

CHAPTER – 1

INTRODUCTION

1.1 BACKGROUND OF THE STUDY:

Nepal is a poor and developing country. Most parts of its land covered by mountains and forests. Therefore, it is called a mountainous country too. Except for mountains and forests, cultivable area of land is short but it is much more productive and about 83% of the people of Nepal depend on agriculture. Resultly, about 38% of its total population goes below the poverty line. Most of the people suffer from unemployment in the lack of appropriate qualifications. Moreover, it is a land locked country and that goods of import and export happen to become expensive because of pilferage, demurrage charge, destruction and high transportation charge. Including all, economic condition of the country depends on agriculture while the development of the country in the matter of economy depends on industrial establishment.

Cement is very most significant and valuable constructive material. Among various constructive materials cement is in first priority. Due to compressive strength, shrinkage and expansion and setting the time features. Cement has been used extensively in our modern society. Cement is used for constructive buildings, bridges, cannels, roads and for other constructive works. It is most significant material but its history in Nepal is not so long. In lack of cement, generally houses were traditionally built by the local resources like clay, stone and mud. In the past, especially in the urban area, people used to make their own domestic cementing materials called “CHUNASORKHI”, but it was not readily available in the market and was very expensive.

For constructive work, the government and other private sectors used to start to import cement from India. Gradually people also used to know about factors of cement. Later, the demand of constructive cement raised and that it was imported in a great degree. Due to high demand of essential constructive material, it was thought to establish cement industry in Nepal. To mobilize natural resources and fulfil the national demand, Himal Cement Factory was established in private sector in 1966 A.D. After sometimes it was

converted into Public Limited Company. The use of cement became very popular in Nepal after establishment of Hetauda Cement Factory.

To save from trade imbalance and to be independent in the matter of cement, Government thought to establish other Cement Industries and soon H.M.G. established two Cement Industries named Udaypur Cement Industry Ltd and Hetauda Cement Industry Ltd. The UCF was established with its commercial production in 2021 B.S. Thereafter, Hetauda Cement Factory (HCF), the largest Industrial Undertaking Length Situated at Lamsure of Hetauda, Makawanpur District, Narayani Zone. It is some 140 K.M. far from the capital city of Kathmandu. The Industry Covers 149 Bighas of Land. Duly it started its commercial production from 2042 B.S. Its daily production capacity is 800 Metric Tones.

Authorized Capital of HCF is about Three Arab. Its paid up capital is Ninety Crores and its issued capital is 1.5 Arab. This industry has made the country self sufficient in respect of cement production. Its survival and growth largely depend upon smooth economical operation, for which the adequate financial performance is necessary. It is useful to provide qualitative cement for better performance of HCF. The present study attempts to appraise the financial performance of Cement Factory (with special reference to Hetauda Cement Factory).

1.2 NEEDS OR SIGNIFICANT OF THE STUDY:

A sound financial performance is important for the growth of Business Enterprise. It is necessary that financial management of enterprises must be appropriate to field for fair rate of return on the capital employed in them. Any mistake made in financial management adversely affects the financial condition and business enterprises. In this regard, it requires to measure the financial performance and the enterprise from time to time.

Hetauda cement Factory is a growing concern and of great national importance in the matter of area and industrialization. But the study related to H.C.F. and its financial performance is very scarce. Thus the importance of this study lies mainly in the fulfillment of research gap on financial performance of H.C.F.

In the Preliminary Phase Udaypur Cement factory was on way to pose or threat to the organization. But in due time, it took its fruitful course. Thus, this kind of study may be helpful to run in competitive market.

This study is also useful to provide feedback information to the management and government regarding what should be done for strengthening the financial performance of Hetauda Cement Factory and other public enterprises.

1.3 **STATEMENT OF PROBLEM:**

Twenty years ago, the Government of Nepal established several Manufacturing Industries under its ownership and control with a view to several manufacturing industries to creating employment opportunities for solving the existing unemployment problem and making available qualitative goods sell at reasonable prices to the consumers. The entire purpose was defected as most of the public enterprises occurred frequent losses causing erosion of their capital to a great extent. Now it is thought better privatize the loosing enterprises rather than injecting fresh capital into them from National Treasury and thereby putting unnecessary burden on the people's shoulder. Mention maybe made that the H.C.F. is also one of the public enterprises which occurred. Frequent losses especially after the competitive entry of Udaypur Cement Factory is under consideration for privatization. Under the circumstances, if it fails any further to show positive working results, its privatization cannot be justifiably protested. In fact, its continuation depends entirely on the successful operation for which the periodical appraisal of financial performance is a must keeping this in view the present study looks into financial performance of the factory. In particular, every endeavor has been made to find out the answers to the following issues:

- a) Is the liquidity position of the H.C.F. satisfactory?
- b) Is the factory management efficient in utilization of its current assets?
- c) Is there on efficient utilization working capital of the factory?
- d) Is the long term solvency position of the factory satisfactory?
- e) How is the profitability position of the factory?
- f) What changes have takes place in the financial position of the factory during the period of the analysis

1.4 OBJECTIVES OF THE STUDY:

The main objectives of the present study are to evaluate the financial performance of the H.C.F. In dealing with the main objective, the following specific objectives are aimed at:-

- a) Assessing the liquidity position;
- b) Measuring the efficiency in utilization of current assets;
- c) Causing the efficiency in use of working capital;
- d) Evaluating the long term solvency position;
- e) Measuring the profitability;
- f) Ascertaining the changes that have taken place in financial position during the period of analysis; and
- g) Suggesting remedial measures wherever found necessary;

1.5 LIMITATION OF THE STUDY:

The present study has been made for partial fulfillment of the requirement for the degree of Master of Business Studies. However, it has a number of uses for the factory management, creditors and owners. The users of this study must be aware of the limitation from which it suffers. Its main limitations are listed below:

- a) Though the Cement Industry in Nepal is constituted of two units HCF and UCF, the present study has been confined to the former unit only due to the denial of concerned authority of later unit to provide relevant information.
- b) Overall, the performance of management of H.C.F. needs to be evaluated, the study in view of time, cost and academic level has been restricted to the appraisal of the financial performance.
- c) The study has made generalization about the financial performance of the factory on the basis of data covered by the period of study from 2059/60 to 2064/65 only.
- d) It would much better to compare the actual ritual rations of the factory with those of the industry to which it belongs. But because of the no

availability of required data such comparison has been made with absolute and historical standards for drawing reference.

- e) The reliability findings of the study largely depend upon the correctness of the data information made available by the factory.

CHAPTER – 2

2 REVIEW OF LITERATURE:

In the previous chapter, a general introduction of the Hetauda Cement Industry has been given. This chapter reviews the available literature on the subject concerned. It is sub divided into three sections. The first section deals with the conceptual framework of financial performance appraisal. The second section reviews the relevant articles and studies while the related thesis submitted for university degrees are reviewed in the third section.

2.1 CONCEPTUAL FRAMEWORK/REVIEW:

In this section, an attempt has been made to form a sound theoretical background for the study. It covers meaning and concept of financial performance, need or significance of financial performance appraisal, basis of financial performance appraisal and techniques of financial performance appraisal.

2.1.1 Meaning and Concept of Financial Performance

Appraisal:

Financial performance is a quantitative analysis of firm's efficiency. In other words, it is a way of studying financial position or condition of a company. The company's financial plan and policy prepared and implemented by management should be judged on the basis of its financial performance. Conceptually, the vocabulary /"financial performance?" Concern with the measurement and analysis of financial operation of a firm through profitability, liquidity and turnover, inflow and outflow of fund set their cost-volume profit relationship approaches.

The profit earned by the firm is the main indicator of financial performance. Profit results mainly from successful operation and efficient management of enterprises over the long term adequate and reasonable

earnings are essential that assure survival and growth to capital adequacy through profit retention access market for both debt and equity and to provide funds for increase assistance the productive sectors.

A company grades itself as a successful company, if it can generate maximum profit to justify fair rate of return on investment. Adequate earning profits on each rupee of sales helps the firms by providing funds from internal earning at the time of capital shortage and help on the way of its long term survival, future growth, expansion and diversification. On the other hand, if the company suffers form losses, it can not survive in the composite society, it suffers from capital shortage etc. Thus, the company in productive area so that profitability position of the company may rise and profit margin and return on investment may boost up.

Liquidity is used widely to measure the overall performance of the company. The company should maintain the liquidity to increase its operational efficiency. Thus the firm must give high preference on managing current assets and current disabilities which have direct effects on company's liquidity position.

A company must maintain liquidity adequate to meet wide range of contingencies and should ensure that it surfers neither from lack of liquidity nor from too most highly liquid. The company may not be able to meet its obligation with result, bad credit rating and loss of creditor's confidence. On the contrary, very high degree of liquidity is also not desirable idle assets earning nothing and it has adverse effect on company's portability position. the liquidity position of the company is determined thought applying current quick ratio.

Financial performance can be evaluated from the point of turnover also. The turnover indicates the speed which assets are being converted or turnover into cash. It evaluates efficiency with firm manage and utilize its assets. Turnover ratio, thus, involves a relationship performance of the company is said to be favorable. On the other hand, low turnover shows inefficient utilization of available recourses and it has adverse affect on overall

performance.. Thus a firm cannot raise its value unless and until it mobilizes its resource effectively and improves turnover.

Inventory plays a vital role on successful operation of a company. Therefore, company should manage inventory efficiently generally high inventory is an indicator of good inventory management and better financial performance of company and vice versa, like was debtors turnover indicates the number of time on the average that debtors turnover each year. A high turnover is indicative for efficient debtor's turnover each year. A high turnover is indicative for efficient debtor's management which ensures sound financial position. On the other hand, possibility of highly bad and doubtful debts and cash crisis are the combined effect of inefficient management. Receivable high fixed assets turnover is the result of efficient management of fixed assets turnover. It is the result of efficient management of fixed assets which contributes more on company's profitability. Low turnover shows inefficient utilization of company's resources on fixed assets. In this way the overall turnover shows the several efficiency of the company. Thus, the effort has to be made to improve over all turnovers through better and efficient utilization and management of available resources of the company.

A company should have an appropriate mix of debt and owners equity in financing the firm's assets, If a company fails to maintain adequate equity capital that makes she company more risky, inadequate equity makes use of more debt which has fixed charge and at the time of low profit company may become insolvent due to inability to pay fixed cost. On the contrary less use of debt is always less than other capital. Thus while evaluating the financial performance; solvency is widely used that measure the funds supplied by owners as compared with the financing provided by creditors.

Inflow and outflow of funds between two points in time is another important indicator of financial performance. The company should ensured better financial performance by establishing favorable equilibrium between inflows and outflows of funds. The inadequacy of the sources of funds and failure to recognize such inadequacy may put the company ingrate loss. Operations, where as too much funds are blocked. The company also makes

operations inefficient and unproductive. Thus the analysis of firm's sources and area of funds application give better knowledge about its financial performance.

Financial performance of each and every type of firm is highly depends upon cost volume and profit relationship. Appropriate relationship between cost volume and profit can guarantee financial strength and in this situation, firm always runs above the break even points sales, high margin of safety for any falling in sales and maximum contribution margin for recovery of fixed cost and realization of handsome profit and vice-versa. On the other hand, thus financial performance can also be evaluated through cost volume and profit analysis.

2.1.2 Need and Significance of Financial Performance:

Financial performance identifies the major strength and weakness of business enterprises. It indicates whether a reasonable account receivable. Collection period, and efficient inventory management policy, sufficient plant property and equipment and an adequate capital structure of all of which are necessary if the firm is to achieve the goal of maximizing shareholder's wealth. Financial performance can also be used to assess a firm viability as an on going earned for the risks taken. (Agrawal, N.P.: 1981:39)

Financial information also required for financial planning, analysis and decision making. Accounting of a firm is the main sources of financial information. The accounting system helps to accumulate, economic decision. The users of financial information include owners, employees, suppliers, governments and society.

2.1.3 Concept of Financial Statement:

Financial statement is also called financial reports. The account balance arrayed in effective and meaningful order so that the facts and concepts they portray may be readily interpreted and used as bases for decisions by all people who are interested in the management, they may review the company's progress to data and to decide upon the course of action to be

taken in future; credit shareholders any judge prospects for their investment and elect to sell or to continue ownership; employee groups may form judgment as to the ability of the company to pay higher wages; and the general public may appraise the effectiveness of the economic unit from which it buy goods or services.

The term financial statement as used modern business refers to two statements the balance sheet or statement of financial position reflecting the assets, liabilities and capital as on a particular date and income statement or profit and loss statement, showing the result achieved during a crestring period which are prepared for the end of accounting year for a business enterprises. It has now become a practice, particulars in case of big companies to add a third statement which is the statement, retained earnings. Moreover, the package of financial statement as it is some times referred to also include such schedules, as those relating to land, building equipment, inventories, long term debt cost of goods manufactured selling expenses and administrative and general expenses, intended to supplement the data contained in financial statement. These schedules are considered as part of the purpose of analysis and in fact, they constitute the first step towards the analysis is being include in the package by some corporate enterprises through it is not currently in general use.

2.1.4 Anatomy of Financial Statements:

1. Profit & loss Account/ Income statement.
2. Balance Sheet.
3. Statement of Retimed earnings.
4. Funds Flows Statements.

1. Profit & Loss A/C / Income Statement :

Income Statement (also know as a statement of operation) is a statement showing over a specified and limit period of the life of a business, the nature and amount of all its income for the period and the nature and amount of all its operating costs and expenses. The profit and loss statement

reflects the concept that the net income or loss of a firm for a period of time may be measured on the difference between revenue and expenses.

I (Net income) = R (Revenues) – E (Expenses) of course, if E is the greater than R , the result is a loss for the period and if E is less the result is an income for the period.

The profit and loss or income statement is a summary of revenue, expenses and net income loss of an enterprise for a particular period of time. Profit & Loss account in one hand provides a concise summary of the enterprise revenue and expenses and on the other hand measure the enterprise profit abilities. In other words, net income increase net assets. Similarly net loss decrease assets and increase liabilities. The system of preparing income statement has also changed from British system having double entry system to American column system. (Batty, J.: 1963:23)

In income statement all the financial transactions of the revenue incomes are compared with the revenue expenses and the result is shown either in net profit or net loss. In other word the income statement reveals the performance of the firm during a particular period of time. Sales are the major source of the revenue income various item of expenses including operating expenses, interest and taxes, which the company has incurred during the period are the major revenue expenditure. In this statement, revenues of a certain period are compared with the earning the difference being either net profit or net loss for the period. (Beirman, Narold, : 1965:11)

The income statement presents the summary of expenses, revenues and net income loss of firm an accounting period. While the balance sheet reveals the composition of assets and liabilities, the income statement shows profitability Orin other word measurement of performance of the firm.

