/C : Account

P/L : Profit & Loss

ROA : Return on Total Assets

ROCE : Return on Capital Employed

ROSE : Return on Shareholders Equity

ROCSE : Return on Common Shareholders Equity

EPS : Earning Per Share

DPS : Dividend Per Share

Pvt. : Private

Ltd. : Limited

PEs : Public Enterprises

Rs : Rupees

i.e. : That is

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#### CHAPTER - I

#### 1. <u>INTRODUCTION</u>

#### 1.1 GENERAL INTRODUCTION:

Nepal is a small developing Himalayan Kingdom situated in South Asia. It is bounded on the north by the Tibentan autonomous region of people's republic of China and on the other three sides by India. It has an area of 147181 sq. km. and runs all along 500 miles from east to west and 80 to 150 miles from north to south. [Census: 2048;10]. Climatically it lies in the temperate zone with added advantages of altitude. Ecologically the country is divided into three regions running east to west. They are mountains, the hill and the plains. The mountain area lies on altitude varying from 48877 meters to 8840 meters above the sea level embracing of earth tallest mountain peaks. Nepal is one of the least developed countries of the world. More than 90% of total population is still in the rural areas and most of them are not yet getting minimum physical facilities that are necessary for human being because of under developed of those areas and their poverty. They is great challenge to the nation to eliminate the property of the country through gradual development of the area and to provide basic needs to the people keeping in view there challenges in nation. Several programs have been launched. The country has a population of 26.4 million with an annual growth rate of 2.2% with the life expectancy of 59.7 years. The density of population is 176.5 per sq. km and GDP US \$ 386. Literacy rate stands 62.7% which is among the the world. [quarterly economic update. 2007, 12]. Geographically, Nepal is blessed and adorned by natural beauty. Today Nepal has become a country of attraction for many tourists from all over the world.

#### 1.2 GENERAL VIEW OF PUBLIC ENTERPRISES:

Public enterprises is an institution operating a services of an economic or social character on behalf of the government but as an independent legal entity largely autonomous in its management through responsible to the public, through government and parliament and subject to some direction, by the government, equipped on the other hand with independent and separate founds of its own and the legal and commercial attributer of a commercial enterprises. [Joshi 2053:3-4]

Public enterprises is an organization which is owned by the public authorities to the extent of 50% or more, is under top management control of the owing public authority and its engaged in activities of a business character and it's market output in the shape of goods services for price. Public enterprises have to maintain proper balance between profit motive and service motive.

Public enterprises are autonomous bodies which are owned and managed by the Government and which provide goods or services for a price. The ownership with the government should be 51% or more to make entity public enterprises. [Laxmi, 4<sup>th</sup> schand and com. Ltd. 3]

#### 1.2.1 PUBLIC ENTERPRISE IN NEPAL:

In case of Nepal "Public enterprises are considered the government tools for bearing socio-economic responsibility". The first public enterprises of the world is admitted to the part of London Authority of Britain, which was formed at 1908 A.D. In the context of Nepal Biratnagar Jute Mills was first which was established at 1936 A.D. to generate nations revenue from the export of Jute in international market. [Bhattari, 2058:213]

Since 1956 Nepal has witnessed and development of public enterprises. His Majesty's government of Nepal has played a vital role in development process of the country. For the purpose HMG of Nepal makes massive investment to create necessary infrastructure and run some

of the large manufacturing industries and to provide essential service to the people. During the different plan period many institution and to provide essential service to the people. During the different plan period many institution of public enterprises were established and many of them were established with assistance of donor countries. The number of such enterprises in the field of industry, business, service, and public utility reached above 60.

But in Nepal the corporation has not only failed to achieve their objectives but also have become a heavy burden on the national economy. The main cause of failure of PE'S in Nepal are lack of management autonomy, inefficient use of means and resources, short sightedness and weakness on the part of political leadership, lack of competitive ability, production of low quality of goods and services. On controlled administrative expenses there of motivation in incumbent human resources use of professionalism as the result the government has adopted a policy of liberal economy giving priority to the involvement of private sector in public enterprises.

Nepal started its planned economic development in 1956 A.D. with the launching of 1st five years plan since then the number of public enterprises had increased substantially in the production or supply of sugar, cement, cigarettes, agricultural tools, petroleum products and all public utilities. PEs of Nepal can be categorized as,

#### 1. Statutory corporation and

#### 2. Companies

Among 30 existing PEs two are public utility PEs namely (I) Nepal drinking water corporation and (II) Nepal Electricity Authority.

#### 1.2.2 ROLE OF PES IN NEPALESE ECONOMY:

Public enterprises in Nepal constitute a vital instrument for the socio-economic development. It enjoys a strategic and crucial position in our mixed economy. Public enterprises were established in many sectors for the over all development of the nation with the different in the production or supply of cement. Brick and Tiles, Sugar, Cigarettes, Petroleum products and almost all the public utilities.

The economy of Nepal is basically a mixes economy, where the public and private sector freely operate in the business environment except in case of defense, which is not open to private sector. There is co-existence of both the public and the private sectors in Nepal for the overall development of the country.

Nepal has adopted mixed economic system where contribution of private and public sectors are co-existed in harmonious and collective ways. The private sectors have a predominant role in market oriented and competitive economic activities so that increase introduction thorough efficiency enhancement and resources use and utilization. However, Nepal government has been involving in some of the specific sector like infrastructure, essential commodities producing, social, welfare, public utilities, national defense and industries that need a huge amount and where private parties do not show any interest particularly.

Nepal is one of the under developed country which is still in its crewing stage of industrial development. So in Nepal PEs are not matter of choice, rather they are a matter of necessity in various sector of economy where private sector has not come forward or are only in limited extent. The public sector has to come into the estates, banking, trading and commercial sectors to a big and small PEs to create industrials bases in the country, to private better goods/ services to the people, to generate employment opportunities, to mobilize the domestic resources into best productive uses and to fulfill the government plans and objectives, PEs

have helped to increase the standard of living, regional balance of developing and they have contributed through import substitutions, export promotion and strengthening the revenue generation of HMG and save foreign currency by reducing import as well as to provide the consumable goods/service at a fair price.

It is sure that Nepal needs to make fairly extensive uses of PEs as a catalytic agent in the process of moving towards development oriented economy at a certain stage in the development process.

# 1.3 <u>A BRIEF INTRODUCTION OF HETAUDA CEMENT INDUSTRIES LIMITED:</u>

Among the various PEs, cement industry is one of the basic agrobased PEs industries. Cement is a fundamental construction material for strong and durable construction works. The consumption rate of cement has been increasing every year. The demand of cement is fulfilled by internal and external supplier at present. The external source is India. Among the internal Himal cement company, Udaypur cement company, Annapurna cement company, Maruti cement industry, Tribeni cement industry and Hetauda cement industry are major manufactures and supplier of cement. The study focuses on Hetauda cement industry.

Hetauda cement industries limited was incorporated under company act 2021 B.S. with the share investment of Nepal government and loan assistance of Asian development bank. Later, credit from national and international commercial bank was also received for financing the project. It's initial sources of finance are Nepal government 13%, Nepal bank limited 66% and Asian development bank 21%.

It has its factory in lamsure at the bank of sasauni brook, in front of the industrial district of the Hetauda at Hetauda of Makawanpur district of Narayani zone in middle development region of Nepal. HCIL is a manufacturing enterprises which is located at Hetauda municipality. It was established in 2033 B.S. to fulfill the fifth national periodic plans. The main objective of this industry was to substitute the import and fulfill 50% of the national demand but the industry meets about 30.88% supplying 123557.200 MT, National demands at 45.4% capacity utilization in fiscal year 2050/05. It was established under fully government ownership investing Rs. 206 millions. It produced only the ordinary Portland cement and is marketed by the company itself. The targeted market of the industry is nation wise.

#### 1.4 STATEMENT OF THE PROBLEM:

In spite of the continuity in the adoption of mixed economy in Nepal, the role of the public enterprise has been assuming considerably more and more significance in the socio-economic development process of the country. Public enterprises should contribute to the government revenue besides saving thetas own interest. But, they seem to have been established. Although there are many problems existing into the public enterprises in Nepal, the problem of profitability is common.

Every public enterprise, the main problems of enterprises is defective objective setting procedures. There is a big communication gap between top and lower employees. The other main problems of public enterprises are that they are failed to use latest technology and infrastructure. The present study will try to analyze and examine the profitability side of Hetauda cement industry. The present situation has indicated that profit has not been properly earned by HCIL. So, it is field that there should be serious study on present situation of this industry. On other hand, the present study will try to analyze and examine the profitability of HCIL. Without proper profitability, it will not just happened it should be managed. For this, effective supervision of labour and practical administration is necessary.

All this requires a periodical appraisal of the performance of weaknesses and taking corrective actions immediately. However, present study looks into the profitability performance of HCIL. The problem can be stated in terms of the following questions.

- i) Is the production efficiency of HCIL satisfactory?
- ii) Is the operating efficiency of HCIL satisfactory?
- iii) Is the overall efficiency of HCIL satisfactory?
- iv) Does the HCIL uses it's fixed assets efficiently?
- v) Does the HCIL use it's total assets efficiently?
- vi) Is the overall performance of HCIL from the view point of profitability and efficiency satisfactory?
- vii) Is the return on shareholder's capital employed of HCIL reasonable?
- viii) Is the earning per share of HCIL satisfactory?

#### 1.5 OBJECTIVE OF THE STUDY:

This study aims to see profitability objective of HCIL. The profitability objective refers not to maximum profit it can refers to efficient profit and efficient production of cement. Along with a foresaid objectives have been embodied in this study.

- i) To measure the production efficiency.
- ii) To gauge the operating efficiency.
- iii) Assessing the overall efficiency.
- iv) Evaluating the efficiency in utilization of Assets.
- v) Apprising the overall performance from the standpoint of profitability and efficiency and
- vi) Suggesting remedial measure when ever found necessary for the improvement in performance of the HCIL.

#### 1.6 NEED AND IMPORTANCE OF THE STUDY:

HCIL is a public enterprises which are suffering from poor performance and financial conditions which are not satisfactory. Most of

public enterprises are in loss. But profit is very essential for any enterprises so, it conversably contributes to improve the profitability as well as overall financial performance of an enterprises. It is also a vital instrument for maximizing production and minimizing cost.

This study help in decision-making, identifying weakness regarding financial administrative. It examine that effective of financial analysis as well as problems and prospected of financial policy. This study also helps HCIL to take necessary correction to improve financial health by exploring the environmental opportunities avoiding threats. Thus, it is most important to improve profit performance of PEs.

#### 1.7 <u>LIMITATION OF THE STUDY:</u>

In the field of every research, it has not get some significance as well as limitation too. Thus present study is limited only to profitability of HCIL. Thus research study is concern with profitability analysis which is generally not capable to give overall performance of an enterprise. The main limitations of the study are as follows:

- i) Limited time is available and the thesis will fulfill the partial requirement of the Masters of business studies.
- ii) The data have been based on at least eight years trend and data are analyzed performance of HCIL.
- iii) The study is more specific in profitability, its effectiveness, major problems faced by the enterprises and suggestion and recommendation for better improvement of HCIL.
- iv) It analyzes only few ratios like in relation to sales and return in relation to investment.
- v) The whole study is mainly based on secondary data and the major detailed on secondary data and major detailed information available from management of HCIL.

vi) The comprehensively an accuracy of the study is limited due to lack of sufficient data.

#### 1.8 ORGANIZATION OF THE STUDY:

The project study would be divided into the following five chapters:

#### 1) *INTRODUCTION:*

The first chapter is "Introduction" chapter. This chapter beings with general background of the study, brief introduction of companies, statemeth of problem, objective of the study, Need and importance of study, limitation of study and organization of study.

#### 2) REVIEW OF LITERATURE:

This chapter includes meaning and concepts of profitability, basis of profitability, tools of profitability analysis, review of related studies.

#### 3) RESEARCH METHODOLOGY:

The third chapter consists of Research design, study period covered, population and sample sources of data, data processing procedure and data analysis tools.

#### 4) PRESENTATION AND ANALYSIS:

The fourth chapter consists comparative profitability ratio with it's analysis.

#### 5) SUMMARY, CONCLUSION AND RECOMMENDATION:

The last chapter contains summary, conclusions and recommendation about the overall study.