The income statement is the "Score board" of the firm's performance during a particular of time. The generally accepted convention is to show one year's saving in the income statement. Since the income statement reflects the results of operations for a period of time, it is a flow of statement. (Bhalla, V.K.: 1987,53)

2. Balance Sheet:

Balance Sheet is one of the most significant financial statements. It contains the information about the resources and obligating of a business entity and it is mainly prepared to fulfill owner's interest of a business for a particular point of time. The statement is based on the reposition that at any given time of assets of a business are equal in value to the sources of funds used to acquire those assets. Also, the sources of funds are either external to the firm (represented by such term as stockholder equity). The proposition or concept is often presented of the basic accounting equation.

$$A (\text{Assets}) = L (\text{Liabilities}) + O (\text{Ownership})$$

Assets and liabilities of the enterprise are shown in two sides Cash marketable securities, book debts, account receivables, stock (inventory) prepaid expenses and loan & advance etc. and fixed assets. i.e., Tangible and intangible fixed asset and investment are shown. Similarly, on the other side, it contains information about borrowing and long term liabilities and owners equity i.e. share capital, retained earning, share premium etc.

A balance sheet not only provides the summary of enterprise resources (assets) and obligation (liabilities and owner's equity) but also a measure of liquidity and solvency position of the enterprise. It shows the real financial position during the close of the fiscal period.

3. Retained Earning (Surplus):

The term 'surplus' refers to the balance of earning expected to be available with and enterprise after providing for its working expenses interest payment and various revisions for liabilities. It is also known as undistributed profit as well as retained earning. In other world 'surplus' is the amount of resources left with enterprise to be retained in the enterprise for future growth and expansion or to be distributed to the owners of enterprise as dividend or for both purpose, although profit is an absolute concept and profitability is relative concept for the purpose of our analyses. We use the term profit and profitability interchangeably refers to generations of surplus.

Retained earnings are the parts of total profit retained in business. Generally firms do not distribute all the profit to stockholders. Only a certain portion of profit is retained in the business for one or the other purposes. It seems that such undistributed funds available for use is free of cost for the firm. We must think in terms of opportunity cost of such funds and must consider it in the overall cost of capital.

The undistributed profit is the part of equity and it legally belongs to common stockholders. Since both the retained earning and common stock are exposed to some magnitude of risk and belong to same group of investors. It is quite logical to consider the required rate of return on retained earnings same as the required rate of return on common stocks. As such, the costs of retained earnings K_r are same as K_e . But there are some basic factors that cause some difference between the costs of these two types of funds. Difference arises mainly from two sources; one is from the tax saving and other is from the saving or transaction costs. (Bhandari, Hem Singh: 1989:41)

4. Funds Flow Statement:

The term "Fund Flow Statement" consists of two term 'Funds' and 'Flow'. The term 'Funds' refer to all pecuniary resources that can be measured in term of money. It may be interpreted as cash or working capital or all financial resources. Net working capital is concerned with the differences between total current assets and total current liabilities.

The term 'Flow' refers to the movement of funds during a period of time. The procurement of funds, during the particular period of time is called inflow of funds and use of funds for the particular period of time is called outflow of funds. So movement of funds is concerned in the inflow and outflow of funds.

The statement which is designed to highlight the changes in the financial position of a business organization during the two periods of one is known as funds flow statement. According to A.N. Anthony – "funds flow statement is a statement prepared to indicate the increase in the cash resources and the utilization of such resources business during the accounting period".

According to Smith & Brown – "A funds flow statement is prepared in summary form to indicated changes occurring in items of indention between two different balance sheet dates".

According to Fouke – "A statement of sources and applications of funds is a technical device designed to analyze the changes in the financial position of a business enterprise between two dates".

According to P. Chandra – "The funds flow statement, also called the statement of change in financial position, shows the sources and used of funds during a given accounting period. This statement, drawing on the information contained in the balance sheet and the profit & loss account provides insight into the movement of funds and helps in understanding the changes in the structure of assets, liabilities and owners equity".

On the basis of above definitions it can be said the comparative study of two balance sheets of a concern prepared for two different years for knowing the financial activities of a company is known as Funds Flow Statement. The main purpose of funds flow analysis is to acquire the clear, information about the financial transaction that things changes in the resources of a company. It reflects to the management's effort in generation income without sacrificing the special health to the entity. Therefore, this statement is of great information concerning financing and investing activities a business surprise and consequent changes in its financial position for a period. The genesis of the funds flow statement is the limited role performed by financial statement in providing the details about the funds of the business received from each source and amount of funds and for each purpose thought the year. A funds flow statement will help the management in allocation the scare resources for meeting productive requirement of the business. The uses of funds should be planned in such a manner that the available resources are put to the best use. The allocation should ensure that the business is in a position to make payment of interest and loan installment as per the agreed schedule. It is as test of effectiveness with which the working capital is used by the management during a particular period.

An activity conducted by the business or any other actions by the management which results in the flow of funds is considered as sources of funds. On the other hand, funds utilized for various purposes are considered as applied and hence known as application for uses of funds.

2.1.5 Limitation of Financial Statements:

1. Financial statements are essentially interim reports and therefore, can not be final because the actual gain or loss of a business can be determined only after it has put down its shelters. However for the various reasons, it is necessary to have accounting in the form of financial statement at relatively request periods during the life of a business. This gives rise to the problem of allocation of coasts as well as income to an accounting period which involves personal judgment. Income and cost transaction flow continuously throughout the life of the business enterprise but they have to be cut off at each balance sheet dates. Several difficulties are faced in attempting to set policies under which cut off will be made and persons entrusted with the job have considerable discretion within the limits of two fundamental accounting principles – the cost allocated to the period must have a logical relationship to the income allocated to the period and the policies adopted must be consistently applied there after financial statement date cannot effort to remain exact under such conditions. Other factors that tend to make statement of assets and liabilities imprecise are existence of contingent assets and liabilities differed maintenance etc.
2. Financial statement tends to give an appearance of finality and accuracy because they are expressed in exact money amounts. Any value may be ascribed to the amounts presented in the statement depending upon the value standards of the persons dealing with them. However, rarely does the value put on assets represent the amount of cash which would be realized on liquidation. As the balance sheet is madden on this they important assumption. Consequently though

fixed assets are shown at costs less accumulated depreciation, the amounts do not, as a rule, represent either the amount for which fixed assets would be sold or the amount that would have to be spent or replace them.

3. Owing to the fact that financial statements are compiled, on the basis of historical cost while there is a market decline in the value of the monetary unit and resultant rise in price, the balance sheet loses its functions as an index on current economic realities. The problem has become important especially during the war and the post war period. The impact of this is felt most in respect of provision for depreciation made from current income in respect of assets purchased before the outbreak of the Second World War. Similarly an increase in the sales volume expressed in monetary units may or may not be the result of a larger number of units sold because all or a part of the apparent increase in volume, may respect increase in selling price thus, conclusions based on an inadequate analysis of comparative data may be quite misleading.
4. Financial statements do not give effect to many factors which have a bearing on financial conditions and operating result because they cannot be stated in terms of money are qualitative in nature. Such factors are the reputation and prestige of the business with the public its credit rating the efficiency and loyalty of its employees and efficiency and integrity of management. Future contingent assets and liabilities customarily are not and usually cannot – be stated definitely in monetary units. Keeping in view all these limitations, it can be said that financial statements do not show the financial conditions of a business; rather they show the position of financial accounting for a business.

2.1.6 Techniques of Financial Performance Appraisal:

Analysis of financial performance is the process of determining financial strength and weakness of the company by establishing strategic relationship between the items of the balance sheet and income statement or other operative data. This analysis is useful to various interested groups i.e. management, owners, creditors, employees etc as it provide clear understanding about the financial condition of the firm. Various analytical tools will be used in this study.

- i. Ration Analysis
- ii. Trend Analysis
- iii. Comparative Financial Statement
- iv. Common Size Statement Analysis
- v. Cost-Volume Profit Analysis

2.1.6 i) Ratio Analysis:

Ratio analysis has been the major tool used in the interpretation and evaluation financial statement. (Choudhary,S.B.:1978:25). The literature on financial statement has discussed continuously the use of ration analysis. Besides this, the accounting and finance text book which can be Baruch lev, financial statement Analysis, (A New Approach Printing Hall, Inc. Englewood cliffs, New Jersey, 1974) p. 11 excepted to report the more important analysis techniques in chapters on external analysis of financial. Statements also emphasize the use of ration analysis.

Ratio analysis is the process of determining and interpreting numerical relationship based on financial statement in ration is a statistical yardstick that provides a measure of the relationship between two variables or figures. This relationship can be expressed as percentage (cost of good sold as a percentage of sales) or as a quotient (current assets as a certain number of items the current liabilities.)

Ratios are simply a means of high lighting in arithmetical terms the relationship between figures drawn from financial statement. In the words of J. Batty "the term account ration is used to describe significantly relationship

which exists between figures shown on a balance sheet, in a profit and loss account in budgetary organization". (Connor, Melvin :1973:26)

Ratio analysis is the principals' technique used in judging the condition port rayed by the financial statement.

Financial growth and development and the present condition of a business enterprise. (Coughlan, John :1968:32)

The technique of ratio analysis is getting wider acceptance in accounting and mathematical world. In this regard Mr. Hilbert states threat the ration analysis provides guides and clues especially in spotting trends towards better or poor performance and in finding out significant deviation from any average of relatively applicable standard. (Coner, Meivinc:1968:36)

There are two schemes of expressing relationship in ratio. The first one is the phrase method such as 200 percent etc. The percentage scheme has the advantages of greater precision because it may develop facts which will be easily remembered. (Drucker,F.Peter:1967:25)

Although ratio analysis is widely in use but it should be remembered that one ration cannot give the entire picture.

In fact the ratio tends to give simply an indication which assists considerably in appraisal of the financial position and operation of the organization.

Ratlos Bty. themselves are not conclusions. Therefore it should be always kept in mind that rations are only guides in analysis of financial statements and not conclusive ends in themselves. Further, if ration is to be important, it must also aid the analyst in making his immediate decisions.(Dambolena, IsmailG. :1980:56)

The single ratio like absolute figures, fail to reveal the financial position of a company. Therefore they should be compared with some standard to know the favorable and unfavorable condition. Certain ratio have been developed as rules of thump by which we can judge the firms financial condition and operated in key area against industry wide standard of comparison. When the firm's ratio is a key area is worse than the industry is standard, we are alerted to a potentially inferior financial performance when

the ratio is better than the industry is standard we are alerted to potentially superior financial performance, at least in that particular area.

Uses of Financial Ratio:

Different parties use different ratios depending upon the purposes, mainly to know the short term creditors, long term creditors, equity investors and management of the firm are the uses and their motto.

I. Short Term Creditors:

Short term creditors hold obligations that will short term nature so they are interested primarily in the liquidity. In other words, they are concerned with the firm's ability to pay its bills.

II. Long Term Creditors:

Long term creditors hold bonds or mortgages against the firm who are mainly interested in cash flow ability of the firm to serve debt over the long run, they may evaluate this ability by analyzing the capital structure of the firm.

III. Equity Investors:

Equity investors are popularly known stock holders. They are concerned principally with present and expected future earnings and stability of these earning.

IV. Management of a Firm:

Management of the firm is particularly interested in overall ratios not particularly in one or two because the firm's purpose is not only to have internal control but also better understanding of what capital suppliers seek in financial condition and the performance from it.

Types of Ratio:

There are various types of ratios which are used by different purpose and can be calculated from the information given in the financial statements. Generally ratios are calculated from the financial statements by the parties such as creditors, investors, financial institutions and management of the firm to know their field of interest. There are mainly statement ratios and functional ratios as indicated below.

- 1) Liquidity Ratio
- 2) Leverage Ratio
- 3) Activity Ratio
- 4) Profitability Ratio

1) Liquidity Ratio:

Liquidity means ability of business enterprise to pay its current obligations as and when they fall due for payment Thus, liquidity ratios intend to derive a picture of the capacity of firm to meet its short term obligations out of its short term resources. In recent time, a core of liquidity ratios have emerged which viewed in their totality and with respect to risk, is expected to yield a rough approximation of the capacity of business to pay its current liabilities as and when they fall for payment. (Elam, Rick:1977:68)

The working capital ratio, which reflects the relation of current accepts to current debts, is indicative of the degree of safety with such short term credit may be extended. Even if a little shrinkage in current assets takes place, this will not to greatly jeopardize the Interest of the current creditors. Hence the short term creditors of a business enterprise are mainly concerned with the working capital ratio in order to justify the granting of loans.

The relationship between current assets and current liabilities in proper or not can be measured with the help if current ratio and quick ratio.

a) Current Ratio:

The current ratio of a firm measures its short term solvency through establishing the relationship between total current assets and total current liabilities. It shows the rupees of current assets available for each

rupee of current obligation. This ratio helps the company to determine the desirable liquidity position to meet its maturing obligation so that the company may not suffer from lack of liquidity and too much highly liquidity. It also acts as index of the working capital available to the company.

The current ratio is calculated by dividing current assets by current liabilities.

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

American institute of certified public accounts defines current assets as cash or sold or consumed during the normal operating cycle of business and which involve a circulation of assets with the current assets group. (Falkm Rick::1977:62)

Current assets represents those assets which can be converted to cash within an accounting period like cash in hand, cash at bank, short term marketable securities, bills receivable, sundry debtors prepaid expenses, inventory(stock) and accrued income. On the other hand, current liabilities are those obligations which are matured within a year like bills payable, sundry creditors, short term loan, long term loan maturing during the current year, income tax payable, dividend payable, outstanding/Accrued expense, advance income, bank overdraft. (Finny, H.A.& H..E.Miller:1954:102)

According to Mr. Sharma, all the liabilities which have to be met during the course of the financial year, should be kept under the heading current liabilities and all the assets which can be realized in cash during the course of financial year in order to meet the current liabilities should be kept under the heading current assets,. Thus if a long term is to be repaid within the financial year, it should be taken as current liabilities. Under the heading of current assets stores and spare parts and loose tools are being shown but these would not be converted into cash and as such would not be available for meeting the current liabilities.

Interpretation:

Current ratio equal to 2:1 current assets double the current liabilities, is considered to be satisfactory one.

Higher Current ratio indicates that the firm is in liquid and his ability to pay its current obligations in time as and when they become due. And on other hand, lower current rating represents that the liquidity position of the firm is not good and the firm will face difficulty in payment of current obligations in time. A high current ratio may not be favorable because of i) pile up of stock and slow moving stock, ii) Unsatisfactory debt collection and iii) Idle cash balance.

b) Liquid/Quick/Acid Test Ratio:

It measures the short term liquidity of the firm but is emphasized the instant debt paying capacity of the firm. Liquidity refers to the ability of a concern to meet its current obligations as and when these become due. The short term obligations are met by realizing amount from current assets. The current assets should be either liquid or near liquidity. Liquid assets include current assets less stock and prepaid expenses. Liquid ratio is calculated by dividing the quick assets by current liabilities and 1:1 is regarded a standard.

Quick ratio is calculated as follows:

$$\text{Quick Ratio} = \frac{\text{Liquid / Quick Assets}}{\text{Current Liabilities}}$$

Liquid assets includes cash in hand, cash at bank, short term marketable securities, short term investment, Bill receivable, sundry debtors, accrued incomes. The quick ratio is very useful in measuring the liquidity position of the firm. Quick ratio equal to 1:1 is considered to be satisfactory one. It is considered that if the quick assets are equal to current liabilities then the firm may be able to meet its short term obligations without any financial difficulty to it.

A high quick ratio indicates that the firm is liquid and has ability to meet its current liabilities in time and on the other hand, a low quick ratio denotes that the firm's liquidity positions are not good.

In the early years, the quick ratio of a one to one was popular. It was considered as a dividing line between a satisfactory and an unsatisfactory short term position. But the current tendency is to deemphasize any given ratio for business as a whole and to ask instead what the typical quick ratio is for a specific trade or industry. (Helfert, Eric A.:1957:103)

In the absence of comparative data, an acid test ratio of one may be considered satisfactory because other things remaining the same, one rupee of assets is sufficient to discharge one rupee of liability.

There are main defects of quick ratio. First, it tells how much current assets are available to pay current liabilities but it does not tell how soon the current assets will be available (or how soon the current assets will be) or how soon the current liabilities will be paid. (Hunt, Williams:1971:36)

Thus, whether there is balanced condition between current assets and current liabilities of the company cannot be judged only through the current ratio and the acid test ratio and in isolation of other factors. The ability of current and quick ratio to indicate short term debt paying ability depends on how rapidly inventory and receivables can be converted eventually into cash.

As a result, the two supplementary ratios should be completed i.e. turnover of receivables and inventory.

2) Leverage Ratios/ Capital Structure Ratio:

Capital structure ratio judges the long term financial position of the firm. M.Y. Khan & P.K. Jain defined capital structure ratio as financial ratio which throw light on the long-term solvency of a firm as reflected in its ability to assure the long term creditors with regard to

- a) Periodic payment of interest during the period of the loan
- b) Repayment of principles on maturing or in predetermined installments at due date. (Holmes, Aurther W.:1962:65)

- c) Financial leverage can work in opposite direction overall rate of return, the earnings of shareholder's will be reduced. If the equity base is thin, the creditor's risks will be high. (Horrigan,James:1994:72)

Capital structure ratio measures the contribution of financing by owners compared with financing provided by creditors. It indicates the firm debt and fixed charge paying ability also.

Following ratios are included under leverage ratios:-

- a) Debt – Equity Ratio
- b) Debt to total Capital Ratio
- c) Total Debt to Total Assets Ratio
- d) Interest Coverage Ratio
- e) Fixed Charge Coverage Ratio

a) Debt – Equity Ratio:

The debt equity ratio is the measure of the relative chain of creditors, and owners against the firm's assets. It is a test of long term solvency of the firm. This ratio indicates the relationship between debt and equity i.e. outsider's funds and shareholder's fund which are some times called as external and internal equities. It relates to shareholder's fund indication the degree of protection enjoyed by the long term creditor. The ratio is also term as debt to net worth ratio. It can be calculated either by dividing the long terms debt by shareholders equity or by dividing total debt by shareholder's equity as follows:

$$\text{Debt equity / debt to net worth ratio} = \frac{\text{Longtermde bt}}{\text{Shareholde r's equity}} = \dots\dots\dots\%$$

Debt equity ratio can also be calculated by dividing the total debt by shareholder's equity funds as follows:

$$\text{Total debt equity Ratio} = \frac{\text{Total Debt}}{\text{Shareholder's Funds}} = \dots\dots\dots\%$$

The below given table helps to know the items of debt and shareholders equity.

Items belonging to equity	Items belonging to long term debts
<ul style="list-style-type: none"> • Equity/Ordinary/ Common share capital • Preference share capital • Share premium • Share forfeited account • Capital reserve • General reserve • Retained earning • Dividend equalization fund • Compensation fund • Sinking funds • Investment fluctuation fund • Profit loss account credit balance 	<ul style="list-style-type: none"> • Debenture • Bonds • Long term loans • mortgage loan

While calculating the debt – equity ratio, accumulated loss profit and loss debt balance and differed expenditure (amortized expenditure i.e. preliminary expenses, establishment charge and advertisement expenditure). If any should be deducted from the shareholder's funds to find out the shareholder's equity.

$$\text{Total Debt} = \text{Long Term Debts} + \text{Current Liabilities}$$

The debt to equity ratio indicates the contribution of debt capital and equity capital fund in total investment. A very high ratio is unfavorable from

the corporation's point of view. Because of, this introduces inflexibility in the firm's operation due to the increasing interference and under pressure from creditors. During the period of low profits, a highly debt financed company suffers great strains as it can not earn sufficient profit even to pay interest charge of creditors. As a result their pressure and control increase and the company finds difficulties to meet working capital needs also. So, it has to borrow on highly unfavorable terms and conditions. During the period of high profits, a highly debt financed company has to pay a large amount of income over cost of capital. Similarly, a low debt equity ratio implies owner's upper hand over creditors. So, it may be favorable to a company. During the period of low profit, the debit servicing will prove to less burden some during the period of high profit. High fixed cost bearing debt being no needed to be paid, the earning per share of shareholder's many rise up an optimum debt-equity ratio should be maintained which is generally determined on the basic of industry average of the firm past records.

b) Debt to Total Capital Ratio:

Debt to total capital ratio fall under leverage ratio. It is calculated by divining the long-term debit (funded debt) by total capitalization i.e. permanent capital which includes shareholders equity and long term debt. This ration helps to establish a link between funded and total long-term funds available in the business. It can be calculated in following two ways.

$$\text{Debt to Total Capital Ratio} = \frac{\text{Longterms Debt}}{\text{Permanent Capital}}$$

Or,

$$\frac{\text{Total Debt}}{\text{Permanent Capital} + \text{Current Liabilitie s}}$$

Long-term debt to permanent capital should be 2:3 for satisfactory position both for share holders and long term loan finances. A low ratio represents security to creditors in extending fund. On the other hand a high ration represents a greater risk to creditors and also to shareholder's under

depression. A very low ratio can worry owners as the firm is not using debt to their best advantages.

c) Total Debt to Total Assets Ratio:

Firm's assets are financed either by debt or by shareholder's capital. Total debt to total assets ratio establishes the relationship between debt and total assets and it explains, what percentage of the value of assets of the company has been financed by its creditors. There should be desirable proportion of debt and equity capital on company's financing. It is calculated as follows:

$$\text{Total Debt to Total Assets Ratio} = \frac{\text{Total Debt}}{\text{Total Assets}}$$

A low ratio of debt to total assets is desirable from the point of the creditors as there is sufficient margin of safety available to them. But its implications for the shareholder's are that debt is not being exploited to make available to them the benefit of trading on equity. A firm with a very high ratio would expose the creditors to higher risk.

d) Interest Coverage Ratio:

It is also known as "time – interest earned ratio" This ratio measures the debt servicing capacity of a firm in so far as fixed interest on long term loan is concerned. It is determined by dividing the operation profit or Earning before Interest and Taxes (EBIT) by the fixed interest charges on loans (Kuchhal, S.C.:1979:65)

Thus,

$$\text{Interest Coverage Ratio} = \frac{\text{EBIT}}{\text{Interest}}$$

It should be noted that this ratio uses the concept of net profit before taxes because interest is tax deductible so that tax is calculated after paying interest on long term loan. This ratio, as the name suggests shows how many

times the interest charges are covered by the EBI out of which they will be paid. In other words, it indicates the extent to which a fall in EBIT is tolerable in the sense that the ability of the firm to service its debt would not be adversely affected for instance, an interest coverage of 10 times would imply that even if the firm's EBIT were to decline to one-tenth of the present level the net profits available for servicing the interest on loan would still be equivalent to the claims of the creditors on the other hand a coverage of five times would indicate that a fall in operating earning to only up to one fifth level can be tolerated from the point of view of the creditors, the larger the coverage, the greater the ability of the firm to handle fixed charge liabilities and the more assured the payment of interest to the creditors. However too high a ratio may imply unused debt capacity in contrast, a low ratio is a danger signal that the firm is using excessive debt and does not have the ability to offer assured payment of interest to the creditors.

e) Fixed Charge Coverage Ratio:

While the interest coverage ratios consider the fixed obligations of a firm to the respective suppliers of funds i.e. creditors and preference shareholder's the total coverage ratio has wider scope and take into account all the fixed obligations of a firm that is (i) interest on loan (ii) preference dividend (iii) Lease payment (iv) Repayment of principle.

This ratio is calculated as follow:-

$$\text{Fixed Charge Ratio} = \frac{\text{EBIT} + \text{less payment}}{\text{Interest} + \text{lease payment} + (\text{preference dividend} + \text{installment of principle}) / (1 - t)}$$

However coverage ratios mentioned above suffer from one major limitation that is they relate the firm's ability to meet its various financial obligations to its earning.

3. Activity Ratio:

The fund of creditors and owners are invested in various assets to generate sales and profits to better the management of assets and the larger

the amount of sales. Activity ratios are employed to evaluate the efficiency with which the firm manages and utilizes its assets. These ratios are also called turnover ratios because they indicate the speed with which assets are being converted or turned over into sales. Activity ratio, thus, involves a relationship between sales and assets. A proper balance between sales and assets generally reflects that assets are managed well. Several activity ratios can be calculated to judge the effectiveness of assets utilization. (Korn, S.Wintonj:1969:31)

- a. Inventory Turnover.
- b. Debtors Turnover.
- c. Average Collection Period.
- d. Fixed Assets Turnover.
- e. Current Assets Turnover.
- f. Total Assets Turnover.
- g. Capital Employed Turnover.

a) Inventory Turnover:

Inventory Turnover Ratio (ITR) is also known as stock turnover ratio in the traditional language usually establishes relationship between the cost of goods sold during a given period and the average amount of inventory outstanding during that period.

Inventory turnover ratio can be looked at from another point of view. While it helps in determining the liquidity of a firm in as much as it gives the rate at which inventories are converted into sales and then into cash, it assists the financial manager in evaluating inventory policy finding to the reasonableness of such a policy at given level to avoid any danger of over stocking as a prelude to the effective utilization of the resources of the firm. (Khan, M.Y.:1989:79)

Theoretically, inventory turnover rate is best expressed through the relationship between costs of goods sold and average inventory at cost but ratio of sales to inventory may be used as a substitute for the ratio of costs of goods sold to average inventory in cases the cost of goods sold is not available.

Though, it may serve as an approximate measure of turnover, the analyst should always be conscious of the fact that it is only a rough approximation. Over and above these, some firms like dependently stores customarily valuing their inventories at selling price and using the so-called retail method for the purpose, computer inventory turnover as the ratio between net sales and average inventory at selling prices.

For greatest accuracy in the calculation of inventory turnover ratio, monthly inventories should ordinarily be used and this is especially desirable if the size of inventories fluctuates substantially in the course of the year. Thus, 'average inventory' for a year is the sum of inventories at the beginning of the year and inventory at the end of every month, the total to be divided by 13. However, in most cases, the external analyst has to be satisfied with the inventory at the end of the accounting period or the average of inventory at the beginning and end of the accounting period.

Inventory Turnover Ratio can be calculated by any of the following three formulae:

$$a) \quad \frac{\text{Cost of goods sold}}{\text{Average Inventory at cost}}$$

$$b) \quad \frac{\text{Net sales}}{\text{Average Inventory at cost}}$$

$$c) \quad \frac{\text{Net Sales}}{\text{Average Inventory Selling prices}}$$

The inventory turnover ratio shows how rapidly the inventory is turning into receivable through sales. Generally, a high inventory turnover is indicated if good inventory management. A low inventory implies expensive inventory level than warranted by production and sales activities level than warranted by production and sales activities or a slow moving or obsolete inventory. A

high level of sluggish inventory amount to unnecessary tip up of funds impairment of profit and increased cost. If the absolute inventories have to be written off, this will adversely affect the working capital and liquidity position of the firm.

b) Debtors Turnover Ratio:

The liquidity position of the firm depends upon the quality of debtors to great extent. The debtors turnover indicates the number of times on the average that debtor's turnover each year. Generally, the first ratio is found out by dividing the credit sales by average debtors. The second ratio is found out by dividing the credit sales by average debtors. The second ratio is found out by dividing the total sales by the end balances of debtors. (Lev, Baruch:1974:71)

It can be calculated in two ways:

$$\text{Debtors Turnover Ratio} = \frac{\text{Credit Sales}}{\text{Average Debtors} + \text{Average Bill Receivable}}$$

This approach requires two types of data: first, credit sales which may not be readily available to the analyst. Similarly the computation of the figure of average debtors and bills receivable involves practical difficulties. In theory these figures should be measured as in case of average inventory, on the basis of the monthly average since this type of information is not likely to be available to the analyst, the alternative is not likely to be available to the analyst, the alternative is to use the average of the opening and closing balance of debtors and bills receivable. The average in the above equating refers to the average of the opening and closing balance.

To solve the difficulties arising out of the non-availability of the information in respect of credit sales and average debtors and bills receivables the alternative method is to calculate the debtors turnover in terms of the relationship between total sales and closing balances of debtors. Thus,

$$\text{Debtors Turnover Ratio} = \frac{\text{Total Sales}}{\text{Debtors} + \text{Bill Receivable}}$$

It should be noted that the first approach to the computation of the debtor's turnover is superior in that the question of the speed of conversion of sales into cash arises only in case of credit sales. The effect of adopting the second approach would be to inflate the receivable turnover ratio.

Debtors Turnover Ratio indicates the number of times the debtors are turned over during the year. The higher value of its turnover the more efficient the management of debtors of more liquid the debtors and vice versa. This ratio should be compared with the ratio of other firms doing similar business and trends may be found out to make a better interpretation of the ratio.

c) Average Collection Period :

The average collection period measures the quality of debtors. It indicates how rapidly the debtors are collected. Shorter the average collection period the better the quality of debtors became short collection period stem better the quality of debtors became short collection period implies the indicating of timely payment by the debtors. An average collection period is compared with the firm credit terms to judge its credit and collection efficiency, as a rule of thumb the average collection period is compared with the firm credit terms to judge its credit and collection efficiency, as a serum of thumb the average collection should not exceed the period of payment mentioned in the term of sales plus one third of the period.

Average collection period is calculated to know the average number of days/months for which a firm has to wait before trade debtors are converted into cash. It is calculated as follows:

$$\text{i. Average Collection Period} = \frac{\text{Days in year (no of working days)}}{\text{Debtors Turnover Ratio}} = \dots\dots\dots\text{Days}$$

For this formula, first we have to calculate the debtor's turnover ratio; without calculating debtors are converted into cash. It is calculated as follows:

$$\text{ii. Average Collection Period} = \frac{\text{Debtors} \times \text{Days in Year}}{\text{Sales (Net)}} = \dots\dots\dots \text{Days}$$

Here sales may be credit sales or total sales and debtors may be average debtors or ending debtors. Average collection period may also be calculated as follows;

$$\text{iii. Average Collection Period} = \frac{\text{Debtors}}{\text{Sales Per day}} = \dots\dots\dots \text{Days}$$

$$\text{Where, Sales per Days} = \frac{\text{Sales (Net)}}{\text{No. of working days (Days in years)}}$$

The debt collection period shows an average period for which the credit sales remain outstanding and measure the quality of debtors. It indicates rapidly or slowness with which the money is collected from debtors.

d) Fixed Assets Turnover Ratio:-

Fixed Assets Turnover Ratio is an indicative of the efficiency concerning the profitable use of fixed assets. This ratio indicates the number of times the fixed asset is turned over during the year. This ratio is defined as sales divided by fixed assets. It measures how well the firm uses its long term (fixed) assets and shows how many Rupees of sales are supported by one rupee of fixed assets. (Lynch, Richard:1988:68)

The ratio is determined by dividing sales (net) by net fixed assets (i.e. the depreciated value of fixed assets or Gross assets less depreciation) and does not include investment. It is calculated as follows:

$$\text{Fixed Assets Turnover} = \frac{\text{Sales}}{\text{Net Fixed Assets}} = \dots\dots\dots\text{Times}$$

Some writers have advocated the use of the ratio of sales to fixed assets on the ground that, as the investment in fixed assets is made for ultimate purpose of producing sales, the ratio of sales to fixed assets is a measure of the achievement of that purpose. If the ratio is too high, it indicates that the firm is over investing in its assets, but in case the ratio is low, it signifies that the firm has an excessive investment in fixed assets and the financial manager must scrutinize the request for additional capital assets purchase.