#### **CHAPTER-II**

#### **REVIEW OF LITERATURE**

#### 2.1.1 MEANING AND CONCEPT OF PROFITABILITY:

It is unthinkable to conceive of a social order completely devoid to profit motive man has almost always been guided by self interest and accrual of profit to an individual or to an organization of individuals. The concepts of both profit and profitability have been vary baffling and controversial ever since their inception on the economic sense. Profit and profitability are two different concepts but they are closely interrelated and mutually interdependent. In fact, profit is an absolute measure and

profitability is a relative concept. In profitability analysis profit making ability of an enterprise or that of an industry is functional relationship of the profit margin with investment, or with sales volume that is regarded as a reliable measure of profitability. The main of a business is to earn profit and if we wish to know the efficiency of business we will have to calculate profitability.

Profit is an absolute figure alone does not give an exact idea of the adequacy or other wise of income or of changes in efficiency as shown by the financial performance of an enterprise. Specially, when problem of historical comparison over a number of years for one company or of horizontal comparison of a number of companies within the one industry group are confronted with the residual profit figures in absolute quantities may be confusing and difficult to interpret due to variations in the size of investments and the volume of sales etc. It, therefore, becomes necessary to relate profit figures either with the volume of sales or with the level of investment and derive quantitative relationship in the form of either ratios or percentages which serves as very important and useful tools in financial analysis. Ratios specially selected to measure the relative profit position of an enterprises are known as profitability.

What is profitability? Profit is the residue of income while profitability is the profit making ability of an enterprise. It devotes either constant or improved or declining state of such ability during a given period. Thus, profit is an relative concept. The term "Profitability", is a composite of two words profit and ability and signifies the capacity and power of a business concern to earn profits. In financial circles its precise connotation is 'earning capacity' or 'earning power' because in interpretation of financial statements of various business concerns today considerable importance and weight age is given to the measurement and evaluation of their current and prospective earning capacities. The

keenness with which both the internal and external users generally look at the financial statements of a business corporation reflects their interest in its reliable profits indices because they are regarded as true indicators of its business activity. This implies that while financial analysis is more external than internal, profitability analysis of the internal working and operation of a concern over sufficiency long period with a view to knowing profit trends, so that managements on the basis of these profit trends so, analsized, may evaluate their own economic performance and accomplishment at the individual profit countries within the organization.

Profitability analysis is external as well as internal because it helps the external users of accounting information via, stockholders, bankers creditors, numerous government agencies, in measuring its economic health of a concern by its net earnings. Profitability analysis is this one of the most significant aspects of financial appraisal of individual firms or industries. It provides and answer to a very important and basis question. How is business? Profitability analysis becomes all the more important when within a business there is an earning goal that helps to guide the behavior of managers and other employees. Even through public sector enterprises should work first and foremost for the country's good, they should not ignore the fact that they are under the necessity of Functioning efficiency and earning a monetary return i.e. profit. According to A.H. Taylor and H. shearing, "The profit motive remains on of the main springs of enterprise and spar to efficiency. It is clearly the destre to make profits which inspires the better organization and greater turnover profitability of a concern indicates its financial stability and trend to enhance the income earning capacity.

In connection with the profitability of a business enterprises a question arise: How can we measure profitability & management of profitability is of vital significance for a business enterprises because the

earning of the profit by it and its measurement in absolute accounting unit (in rupees) do not enable its management or owners to ascertain its exact standing vis-a-vis its competitors. Profit is a constantly changing phenomenon and is the end product of business activity based on many variables like volume of sales, prices and costs on the one hand and the size of capital investment on the other hand.

The concept of profitability as a relative measure also lays emphasis on the fact that profitability is a function of a number of variables which can be symbolically expressed as:

Profitability: f (I., S., Pr., Cts., T., Cty, Pmn., D., .....)

1. A.H. Taylor and H. Shearing, Financial and Cost Accounting for Management, (Los

1. A.H. Taylor and H. Shearing, <u>Financial and Cost Accounting for Management</u>, (London: Macdonald and Evans Ltd.), 1965, P. 170.

Where,

I = Investment and Instrument turnover

S = Sales volume

Pr = Prices

Cts = Cost

T = Technology

Cty = Capacity

Pmn = Profit margin

D = Dividend policy

The functional relationship indicates that in order to ascertain the degree of profitability of an enterprise, it is necessary to establish a quantitative relationship between profits on one hand and any of the above mentioned variables approach is that profit expressed in terms of absolute units of account by themselves does not give any idea about profitability of a business concern. When profit is shown as a percentage of sales, it is

known as profit margin. If profit is expressed as a percentage of investment. It is termed as return on investment.

Profitability as a relative measure may be positive or negative. Profitability is positive of business operations during a given accounting period result in creating a surplus thus adding to the worth of original investment. As opposed to this, if business operations result in a reduction of the owners original investment profitability will be negative for which it would be more appropriate to use the word "Un profitability". If allowed to persists it would gradually consume the funds originally committed to the business by the owners do not reveal any change during the accounting period (an eventuality which is most unlikely) profitability will zero, i.e. a state where there would be neither profit nor loss. However, in real business situation the possibility of there being no profit no loss to a going business concern cannot normally be conceived of business concern the business operations of the concern would result in either positive profit or negative profit (i.e. loss). Profitability is the best management guide to increase management efficiency. Relative profitability, despite its imperfections, is a pertinent concept for use in analyzing and expressing efficiency in the various fields of business activity of an enterprise.

#### 2.1.2 PURPOSE OF PROFITABILITY ANALYSIS:

The purpose of profitability measurement is to see whether an enterprise had effectively used its resources to achieve its profitability objectives. A profitability objective in this context measures not the maximum profit the business can produce but the maximum profit the business can produce. The minimum is the rate of profit required for the desired type o investment is a business enterprise. This means that there must not be only enough profit to yield the capital the market rate of return on money which is already sunk in business but also provide additional capital needed in order to cover the cost of staying in business.

#### 2.1.3 <u>LIMITATION OF PROFITABILITY ANALYSIS:</u>

Profitability analysis is related with profit earning ability of firm which is made to evaluate its financial performance but overall financial performance is not assured only by analyzing profitability. This, the main limitation of profitability analysis is that is not. Cable to present actual financial picture. It does not consider liquidity solvency and turnover aspect. The major limitation of this analysis can be listed as follows:

- 1) It is a part of financial analysis, which only evaluates profit ability so that overall financial performance cannot be assured.
- 2) It does not consider liquidity factor which plays major role in financial evaluation.
- 3) It does not consider solvency factor which shows the firm debt capital management that ensure financial strength and weakness.
- 4) It also not considers efficiency in consideration of assets management due to which financial efficiency is not liable.

#### 2.1.4 BASIS OF PROFITABILITY ANALYSIS:

Every analysis required basis for its analysis. Without such basis analysis cannot be performed. So, for profitability analysis also a basis is required. Profitability analysis is performed using financial statements. Financial statements are the basis of profitability analysis.

Financial statements refer that statement which systematically contains summarized information of the firm's financial affairs. These statements provide reliable financial information about economic resources and obligation of business enterprises. Financial statements contains summarized information of firms financial affaris organized systematically. They are meant to represent the firm financial situation to user.

The financial statements refer to the to summarized financial reports which the accountant prepares usually at the end of the fiscal year of an enterprise, they are the balance sheet or statement of financial position and the income statement or profit and loss accounts. The term financial statements used by itself without qualification usually refuse three principal statement of balance sheet, income statement, statement of changes in equity and an analyzing changes in the ownership accounts.

Financial statement is an accounting picture of the firms operations and financial position. Hampton viewed, "The Financial Statement is a financial report prepared for a given period of time. It is an organized collection of data, organized according to logical and consistent accounting procedures."

John N. Myer has more lucidly stated, "The financial statements provide a summary of accounts of a business enterprises, the balance sheet, reflecting the assets, liabilities and capital as of a certain date and the income statement showing the result of operations during a certain date and the income statement showing the result of operations during a certain period" Evidently, financial statement contains income statement and balance sheet.

Income statement is the statement that shows the result of trading and non-trading operations during a certain period of time, usually a year in condensed form. The income statement reflects the earning capacity and potential o the firm. It present the summary of revenue, expenses and net income or net loss of a firm for a certain period of time which measure the firms profitability, player viewed, "The income statement summarizes the operations of a business during a specific period of time and shows the result of such period o time and shows the result of such operations in the form of net income or net loss.

In this statement, revenue of a certain period are compared with the expenses, the difference being either net profit or net loss for the period. The income or net loss for the period. The income statement is an

important aspect of the common as it reflects the efficiency, with which the concerns is utilizing its resources to generate surplus.

- 3. John H. Hampton, <u>Financial Decision Making: Concepts and cases</u>, prentice Hall of India Pvt. Ltd., New Delhi 1977, P. 631
- 4. John N. Myer, Financial Statement Analysis, prentice Hall of India Pvt. Ltd., New Delhi, 1974, P. 3

However, the income statement may not be the true representative of the operational efficiency of the concern as, at times, it may consist the income statement occupies a significant place in portraying the result from the operation of business during a specific period of time.

Similarly, Balance-Sheet present the position of firm's assets, liabilities and equity at a particular date. In this connection pandey says, "The balance-sheet contains information about the resources and obligation of a business entity and about its owner's investment in a business at a particular point of time. In accounting language, the balance sheet communicates information about the assets, liabilities and owners' equity for a business firm as on a specific date. It provides a sand shot of the financial position of the firm's accounting period". A balance-sheet is a statement showing the nature and amounts of all assets owned at the close of fiscal period, the nature and amount of debts owned and the firm amount of the equity of the owner or owner's assets of the business.

Kennedy Viewed, "The balance sheet which reveals the financial position of a business as reflects by the accounting records, contains a list of assets, liabilities and net worth items as on given date."

#### 2.1.5 TOOLS OF PROFITABILITY ANALYSIS:

Various ratio of profitability are the major tools of profitability analysis. Ratio analysis provides such tools for making various analysis as well as profitability analysis. Ratio analysis stands for the process of determining and presenting the relationship of items and groups of items in the financial statements.

5. I.M. Pandey, <u>Financial Management</u>, sixth revise edition, Vikash Publishing House Pvt. Ltd. 1993, P. 26

Ratio analysis is a powerful tool of financial analysis which helps in identifying financial strength and weaknesses of business concerns. It is an important way to state meaningful relationship between components way to state meaningful relationship between components of financial statements. The primary purpose of ratios is to point out areas for further investigation. Ratio analysis has been a major tools used in the interpretation and evaluation of financial statements since late 1800. A widely used tool of financial analysis is ratio analysis. It refers to the numerical or quantities relationship between two items or variables. It is the expression of the relationship between two items either from balance sheet or from income statement or from both statements.

A ratio is defined as, "The indicated quotient of two mathematic expression" and as "the relationship between two or more things". A ratio helps to the researcher to make qualitative judgment about the firm's financial position and performance. Ratio analysis is an important way to state meaningful relationships between components of financial statements. Ratios are guides or shortcuts that are useful in operations of a company and in company them to previous year or to other business concerning. The term "Ratio refers to the numerical or quantitative relationship between two variables. The rational of ratio analysis lies in the fact that it makes related information comparable. A ratio is calculated by dividing one item of the relationship with the other"<sup>7</sup>.

<sup>6.</sup> Ralph Dale Kennedy, and Steweart Macmillan, <u>Financial Statement for Analysis and Interpretation</u>, Richard. D. Irwin Inc. Chicago, 1947, P.1

# 7. M.Y. Khan and P.L. Jain, <u>Financial Management</u>, Tata McGraw Hill Publishing Co. Ltd., New Delhi, Reprint 1990, P.117

The ratio analysis involves comparison for a useful interpretation of financial statements. Ratio is the quantitative relationship between items. A ratio is defined as the indicated quotient of two mathematical expressions and is the relationship between two ore more things. It is undertaken of various parties engaged such as trade creditors, debenture holders, investors and management in the firm according to their specific purpose. It is defined as a systematic use of ratio to interpret financial statement so that the Strength and weakness of a firm as well as its historical performance and current financial condition can be determined. The alternative methods of expressing items which are related to each other, which are for the purpose of financial analysis is called ratio analysis.

Financial analysis is used as an index or a yardstick for evaluation of the financial position and performance of firm. A Ratio analysis is a yardstick tool to evaluate the financial performance and condition of the firm.