However, as sales are dependent on factors other than fixed assets - the ability efficiency and courtesy of salesman; the quality and style of goods; favorable markets strategic location; demand creation etc no direct relationship which can be insignificantly measured by the ratio can be established between sales and fixed assets. Amount of fixed assets with money value of sales, with results that are significant. Therefore, the ratio is not recommended for general use.

e) Current Assets Turnover Ratio:

Current assets turnover ratio measures the efficiency of the company in utilizing its investment on current assets. It shows the number of times on the average that current assets turnover each year. Generally higher value of the current assets turnover indicates that the company is more efficient in the management of current assets and vice versa. Current assets turnover equals sales divided by current assets;

$$\text{Current Assets Turnover Ratio} = \frac{\text{Sales}}{\text{Current Assets Turnover}}$$

f) Total Assets Turnover:

The firm must manage its total assets efficiently and should generate more revenue through their proper utilization. The total assets turnover ratio examines the company's efficiency through establishing relationship between

the amount invested in the assets and the result accruing in terms of sales. In other words, it shows the sales generated per rupee of investment in total assets. The total assets turnover ratio is calculated as follows:

$$\text{Total Assets Turnover} = \frac{\text{Sales}}{\text{Total Assets (Net)}}$$

Intangible assets refer to the assets which have no physical existence like goodwill, copyright, patents etc. In the same way, fictitious assets refer to deferred expenditure and debit balance of profit and loss account.

The Total Assets Turnover Ratio, in general, indicates the proper utilization of assets of the firm and vice versa. It helps to show the firm's ability of generating sales from the total financial resources available to the firm. Idle assets lead to lower assets turnover.

g) Capital Employed Turnover Ratio:

Capital employed is the amount entrusted by the owners and long term loan financiers to the firm. It includes the amount of owner's equity and debenture, bond and long term loan. The amount of capital employed represents the net current assets (current assets minus current liabilities) and long term assets of the firm. Capital employed turnover ratio is calculated to know the effectiveness in utilizing the capital employed by dividing sales by capital as follows:

$$\text{Capital Employed Turnover Ratio} = \frac{\text{Sales}}{\text{Capital Employed}} = \dots\dots\dots \text{Times}$$

Capital Employed includes the amount of

Paid up equity share capital	xxx
Paid up preference share capital	xxx
Share premium	xxx
Earned surplus	xxx
Capital resource	xxx
Debenture	xxx
Long term loan	xxx
Mortgage	xxx
Total Capital Employed	<u>xxx</u>

The higher the capital employed turnover ratio the more efficient the utilization of owners and long term creditors fund. This ratio should be compared if possible with the industry average.

4. Profitability Ratio:

The test of effectiveness of any business under taking is its Profitability profit is out come of successful operation and efficient management of enterprise. Sufficient profit is not only necessary to cover the risks but also exits in society over long period of time through expansion, growth and diversification of its business. (Major, R. Charles:1966:51)

Apart from the creditors, both short-term and long-term, also interested in the financial soundness of a firm are the owners and management or the company self. The management of the firm is naturally eager to measure its operation efficiency. Similarly, the owners invest their funds in the expectations of reasonable return. The operation efficiency of a firm and its ability to ensure adequate return to its shareholder's depends ultimately on the profit to ensure adequate return to is shareholders depends ultimately on the profit earned by it the crucial importance of profit of a firm cannot be over stressed. Profitability is a measure of efficiency and the search for it provides an incentive to achieve efficiency profit ability also indicates public acceptance of the products and shows that the firm can produce competitively. Moreover

profit provides the money for repaying the debt incurred to finance the project and the resources for the internal financing of the expansion. The profitability of a firm can be measured by its profitability ratios. In the other words, the profitability ratios are designed to provide answers to questions answers to question such as (i) Is the profit earned by adequate? (ii) What rate of return does it represent? (iii) What is the rate of profit for various divisions and segments of the firm? (iv) What is the earning per share? (v) What amount was paid in dividends? (vi) What is the rate of return to equity holders and so on. (Mohan, Man:1982:21)

This ratio is calculated in relation to sales and investment this ratio is related to profit of the business. Profit is essential for the survival of the business, P sot so it is regarded as the economic progress. Profit ability ratios are calculated to measure the coverall efficiency of the business. Generally profitability ratios are calculated either in relation to sales or in relation to investment. Following ratios are calculated under profitability ratios.

Profitability rations in relating to sales are:

- a) Gross Profit Margin
- b) Net Profit Margin
- c) Operating Ratios

Profitability ratings in relation to investment are:-

- a) Return on Capital Employed
- b) Return on Assets
- c) return on Shareholder's Equity

Earning performance (Capital market) ratio:-

- a) Earning Per Share
- b) Dividend Per Share
- c) Dividend Payout Ratio
- d) Dividend Yield Ratio
- e) Price Earning Ratio

Profitability rations in relation to sales:-

a) Gross Profit Margin:

The first profitability ratio in relation to sales is the gross profit margin. It expresses the relationship of gross profit on sales net sales, in terms of percentage, representing the percentage of gross profit earned on sales.

This determinants of this ratio are the gross profit and sales, which mean net sales obtained after deducting the value of goods returned by the customers from the total sales. Gross profit results from the difference between net sales and cost of goods sold without taking into account expenses generally charged to profit and loss account. Thus, it clear that operating expenses are not involved.

Cost of goods sold in the case of trading concern is the purchase price of goods and all expenses directly connected with the purchase of goods while in the case of a manufacturing concern. It consist of the purchase price of raw material all manufacturing expenses. It is calculated by dividing the gross profit by sales.

$$\text{Gross Profit Margin} = \frac{\text{Sales} - \text{Cost of Goods Sold}}{\text{Sales}} \text{ or } \frac{\text{Gross Profit}}{\text{Sales}}$$

The gross profit margin reflects the efficiency with which management produces each unit of product. This ratio indicates the average spread between the cost of goods sold and the sales revenue. When we subtract the gross profit margin from 100 percent, we obtain the ratio of cost of goods sold to the sales. Both these ratios show profit relative to sales after the deduction of production cost, and indicate the relation between production cost and selling price. A high gross profit margin relative to the industry average implies that the firm is able to produce at relatively lower cost.

A high gross profit margin ratio is a sign of good management. A gross margin ratio may increase due to any of the following factors: (i) Higher sales price, cost of goods sold remaining constant (ii) Lower cost of goods sold, sales price remaining constant (iii) A combination of variation in sales price and

cost the margin widening and (iv) An increase in the proportionate volume of higher margin items. The analysis of these factors will reveal to the management how a depressed gross profit margin can be improved. A low gross profit margin may reflect cost of goods sold due to the firm's inability purchase at favorable terms inefficient utilization of plant and machinery or over investment in plants and machinery resulting in higher cost of production. The ratio will also be low due to fall in price in the market or marked reduction in selling price by the firm in an attempt to obtain large sales volume the cost of goods sold remaining unchanged financial manager must be able to detect the causes of a falling gross margin and initiate action to improve the situation.

***b)* Net Profit Margin:**

Net profit is obtained when operating expenses, interest and taxes are subtracted from gross profit. The net profit margin ratio is measured dividing profit after tax by sales.

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

This ratio establishes a relationship between net profit and sales and indicates manufacturing, administering and selling the products. This ratio is the overall measure of the firm's ability to turn each rupee sales into net profit. If the net margin is inadequate the firm will fail to achieve satisfactory return on owner's equity.

This ratio also indicates the firm's capacity to with stand adverse economic conditions. A firm with a high net margin ratio would be in an advantageous positing to survive in the face of falling sales prices, rising cost of production or declining demand for the product. It would really be difficult for a low net margin firm to with can make better use of favorable conditions such as rising sales price falling cost of production or increasing demand for

the product such a firm will be able to accelerate its profit at a faster rate than a firm with a low net profit margin. (Meigs, W.B.:1978:53)

The operating expenses ratio an imprint table explains the change in the net profit margin ratio. This ratio computed by dividing operating expenses via cost of goods sold plus selling expenses and general and administrative expresses (Excluding) by sales.

$$\text{Operating Expenses Ratio} = \frac{\text{Operating Expenses}}{\text{Sales}}$$

A higher operating expenses ratio is unfavorable since it will leave a small amount of operating income to meet sincerest divided etc to get a comprehensive idea of the behavior of operating expenses variations in the rations over a number of years should be studied. Certain expenses are within the managerial discretion change in the management policy detailed analysis may reveal that the year to year variations in the operating expenses ration are temporary in nature arising due to some temper conditions.

The operating expenses ratio is a yardstick of operating efficiency but it should be used cautiously. It is affected by a number of factors such has external uncontrolled able fats internal facts employees and management efficiency all of which are difficult to analyze further the ratio cannot be used as test of financial condition in case of those firms where non operating revenue and expenses a sub spatial part of the total income.

The operating expenses ratio indicates the average aggregative variation in expensed, where some of the expenses may be increasing while other may be falling. Thus, Topcon on the behavior of specific expenses items the ratio of each individual operating. Expenses to sales should be calculated. These ratios when compared from year to year for firm will throw light on managerial policies and programs.

Profitably Ratios in Relation to Investment:

As already observed, the profitability ratios can also be computed by relating the profits of a firm to its investment. Such ratios are popularly termed as Return on Investments (ROI). There are three different concepts of investment in vogue in financial literature assets, capital employed and shareholder's equity. Based on each them, there are three broad categories of ROIS. They are (a) Return on Assets (b) Return on capital employed and (c) return on shareholders equity.

Return on Assets (ROA):

Here the profitability ratio is measured in terms of the relationship between net profit and assets the ROA may also be called profit to assets ratio. There are various approaches possible to define net profits and assets according to the purpose and intent of the calculating or the ration depending upon how these two storms are defined, many variations of ROA are possible.

The concept of net profit may be (i) net profit after tax, (ii) net profits after taxes plus interest, and (iii) net after taxes plus interest minus tax saving.

The different variants of the ROA are illustrated below;

$$(i) \quad \text{Return on Assets (ROA)} = \frac{\text{Net Profit After Taxes}}{\text{Average Total Assets}}$$

The ROA based on this ratio would be an underestimate as the interest paid to the creditors is excluded from the net profits. In point of fact the real return on the total assets in the net operating on assets is the net profits of interest.

$$(ii) \quad \text{ROA} = \frac{\text{Net Profit After Taxes} + \text{Interest}}{\text{Average Total Assets}}$$

$$(iii) \quad ROA = \frac{\text{Net Profit After Taxes + Interest}}{\text{Average Tangible Assets}}$$

$$(iv) \quad ROA = \frac{\text{Net Profit After Taxes + Interest}}{\text{Average Fixed Assets}}$$

This ratio judges the effectiveness in using the total fund supplied by owners and creditors. Higher ratios shows the higher return on the assets used in the business there by indicating effective use of the resources available and vice versa.

Return on Capital Employed (ROCE):

The ROCE is the second type of the ROI. It is similar to the ROA except in one respect. Here the profits are related to the total capital employed. The term capital employed refers to long – term funds supplied by the creditors and owners of the firm. It can be computed in two ways. First it is equal to non-current liabilities (long term liabilities) plus owner's equity. Alternatively, it is equivalent to net working capital plus fixed assets. Thus the capital employed basis provides a test of profitability related to the sources of long term funds. A comparison of this ratio with similar firms with the industry average and over time would provide sufficient insight into how efficiently the long term funds of owners and creditors are being used. This ratio can be calculated by using either of the following formulae:

Return on Capital Employed (ROCE)

$$(a) \quad \frac{\text{Net Profit After Taxes}}{\text{Capital Employed}} \times 100 \%$$

$$(b) \quad \frac{\text{Net Profit After Taxes} + \text{Interest}}{\text{Capital Employed}} \times 100 \%$$

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

Return on Total Shareholder's Equity:

According to this ratio, profitability is measured by dividing the net profit after taxes (but before preference dividend) by the total shareholder's equity. The term shareholder's equity includes (i) preference share capital (ii) ordinary shareholder's equity consisting of (a) equity share capital, (b) share premium, (c) reserves share and surplus less accumulated losses.

$$\text{Return on Total Shareholder's Equity} = \frac{\text{Net Profit After Taxes}}{\text{Total Shareholder's Equity}}$$

This ratio reveals how profitably the owner's funds have been utilized by the firm – A comparison of his ratio with that of similar firms as also with the industry average will throw light on the relative performance and strength of the firm.

Earning Performance Ratios:

a) Earning per share (EPS):- A part from the rate of return, the profitability of a firm from the point of view of the ordinary shareholder's is the EPS. It measures the profit available to the equity holders on a per share basis, i.e. the amount that they can get on every share held. It is calculated by dividing the profits available to the shareholder's by the number of the outstanding shares. The profit available to the ordinary shareholder's are represented by net profits after tax and preference dividend. Thus,

$$\text{ESP} = \frac{\text{Net profit available to equity holders}}{\text{Number of ordinary shares out standing}}$$

EPS is widely used ratio yet, EPS as a measure of profitability of a firm from the owner's point of view, should be used continuously as it does not recognize the effects of increase in equity capital as a result of retention of earnings. In other words, if EPS has increased over the year, it does not necessarily follow that the firms profitability as a result of retention of earnings. In other words, if EPS has increased over the year, it does not necessarily follow that the firms profitability has improved because the increased profits to the owners may be the effect of an enlarged equity capital as a result of profit retentions, though the numbers of ordinary shares outstanding still remains constant. Another limitation of EPS is that it does not reveal how much is paid to the owner's as dividends or how much to he earnings are retained in the business. It only shows how much "theoretically" belongs to the ordinary shareholder's. As a profitability ratio, the EPS can be used to draw inferences in the basic of (i) its trend over a period of time (ii) comparison with the industry average.

b) Dividend Per Share (DPS):

The EPS represent what the owners are theoretically entitled to receive from the firm. A part of the net profits belonging to them is retained in the business and the balance is paid to them as dividends. The dividends paid to the shareholder's on a per share basis is the DPS. In other words, DPS is the net distributed profit belonging to the shareholder's dividend by the number of ordinary shares outstanding. That is:

$$\text{DPS} = \frac{\text{Net profit available to equity holders}}{\text{Number of ordinary shares out standing}}$$

The DPS would be a better indicator than EPS as the former shows what exactly is received by the owners. Like the EPS. The DPS also should not be taken at its face value as the increased DPS may not be a reliable measure of the profitability as the equity base may have increased due to increased retention without any change in the number of outstanding shares.

c) Dividend Payout Ratio (D/P):

It is also known as pay out ratio. It measures the relationship between the earnings belonging to the ordinary shareholder's and the dividend paid them. In other words, the D/P ratio shows what percentage share of the net profit after taxes and preference dividend is paid out as dividend to the equity holders. It can be calculated by dividing the total dividend paid to the owners by the total profits/earning available to them. Alternatively it can be found out by dividing the DPS by the EPS. Thus,

$$(i) \quad D/P = \frac{\text{Total Dividend to Equityholders}}{\text{Total Net Profit belonging to Equityholders}}$$

$$(ii) \quad D/P = \frac{\text{Dividend Per Ordinary Share (DPS)}}{\text{Earnings Per Share (EPS)}}$$

The D/P ratio is an important and widely used ratio. The payout ratio can be compared with the trend over the years or an inter firm and intra-industry comparison would throw light on its adequacy. Investors have a marked preference for higher dividend payout ratio.

d) Earning and Dividend Yield:

Another profitability ratio from the point of view, the ordinary shareholder's is the earning and dividend yield. It is closely related to the EPS and DPS while the EPS and DPS are based on the book value per share, the

yield is expressed in terms of the market value per share the earning yield may be defined as the ratio of earning yield may be defined as the ratio of earning per share to the market value per ordinary share. Similarly the dividend yield is calculated by dividing the cash dividends per share by the market value per share, That is:

$$(i) \quad \text{Earning Yield} = \frac{\text{EPS}}{\text{Market Value Per Share}}$$

$$(ii) \quad \text{Dividend Yield} = \frac{\text{DPS}}{\text{Market Value Per Share}}$$

The earning yield is also called the earning price ratio.

e) Pricing Earning Ratio (P/E):

The P/E ratio is closely related to the earnings yield / earning price ratio. It is the actually the reciprocal of the latter. This ratio is computed by dividing the market price of the share by the EPS. Thus,

$$\text{P/E Ratio} = \text{P/E Ratio} = \frac{\text{Market Price of a Share}}{\text{EPS}}$$

The P/E ratio reflects the price currently being paid by the market for each rupee of currently reported EPS. In other words, The P/E ratio measures investor's expectations and the market appraisal of the performance of firm. In estimating earnings, therefore, only normally sustainable earnings associated with the assets are taken into account. That is the earning is adjusted for

income from, say, discontinued operations and extraordinary items as well as many other items not expected to occur. As a general rule, the higher the P/E ratio, the better it is for the owners. This ratio is popularly used by security analysts to assess a firm's performance as expected by the investors.

2.1.6.2 Trend Analysis

The trend analysis is the study of change of the data shown in financial statements over a period of time. It involves the computation percentage relationship that each statement item bears to the same item in the base year. The earliest year involved in comparison is generally taken as the base year with base reference to which all other statements are studied. If the earliest year is not a normal year, any other involved in comparison may be taken as the base year. In the computation of trend percentage (trend ratios), the first step is to take up necessary items for a number of years from the statements. It is so because the trend ratios are generally not computed for each and every item of the statements. The second step is to take every item of base year statements Rs. 100. The third and last step is to compute trend ratio by dividing each item of remaining statements with the corresponding item of base year statement. Thus, the method of computation of trend ratios is the same as that of index numbers.

As a matter of fact, the trend ratios may be thought as index numbers showing relative changes in financial data over a period of time. Khan & Jain state, "Trend ratios indicate the direction of change in the performance improvement, deterioration or constancy over the year." Thus trend analysis is a dynamic method of analysis. It enables an analyst to see the future of a concern in its right perspective by making an indication in which it (Concern) is going. I.M. Pandey mentions, "The trend analysis of ratio adds considerable significance to the financial analysis because it studies

ratios of several years and isolates the exceptional instance occurring in one or two periods". (Movac, David:1975:73)

2.1.6.3 Comparative Financial Statement:

Comparative financial statements are statements of the financial of a business so designed as to provide time prospective to the consideration of various elements of final position embodies in such statement. (Pandey, I.M.:1990:21)

Theoretically, any such statements can be belonged to the family of comparative financial statement. However, It is the balance sheet and income statement (i.e. P/L A/C) which along are prepared in a comparative form because they are most important statement of financial positions this is because it is through the income statement that the impact of conducts of business is brought to bear on the balance sheet.

a) Comparative Balance Sheet:

Increase and decrease in various assets and liabilities as well as proprietors' equity or capital, brought, about by the conduct of business can be observed by the comparison of the balance sheet at the beginning and end of period. Such observation offers yield considerable information which is of a value informing on opining regarding the progress of the enterprise and in order to facilities comparison, a single device known as the "Comparative Balance Sheet" may be used. (Prahdhan, Surendra:2000:35)

Comparative balance sheet is a tool of financial statement analysis in which the items of balance sheet of a last two year are compared and the changes between dates are indicated in absolute amount as well as in percentage increased or decreased. It shows not only the balance of the amount at different dates but also the extent of their increase or decrease between these data. Thus, it may be defined as the study of the defined of the same items, groups of items. And computed in two or more balance sheet of

the same business enterprise on defendant dates and the study of defined of proportion computed from those figures on the different dates. These great advantages of this analysis is that its parties the defined of particular nature of business enterprises and of the enterprise as a whole.

b) Comparative Income Statement:

Comparative income statement shows the operating result for a number of accounting periods so that changes in absolute data from one period to another period may be started in terms of money and percentage. It contains the same column as the comparative balance sheet and provides the same type of information the amount balances, increase and decrease in money amounts and if desired, the percent of increase of decrease (Pokharel, Shiva Prasead:1991:61).

Comparative income statement is a told of financial statement in which the items of income statement of at least two years are compared and changes between date are indicated in absolute rupees in percentage increase or decrease.

2.1.6.4 Common Size Statement Analysis:

Preparation of comparative financial statements and the calculation of trend percentage or ratios as methods of analysis financial statements, have one common short coming the inability of the analyst to comprehend the changes that have taken place from year to year in ratio to the total assets, total liabilities and capital or total net sales. The seriousness of this limitation is bought for the when a comparison is being made of two or more business unit or of one unit with statements for an industry as a whole because there is no common base of comparison when dealing with absolute figures. However, incase the balance sheet and income statement items are shown in analytical percentage i.e. percentage or ratio of the total of appropriate items (total assets, total liabilities and capital and total net sales) a common base for

comparison is provided. The statement I this term is designed as common size statement.

a) Common Size Balance Sheet:

The common size balance sheet percentage shows the relation of each assets item to total assets and each liabilities and capital. As these percentage show relationship to balance sheet totals, variations from year to year do not necessarily indicate changes in money amount,, in fat, the balance sheet common size ratios may reflects a change in the individual item, a change in the total or a change in both.

In order to increase materially the value of common size balance sheet, an additional column may be provided for each year to show the percentages of each item within a group to the total of the group.

As the common size balance sheet percentages represent components parts of the totals, a horizontal comparison form year to year would result only in a study of the trends of relationships; they do not give information about the trends of individuals items form year to year. It is doubtful whether the observation of the friends of these relationships is of any utilizing because the total is affected by the variations in all its components with the result that trends of relationships are too difficult for interpretation. Common size balances can be useful only if it could be established in any particular business that a certain item should normally be a certain percentage of the relevant total but it is very difficult, if not impossible to establish such norms and this fact detracts form the usefulness of common size balance sheet.

b) Common Size Income Statement:

Income statement common size percentages how the amount or percentages of net sales that has been absorbed by each individual costs or expense item. A comparison of common size income statement ratios is significant in as much as they show that a large particulars or smaller relative amount of net sales figure was used in meeting costs or expenses through

percentages may be influenced by variations in sales prices, higher or lower cost of goods acquired or both.

2.1.6.5 Cost – Volume-Profit Analysis:

Another important tool used in analyzing financial performance of a firm is cost-volume-profit analysis. The C.V.P. analysis helps in finding out the relationship of costs and revenues to volume. It is a device used to determine the usefulness of the profit planning process of the firm. Really speaking there is inter-relationship between cost volume profit and profit planning. However, it should be noted that the formal profit planning control involves the use of budget and other forecasts and C.V.P. analysis simply provides an over view of the profit planning process and helps to evaluate the purpose and reasonableness of such budgets and forecasts. C.V.P helps to determine the minimum sales level to avoid losses and his sales volume at which the profit goal of the firm will be achieved. It also helps management to choose the most profitable combination costs and volume. C.V.P. analysis can be used by a dynamic management to predict and evaluate the implications of its short run decisions about fixed and variable cost volumes and selling price for its profit plans on a continuous basis.

The C.V.P. analysis furnishes complete picture of the profit structure which enables management to distinguish between the effect of sales volume fluctuation and the result of price cost changes upon profit.

2.1.6.5.1. Contribution Margin and Contribution Margin Ratio (Profit Volume Ratio)

The Margin of Sales over fixed costs will be called the contribution margin mathematically,

$$\text{Contribution Margin} = \text{Sales} - \text{Variable costs.}$$

Conceptually, this is the contribution made by sales of any period, after coverage of all applicable variable costs towards the recovery of the fixed costs

of that period and the realization of profit (in that order). The contribution margin can be expressed in per unit also. The contribution margin per unit is the excess of the unit selling price over the unit variable costs.

Contribution Margins or profit volume ratio express relationship between contribution and the value of sales. It may be employed to measure the relative contribution of product or company for different period. The following formula is used to calculate Contribution Margin and Contribution Margin Ratio (PVR).

$$\text{Contribution Margin} = \text{Total sales revenue} - \text{Total variable cost}$$

Contribution margin or profit volume ratio

$$(\text{C.M. or P.V.R}) = \frac{\text{Total Variable Cost}}{\text{Total Sales}}$$

2.1.6.5.2 Break Even Analysis (B.E.P. Analysis):

Break Even Analysis is an analytical technique used to study cost volume profit relationship. It provides information to management in most clear way. It is an effective and efficient reporting system.

The break even analysis establishes relationship between volume cost and revenue. It determines the point where total revenue equal total costs i.e. profit is zero. This point is equilibrium point and is also known as break even point. The cost and revenue relationship at the B.E.P. can be expressed as under;

$$\text{Total Costs} = \text{Total Revenue (Sales)}$$

Separation of total cost into fixed and variable is one of the important pre-condition for the use of C.V.F. of break even analysis. For the break even point to occur, it is necessary that the firm has some fixed costs and some variable.

Break even formula

Break even point of a business can be determined by the following simple algebraic formulae;

$$\text{Break Even Point (in unit)} = \frac{\text{Fixed Cost}}{\text{C.M.P.U}}$$

$$\text{Break Even Point (in Rs.)} = \frac{\text{Total Fixed Cost}}{\text{P.V. Ratio}}$$

2.1.6.5.3 Margin of Safety:

With the help of break even point margin safety of the firm can be found out. The margin of safety is the difference between the total sales and the sales at the break even point. The size of the margin of safety is indicative of the strength of business enterprises. A firm to be strong enough must have high margin of safety so that even if there is a fall in sales, it can make profit. On the contrary, if margin of safety is small a fall in sales may create serious problem. The margin of safety can be calculated in the following manner.

$$\text{Margin of Safety} = \text{Total Sales} - \text{Sales in break even point}$$

2.2 Review of related studies:

Different researchers have approached financial ratio analysis in different ways. A review of these approaches is important in order to develop an approach that can be employed in the context of Nepalese enterprises.

A study was conducted on "Some Empirical Bosses of Financial Ratio Analysis" in April 1963. (Prahdan, S.M.:1979:71)

This study cause on correlation between financial ratios and its utility to analyze statistical nature of financial ratios and evaluation of utility of financial ratios were the main objectives of this study. The major finding in brief may be stated as follow:

- a) Short term liquidity ratios are highly correlated with each other.
- b) Long term solvency ratios are also highly interred correlated as a group.
- c) The co-linearity pattern of the return on investment ration is 1st gaily simply
- d) Financial ratios can be fairly efficient predictor of a variety of financial difficulties.

The other study concluded was on "usefulness of financial ratios to inventors in common stock."(Schall, Lawrence:1966:51)

The objectives of this study were to examine the usefulness of the ratio to decision makers. In this study a group of 33 ratios initially chosen was reduced to similar group of 10 ratios that liabilities to net worth, working capital to sales, sales to total assets, income available for common shareholders' to net worth, the excess of income per common share over dividends per common share to income per common share, pre-tax net operation income to sales net income before tax minus income tax divided by net income before taxed, cash flow to number of common share, current liabilities to investors and earning per share to price per share. The major findings in barriers areas are as follows:

- a. Financial ratios are generally useful to external decision make there.
- b. The predictive abilities of the various ratios rate of return models strong doubt upon the usefulness of financial ratios alone to investors in common stock, who are interested in forming expectations about future rate of return rankings.

A study was conducted on "Assessing industry Rise by Ratio Analysis" in October 1975. The objective of this study was to demonstrate a technique for scaling industries according to degree of risk. The ratios were selected on the basis of the industry characteristics and the result reported by prior researches. The study had selected all tougher twenty three industries. In this study altogether five ratios were calculated the major finding in brief may be stated on financial ratio, which can be used to rant the industries according to the degree of risk.

The study was conducted on "The effect of lease data on the predictive ability of financial rations."

The main purpose of this study was to develop such information about the lease question by analyzing the problem from a term financial statements. The ratio short term liquidity ratios, cash flow ratios, long term solvency ratio, short term capital productivity ratios, profit marines on investment ratio, short term capital productivity ratios, profit margins on investment ratios and debt coverage ratios were calculated in this study. The conclusion or this study was the research clearly did not support the hypothesis that addition of capitalized lease date to a firm's financial statement will increases the power of affected financial ratios for prediction firm bankrupt. The Study was conducted on "Ratio stability and corporate failure."

The main purpose of this study was to know the stability of all financial ratios over time, as well as the level of these ratios as explanatory variable in the derivation of the discriminate function. The data were collected from 68 firms half of them failed and half of them did not fail. The following ratios were used in the analysis of this study:

- a) Portability Ratio
- b) Activity or Turnover Ratio
- c) Liquidity Ratio
- d) Indebtedness Ratio

The major findings of this study are as follows:

- a) Standard deviation of ratio over times appeared to be the strongest measure of ratio stability
- b) The ratio of net profit to sales, net profit to total assets, fixed assets to net worth funded debt to net working capital, total debt to total assets and standard deviation of inventory to net working capital and fixed asset to net worth have shown to be relevant in predicting corporate failure.

A study conducted on "Liquidity Ratios and Recent British Monetary experience"

To investigate the behavior of liquid assets ratios of British Banks since the end of world war was 2nd to analyze the possible efficiency of prescribed liquidity ratios as weapon monetary policy was the main purpose of this study. The major conclusion in brief may be stated as below.

- a) Prescribed liquidity ratios can serve the authorities only as a crutch of rather liquidated support. The ideal situation is on which they can eschewed completely.
- b) Reliance upon the secondary liquidity ratios as tacit admission of the inadequacy of previous monetary and fiscal measures.

Financial performance of a company, "A case study of Bansbari Leather and shoes factory" was made by Mr. Shiva Pokhrel.

His major findings were that the equity position of BSLF was sound. Factory had excessive amount of debtors and inventory. The turnover ratio of BSLF was found too poor. It was the result of own sales volume in comparison to its investment. The company's profitability was also very poor. But on the other hand BSLF had sound long term solvency.