The operational and financial problems of a business concern can be ascertained by examining the behavior of these ratios. Financial ratios help to make qualitative judgment. The objective of such ratio is to give financial performance. Ratio analysis is widely used but no one ratio gives the exact picture. In other hand, ratio by themselves are not conclusion, as they are only means and not an end. Ratio analysis is in conceivable that accounting data can be analyzed without transforming it into ratios.

Hence, a justification of financial ratios would also be an important justification of financial accounting.

Ratio analysis involves basic standards of comparison for a useful interpretation of the financial statements. A single ratio by itself does not indicate favorable or unfavorable condition of a firm unless it is compared to some appropriate standard. Selection of a proper standard of comparison is a most important element in ratio analysis.

Ratio analysis provides guides and clues especially in spotting trend towards better or poor performance, and in finding out significant deviation from any average or relatively applicable sandard.<sup>8</sup>

The four most common standards used in ratio analysis in financial management are: absolute, historical, horizontal and budgeted.

Different types of ratio are used in day today. Generally, four types of ratios are used in analyzing the financial position of a company. These are explained as follows:

#### 1. LIQUIDITY RATIOS:

Liquidity means the ability of a firm to meet its short term obligations and reflects the short-term financial strength/solvency of the enterprise. This ratio flashes our picture of the capacity of an enterprises to meet its short-term obligations out of its short-term resources. If the company is enable to meet its short-term obligations due to lack of sufficient liquidity, it will result in bad credit ratings, loss of creditor's confidence, so that much be a proper balance between the degrees of liquidity. High liquidity means as idle assets, and

<sup>8.</sup> James c. Harrigon, <u>Some Empirical Bases of financial Ratio Analysis: Accounting review</u>, <u>Vol. XL., XL, 1965, P. 568</u>

unnecessary tied up funds in current assets. Therefore, we can say that liquidity measures the ability of the business concern to meet its maturable obligations.

Liquidity refers to "Nearness to cash". The nearer an incensement is to cash the lower is its rate of return, the large size of current assets is associated with high liquidity and low profitability and viceversa. Inadequate liquidity may lead a business concern to delay payments, sell assets or obtain temporary financing an unfavorable terms.<sup>9</sup>

Liquidity ratio shows the relationship between current assets and current liabilities. Liquidity ratios measures the ability of the firm to meet its maturing obligations. Current ratio, acid-test ratio, cash velocity and inventory to net working capital are some of the important liquidity ratios.<sup>10</sup>

Different types of ratios have been used to measure the liquidity position of an enterprises which shows the relationship between current assets and current liabilities. High current assets over current liabilities are considered favorable. Current ratio and quick ratio are the most widely accepted liquidity ratios for general purpose. The commonly used ratios to measure liquidity position of the enterprises are current ratio and quick ratio, which are explained one by one.

<sup>9.</sup> Radhe Shyam Pradhan, <u>Public corporation of Nepal: A study of financial ratios</u>, National Book organization, New Delhi, P.P. 13-14.

<sup>10.</sup> C.R. Kothari, Quantitative Technique, New Delhi, Viaksh Publishing Pvt. Ltd., 1997, P. 488

Current ratio is the ratio signifying the relationship of current assets to current liabilities. It is essential to indicate firm's liquidity and short-term debt paying ability. Sometimes, it is called working capital ratio, current assets including cash and other assets, which can be converted into cash within one year period. The other assets include raw materials, inventory, marketable, securities, account receivables, debtors etc. Current liabilities include all short-term obligations which must be paid within one year. They are creditors, bills payable, accrued expenses, bank overdraft, provision for taxation, short-term debt etc.

Higher the current ratio, the larger the amount of rupees available per rupee of current liabilities, the more the firm's ability to meet current obligations and the greater the safety of funds of short-term creditors "Although their is no hard and fast rule conventionally a current ratio 2:1 is considered satisfactory".<sup>11</sup>

Quick ratio is the ratio of quick assets to current liabilities. The ratio is a better test of financial strength than the current ratio as it gives no consideration to inventory, which may be very slow moving. The quick ratio is derived by dividing the total of the quick assets include all current assets except inventory and prepaid expenses which can be converted into cash immediately without loosing a value. A quick ratio of 1:1 has usually been considered favorable. But the standard for the quick ratio varies from company to company.

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#### 11. M.Y. Khan and P.K. Jain, Op.Cit., P.121

#### 2. LEVERAGE/CAPTIAL STRUCTURE RATIONS:

Leverage or capital structure ratios are also known as long-term solvency ratios. These ratios helps to measure the financial contributions of owners and creditors comparatively. These ratios indicate the situation of the capital structure which is calculated to measure the company's ability of using debt for the benefits of shareholders. The leverage ratios shows how much of an enterprise's fund are financed by debt and equity and examine the prospects for the future financing. Also, leverage ratios are used to measure the firm's ability to meet long-term obligation. Generally, assets of the firms are financed both by equity and debt.

Therefore, in every business concern, there should be an appropriate mix of debt and owner's equity in financing the firm's assets.

"Leverage ratios are calculated to measure the financial risk and the firm's ability of using debt for the benefits of shareholders." Leverage ratios are calculated from the balance sheet item and also from the income statements, which are useful to find out operating profit. It is useful to find out whether an enterprises is successful to cover the fixed charges or not.

The leverage or capital structure ratio may be defined as financial ratios which throw light on the long-term creditors forward to (1) periodic payment of interest during the period of loan and (2) repayment of principal on maturity or in

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#### 12. I.M. Pandey. Op.Cit., P. 508

installments at due dates. We can say that this ratio shows the share of financing by owners and creditors which is very essential for long-term solvency. At last in conclusion, it can be said that the firms with high leverage ratios run the risk of longer losses but also have a change of gaining high return and vice-visa. Leverage ratios indicate whether or not the firm's revenue can support interest and other fixed charges, as well as whether or not there are sufficient assets to pay of the debt if firm liquidates. It indicates following ratios:

- (1) Debt-equity ratio
- (2) Debt to total capital ratio
- (3) Debt to debt worth ratio
- (4) Interest coverage ratio

#### 3. ACTIVITY OR TURNOVER RATIO:

An activity ratio may be defined as a test of relationship between sales and the various assets of a firm. Depending upon the various assets there are various types of activity ratio. In other words, the activity ratio represents the intensity with which the firm uses its assets in generating sales. It is related with measuring the efficiency in assets management as well as of the effectiveness of the investment of resources in the business firm. In the words of Scall and Haley's, "Activity ratio indicates how effectively the company is using its assets." <sup>13</sup>

The activity ratio measures the two different types of efficiency like investments efficiency and operating efficiency. Activity ratio are concerned with measuring the efficiency in operation as well as assets management. So, it is also known as efficiency ratio.

<sup>13.</sup> L.D. Scall and C.W. Haley, <u>Introduction to Financial Management</u>, McGraw Hill, New Delhi, Third Edition P. 409

Activity ratio is used to measure the speed with which various accounts are converted into sales or cash. The efficiency with which the assets are used would be reflected in the speed and rapidity with which assets are converted into sales. The greater the rate of turnover or conversion, the more efficient the utilization or management.

Activity ratios involve a relationship between sales and various assets, and presume that exist an appropriate balance between sales and presume that there exists an appropriate balance between sales and various assets like inventories, receivable, fixed assets, total assets etc. Inventory turnover ratio, capital employed turnover ratio, debtors turnover ratio, total assets turnover ratio, average collection period etc. are the more important and widely used activity ratio.

#### 4. PROFITABILITY RATIOS:

Profit is essential to survive in any business firm for its successful operation and future expansion and growth. Profitability is a measure of efficiency and the search for it provides an incentive to achieve efficiency<sup>14</sup>. The ratios measures overall efficiency of management as the return generated on sale and investment. It is also a control measure of the earning power of a firm as well as operating efficiency.

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#### 14. M.Y. Khan and P.L. Jain, Op.Cit., P. 98

Profitability ratios are designed to provide answer to such as (1) is the profit to earn by the firm adequate (2) What rate of return does it represent? (3) What is the rate of profit for various divisions and segment of the firm? (4) What are the earnings per share? (5) What amount was paid in dividends? (6) What is the rate of return to equity shareholder's? So on.

Profitability ratios essentially relate to the profit earned by a firm during a particular period to various parameters like sales, shareholder's equity, and capital employed and total assets. In this regard Weston and Brigham say, "Profitability is net result of a large number of policies and decisions. The ratios examined thus for reveal some interesting things about the way the firm operates but the profitability ratio given final answer about how effectively the firm is being managed." <sup>15</sup>

The profitability ratios are calculated to measure the operating efficiency of the company. Besides management, creditors and owner of the company are also interested in the profitability ratio of the firm. According to Van Horne, "profitability ratio are of two types those showing profitability in relation to relation to investment. Together these ratios indicates the firm's efficiency of operation" <sup>16</sup>. The ratio can be determined on the basis either of sales or investment. The more important profitability ratios in relation to sales are gross profit margin,

net profit margin and operation ratio. Similarly, the more important profitability ratios in relation to investment are return on fixed assets, return on assets, return on assets, return on shareholders equity and return on capital employed.

Above described are the various aspects of ratio analysis which are employed to measure overall financial performance of firm. In this

<sup>15.</sup> J. F red Weston and Eugene F. Brighman, <u>Managerial Finance</u>, Seventh Edition, The Dryden press, Hinsdale Illinois, 1981, P. 145

<sup>16.</sup> James C. Van Horne, <u>Financial Management and Policy</u>, Prentice Hall of India Pvt. Ltd., New Delhi, 1976, P. 771

study emphasis is given on profitability analysis so, only profitability ratios are further analyzed to evaluate its profit performance. Thus, the major tools of profitability analysis are profitability ratios.

#### 2.1.6 GROSS PROFIT MARGIN RATIO:

This ratio expresses the relationship of profit to net sales. The gross profit is the different between net sales and costs of sales. Anil B. Roy chaudhary observes; "This ratio is of vital importance for ganging business results" The importance of this ratio lies in the fact that it is widely accepted as a device for testing the adequacy of selling prices and efficiency of stock control, particularly in wholesale and retail trading concerns. Schell and Halley remark that, "The gross profit margin reflects the effectiveness of pricing policy and production efficiency, i.e. how well the purchase of production cost of goods is contolled" 18.

Gross profit margin indicates the percentage of profit after cost of production. This ratio is a measure of productive efficiency. Gross profit is the result of the relationship between prices, sales volume and costs. If gross profit margin falls dawn the cost of production increases or sales volume decreases. The gross profit margin ratio reflects the efficiency of management to produce at relatively cost nature . This ratio indicates the

<sup>17.</sup> Anil B. Roy Chaudhary, <u>Analysis and Interpretation of Financial Statement through</u>
<u>Financial Ratios</u>, Orient Longman, New Delhi, 1970, P.41

<sup>18.</sup> Lawrence D. Scall and Charles W. Haley, Op.Cit., P. 409

average speed between the costs of goods and sales revenue. A high gross profit margin is a sign of good management.

The percentage relationship between gross profit and sales is gross profit margin ratio. Gross profit means the excess amount of sales over cost of goods sold. The ratio measure the efficiency of production management, size of gross profit depending upon cost price and sales volume. This ratio tells is the profit of the firm relatives to sales after we deduct the cost of producing the goods sold. It indicates the efficiency of operation as well as how products are priced. so, gross profit margin is the result of relationship between cost rice and sales volume.

One of the most common ratios in operational analysis is the calculation of gross profit as a percentage of net sales. A firm should have a reasonable gross profit margin to ensure adequate coverage for operating expenses of the firm and sufficient return to the owners of the business. Gross profit ratio expresses the relationship between gross profit and sales and is usually expressed in percentage. The gross profit should be adequate to cover operating expenses and to provide fixed charges, to pay dividend and built reserves.

There is no norm of judging the gross profit ratio and, therefore, evaluation is a matter of judgment. The gross profit should be adequate to cover operating expenses and to provide for fixed charges, dividends and building up of reserves. A low gross profit ratio will suggest decline in business, which may be due to insufficient sales, higher cost of production or all round insufficient management. A high gross profit margin is a sign of good management. Gross profit ratio is calculated as follows:

$$Gross \ profit \ margin = \frac{Gross \ Profit}{Net \ Sales} \ \ x \ 100$$

This ratio indicates the degree to which the selling price of goods per unit may decline without resulting in losses from operations to the firm. "A high gross profit ratio to sales is a sign of good management as it implies that the cost of production of the firm is relatively low. A relatively low gross profit ratio is definitely a danger signal, requiring a careful and detail analysis of the factors responsible" <sup>19</sup>.