"Evaluation of financial performance of Agriculture inputs Corporation Nel" was undertaken by Mr. Hem Singh Bhandari.

He observed in this study that the financial performance of A/C was seen to be very poor. Every year A/C was operative in losses. The corporation did not attempt to control its unnecessary costs burdens. Liquidity position on A/C was also poor and it is unable to meet its current obligations. Due to the increasing trend of debt financing, interest burden to the corporation was increased along with debt. A/C's poor activity revealed the inefficiency of the corporation. This indicates that the corporations overall poor planning and ineffectiveness.

Another study was conducted by Mr. Dhan Bd. Thapa on "A study of financial performance of Bhrikuti Paper Mills Ltd." In 2048. The major findings of this study concluded that BPML had been able to have enough sources of fund by its own efforts to meet the expenditure. This has points out to improve financial position that it had acquired within the few years of operations.

Similarly the analysis of financial as well as operation as performance of BPML through ratio analysis, the conclusions are drawn toward the favorable achievement in the most aspects the same. Similarly the profitability of BML in relation to its sales of the year, total assets capital is also seen improved. But however BGPML was not able to generate gross profit margin in the subsequent fiscal years it had generated in the very first year of its operation, and further it had been able to strike a proper balance between liquidity and lack of liquidity throughout the operational phase.

Another study was conducted by Suresh Pradhan on "A study on working capital policy of manufacturing public enterprise in Nepal" 1989. The major findings of the study show that almost all the selected MPWS have followed a moderate approach. None of them followed a conservative one. But majority of MPWS has sufficient liquidity. There is improvement in the use of CAS in selected MPWS. Because CAS turnover is 1.:1 time to sales moreover there is high turnover of cash and receivable in comparison to inventory except RDL the selected MPES are incurring loss at the rate of (5.33) percent in relation to their sales because of the operation in the efficiency. There is highest use of long term funds operation profit in CAS financing. The capacity utilization is the significant factor in determining the requirement of selected MPES and the variable, sales, cash flow cycle and interest rate are not significant in the determination.

Mr. Mukund Prasad Dahal has made a study on "capacity utilization of public enterprises in Nepal" and he has concluded that the public enterprises

of Nepal have been suffering from the problem of no availability of raw materials which has resulted the low capacity utilization of manufacturing capacities therein. The lack of skilled labor also is the major factor of low capacity utilization. Higher price of product of enterprise^{3s} incre³ased the huge inventory of unfold goods. It relates the problem to utilize the capacity in the succeeding an d next following years. He has suggested that utilizing the full capacity of machine and reducing the price by recruiting skilled labor and renouncement of new machine and innovated technology to sum, the problem of unemployment way be solved.

Mr. Jwala Prasad Yadav exposed on this study on "A study on financial performance of Bansbari Leather and shoes factory Ltd." Which reveled that never stocking of shoes invited financial crisis. Because in these situation production was increased buy selling decreased. Amount raised by Issuing share was mot invested in working capital so inventory, account receivable, which could note be converted in cash immediately. It was also showed hindrances in liquidity and in thesis way factory had to face financial crisis. In other words profitability position of the best was very poor.

A study conducted by Surendra Man Pradhan on " An Appraisal on operational performance of Balaju Textile Industry with special reference to financial management. " He highlighted some valuable suggestion which are mentioned here under.

- The per unit cost should be least and only then price would be fair.
- Inventories should be not be high nor low but it should in optimum level and collection period should be short too.
- Investment and industries should be on the basis of capital budgeting. Capital structure of the industries not should be fully rely on neither equity nor debt. But it should be on the basis of proper mix proportion between them.

CHAPTER – 3

RESEARCH METHODOLOGY

The basic objective of the present study is to analyze the financial performance of Hetauda Cement factory and to recommend necessary suggestion for the improvement of weaknesses. To fulfill this objective of the study, appropriate methodology has been followed. So, this chapter concerned with the research methodology applied in conducting the study consist of research design, population and sample, nature and sources of data collection techniques and data analysis tools.

3.1 Research Design.

The present study is obviously a case study of the H.C.F. It makes an intensive investigation into financial performance of the factory for obtaining a complete and accurate description of the existing situation. It involves the systematic collection and presentation of data to given clear picture of the financial management of the undertaking. Thus, a descriptive research design has been adopted in adopted in carrying out the study.

3.2 Population and Sample:

At present there are only two Cement Manufacturing industries in Nepal HCF and UCF, which from the population for the study. The selection of any one of these enterprise cannot fairly represent the characteristics of the entire population. Hence, it is necessary to make the study of the total population. However, the question of population and sample does not arise, as the present study is a case study of the HCF.

3.3 Sources of Data:

The present study is based mainly on secondary data. The sources of secondary data are both internal and external. The internal secondary data

include the data available in financial statements unpublished official records of the HCF. The external secondary data include the data available in books, periodicals, unpublished officials records of the government organizations and published and unpublished reports.

3.4. Data Collection Technique:

After receiving a letter of introduction from the campus, exhaustive list of required data and information was prepared. The data needed for the appraisal of financial performance of the HCF were obtained directly from the registered head office of the factory at Hetauda Makwanpur. The supplementary data and information were obtained from the unpublished official's records of the office of the register of companies, the reports of the controller and Auditor's general of companies, the reports of the controller and Auditor's general of Nepal and the previous studies related to the aspect.

3.5 Data Analysis Tools:

Since the study concentrates on financial aspects of HCF some important financial tools/techniques like ratio analysis, fund flow analysis has been used. In addition the statistical tools like average, percentage, range, standard deviation, correlation and regression have also been applied in order to make the analysis more systematic, scientific and useful. Besides these, graphs have also been constructed to give a much more vivid picture of the trends and relationships of the financial facts under consideration.

3.6 Organization of the Study:

The entire study has been divided into five major chapters. The First Chapter gives a general introduction of the subject matter covering background of study, need and significance of the study, statement of problem, objective of the study and limitations of the study. In the Second Chapter the pertinent literature and studies have been reviewed making logical and meaningful grouping into conceptual framework and review of journals and previous studies. The Third Chapter furnished the research

methodology encompassing research design population and sample, sources of data, data collection technique, data analysis tools and organizations of the study. In the Fourth Chapter, the relevant data have been presented in the form of tables and graphs and analyzed with the help of financial and statistical tools for drawing inferences. The Fifth Chapter accommodates summary, conclusions and suggestions for ameliorating the financial performance of the factory.

CHAPTER – 4

DATA PRESENTATION AND ANALYSIS

In the previous chapter, the research methodology adopted in carrying out the study was framed. This chapter presents the relevant data meaningfully in the form of tables and graphs and analyses them with the aid of financial and statistical tools for the fulfillment of the state objectives. In particular it measures the profitability as well as efficiency in utilization of available resources and examines the short term as well as long term solvency position of the HCF. In the pages to follow:

4.1 Liquidity Ratio:

Liquidity ratios indicate the liquid position of a company. To measure the ability of a firm to meet its maturing obligations. Liquidity increases the operational efficiency of a company. Thus a company should have neither low nor high liquidity. If a company fails to meet its obligation due to lack of sufficient fund it will result in bad credit rating, it will lose creditor's confidence. A very high degree of liquidity results in unnecessary fund tied up on current assets and it is also bad because idle assets earn nothing. Therefore, it should maintain proper balance between high liquidity and lack of liquidity. The company's liquidity position can be measured with the help of current ratio and quick ratio.

4.1.1 Current Ratio:

With the help of current ratio, the company measures its short term solvency i.e. ability to meet short term obligation. It also shows a rupee of current assets available for each rupee of current liabilities. It should be born in mind that current assets are not the only source of funds to meet current liabilities. A firm can borrow from new creditors to repay the old. The current ratio is computed by dividing current assets by current liabilities.

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

In interpreting this ratio, current ratio of 2:1 has long been considered generally satisfactory but indiscriminate use of this standard is unfound. This ratio varies from industry to industry and within the same industry from company to company. One should be careful to determine acceptable standard within the industry in which the company operates.

The current ratio of Hetauda Cement factory has been presented in table 4.1 along with the standard deviation and co-efficient of standard deviation in current assets and current liabilities and co-efficient of correlation between current assets and current assets and current liabilities.

Table -4.1
Current Ratio of HCF
(2059/60 to 2054/65)

Year	Current Assets	Current Liabilities	Ratio in times
2060/61	393,692	365714	1.08
2061/62	452,113	381,113	1.19
2062/63	471,005	400,331	1.180
2063/64	527,442	397,405	1.33
2064/65	537,537	386,095	1.39
2065/66	504,410	300,090	1.68
Average	481,033	371,775	1.30

Source: Annual Reports of HCF for the years 2060/61 to 2065/66

The absolute amount of both current assets and current liabilities of the factory during the period of study from 2060/61 to 2065/66 as shown in table 4.1, recorded indefinite trends. The current ratio of the factory marked a

increasing trend during 1st and second years and decreasing trend during 3rd year and increasing trend there after.

It is 1.08 times, 1.119 times, 1.18 times, 1.33 times, 1.39 times and 1.68 times in 2060/61, 061/62, 062/63, 064/65 and 065/66 respectively ratios are less than standard. Hence the short term financial conditions is not satisfactory in the year of study.

4.1.2 Quick Ratio:

The Quick or Acid Ratio is a more refined measure of the firm's liquidity. This ratio establishes a relationship between quick or liquid assets and current liabilities. An asset is liquid; if it can be converted into cash immediately or reasonably soon without any lose of value cash is the most liquid assets. The other assets which are considered to be relatively liquid and included in quick assets are book debts and marketable securities. Stocks and prepaid expenses are considered to be less liquid. Inventories normally require something for realizing into cash; the value of stock also has a tendency to fluctuate. The quick or liquid assets are separated for calculation the quick ratio. Prepaid expenses should also be excluded because they can not be converted into cash. The quick ratio is found out by dividing the total of the quick assets by total current liabilities.

$$\text{Quick Ratio} = \frac{\text{Quick/ Liquid}}{\text{Current Liabilitie s}}$$

Generally, a quick ratio of 1:1 is considered to represent satisfactory current financial position. A company with a high value of quick ratio can flounder if it has sow-paying doubtful and stretched out in age receivables (book debts). On the other hand a company with a low value of quick ratio many really be prospering and paying its current obligations in time, if tit has been managing its inventories very efficiently with a continuous edibility.

Nevertheless, the quick ratio remains an important index of the firm's liquidity.

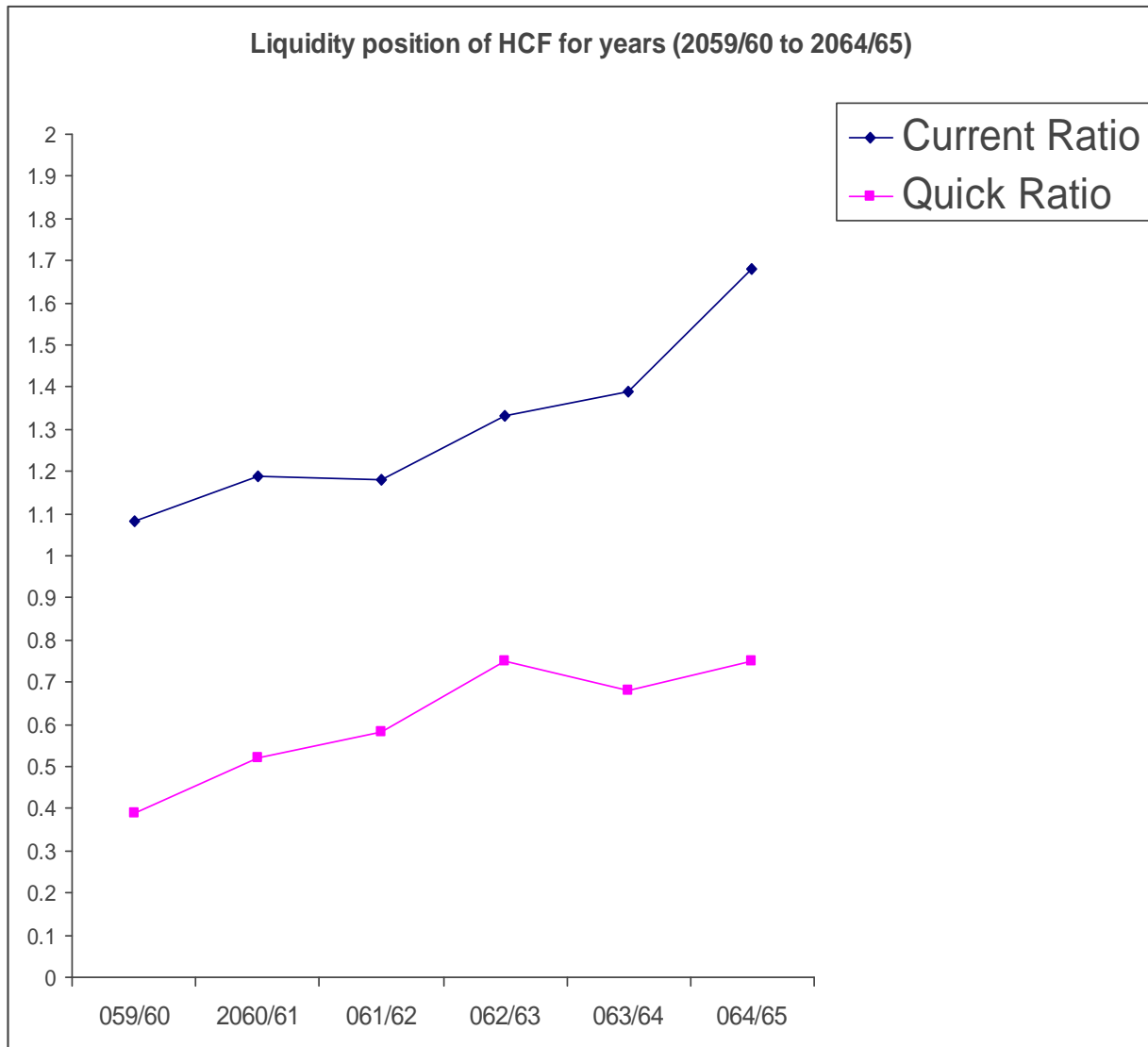
The quick ratio of the Hetauda Cement Factory has been presented in table 4.2 for 2060/61 to 2065/66.

Table 4.2
Quick Ratio of HCF
(2060/61 to 2065/66)

Years	Quick Assets	Current Liabilities	Ratio (in times)
2060/61	141,969	365,714	0.39
2061/62	197,588	381,013	0.52
2062/63	231,348	400,331	0.58
2063/64	297,511	397,405	0.75
2064/65	263,958	386,095	0.68
2065/66	223,910	300,090	0.75
Average	226,047	371,775	0.61

Source: Annual report of HCF for the year 2060/61 to 2065/66

The quick ratio of the factory marked increasing trend in 1st four years and decreased in 5th year and increasing trend there after. It is 0.39 time, 0.52 times, 0.58 times, 0.75 times, 0.68 times and 0.75 times in years 2060/61, 2061/62, 2062/63, 2063/64, 2064/65 respectively. It is less than standard in each year. So liquidity position of the factory is not satisfactory.

Graph:**4.2 Activity Ratio:**

Turnover or activity ratio measure the effectiveness of the employment of resources in a company through establishing the relationship between sales and various assets. This ratio indicates the speed with which assets are being turned over ratio into sales the turnover of HCF is measured through inventory turnover, debtors turnover and working capital turnover etc.

4.2.1 Inventory Turnover Ratio:

An enterprise is required to maintain inventory or stock for efficient and smooth procurement, production and sales operations. As such, inventories constitute a lion's share of their current assets requiring huge investment, so it is necessary to manage inventories efficiently and effectively to avoid unnecessary investment inventories have been called the grave yard of a business because they have frequently been the prime cause of business failure. If the factory processes excessive inventory for a long period it increases the chances of loss of liquidity in it. The factory may even be bankrupt if both the inventories and liabilities are heavy. So it is essential to establish the relationship between stock figures to total sales so called inventory turnover ratio or stock turnover ratio. The ratio of inventory (stock) to sales is computed as follows.

$$\text{Inventory Turnover Ratio} = \frac{\text{Cost of Goods Sold/Cost of Sales}}{\text{Average Inventory}}$$

Inventory turnover ratio indicates the efficiency with which the inventories of the firm are managed. It indicates whether the investment in inventory is efficiently used or not it also explains whether investment in inventories is within proper limits or not and marketability of inventory and reasonableness of quantity on hand. The inventory turnover can be computed by dividing the sales figure by inventory but calculation of inventory turnover by dividing cost of sales with average inventory is more appropriate. The logic behind establishing a relationship between cost of goods sold and average inventory seems to be that stock should be compared with cost of goods sold rather than sales because the stock is at cost price and the sales include the profit also. Alternatively the stock may be converted into selling price by adding profit portion and be compared with sales instead of cost of sales. Likewise, stock may have changed significantly during a given year and as much it is particularly important to use a yearly average than the year end stock amount. If the information regarding the cost of goods sold and average

inventory are lacking, this ratio can be computed by dividing the figure of sales by year end inventory figure.

Inventory Turnover Ratio measures the velocity of conversion of stock into sales. A high stock turnover indicates efficient management of inventory, because more frequently the stocks are sold the lesser amount of capital is required to financial the inventory. But excessively high ratio may be a symptom of under investment in stock, which may bring serious drawback in future. On the contrary a low stock turnover indicates over investment in stock, dull business, poor quality of good stock accumulation, accumulation of absolute and slow moving goods low profits as compared to total investment and inefficient inventory management.

The inventory turnover of HCF has been presented in the table 4.3 for the fiscal year 2060/61 to 2065/66.

Table 4.3
Inventory Turnover Ratio of HCF
(2060/61 to 2065/66) In Rs '000'

Years	Cost of Sales	Average Inventory	Ratio in Times
2060/61	388547	255273	1.50
2061/62	507615	251325	2.00
2062/63	471549	247091	1.91
2063/64	502040	234794	2.13
2064/65	483875	251755	1.92
2065/66	480775	27739	1.74
Average			1.87

Source: Annual report of HCF for the year 2060/61 to 2065/66

During the period of study, the ratio of average Inventory to cost of sales fluctuated. It is 1.50 times, 2.00 times, 1.91 times, 2.13 times, 1.92 times and 1.74 times in the year 2060/61, 2061/62, 2062/63, 2063/64, 2064/65 and

2065/66 respectively. It is always less than two times. It shows that the inventory of HCF has not been managed efficiently.

4.2.2 Debtor / Receivable Turnover Ratio:

When credit is used as a tool for the promotion of sales, debtors or amount receivables and bills receivable emerge in the enterprises books of accounts, as the firm requires waiting over a short period in future to get payment against goods or services delivered to the customers on credit, debtors form the part of current assets and consume the relative share of firms resources.

Trade credit is an essential marketing tool in the hand of management in order to protect the sales of the factory from competitor and to attract the potential customers to buy its product. It creates receivables or book debt, which the factory is expected to collect in the near future. In HCF book debt do not constitute as substantial portion of current assets as in other companies. It was informed by the management of HCF that the factory sells its products only in cash or on seven days bank guarantee. But as mentioned in the financial statement, it cannot be said to have completely closed the current sales in HCF and thus it is important for the analyst to find out the rate which cash is generated by turnover of debtors. The turnover of debtors, which is an excellent supplementary check to be used for judging the adequacy of warrant ratio, has been calculated by dividing the amount of sales by the amount of trade debtors. The number of days to collect debtors has also been calculated by dividing the product of trade debtors and the number of working days by the amount of sales. The total sales for the computation of ratio have been used in the absence of the break-up of sales into cash and credit in financial statement of the factory.

For the purpose of calculation debtors' turnover ratio in HCF only those debtors at the end of each fiscal year have been included which arise from the regular sales of the factory. Reserve for bad and doubtful debt has not been deducted from the total amount of trade debtors in order to avoid the impression that a larger amount of debtors has been collected. The turnover of

debtors can be increased by allowing less credit period to debtors, i.e. making collection within a short period. The effective credit administration result in higher turnover of debtors, which is good enough for the short term creditors of the factory. For higher profitability a high turnover of inventory should be accompanied by prompt collection of debtors which in turn serves the purpose of long term creditors of the factory.

$$\text{D.T.R} = \frac{\text{Sales}}{\text{Debtors}}$$

The Debtors Turnover Ratio shows the relationship between net credit sale and average debtors to evaluate the efficiency with which debtors are managed. It indicates the number of times the debtors rotate in year. The following **Table** shows debtors turnover ratio and days sales outstanding in HCF from 2060/61 to 2065/66.

Table No: 4.4
Debtors/Receivable tunable ratio
(2060/61 to 2065/66) In Rs '000'

Year	Sales	Debtors	Turnover	No. of days to collect debtors
2060/61	416,057	187	2,224	2
2061/62	665,404	3,680	178	2
2062/63	658,720	8,206	80	4
2063/64	655,968	554	1,185	0
2064/65	706,303	514	1,374	0
2065/66	750,305	490	1,531	0
Average				1

Sources: Annual reports of HCF for the year 2060/61 to 2065/66.

The Debtors Turnover Ratio of the factory as indicated in table 4.4 marked fluctuating trend in the period of study. It is 2,224 times, 178 times,

80 times, 1,185 times, 1374 times and 1,531 times in the year 2060/61 to 2065/66 respectively. Therefore debtors turnover shows that the receivables has managed efficiently.

4.2.3 Working Capital Turnover:

In order to test the efficiency with which net working capital is utilized many analyst determine the ratio of net sales to net working capital i.e. the turnover of working capital. This is done by the networking capital in to net sales. Indicating whether the business is being operated on a small or large amount of net working capital in relation to sales. Larger the net in comparison with net working capital the less favorable the situation is likely to be if the resultant not working capital turnover has been made possible b y the use of an excess amount of current credit. The real danger lies in the possibility of a decline in sales due to unforeseen circumstances like, cancellation of order strikes, depressions, and competition, working capital turnover is calculated as follows:

$$\text{Working Capital Turnover} = \frac{\text{Net Sales}}{\text{Net Working Capital}}$$

A high working capital turnover^{3r} may be result of favorable turnover of inventories, and receivables or may reflect an inadequacy of net working capital accompanied by low turnover of inventories and net working capital accompanied by low turnover of inventories and receivables. On the other hand a low turnover of net working capital may be the outcome of an excess of net working capital slow turnover of inventories and receivables, a large cash balance or investment of working capital in the form of temporary investment. Thus in interpreting the net working capital turnover, the analyst should exercise considerable caution because the working capital turnover ratio is a composite of a number of relationship each one of which should be analyzed carefully to account for changes from year to year or between companies.

The following **Table** shows working capital turnover of HCF from 2060/61 to 2066.

Table – 4.5
Working Capital Turnover of HCF
(2060/61 to 2065/66) **In Rs. '000'**

Year	Sales	Working Capital	Turnover (in times)
20650/61	416,057	29,978	13.87
2061/62	655,404	71,100	9.22
2062/63	658,720	70,674	9.32
2063/64	655,968	130,037	5.05
2064/65	706,303	151,442	4.67
2065/66	750,305	204,320	3.67

Sources: Annual reports of HCF for the year 2060/61 to 2065/66.

Table 4.5 shows that the working capital turnover ratio is in decreasing trend. It is 13.87 times, 9.22 times, 9.32 times, 5.05 times, 4.67 times and 3.67 times in financial year 2060/61 to 2065/66 respectively. Thus, the working capital is not used efficiently during the years of study.

4.2.4 Solvency Ratio:

Solvency ratio is also called capital structure ratio or leverage ratio. Solvency ratio judges the long-term financial position of the firm. M.Y. Khan and P.K.Jain defined "Capital structure ratio as financial ratio which through light on the long-term solvency of a firm as reflected in its ability to assure the long term creditors with regard to (I) periodic payment of interest during the period of loan (II) payment of principle on maturing or in pre-determining installments at due dates." Solvency ratio measure the contribution by owners compared with financial provided by creditors. It indicates the debt and fixed charge paying ability also.

Debt Equity Ratio:

The debt equity ratio is the measure of the relative claims of creditors and owners against the firm's assets. Debt to shareholders equity ratio measure the firm long term solvency. One view is to calculate the debt equity ratio as long term debts divided by the shareholders equity, common shareholders equity, common shareholders equity plus preference shareholder equities.

$$\text{Debt - Equity Ratio} = \frac{\text{Long Term Debt}}{\text{Shareholders - Equity}}$$

Past accumulated losses and net profit should be included in the shareholders equity. Recall that the shareholders equity is equal to the net worth. There for this ratio is called debt to net worth ratio.

Another variation of the debt equity ratio is to divide the total debt by the shareholder equity.

$$\text{Debt - Equity Ratio} = \frac{\text{Total Debt}}{\text{Shareholders}}$$

The debt to equity ratio indicates the contribution of debt capital and equity capital fund in total investment. A very high ratio is unfavorable is form the corporation point of view.

An optimum debt-equity ratio should be maintained which is generally determined on the basis of industry average of the firms past records. Conditions and performance of H.C.F. in relation to debt equity ratios are presented bellow.

Table 4.6
Debt Equity Ratio of H.C.F
(2060/61 to 2064/65)

"000"

Years	Total Debt	Share holders equity	Debt equity
2060/61	691,594	(96,429)	(714)
2061/62	704,393	(75,9211)	(9.28)
2062/63	719,711	(10,374)	(69.37)
2063/64	6996786	32,780	21.26
2064/65	630475	112,788	5.49
2065/66	500440	219810	2.28
Average			(5676)

Sources: Annual Reports of HCF for the year 2060/61 to 2065/66

Table 4.6 shows the Total Debt to Shareholders equity ratio. It is decreasing trend in 1st three years, In Fourth year it the cleared and thereafter it is in decreasing It is 7.14 times, 9,28 times 69.37 times, 21.26 times, 5.49 times, and 2,28 times in the year 2060/61, 2061/62, 2062/63, 2063/64, 2065/66 receptively. During the period of and his average ratio HCF is less them standard harm which indicate that HCF is a less average of company. This type of cap[ital structure is favorable of creditors because them are provided margin of safety.

Debt To Total Capital Ratio:

Debt to total capital ratio fall under leverage ratio. It is calculated by dividing the long term (funded debt) by total capitalization i.e. permanent capital which includes share holders equity and long term debts. This ratio helps to establish a link between funded best and total long term funds available in the business.

$$\text{Debt to Total Capital Equity Ratio} = \frac{\text{Long Term Debt}}{\text{Total Capitalization}}$$

Funded debt to total capitalization ratio should be 2:3 for satisfactory position both for shareholder and long term loan financiers. A low ratio represents security to creditors in extending funds. On the other hands, a high ratio represents a greater risk to creditors and also to shareholders under depression. A very low ratio can worry owners as firm is not using debt to their best advantage.

The funded debt to total capitalization ratio of HCF is shown on the following

Table 4.7

Debt to Total Capital Ratio

(2060/61 to 2065/66)

In Rs '000'

Year	Lone Term debt	Total capital	(Ratio in times)
2060/61	325880	229451	1.42
2061/62	323380	247459	1.31
2062/63	319380	309006	1.03
2063/64	299380	332161	0.90
2064/65	244380	357168	0.68
2065/66	200350	420160	0.48
Average			0.977

Sources : Annual Report of HCF for the year 2060/61 to 2065/66.

Table 4.7 shows that the debt to total capital ratio of HCF recorded down ward tendency during the period of the study it is 1.42 times 1.31 times, 1.03, times, 0.09 times, 0.68 times and 0.48 times in year 2060/61 to 2065/66 respectively. During the period of analysis average ratio of HCF (i.e. 097) respectively. During the period of analysis average ratio of HCF (i.e. 097) more than standard norm (0.67) which indicates that HCF is a high leveraged company this type of capital structure is **Favorable** for owner but not for creditor.

Proprietary Ratio:

A variant of debt to quit ration is the proprietary ratio which establishes the relationship between proprietors funds and total assets. the difference between this ratio and 100 percent represents the ratio of total liabilities to total assets. it is calculated as follows.

$$\text{Proprietary Ratio} = \frac{\text{Proprietary Fund}}{\text{Total Assets}} \times 100\%$$

The Proprietary Ratio of H.C.F. is shown on the following table.

Table 4.8
Proprietary Ratio of HCF
(2060/61 to 2065/66)

Year	Proprietary	Total Assets	Ratio
2060/61	96429	730725	0.13
2061/62	75,921	762505	0.10
2062/63	10,374	757861	0.01
2063/64	32,781	792977	0.04
2064/65	112,788	792,435	0.14
2065/66	219,810	755,162	0.29
Average			0.02

Sources: Annual sports of H.C.F. For the year 2060/61 to 2065/66

The proprietary ratio to the factory as indicated in table 4.8 marked in increasing tend in the period of study. It is (0.13) times, (0.a0) times and 0.29 times in the years 2060/61, 2061/62, 2062/63, 2063/64, 2064/65 and 2065/66, respectively. It is the clear indication that the proprietors have been increasing their investment in total assets.

Ratio of Total Liabilities to Total Assets:

The difference between proprietary ratio and 100 percent represents the ratio of total liabilities to total assets. It established the relationship between total liabilities and total liabilities and total assets. It is calculated as follows.

Ratio of total liabilities to total assets = 100 – proprietary ratio

Ratio of total liabilities to total assets of H.C.F. is shown the following table.

Table 4.9
Ratio of Total Liabilities to Total Assets
(2060/61 to 2065/66) In Rs '000'

Year	1-proprietary	Ratio
2060/61	1-0.13	1.13
2061/62	1-0.10	1.10
2062/63	1-0.01	1.01
2063/64	1-0.04	0.86
2064/65	1-0.14	0.71
2065/66	1-0.29	0.96
Average		

Sources: Annual Reports of HCF for the year 2060/61 to 2065/66

The ratio of total liabilities to total assets to the factory indicated in the table 4.9 marked in decreasing trend due to increasing trend in proprietary ratio. it is 1.13 times 1/10 times 0.96times 0.86 times and 0.71 times in the years 2060/61 to 2065/66 respectively.