#### **2.1.7 NET PROFIT MARGIN RATIO:**

Net profit margin ratio is a good indicator of the efficiency of a firm. As pointed out by Van Horne, "This ratio tells us the relative efficiency of the firm after taking into account all expenses and income taxes, but not extraordinary charges" 20.

This ratio measures the overall profitability of the firm by establishing relationship between net profit and sales. The relationship between net profit and sales indicates management's ability to operate the business with sufficient success not only to recover the cost of production, operating expresses of business and cost of borrowed fund but also to leave a margin of reasonable compensation to the owners for providing their capital at risk.

Net profit margin ratio is the overall measure of the firm's ability to turn each rupee sales into net profit. It is very useful to the proprietors and prospective investors because it reveals the overall profitability of the concern. It would really be difficult for low net margin to withstand these adversities. Similarly, a firm with high net margin can make better use of favorable condition by raising sales prices or reducing cost of production or increasing demand for the product. Such a firm will be able to

<sup>19.</sup> James C. Van Home, Op.Cit., P. 766

<sup>20.</sup> James C. Van Home, Op.Cit., P. 726

accelerate its profits at a faster rate than a firm with a low net profit margin.

Net profit margin ratio (in percentage) is calculated by dividing the amount of net surplus by the amount of operating revenue, multiplied by 100. The formula for calculating the ratio is:

$$Net\ Profit\ Margin\ Ratio = \frac{Net\ Profit}{Net\ Sales} \ x\ 100$$

A high ratio indicates a low margin of safety because in such a situation it becomes to meet all operating expenses when the operating revenue s tarts falling slightly. A low ratio indicates that a concern is earning reasonable profits over a high sales turnover, resulting into a higher net profit volume.

Net profit margin ratio is widely used as a measure of overall profitability and is very useful to proprietors. This ratio in conjunction with the operating ratio. throws light on the importance of a company's non-operating activities. Net profit margin indicates margin of compensation left to the owners for providing their capital, after all expenses have been meet. It helps in determining the efficiency with which the affairs of the business are being managed. A high net profit margin would enable the firm to withstand adverse economic condition and a low margin will have opposite implication.

#### 2.1.8 **OPERATING RATIO:**

Operating ratio try to establish relation between operating cost and net sales. Operating cost includes: (a) cost of goods sold, and (b) operating expenses includes administrative expenses, selling and distribution expenses, interest on short-term loan, discount allowed and bad debts. Net sales equals of sales minus sales returns.<sup>21</sup> The ratio is computed as follows:

$$Operating \ ratio = \frac{Operating \ Cost}{Net \ Sales} \quad x \ 100$$

Operating ratio indicates an average operating cost incurred on a sales of goods worth Rs. 100. Lower the ratio, higher is the operating profit available to cover the non-operating expenses to pay dividend, and to create reserve and vice-versa. The ratio is calculated to determine the operational efficiency and expressed as a percentage.

#### 2.1.9 <u>RETURN ON ASSETS (ROA):</u>

It measures the productivity of the assets. It is measured in terms or relationship between net profit and assets. The income figures used in computing this ratio should be operating income.

Return on assets ratio measures the net profit after t ax against the amount investment in total assets. According to Van Horne, "When we multiply the assets turnover of the firm by the net profit margin, we obtain the return on assets." The ratio is calculated to measure the profit after tax against the amount invested in total assets to as certain whether assets are being utilized properly or not.

It equals net profit after tax divided by total assets and multiplied by 100. It is calculated applying the following formula:

Return on Assets (ROA) = 
$$\frac{Net \ profit \ after \ tax}{Total \ Assets} \times 100$$

The ratio judge the effectiveness in using the total fund supplied by the owners and creditors. Higher ratio shows the higher return on the

<sup>21.</sup> S.P. Munan Karmi, <u>Managemeth Accounting</u>, Buddha Academic Publishers and Distributors Pvt. Ltd., Kathmandu, 2002, P. 478

<sup>22.</sup> James C. Van Horn, Op.Cit., P. 772

assets used in business thereby indicating effectiveness of resources available and vice-versa.

## 2.1.10 RETURN ON CAPITAL EMPLOYED (ROCE):

The main interest of proprietors is to earn a attractive profit that is to receive satisfactory return on their investment. Shareholders measures the success or failure of a company in terms of profit related to capital employed. Return of capital employed is an important tool for management as it helps in decision-making and in establishing control mechanism.

The term capital employed means the value of assets which are effectively used by a concern and which contributes earnings of that concern during a year. So the value of those idle and factious assets is excluded while arriving at the amount of capital employed.

The term 'capital employed' in a business has been described in a number of ways: 'gross capital employed', 'net capital employed', and 'proprietors net capital employed.'

Gross capital employed usually comprises the total assets of the business while net capital employed consists of total assets of the business less current liabilities. Properties net capital employed can be obtained by deducting all current and long-term liabilities from the total assets. In other words, the proprietors' net capital employed consists of paid-up capital plus reserve and surplus belonging to shareholder's.

The profitability of a concern depends upon two factors: (1) rapidity of turnover of the capital employed, and (2) the operating profit margin. Profitability is the product of these two factors. Return on capital employed is calculated to assess the overall profitability of a concern.

The ratio measures the relationship between capital employed and net profit after tax. This ratio indicates low well the management has used the fund supplied by owners and creditors. Higher ratio indicates the efficient use of fund entrusted to the firm by creditors and owners.<sup>23</sup>

Return on capital employed is an indicator of the meaning capacity of the capital employed in the business. Profit is related to the total capital employed, in general sense, and refers to long-term funds supplied by the creditors and owners of the firm. This ratio because it considered to be the most important ratio because it reflects the overall efficiency with which capital is used. It is helpful to show well the management has used funds supplied by different parties and firm itself. This ratio can be calculated by using the following formula:

Return on capital employed = 
$$\frac{Net\ profit\ after\ tax}{Capital\ Employed} \times 100$$

This ratio shows how efficiently the management has used the available resources supplied by owners and creditors. Higher ratio of percentage shows efficient utilization of fund and vice-versa.

#### 23. S.P. Munan Karmi, Op.Cit., P. 479

## 2.1.11 RETURN ON SHAREHOLDERS EQUITY:

The amount earned on the shareholders equity or investment is called return on shareholders equity. Return on shareholders investment is considered an important indication of a company's profitability because it indicates how well the company is doing with the investment contributed by its shareholder or owners. In the words of Robert N. Anthony and James S. Reece, "Return on shareholder investment reflects how much the firm has earned on the funds invested by the shareholders. <sup>24</sup>

The term owner's equity or shareholders investment includes capital contribution and all reserve. According to Manmohan and Goyal, "Return on shareholders investment, also called return on proprietor's funds in the ratio of net profit to proprietor's funds as shows by the balance sheet which are the same as total assets less liabilities". Favorable and unfavorable results mean the efficiency of management.

The ratio of return on owner's equity is a valuable measure for judging the profitability of an organization. This ratio helps the shareholders of a corporation to know the return on investment in term of profits. Shareholders are always interested in knowing as to what return they earn on their invested capital. K. Jr. H. Clifton and wachtl P. Richard observe, "The return on equity related net income to stockholder equity"<sup>25</sup>.

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25. Krepo Jr. H. Clifton and Wacht F. Richard, <u>Financial Administration</u>, The Dryden Press, Hinsdale Illinois 1975. P.45

They further point out that the ratio of return on owners equity is most significant when the book value of net worth is close to the market value of the stock since net capital is raided at market prices rather than at book value and firms are usually judged on their earning performance relative to the market price of their stock.

Return on shareholders equity indicates the profitableness of the owner's investments. This is the most commonly used ratio for measuring the return on owner's investment and calculated as follows:

$$Rose = \frac{Net \ profit \ after \ tax}{Total \ Shareholder's \ equity} \ x \ 100$$

<sup>24.</sup> Robert N. Anthony and James S. Reece, Op.Cit., P. 346

This ratio reveals how profitably the owners fund have been utilized by the firm. Higher ratio or percentage reveals the efficient use of owner's investment and vice-versa.

## 2.1.12 RETURN ON COMMON SHAREHOLDERS EQUITY:

The equity shareholders assume the maximum risk and have the highest stake in a company. In their case, the rate of dividend is into suitable. They are the real owners of the company as such the performance of the company's operations is judged on the basis of equity capital earnings.

Existing and prospective shareholders have much interest in this ratio because it shows the percentage of earned profit to the equity (shareholder's fund) and the profit earning capacity of a concern. Specially, it helps in making a comparison between earning capacity of two concerns. For shareholders' it is profitable and favorable to make more investment in a concern. Specially, it helps in making comparison between earnings capacity of two concerns. For shareholders, it is profitable and favorable to make investment in a concern in which this ratio is higher. Thus, this ratio is very necessary for making an overall analysis of profitability of concern.

Preference share dividend has been deducted from the net profit and the residual net profit has been taken into consideration while calculating this return. Reserve and surplus and the total of actual paid-up amount or equity share capital have been added of up and miscellaneous expenditure if any has been deducted.

The ratio of return on common shareholder equity can be expressed in the following form:

$$ROCSE = \frac{Net\ profit\ after\ tax-Preference\ dividend}{Equity\ Share\ holder's\ fund} \quad x\ 100$$

Higher the ratio, better the management. Thus, higher return on common shareholders equity is preferable.

## 2.1.13 EARNING PER SHARE (EPS):

A part from the rate of return, the profitability of a firm from the point of view of the ordinary shareholders is the earning per share basic i.e., the amount that they can get on each share held. In other words, this ratio measured the earning available to an equity shareholder on a per share basis. The objective of computing this ratio is to measure the profitability of the firm on per equity share basis. There are two component of this ratio which are: (1) Net profit after preference divided and (2) Number of equity shares outstanding. This ratio is computed by dividing the net profit after preference dividend by the number of equity share outstanding.

In the words of A. Tom Nelson, "Investment circle often quote earning per share as a measure of profitableness of the ordinary shareholder investment. It has become one of the most important measures by which outsiders evaluate performance of managements." <sup>26</sup>

Earning per share is considered one of the msot important indicator of profitability because it can easily be compared with pervious earning per share figures and with those of other companies and investors finds it convenient to compare the amount earned for a single share of stock Hampton, John J. observes that, "Earning per share is arrived at by dividing the earning available to the equity or common shareholder by the number of outstanding share. However, the shareholder by the number of outstanding share. However, the share authorized but not used or

authorized issued and repurchased (treasury stocks), are omitted form the calculation."<sup>27</sup>

To interpret, this ratio properly requires a good understanding of how primary and fully diluted earning per share are calculated. It is expressed as absolute figures. In the form of formula, this ratio may be expressed as under figures. In the form of formula, this ratio may be expressed as under.

$$EPS = \frac{Net\ profit\ after\ tax-Preference\ dividend}{No.\ of\ Equity\ Share\ Outstanding}$$

In general, higher the figure better it is and vice-verse. While calculating the EPS, retained earning should not be considered. i.e. only the earning of the year should be considered.

# 2.1.14 <u>DIVIDEND PER SHARE (DPS):</u>

Net profit after taxes belong to the shareholder. And net profit after preference will be the earning available to the common shareholders. But, it is not necessary that dividend per share must be equal with the earning per share. The amount of earning distributed and paid as cash dividend is considered for calculating the dividend per share. The objective of computing this ratio is to measure the profitability of the firm on dividend per equity share basis. There are two components of this ratio which are as under: (1) amount of earning distributed as dividends and (2) Number of common share outstanding. This ratio is computed by dividing the amount of dividend distributed to shareholders outstanding. In the form of formula, this ratio may be expressed as under:

<sup>26.</sup> A Tom Nelson, <u>Modern Management Accounting</u>, Good Year Publishing Company, California, P. 59

<sup>27.</sup> John J. Hampton, Op.Cit., P. 107

DPS =

In general, higher the figure better it is and vice cerse, Dividend per share may not be equal to the earning per share. If earning is not sufficient, retained profit may be used to distribute the dividend.<sup>28</sup>

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28. S.P. Munan Karmi, Op.Cit., P. 483

## 2.1.15 COMMON SIZE INCOME STATEMENT:

Common-size income statements provide a quick and effective measure for developing a system of very useful financial ratios. In common size profit and loss statement various parts compared with the whole that is the total income of disposition. Common size ratio helps in comparison of income statements prepared on different dates and in judging the profitability of a business concern and are also uses for revenue, cost and expenses study.

In the present study, common size income statement has been applied in analysis of the income statement. In these techniques, sales figure is assumed 100 percent and all other items are express as percentage of sales. These percentage figures clearly bring out the relative significance of each group of items in the aggregate of the firm.

In the common size income statement, the various parts are compared with the whole as in case of common size balance-sheet that is the total income from sales is divided into its forms of position"<sup>29</sup>

# 2.2 REVIEW OF SOME REALTED RESEARCH STUDIES:

Every research requires clear-cut ideas about the problem of study and its solution, which emerges from the review of literature. Scientific research must be added on past knowledge. The pervious studies cannot be ignored because they provide the foundation to the present study.

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#### 29. John N. Myer, Op.Cit. P. 140

The present chapter reviews the existing literature in related area of the research study. This review provides a comparative perspective to evaluate and interpret the significance of one's findings. Literature relating to manufacturing PEs and profitability are review. Limited resources and time at the disposal of the researcher had not been allowed a much more extensive reviewed of the related research.

The thesis entitled "A financial analysis of manufacturing PEs in Nepal: A case study of Hetauda cement industries limited" was undertaking by kapil subedee and submitted at December 1996. It analyzed five year's financial statements from 2046/47 to 2051.52. This study was based on secondary data as well as primary data. Kapil subedee used the trend analysis, fund flow analysis and ratio analysis as tools for analysis in the study.

The demand of the Hetauda cement industry is high but supply side of HCIL is low and capacity utilization is also under 50 percent so that is would have suffered from heavy losses. It is going on heavy loss year by year. In such situation of HCIL, subedee highlights a question. "How can the industry be saved from the shortage of funds?" as statement of the problem.

To examine the financial position, to assets the financial strength and weakness, to perform trend analysis of financial management of HCIL and to recommend measure for the financial management of the industries and to make suitable recommendation to the government PEs and future researches based on the data are objectives of the study. Following are the major findings of the study.

- 1) Current ratio shows the unfavorable condition of the short term solvency and quick ratio is highly unfavorable because of nominal quick current assets but the trend of both the ratio are satisfactory.
- 2) Long term debts to net worth ratio, debts to capital employed ratio and total debts to equity ratio are normally higher but the trend of these ratio are satisfactory.
- The interest coverage ratio, inventory turnover ratio, fixed assets turnover ratio, capital employed turnover ratio and debtor's turnover ratio are unfavorable and unsatisfactory. The trend of these ratios is also not practicable and satisfactory. But the trend of capital employed turnover ratio is improving from fiscal year 2049/50 and 2051/52.
- 4) Gross profit margin, net profit margin and operating profit ratios are unsatisfactory and unfavorable except in the fiscal year 2048/49. The trend of gross profit margin is satisfactory but the trend of net

<sup>30.</sup> Kapil Subedee, "A Financial Analysis of Manufacturing Public Enterprises in Nepal: A cash study of Hetauda Cement Industries Limited", Unpublished Master Degree Dissertation, 1996

- profit margin and operating profit ratio are unsatisfactory and not practicable.
- Return on total assets ratio, return on capital employed ratio and return on shareholder equity ratio are unsatisfactory because the returns are always negative except in the fiscal year 2048/49. The trend of that is also highly unfavorable and fluctuated over research period but return on shareholder equity is slightly improved from the fiscal year 2048/49 against before the time.
- 6) Working capital has not taken a particular trend increase.
- 7) The decreasing and increasing rate of gross sales is lower against total deduction into their proportion. Net sales, cost taken positive trend.
- 8) The relationship between sales and inventory is not positive and there is substantial gap between actual and target sales and production. It means that the management of HCIL has not been successful to operate smoothly its full capacity. So, HCIL has been suffered from before establishment because it took long period to be well established as compared estimated time.

The thesis entitled "profitability: A case study was performed by D r. M.R. Kedia in relation to research study on tooth paste industry of India.

Dr. M.R. Kedia has tried to highlight the research work on the topic of profitability in tooth paste industry of India. He has taken four industries to analyze their comparative profitability and profitability of industry as a whole. Industry under study are the Balsara, the Colgate, the Hindustan Ciba and Hindustan Level.

His study has been divided into two parts. In parts A, common size profit and loss statements have been used and in parts B various rations relating to profitability have been discussed.

Five years common-size income statement from 1981/084 to 1085/086 of four companies like the Balsara, the Colgate, the Hindustan Ciba and Hindustan level is presented. As per common-size income statement, the net income trend of Colgate Palmolive is more consistent and better. As in base in 1981/82, it is 5.25 percent and flows in the same level which reaches 584 percent in year 1985/86.

Similarly, the trend of Balsara Hygine product flows from 4.16 percent of net income in year 1981/1982 to 3.89 percent in year 1985/86. The trend of Hindustan level net income flows from 3.93 percent to 3.23 percent. Finally, the trend of Hindustan Ciba flows from 0.35 percent to 4.532 which are shown by common-size income statement presented by Dr. M.R. Kedia.

In addition to make final conclusion, Dr. Kedia has used various profitability ratios like gross profit margin ratio, net profit margin ratio, return on capital employed, and return on owner's equity capital. Following are the major finding of the profitability study:

- The gross profit margin trend of Colgate Palmoive is hihgly greater than industry average and its' trend is very consistent. Further, Balsara's gross profit trend is almost approaching to industry average under study period. Hindustan level trend in almost approaching to average. And the gross profit trend of Hindustan Ciba is below the industry average. On the basis of Gross profit margin Colgate in first ranker than Balsara, third ranker Hindustan lever and last Hindustan Ciba. The gross profit trend of each manufacturing company is almost satisfactory.
- 2) The net profit margin trend of these four companies is also very consistent except the Hindustan Ciba. Even through net profit margin of this company are satisfactory as three ratio approaches to industry average.

- 3) The return on capital employed of Colgate Palmolive is very high from industry average and other are approaching to industrial average which seems to be better.
- 4) The return on owner's equity of Colgate is very consistent thought out the period and above industries average. Other are approaching to the average which seems to be satisfactory but the return trend of Balsara is more variable thought out the period.
- 5) The return on equity capital shows very consistent. The trend of Colgate Palmolive starts from 91.60 and flows to 93 Percent under study period. The other trends is also satisfactory.

The final conclusion drawn by Dr. M.R. Kedia from all angles, the position of the Colgate was on top followed by Balsara. The position of the Hindustan level can be ranked third while the Hindustan Ciba can be ranked last.

The thesis entitled "profitability of unit Trust of India" was undertaking of J.K. Sharma in relation to research study on unit trust of India from year 1975/1986 o 1984/1985?

- Mr. J.K. Sharma has tried to focus research work on the profitability of unit trust of India. He argued in confederating of profitability of company with weather which are presented as follows:
- I) Firstly, the state of profitability is a variable phenomenon like the weather of a day. The weather can change or will change according to in humidity and temperature and other relevant factors. Similarly, profitability will change owing to change in its determinants.
- II) Secondly, the study of weather on particular days makes is possible to forecast the weather on the following day. In the same manner, analytical study of profitability in a concern or business, in other words scientific study of the current trend of its profitability

- provides us with the base to forecast possible future trends of profitability.
- III) Thirdly, the study of the determinants of profitability by an accounting/financial adviser/analyst can be also be likened to temperature reading and study of humidity by a meteorologist.

In his study the profitability of the unit Trust of India has been examined with reference to (i) rate of return (ii) Capital appreciation (iii) rates of dividends and (iv) expenses ratio. Following are the major finding of the study.

- 1) The rate of return of the unit trust of India in base year 1975/1976 is 8.5 percent and the trend of return is continuously increasing which approaches to 12.8% in year 1984/85. It is show unsatisfactory profitability.
- 2) The rate dividend trend is also in increasing trend under study.
- The operating ratio of the unit trust of India in base year 1975/1976 is 1.04 and its trend is continuously decreasing which approaches to 0.52 percent in year 1984/1985. It seems to be unsatisfactory level result in better profitability of unit trust.
- 4) Capital appreciation revealed in low in comparison with reserve bank of India. The reason presented is that Reserve Bank of India covers only equity Share where as the unit trust of India covers all type of securities. In view so the primary purpose of fulfilling the basis objectives of the units funds are invested in various types of security of new company which may be the probable reason for such low rates of capital appreciation.

Final conclusion presented by Mr. J.K. Sharma as, the Unit trust of India has undoubtedly emerged as an important institution, holders of corporate securities. However, the analysis of its profitability suggest that its record of performance leaves much to be desire. Its real rates of return

simple and overall have not only been low and unprogressive but have also not recorded any significant increase over the year, the concessions and subsidies from Government not withstanding. The conservative and over cautions investment policy in terms of over reliance on senior securities having a fixed rate of return seems to be the reason fro the unfavorable and low rate of profitability. The rates of dividends paid to the unit holders are not satisfactory as regards capital appreciation; the unit trust of India does not offer much capital appreciation to the investors.

The thesis entitled "Profitability Analysis: A case study of instrumentation Ltd. is research forwarded by Mr. Ashok Kumar Gupta on profitability of instrumentation India limited manufacturer of electronic instruments, pneumatic instruments, panel enunciators, control valves and allied items, Gas analyzers steel plants etc.

The objective of his study was to access profit performance of Instrumentation Ltd. for which Mr. Gupta used various tools like return on investment, return on shareholder investment, return on equity capital, earning per share etc. He has taken five years 1980/1981 to 1984/1985. The major finding of the study can be presented as follows:

- 1) The gross profit in relation to capital employed should a rising tend throughout the study period except 1984/1985. Capital employed shows a rising trends throughout the study period.
- The total assets of the company shows an increasing trend throughout the study period. The ratio of net profit after interest and tax on total tassets shows ups and down. The highest ratio was 1.89 percent in 1980/1981 and 1981/1982. In 1984/1985 this ratio was 1.46 percent. The company has received a good percentage of net profit on total assets.

- 3) Shareholders fund shows an increasing trend. Return on shareholders investment ratio shows fluctuations during the study under review. In 1980/1981 it was 9.80 percent and the highest percentage of this ratio was 10.14 percent in 1981/1982. In 1984/1985 it was 7.01 percent. This rate shows a sound and good position of the company.
- 4) The net profit after tax to total revenue ratio of Instrumentation limited showed a decreasing trend up to 1982/1983. In 1984/1985 it was 1.98 percent in 1980/1981. The company was not earning a good amount of profit in the face of total revenue. The company should try to increase this ratio. The net profit before interest and tax and depreciation to total revenue shows a fluctuating trend during the period under review. Position of this ratio was not so must good but it was satisfactory level.

Mr. Ashok Kumar Gupta finally concluded after the whole study as the performance of the company was good and management was efficient. The company was earning a good amount of profit and paying a good rate of return to investors. The was an indications of good profitability of Instrumentation limited.

The thesis entitled "profit planning and control in Manufacturing public enterprises: A case study in HCIL" is the undertaking of Miss Pramita Dangol starting from fiscal year 2051/052 to fiscal year 2051/056. The presentation and analysis of data is admirable. She has briefly presented the long-range and short-range data and she has described about the weakness as well as conclusion very well. She has used secondary data from unpublished documents, magazines and reports of auditor's general office and primary data collected from the personal interview.

Miss Pratima Dangol in her research report withdrawn following conclusion:

1. Hetauda Cement Industry Ltd. has no in depth analysis of company's strength and weakness. She highlights following strength and weakness of HCIL.

#### **Strength:**

- Experienced staffs.
- F High quality products.
- Local raw material.
- Employment opportunities.
- Increasing demand of the cement.

#### Weakness:

- Lack of autonomy.
- Raw Material, packing material and spare parts are not available in time due to various reasons.
- Either lack of capital or not fully capacity utilization of production.
- Lack of high grade limestone.
- Objectives of Nepalese Public enterprises are not clear. Conflict between social objectives and profit objectives all hindering to profit planning program to increase profitability but these enterprises have a number of social objectives.
- 3) HCIL have not set the program to maintain on optimum enterprises environment that maximize the interest and motivation of all employees.
- 4) HCIL has been suffering from the department and staff conflict, due to lack of defining the line and staff responsibility clearly, due to lack of defining the line and staff responsibility clearly, due to manager personal ego.
- 5) Due to lack of budgeting experts and skilled planners, plans are formulated on traditional adhoc basis.

- 6) HCIL have not any statement of specific goals about research and development, factory productivity, capacity utilization and control.
- 7) Planning department of HCIL has no adequate authority to decide and create new ideas to formulate various plans.
- 8) Pricing system of Nepalese public enterprises is not scientific. PEs adopts traditional pricing methods usually cost plus pricing methods applied to determine price. Certain products are period below costs as per Nepal government circular.
- 9) HCIL have not a proactive of systematic forecasting. Sales forecasts are made with precious sales figure and production capacity. This shortcoming is due to lack of skilled experts.
- 10) Theoretically, Production plan should be based on sales plan. But dye to the production oriented economy, Nepalese public enterprises does not consider sales plan to develop the production plan. There is no proper co-ordination between sales, inventories and production.
- 11) There is no any systematic and effective practice of profit planning so, it is required to have a good knowledge about the concept of comprehensive profit planning and control then they should equally implement this concept in real practice.

The thesis entitled "A financial analysis of manufacturing public enterprises in Nepal: A case study of Udayapur Cement Industries Limited" was undertaking of Bhes Prasad Bhurtel and submitted on December 2000. It analyzed six year financial statement from 2050/51 to 2055/56 B.S.. This thesis is based on primary as well as secondary data. It analyzed the financial performance of Udaypur cement industries. Analysis was made using tools like ratio analysis, trend analysis, funds flow analysis etc.

Financial efficiency of Nepalese PEs has not been satisfactory in accomplishing on the basis relating to generating profit. Udaypur cement Industries limited (UCIL) is also one of the manufacturing PEs. whose financial position is getting worse and worse year by year. so, an attempt is being made why UCIL has been financially weak.

The objectives of study are to examine profitability records, the strengths and weakness of various aspect of financial and operational structure for to evaluate the financial health, the position of the sources and utilization of funds in the past to find out the role of sources of financing to make enquiry into the short term and long term financial strength to explore financial position of UCIL. Bhes prasad Bhurtel has pointed out some major finding regarding UCIL as following:

- The profitability record of UCIL is unsatisfactory because seven measures of profitability indicate that UCIL has been suffering from heavy loss. Only the gross profit margin is positive. The trend of profitability ratio is also fluctuated widely in the negative region to downward direction. The reasons for such poor profitability are high cost of production, administrative and selling expenses.
- The effect of unsatisfactory profitability record is reflected in the overall financial health of the enterprises. So, the solvency position of UCIL is also unsatisfactory. Average current and quick ratio are 0.86 and 0.155 times which indicate that UCIL is not able to meet its maturing debts and obligation in time. The trend of current ratio and quick ratio are going downward direction each year.
- The capital structure ratio of UCIL is satisfactory in comparison to profitability and solvency ratios. Debt equity and debts to total capital ratio are not fluctuated in the study period and it is going upward direction.

- 4) All the efficiency ratio except the debtor's turnover ratio is in unfavorable to the firm. Average inventory turnover ratio is 1.67 times which is lower than same industry of Nepal.
- 5) Trend line analysis was reveled that trend of most of the relevant items have not taken particular direction. The trend of net profit (loss) was placed in negative region.
- 6) Fund flows analysis indicates that funds operation, income from other sources increases of long term loan, issue of preferred stock, sale of investment, and decrease in working capital have been the main sources of fund. Similarly increase in working capital, purchased of fixed assets, purchase of long term loan been the main application of fund. Low fund generation misuse of generated fund in excessive investment in less productive working capital and under utilization of fixed assets been the factor responsible for the negative profitability of UCIL.
- 7) Average capital utilization of the UCIL is only 45 percentages during the study period. The under utilization of the capacity is the most important cause of such financial position.
- 8) Demand of the product of UCIL is higher that of the other cement industries because the industries is proud about its quality product. Absence of proper pricing policy and particular price guidelines from government has led UCIL to confusing pricing decisions. Profitability of any firm highly depends on its pricing. So, lack of proper pricing policy is another cause of such negative profitability.
- 9) UCIL has not taken serious attention to proper planning, controlling and budgeting aspect. It is confused about its overall objective of conducting the corporation either it is service motive or a commercial line. It is due to the change in the government perspective regarding about this.

The project report entitled "Financial performance analysis of Udaypur cement industry limited" was undertaking of madhab Kumar Thapa and submitted on May 2003. It also analyzed six years financial statement from 2050/051 to 2055/056 B.S. This project is generally based on secondary data. It analyzed the financial performance of UCIL. Analysis is made using the tools of ratio analysis and trend analysis.

The major findings of field study by Madhav Kumar Thapa are pointed as following:

- 1) UCIL is operating in less capacity utilization only 35.94% capacity utilized, which brings more cost and less profit. There fore, to avoid this problems management of UCIL tries to utilize full capacity by maintaining all things in balance.
- Limestone, Red Clay, Iron, Coal, Bora, Gypsum, power etc. is the major component of UCIL. Without it, factory will be closed so that regular attention is required for regular supply system of these raw materials. So, UCIL is suffering from lack of raw-materials. Therefore, these components should be supplied by operating competitive tender. They must be supplied time period otherwise punishment system should be adopted to maintain its stock and problems.
- 3) Lack of regular maintenance and replacement of modern equipment is seen during study period, bringing huge amount of maintenance cost in every year. Thus, preventive maintenance method to be safe from idle time and break down problem.
- 4) Lack of proper utilization of heat and power is seen in study period, which is creating more expenses. So, that the management of UCIL should try to minimize the cost of heat and power by using right quantity in right place.

And analysis on the basis of financial statements which he made is concluded as follows:

- The liquidity position of the company is poor and must be improved adopting an appropriate strategy of maintaining adequate current assets and by reducing the level of current liabilities.
- 2) The activity ratio shows the inefficiency of management due to lower amount of production as compared to its capacity. The production level should be increased fully utilizing its present fixed assets, adopting short range and long range production plan. Unnecessary fixed assets should be sold off. The plant layout should be managed in order to help in production process if it is necessary.
- 3) Profitability ratios indicate weak rate of return. UCIL has been suffered by heavy loss due to lower amount of sales and the higher amount of cost of production and operating cost as well as interest and differed revenue expenditure. The industry should launch a long range program to cut down the excessive cost and adopt standard costing budgetary cost control techniques in this regard.
- 4) The management of the company needs to increase in production and sales volume utilizing its available capacity.
- 5) It is identified that nature of cost variability is weak point. It should step forward to improve cost through cost and it.

# CHAPTER - III RESEARCH METHODOLOGY

#### 3.1 INTRODUCTION:

Research is a systematic and organized effort to investigate a specific problem that needs a solution. This process of investigation involves a series of well thought of gathering, recording, analyzing and interpreting the data with a purpose of finding answer to the problems.<sup>14</sup>

So, research is an ongoing and ever growing activity. It is done not only to solve a problem existing in the work sitting, but also to add or continue to the general body of knowledge in a particular area of interest. Research methodology is the way to solve systematically about the research problem.<sup>15</sup>

So, research methodology refers to the various sequential steps to be adopted by the researcher in studying a problem with certain objectives in a view. Therefore, this chapter deals with the following aspects of methodology.

- 1. Research design
- 2. Study period covered
- 3. Population and sample
- 4. Sources of data.
- 5. Data processing procedure
- 6. Data analysis tools

14. Hardward, Wolf and Pant, Prem Raj, Hand Book for Science and Thesis Writing, Buddha Academic Publication 2<sup>nd</sup> Edition 1999, P-230.

15. Kothari, C.R. Research Methodology, Models and Techniques Wiley Eastern Limited 3<sup>rd</sup> Edition 1990, P-39.

#### 3.2 RESEARCH DESIGN:

Research design of the plan, structure and strategy of investigation conceived so as to obtain answer research question and to control variance. The plan is the overall scheme or program of the research. It includes an outline of that the investigator will do from writing the hypothesis and their operational implication of final analysis of data. The structure of the research is more specific.

It is the outlines, the scheme and the paradigm of the operation of the variables. Strategy as used here is also more specific then plans. In other words, strategy implies how the research objective will be reached and how the problems encountered in the research will be tackled.<sup>16</sup>

Basically, the research design has two purpose, the first is to answer the research question and second is to control variance. The research design asks what approach to the problem should be taken. What method will be used? What strategy will be must effective? Identification may be considered as the planning stage of a research. The remaining activities refer to design operating and competition of the research study.

A research design is the arrangement of condition for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure.<sup>17</sup>

In general, research design means definite procedure and technique, with guideline. Research design is a framework for the researcher in a particular task. The research design of this study is descriptive as well as analytical. The main objective of the study is an evaluation of profitability of HCIL.

17. IBID, P-53

The main objective of financial analysis is to find out profitability of HCIL. In order to do so, we need to analyze financial performance. Financial analysis is the process of identifying the financial strengths and weakness of the firm by properly establishing relationship between the items of the balance sheet and profit and loss account. Financial analysis

<sup>16.</sup> Hardward, Wolf and Pant, Prem Raj, Op Cit, P-50

gives the real picture of financial performance of any organization. So, it helps to management with kind of policies should be adopted. There are many variables in HCIL. This chapter looks into the research design, nature and sources of data, data gathering procedure and tools of analysis. By analyzing only certain aspects, the clear picture of financial position of such big public organizations cannot be understood. So, the study has tried only to have a glance on it. This is the objectives of the present study.

# 3.3 STUDY PERIOD COVERED:

The present study is undertaken for a period of nine years i.e. from fiscal year 2055/056 to fiscal year 2063/064 and on the basic of this study period, profit performance of HCIL is analyzed.

#### 3.4 POPULATION AND SAMPLE:

In total there are still more than forty-three public enterprises remaining under various sector of economy. Among the thirteen manufacturing PEs only HCIL is selected as sample unit for the study.

# 3.5 **SOURCES OF DATA:**

Information is the life blood of any research. To gather the information data collection is major task. To achieve the objective of this study both primary as well as secondary data has been used. Primary data are collected though media of interviews with the officials. The main sources of all historical data are collected from Hetauda cement industries limited as well as other books, magazines, articles, news papers, unpublished thesis etc.

# 3.6 DATA PROCESSING PROCEDURE:

At first, financial statement and other financial data were reviewed. After that all collected data from fiscal year 2055/56 to 2063/64 have been categorized according to their nature in the tabular and chart from selecting relevant data. Summary of balance-sheet and income statement

for all study period have been prepared in order to make easy profitability appraisal of HCIL.

# 3.7 DATA ANALYSIS TOOLS:

For presentation of collected data and its interpretation, some financial and statistical tools are used. The statistical tools mainly used in this study are profitability ratios and graph diagrams.

# **CHAPTER-IV**

#### PRESENTATION AND ANALYSIS

Every study depends upon some data presentation and their analysis. Without presentation of facts and their analysis, study is incomplete. This

chapter presentation and analysis is a heart of study, in the absence of which study is meaningless. It explores about the existing nature and problem of HCIL. On the basis of this chapter, weakness, strength, opportunity and threats are scrutinized. It helps to convert from opaque to transparent. So, it is scrupulous chapter of the research.

This chapter is incorporated with various analytical tools. Without using analytical tools, we cannot diagnose about the nature of HCIL. Gross profit margin ratio, net profit margin ratio, operating ratio, return on fixed assets, return on assets, return on capital employed, return on shareholder equity, earning per share etc are used as tools and techniques for analysis. As a consequence, summary and conclusion are presented in last on the basis of which recommendation have been given to improve the condition.

## **4.1 GROSS PROFIT MARGIN:**

Gross profit margin establishes a relationship between gross profit and net sales and it indicates the capacity of covering operation cost. It is calculated by dividing gross profit by net sales. Comparative picture for different fiscal year of HCIL are presented in the following table:

Table No. 4.1

Fiscal Year	Gross Profit (Rs.)	Net Sales (Rs.)	Gross Profit
			Margin (%)
2055/56	209167593	586041884	36%
2056/57	157790181	542170327	29%

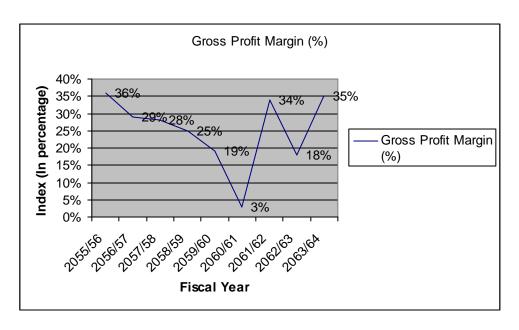
2057/58	162302101	578710237	28%
2058/59	150684050	598141523	25%
2059/60	80691635	416057520	19%
2060/61	19068548	655404842	3%
2061/62	222457688	658720310	34%
2062/63	118733000	659627777	18%
2063/64	282467264	807049328	35%
Average	155929162	611324861	25%

Source: Annual Reports of HCIL for the year 2055/56 to 2063/64

It is observed from above table that the highest gross profit margin of HCIL is 36% in fiscal year 2055/56 and the lowest gross profit margin of HCIL is 3% in fiscal year 2060/61. The average gross profit margin of study period is 25%. The evidence shows that the general gross profit margins are above average except in fiscal year 2059/60, 2060/61 and 2062/63. On the basis of this evidence, way can say that gross profit margin of HCIL is satisfactory. In fiscal year 2055/56, it is 35% which is highest level, in fiscal year 2056/57 it reduces to 29%, in fiscal year 2057/58 reduces to 28%, in fiscal year 2058/59 reduces to 25%, in fiscal year 2059/60 it reduces to 19%, in fiscal year 2060/61 it reduces to 3%, in fiscal year 2061/62 it increase to 34%, in fiscal year 2062/63 it reduce to 18% and finally in fiscal year 2063/64 it increase 35%. The gross profit is gradually decreasing each year during study period but finally increases in 2063/64 which presents favorable situation so, gross profit margin of HCIL is satisfactory.

The trend of gross profit margin of HCIL can also be shown from following graph diagram.

# Figure No. 4.1



In above diagram trend of gross profit margin is in decreasing way from fiscal year 2055/56 to fiscal year 2060/61 from 35% to 3% again it dramatically rise to 34%. Again it reduce to 18% in financial year 2062/63 but in increase to 35% in financial year 2063/64. In average it shows satisfactory level of gross margin. Except 2059/60, 2060/61 and 2062/63, profit margins are above average.

# 4.2 <u>NET PROFIT MARGIN:</u>

The net profit margin establishes a relationship between net profit and net sales. It indicates management efficiency in controlling the manufacturing and administrative cost of the products. The net profit margin reflects how much amount of net profit has earned in the sales of rupee one. A high result is favorable and vice-versa. It is calculated by dividing net profit by net sales. Comparative picture of HCIL for various years under study are given in the table below:

**Table No. 4.2** 

Fiscal Year	Net Profit (Rs.)	Net Sales (Rs.)	Net Profit Margin
			(%)

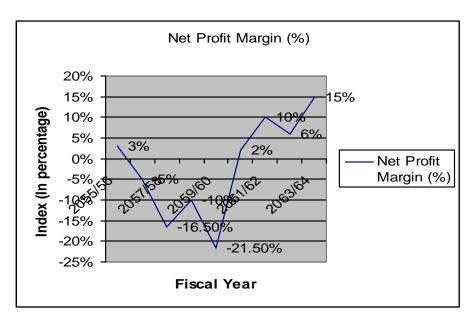
2055/56	17353643	586041884	3%
2056/57	(27856096)	542170327	-5%
2057/58	(95626230)	578710237	-16.5%
2058/59	(62487945)	598141523	-10%
2059/60	(89571204)	416057520	-21.5%
2060/61	13333445	655404842	2%
2061/62	65078096	658720310	10%
2062/63	39577667	659627777	6%
2063/64	121057399	807049328	15%
Average	(2126781)	611324861	-0.5%

Source: Annual Reports of HCIL for the year 2055/56 to 2063/64

Above table shows that the highest net profit margin of HCIL is 15% in the fiscal year 2063/64 and lowest net profit margin of HCIL is 21.5% in the fiscal year 2059/60. The average net profit margin under study is -0.5%. Net profit margin are positive is 5 years, rest years' net profit margin are negative. The net profit margin in fiscal year 2055/56 is 3%, it decreases to -5% in fiscal year 2056/57, it decrease to -16.5% in fiscal year 2057/58, it increase to -10% in fiscal year 2058/59, and again it decreases to -21.5% in fiscal year 2059/60. After that increases to 2% in fiscal year 2060/61 increase to 10% in fiscal year 2061/62, decreases in fiscal year 2062/63 and finally increase to 15% in fiscal year 2063/64.

The net profit margin of HCIL is more negative under study year. The evidence shows that the net profit margin ratio under the study period unsatisfactory even in final year it is in increase trend. Trend of this ratio can be shown in the following diagram:

# **Figure 4.2**



In above diagram, trend of net profit margin is forwarded to negative from positive in fiscal year 2055/56, finally it rises up in fiscal year 2063/64, further highly rises to 15% in fiscal year 2063/64. Final trend is in progressive line even average is not satisfactory which is clear from above graph diagram.

## 4.3 OPERATING EXPENSES RATIO:

The operating expenses ratio shows the relationship between operating expenses sales. Operating and net expenses include selling and expenses administrative expenses distribution Comparative picture of operating ratio of HCIL for various years under study are given in the table below:

**Table No. 4.3** 

Fiscal	Operating Cost	Net Sales	Operating Ratio
Year	(Rs.)	(Rs.)	(%)
2055/56	152393002	586041884	26%
2056/57	151489710	542170327	28%

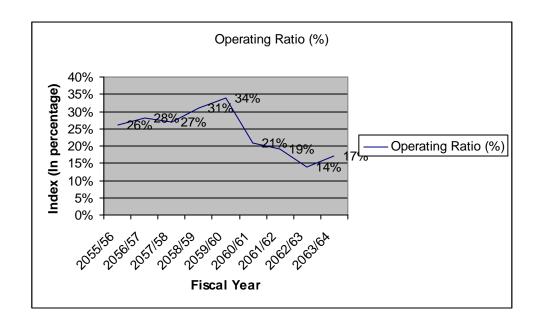
2057/58	155590668	578710237	27%
2058/59	185661736	598141523	31%
2059/60	143045428	416057520	34%
2060/61	135617906	655404842	21%
2061/62	126152480	658720310	19%
2062/63	92511235	659627777	14%
2063/64	137198385	807049328	17%
Average	142184394	611324861	23%

Source: Annual Reports of HCIL for the year 2055/56 to 2063/64

It is observed from above table that operating expenses ratio of fiscal year 2055/56, 2056/57, 2057/58, 2058/59, 2059/60, 2060/61, 2061/62, 2062/63 and 2063/64 are 26%, 28%, 27%, 31%, 34%, 21%, 19%, 14% and 17% respectively. The highest operating ratio is 34% in fiscal year 2063/64. Average operating expenses ratio is 24%. Generally, lower operating expenses is preferable.

From above table, it is clear that operating expenses in beginning to fiscal year 2059/60 are increasing after that in fiscal year 2063/64 decreasing to 17%. It shows unsatisfactory operating expenses ratio. The trend of this ratio can be shown in the following diagram.

# Figure No. 4.3



In the above diagram trend of operating expenses ratios is forwarded upward initially. From fiscal year 2059/61 trend is forwarded downward. Decreasing trend of operating expenses is general satisfactory. But the above trend is highly increasing. So, it is clear from above diagram that the operating expenses ratio of HCIL is highly unsatisfactory which result in lower or negative amount of operating profit.

# **4.4 RETURN ON FIXED ASSETS:**

Return of fixed assets is a relation between net profit and net fixed assets. It shows the capacity of earning of net assets investment. Comparative picture of return on fixed assets for various year under study for HCIL are given in table below:

**Table No. 4.4** 

Fiscal	Net Profit	Fixed Assets	Return on fixed
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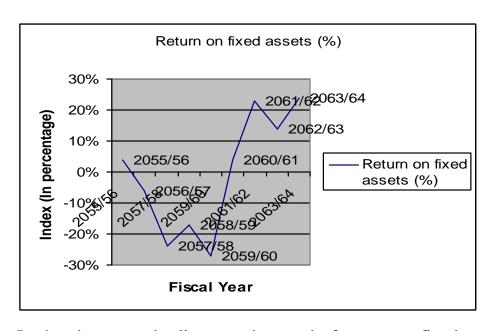
Year	(Rs.)	(Rs.)	assets (%)
2055/56	17353643	473288093	4%
2056/57	(27856096)	434282345	-6%
2057/58	(95626230)	400820450	-24%
2058/59	(62487945)	366207306	-17%
2059/60	(89571204)	337033619	-27%
2060/61	13333445	310932337	4%
2061/62	65078296	286856864	23%
2062/63	39577667	282697621	14%
2063/64	121057399	504405829	24%
Average	(2126781)	377391607	-1%

Source: Annual Reports of HCIL for the year 2055/56 to 2063/64

In the above table, returns on fixed assets on average are negative. The highest return on fixed assets of HCIL is in fiscal year 2063/64 which shows positive forwarding in the future years. The lowest return on fixed assets of HCIL is in fiscal year 2059/60 which shows worse situation of profitability.

So, it is observed from above table that return on fixed assets is in decreasing trend from fiscal year 2055/56 to fiscal year 2059/60. Again from the fiscal year 2060/61, it is continuously decreasing to 2062/63 to 14% from 23% and finally in fiscal year 2063/64 increasing. Even the position of return on fixed of HCIL is not satisfactory at all. The trend of these ratios can be shown using the diagram presented below:

Figure 4.4



In the above graph, diagram, the trend of return on fixed assets is fluctuating and negatively. In fiscal year 2055/56, the trend of return on fixed assets started from 5% and after that it continuously is in decreasing trend passing from negative areas. Finally, in fiscal year 2060/61 it cross the negative boundary and passed to positive 4%, further also increases positively upward to 23% in fiscal year 2061/62 in fiscal year 2062/63 decrease to 14%, and finally increase to 24% in fiscal year 2063/64 which shows positive prospect even last year trend are not satisfactory.

# 4.5 <u>RETURN ON TOTAL ASSETS (ROA):</u>

Return on total assets evaluates how far the management is effective in using the total resources invested in assets whatever the source of financing may be. It measures the profitability of all financial resources invested in the firm's assets. The return on total assets ratios or of HCIL for the fiscal year 2055/56 to 2064/64 given in the table below:

**Table No. 4.5** 

Fiscal	Net Profit	Total Assets	ROA (%)
Year	(Rs.)	(Rs.)	

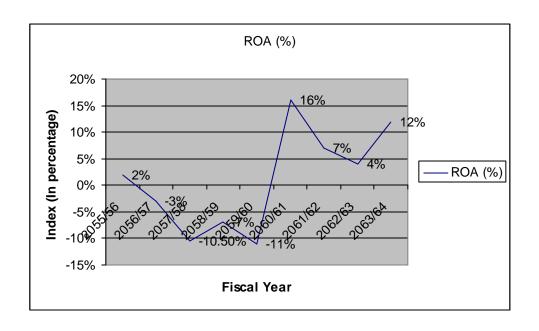
2055/56	17353643	906068309	2%
2056/57	(27856096)	888775879	-3%
2057/58	(95626230)	913821069	-10.5%
2058/59	(62487945)	866390155	-7%
2059/60	(89571204)	729866344	-11%
2060/61	13333445	830146667	16%
2061/62	65078296	914154805	7%
2062/63	39577667	954254804	4%
2063/64	121057399	999872804	12%
Average	(2126781)	733959904	-3%

Source: Annual Reports of HCIL for the year 2055/56 to 2063/64

It is observed in the above table that the returns on total assets in average is negative. The lowest return on assets is in fiscal years 2059/60 and the highest return on assets is in fiscal year 2060/61. Above table presents worse position of return on total assets.

So, it is clear from above table that the ROA of HCIL under study period is not satisfactory. In fiscal year 2055/56 is 2% which continuously decreasing negatively to 11% in fiscal year 2059/60. From fiscal year 2060/61 it started to increase and in fiscal year 2061/62 and 2062/63 is again a decrease even remains positive. In fiscal year 2063/64 increase to 12%. The trend of ROA of HCIL can also be shown using following graph diagram.

Figure 4.5



In the above graph diagram, the trend of ROA passes generally from negative area under study period from 2055/56 to 2061/62 but fiscal year 2062/63 also decrease after that increase. In fiscal year 2055/56 it starts from 2% which falls to 3% in 2056/57 and continuously false down negative up to the fiscal year 2059/60. In fiscal year 2060/61 it fortunately rises to 16% which shows positive trend, again decrease to 7% through to 4% even remain positive and increase to 12% in fiscal year 2063/64. The succeeding fiscal year trend are positive even due to negative trend in preceding years negative trend of ROA under study period is not satisfactory.

# **4.6** RETURN ON CAPITAL EMPLOYED (ROCE):

This ratio use to measure the profitability how well managed the long term resources financed by owners and the creditors. The ratio shows how much return the company gives towards its investors. This ratio is calculated by dividing net profit after interest and taxes by capital employed. Capital employed includes long-term debts plus net worth or it is equivalent to net working capital plus net fixed assets. Higher the ratio

is assumed to be favorable and vice-versa comparative picture of return of capital employed has been expressed in the table below:

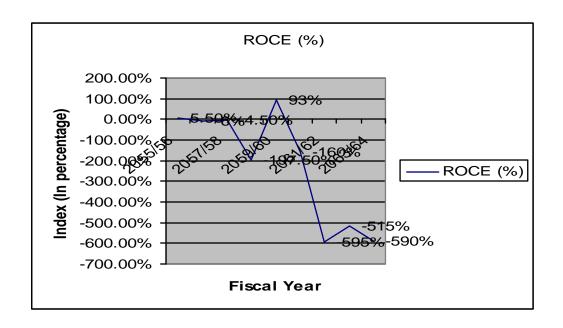
**Table No. 4.6** 

Fiscal	Net Profit	Capital Employed	ROCE (%)
Year	(Rs.)	(Rs.)	
2055/56	17353643	317102913	5.5%
2056/57	(27856096)	450209496	-6%
2057/58	(95626230)	213936285	-4.5%
2058/59	(62487945)	3162721	-197.5%
2059/60	(89571204)	(96429773)	93%
2060/61	13333445	(83309780)	-160%
2061/62	65078296	(10942864)	-595%
2062/63	39577667	(7684984)	-515%
2063/64	121057399	(20518203)	-590%
Average	(21.26781)	85058424	-3%

Source: Annual Reports of HCIL for the year 2055/56 to 2063/64

It is observed from the above table of HCIL that the highest ratio is 93% in the fiscal year 2059/60 and the lowest ratio is -595% in the fiscal year 2061/62. The average of the ratio under study period is -3%. The above situation shows unsatisfactory return on capital employed under study period. HCIL is not able to generate return on capital employed by owners as well as long term lender. The trend of return on capital employed can be presented using following graph diagram:

Figure 4.6



In the above graph, diagram, the trend of return on capital employed is highly fluctuating. In year 2055/56, it starts from 5.5% and forward negative upto year 2058/59. After that it dramatically raised upward to 93% in year 2059/60 again its drop to negative area and forward negative to preceding year. The trend clearly present the highly unsatisfactory situation of return on capital employed under study period.

# **4.7 RETURN ON SHAREHOLDER EQUITY (ROSE):**

Return on shareholder equity measures the overall profitability of the owner's investment. It indicates how well the firm has used the resources of owner's investment. It indicates how well the firm has used the resources of owners. A high return on equity represents the sound profitability position of a firm vice-versa. This ratio is calculated by dividing net profit after tax and interest by shareholders equity the comparative picture of HCIL for fiscal year 2055/056 to 2063/64 has been shown in following table.

Table No. 4.7

F	iscal	Net Profit	Shareholder equity	ROSE (%)
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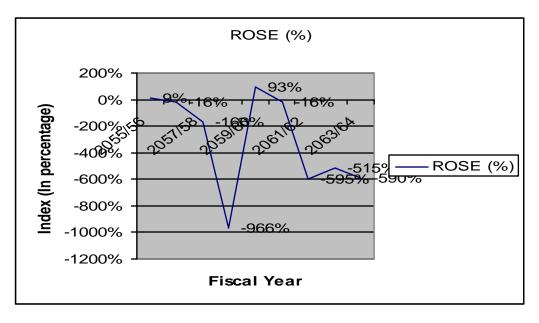
Year	(Rs.)	(Rs.)	
2055/56	17353643	200658190	9%
2056/57	(27856096)	173550011	-16%
2057/58	(95626230)	57659561	-166%
2058/59	(62487945)	57659561	-966%
2059/60	(89751204)	6467323	93%
2060/61	13333445	(96429773)	-16%
2061/62	65078296	(10942864)	-595%
2062/63	39577667	(7684984)	-515%
2063/64	121057399	(20518203)	-590%
Average	(2126781)	24383276	-9%

Source: Annual Reports of HCIL for the year 2055/56 to 2063/64

It is observed from the above table of HCIL that the highest ROSE is 93% in 2059/60 and the lowest ROSE is -966% in 2058/59. The average of the ratio is -9% which shows highest unfavorable situation. Mostly, the ROSE shows negative return which present ineffective utilization of government investment in equity. The overall profitability position in HCIL in term of return on shareholder equity indicates that management has not used the owners capital soundly because the manufacturing industry standard is 13% and ROSE is generally highly below to this standard.

The trend of return on shareholder's equity can also be presented using following graph diagram:

# **Figure 4.7**



In the above diagram ROSE shows 9% in fiscal year 2055/56 which forward negative to -16% in fiscal year 2058/59 which forward positive to 93% in fiscal year 2059/60 and again it down negative from fiscal year 2060/61 similarly fiscal year 2061/62, 2062/63 and 2063/64 also negative. The above trend of ROSE of HCIL shows worse situation of ROSE.

## 4.8 EARNING PER SHARE (EPS):

Earning per share measure the profitableness of ordinary shareholder's investment. The objective of computing this ratio is to measure the profitability of the firm on per equity share basis. This ratio is computed dividing net profit after preference dividend by the number of equity share outstanding. The comparative picture of HCIL from fiscal year 2055/56 to 2063/64 has been shows in the following tables:

Table No. 4.8

Fiscal	Earning available for	No. of share	Earning per
Year	equity share (Rs.)	(Rs.)	share (Rs.)

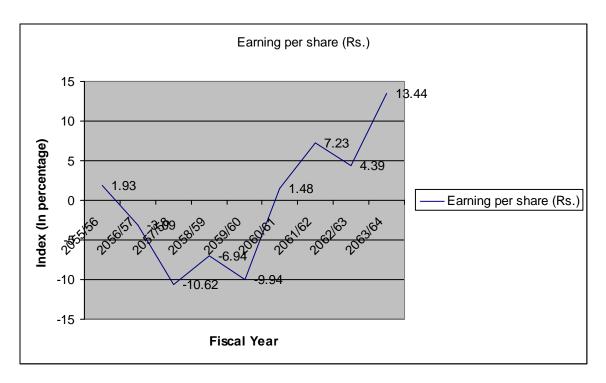
2055/56	17353643	9006850	1.93
2056/57	(27856096)	9006850	-3.09
2057/58	(95626230)	9006850	-10.62
2058/59	(62487945)	9006850	-6.94
2059/60	(89751204)	9006850	-9.94
2060/61	13333445	9006850	1.48
2061/62	65078296	9006850	7.23
2062/63	39577667	9006850	4.39
2063/64	121057399	9006850	13.44
Average	(2126781)	9006850	-0.24

Source: Annual Reports of HCIL for the year 2055/56 to 2063/64

The above table shows that earning per share fluctuated during the whole study period. The highest earning per share was 13.44 in fiscal year 2063/64 and the lowest was -10.62 in fiscal year 2057/58. The situation of EPS is positive to 1.93 in fiscal year 2055/56 which proceeds in fiscal year 2056/57 to -3.09 and continued negative of fiscal year 2059/60. After this year EPS started to rise positively which shows progressive situation. Finally, in fiscal year 2063/64 under study period earning per share is 13.44. Overall situation of earning per share is not satisfactory.

The trend of earning per share can also be presented using following graph diagram:

Figure 4.8



In the above diagram, earning per share is 1.93 in fiscal year 2055/56 which forwarded negatively to Rs. -309 in fiscal year 2056/57 and continued negatively to Rs. -9.98 to fiscal year 2059/60. After that it started to rise and approach to Rs. 1.48 in fiscal year 2060/61 and continued positively to Rs. 13.44 in fiscal year 2063/64 which shows progressive earning per share in succeeding year under study. Due to mostly negative trend, it is also not satisfactory and favorable.

# **CHAPTER - V**

# SUMMARY, CONCLUSION AND RECOMMENDATIONS 5.1 SUMMARY:

Nepal is a land locked country whose economy is mainly based on agriculture. The amount invested on agriculture is greater in Nepal also in almost all countries. About 90 percent people are engaged in agriculture in Nepal.

After industrial revolution, industries have been established by some countries which are forwarded towards developed countries. To see these countries, industrial sector has been taken as a medicine for rapid socio-economic development in the world and Nepal is also not exception in this regard.

With a view to develop import substitution, fulfillment of unemployment problem as far as, utilization of unused natural resources and income generation, the government of Nepal has established public enterprises before pre-planning period and during planning period. They are categorized into industrial, trade, finance and insurance, manufacturing public utilization and social services. This study is mainly concentrated on manufacturing sector.

Various public enterprises are concerned within the manufacturing sector. Cement is one main element of manufacturing public enterprise. Among them, Hetauda Cement Industries limited has been chosen for the research.

Cement is a basic construction material to build road, bridge, dam, buildings and so on. Before establishment of Himal Cement Factory, all required cement were imported from the abroad and India. To reduce trade imbalance, Himal Cement factory had been established. Himal Cement factory had not been successful to fulfill the growing demand alone. So, the government has established the Hetauda Cement Industries Limited

from Government of Nepal under loan assistance from Asian Development Bank, Manila and public funds.

Hetauda Cement Industries Limited has been established by public funds. The main objective of the HCIL is to earn profit providing cement cheaply and utilizing resources more effectively. So, it is necessary to monitor HCIL successfully in accomplishing the basic established objectives.

Profit is a life blood for every enterprise. Without profit no any enterprise can survive for long period. The objective of this study is to investigate whether the HCIL is able to generate profit or not. For analysis, profitability analysis is chosen. To analyze profitability condition, financial data are collected from the central office of HCIL for nine years from fiscal year 2055/56 to 2063/64. After that they are organized in a systematic way in order to use financial tools easily.

To profitability position of the company has been analyzed with the help of only quantitative method like profitability ratios. Trend analysis graphs, charts and tables are used to support analytical findings.

The objectives of employing profitability ratio analysis are to investigate overall performance of company. The analysis and interpretation of ratios is an attempt to determine the significance and meaning of the financial statement which would be helpful in forecasting the future prospects. The major finding using financial tools are presented as conclusion.

#### 5.2 CONCLUSION:

On the basis of profitability analysis following major findings can be concluded:

- 1. Gross profit margin ratio is not satisfactory because the cost of goods sold is high but the trend of that cost is satisfactory.
- 2. Net profit margin ratio indicates inefficiency of management of earn profit in fiscal year 2061/62. The ratios are extremely lower than that of required. Finally, trend is progressive.
- 3. Operating ratios indicates almost satisfactory level so, it is favorable.
- 4. Return on fixed assets is negative except in fiscal year 2055/56, 2060/61 to 2063/64. The trend of this ratio is fluctuating.
- 5. Return on assets is always unfavorable except in fiscal year 2060/61 and 2063/64. There is no particular trend of net profit. The trend of those ratios is also highly unsatisfactory.
- 6. Return on capital employed ratio is highly unsatisfactory except in the fiscal year 2059/60 and has not taken a particular trend. The trend of those ratios is also highly unfavorable and fluctuating over research period.
- 7. Return on shareholder's equity is unsatisfactory except in the fiscal year 2059/60 and has not taken a particular trend. The trend of those ratios is highly fluctuating over research period.
- 8. Earning per share is not satisfactory as Average earning per shares are negative 2060/61 to 2063/64. From the fiscal year 2060/61, it shows progressive even not favorable.

## 5.3 **RECOMMENDATIONS:**

After the detail profitability analysis of HCIL, it is found that HCIL is suffering from heavy loss. Its situation is extremely negative and fluctuating during the study period. Its management is not capable enough to forward the HCIL in profit condition. Profitability ratios indicate weak financial position. HCIL has been suffering by heavy loss due to higher amount of operating expenses as well as interest and deferred revenue expenditure. The industry should launch a long range program to cut down the excessive cost and adopt standard costing budgetary, cost control techniques to improve profitability of HCIL otherwise it should be privatized if not possible liquidated.

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