Fixed Assets to Net Worth Ratio

This is calculated by dividing the depreciated book value of fixed assets by the amount of net worth.

$$\text{Fixed Assets to Net worth Ratio} = \frac{\text{Net Fixed Assets}}{\text{Net Worth}}$$

The ratio shows the extent to which ownership funds are sunk into assets with relatively turnover. When the amount of proprietors funds exceed the value of fixed assets, a part of the net working capital is supplied by the shareholders, provided that there are no other non current assets and when proprietors fund are less than the fixed assets, creditors obligations have been used to finance a part of the fixed assets.

The fixed assets to net worth ratio of H.C.F. are shown on the following table.

Table 4.10
Fixed Assets to Net worth Ratio & HCF

2060/61 to 2065/66

in Rs 000

Year	Net fixed assets	Net worth	Ratio
2060/61	337033	96429	(3.50)
2061/62	310932	75921	(4.10)
2062/63	287856	103781	(8.10)
2063/64	265535	32781	(8.10)
2064/65	254898	112788	(2.26)
2065/66	250752	219810	(1.14)
Average			(23.75)

Source : Annual reports of HCF for the year 2060/61 to 2065/66

Table 4.10 shows the ratio and fixed assets to net worth for the years 2060/61 to 2065/66. It is decreasing trend in 1st three years, increased in 4th year and decreasing trend thereafter. It is (3.50) times, (4.10) times, (27.65) times, 8.10 times, 2.26 times and 1.14 times in years 2060/61 to 2065/66 respectively.

Ratio of Current Assets to Proprietor's Funds

This is obtained by dividing the value of current assets by the amount of proprietor's funds.

$$\text{Ratio of Current Assets to proprietor 's Foods} = \frac{\text{Current Assets}}{\text{Pr oprietor 's Funds}} \times 100 \%$$

The purpose of the ratio is to show the percentage of proprietors fund investment in current assets. There are cases where a higher proportion of current assets to proprietor's funds, as compared with the proportion of fixed assets is deemed to b an indication of the financial strength of the business. However, different industries have different standards and history of Particular concern must be studied before too great a reliance is placed on this ratio. Then, any meaning implied in their ratio must be read along with the result given by the fixed assets to proprietorship funds ratio or proprietary ratio.

The ratio of current assets to proprietors fund is shown in the table 4.11

Table 4.11
Ratio of Current Assets to Proprietor's Fund of HCF
(2060/61 to 2065/66) In Rs '000'

Years	Current assets	Proprietors fund	Ratio (in times)
2060/61	393,692	(96,429)	(408)
2061/62	452,113	(75,921)	(5.95)
2062/63	471005	(10,374)	(45.40)
2063/64	527,442	32,781	16.08
2064/65	537537	112,788	2.45
2065/66	504,410	219,810	2.29
Average			12.70

Sources: Annual Reports of HCF for year 2060/61 to 2065/66

Table 4.12 shows the ratio of current assets to proprietor's fund. Of HCF It is in decreasing trend in 1st three years in 4th year increased and remaining year in increasing trend. It is (4.08) times, (5.95) times, (45.40) times, 16.08 times, 2.45 times and 2.29 times and 2.29 times in the years of 2060/61 to 2065/66. It increases due to decrease in proprietor's fund.

Interest Coverage Ratio/ Debt service Ratio:

Interest Coverage Ratio also known as debt service ratio is determined by dividing fixed interest charge into net profit. The two variables involved in this ratio are fixed interest charges and net profit. There is some controversy regarding the connotation of the word 'net profit' whether the item to be taken into consideration is before or after the deduction of income tax. Though there are argument on both side, it can be stated in a nutshell that net profit before income tax is to be used in the computation of the ratio because income tax is paid after the deduction of fixed interest charge with there result that the ability of the business to meet these charges is not affected by the heavy of income tax.

$$\text{Interest Charge Ratio} = \frac{\text{Net Profit before interest and income tax}}{\text{Fixed interest charges}}$$

The ratio gives an idea of the extent to which a firm's earning may contract before it is unable to meet interest payment out f current earnings.

Table 4.12
Interest Coverage Ratio of HCF
(2060/61 to 2065/66)

In Rs '000'

Year	Net profit between Int. & Tax	Interest Change	Ratio in times
2060/61	(24672)	33836	3.03
2061/62	83,052	27,357	3.03
2062/63	121,440	31,553	3.84
2063/64	90,947	29,490	3.08
2064/65	145,396	21,390	6.79
2065/66	18,7129	20,390	9.17
Average			4.19

Sources : Annual reports of H.C.F for the years 2060/61 to 2065/66

Table 4.13 shows the Interest coverage ratio of HCF marked a fluctuating trend during the period of study. During the 1st year, it is negative due to negative net profit. In 2nd year it increased due to increase in net profit. It is (072) times, 3.03 times, 3.84 times, 3.08 times, 6.79 times and 9.17 times in the financial year 2060/61 to 2065/66 respectively. Its average ration is 4.19 times. It shows that operating profit has not managed efficiently.

4.2.4 Profitability Ratios:

Profitability ratios measure the worth of the selected investment in various categories of assets depending largely on sales performance and operative efficiency. Profitability position Rs. Is measured by general profitability ratios i.e. gross profit ratio operation profit ratio, net profit margin and overall profitability ratio i.e. return on shareholders investment, return on equity capital, return on capital employed.

a) General Profitability Ratio:

- General profit margin ratio establishes the relationship between gross profits with sales to measure the relating operational efficiency of he company. Te gross profit margin reflects the efficiency with which management produces each unit of product. This ratio indicates the average spread between cost of goods sold and the sales revenue. When we subtract

the gross profit margin from 1000 percentage, we obtain the ratio of cost of goods sold to sales. Both these ratio shows profit relative to sales after the deduction of production costs and indicate the relation between production cost and selling price. A high gross profit margin relative to the industry average. Implies that the firm is able to product at relatively lower cost.

A high gross profit margin ratio is sign of good management. A gross profit margin ratio may increase due to any top the following factors.

- i) Higher sales price cost of goods sold remaining constant.
- ii) Lower cost of goods sold, sales price remaining constant.
- iii) A combination of variations in sales price and cost of margin widening.
- iv) An increase in proportionate volume of higher margin items.

The analysis of these factors will reveal to the management how to depressed gross profit margin can be improved.

A low gross profit margin ratio should be carefully investigated. It may reflect a higher cost of goods sold due to the firm's inability to purchase at favorable term, in efficient utilization of a plant and machinery for over investment in plant and machinery or over investment in plant and machinery and making resulting n higher cost production. This ratio will also be low due to fall prices in the market or market reduction in selling price by the firm in an attempt to obtain large sales volume, the cost of goods sold remaining unchanged. The financial manager must be able to detect the causes of falling gross margin and initiate active to improve the situation it is calculated by dividing the gross profit by sales.

$$\text{Gross Profit Margin} = \frac{\text{Gross Profit}}{\text{Sales}} \times 100 \%$$

The gross profit margin of HCF has been presented in table 4.13

Table 4.13
Gross Profit Margin of HCF
(2060/61 to 2065/66)

Years	Gross Profit	Sales	Ratio %
2060/61	27,510	416,057	6.61
2062/63	147,789	655,404	22.54
2063/64	153,927	655,968	23.46
2064/65	222,428	706,303	31.49
2065/66	269,530	750,305	35.92
Average			24.73

Table 4.14 shows gross profit margin of HCF for the financial year 2060/61 to 2065/66. It is in increasing trend in 1st three years, in 4th year it is decreased and again in increasing trend. It is 6.61%, 22.54%, 28.41% 23.46%, 31, 49% and 35.92% in the financial years of 2060/61 to 2065/66 respectively. Average of gross profit margin in 24.73 times. It shows that cost of production is very high in compared to its sales.

Operating Profit Ratio

Operating profit ratio tries to establish between operation profit and net sales.

$$\text{Operating Profit Ratio} = \frac{\text{Operating Profit}}{\text{Sales}} \times 100 \%$$

Naturally, higher operating profit ratio is the more favorable because it would leave a higher margin to meet interest, dividends and other corporate needs. It can also be used as a partial index of overall profitability but can not be used as a test of financial condition without taking into account financial and extra ordinary items. In interpreting the operation profit ratio full recognition must be given to the possibility of variations improbity from year to year for company to company, due to changes or differences in policies involving expenses that are subject too managerial decisions. In general, for manufacturing concerns operation profit ratio is expected to touch a percentage of 25 to 15 percent, It reveals the profitableness of sale and

indicates the portion remaining out of every rupee worth of sales after all current operation cost and expenses have been met.

The operating profit ratio of HCF has been presented in the table. 4.15

Table 4.14
Operating Profit Ratio of HCF
(2060/61 to 2065/66)

In Rs. '000'

Years	Operating Profit	Sales	Ratio%
2060/61	(31,291)	416,057	(7.5)
2061/62	80,016	655,404	12.20
2062/63	113,883	658,720	17.28
2063/64	75,452	655,968	11.50
2064/65	128,689	706,303	18.22
2065/66	169,927	650,305	22.64
Average			14.89

Sources : Annual Reports of HCF for the years 2060/61 to 2065/66

The above table presents a fluctuation trend of operation profit ratio. It is 7.5%, 12.20%, 17.28%, 11.5%, 18.22% and 22.64% in the years of 2060/61 to 2065/66 respectively. The average of operation profit ratio is 14.89%. In 1st year it is negative because of more operation expenser that gross profit. There after, it is in positive due to less operation express that gross profit HCF should reduce its expenses by establishing cost control mechanism to get high operating profit.

Net Profit Margin

Net profit is obtained when operating expenses and income tax subtracted from gross profit. The net profit margin ratio is measured by dividing net profit after tax by sales.

$$\text{Net Profit Margin} = \frac{\text{Net Profit After Tax}}{\text{Sales}} \times 100\%$$

Generally, non operating income and expenses are excluded, when this ratio is calculated. This ratio establishes a relationship between net profit and sales and indicates management's efficiency in manufacturing, Administration and selling the product. This ratio is the overall measure of the firm's ability to turn each rupee of sales in the net profit. If the net margin is inadequate the firm will fail to above satisfactory return on owner's equity. This ratio also indicates the firm's capacity to withstand adverse economic conditions. A firm with a high net margin ratio would be in an advantage positions to survive in the face of falling sales prices. Rising cost of production or declining demand for the product. It would really be difficult for low net margin. It can make better use of favorable conditions such as rising sales prices falling cost of production or increasing demand for the product. Such a firm will be able to accelerate its profits at a faster trade than a firm with low net profit margin.

The net profit margin of HCF has been presented in table 4.16

Table 4.15

Net Profit Margin of HCF

(2060/61 to 2065/66)

in Rs. '000'

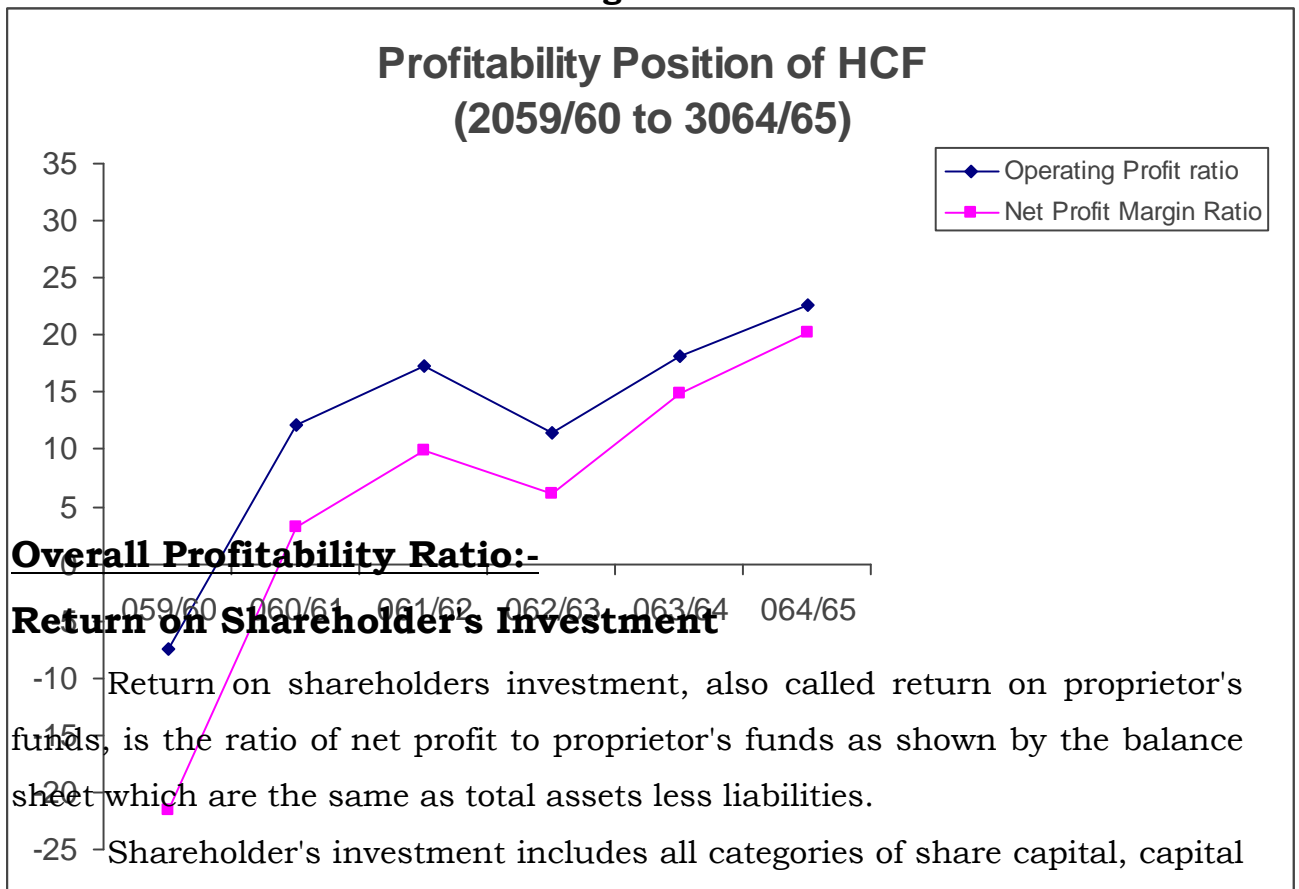
Years	Net profit after Tax	Sales	Ratio (%)
2060/61	(89,571)	416,057	(21.52)
2061/2062	20,722	655,404	3.16
2062/63	65,646	658,720	9.96
2063/64	39,867	655,968	6.07
2064/65	151,488	750,305	14.81
2065/66	151,488	750,305	20.19

Sources: Annual Reports of HCF for the year 2060/61 to 2065/66

Table 4.16 shows the net profit margin of HCF increasing trend in 1st three years, in 4th year it decreased and again in increasing trend remaining

years of study. In 1st year it is negative due to negative net profit after tax. It is (21.52%), 3.16%, 6.07%, 14.81% and 20.19%. It shows that net profit margin is becoming satisfactory. To get high net profit margin, the company should rise demand of product, sales and decrease cost of sales operating expenses etc.

Fig.4.2



Overall Profitability Ratio:-

Return on Shareholder's Investment

Return on shareholders investment, also called return on proprietor's funds, is the ratio of net profit to proprietor's funds as shown by the balance sheet which are the same as total assets less liabilities.

Shareholder's investment includes all categories of share capital, capital reserve, all revenues reserves and account of appropriations profit. It is usual for the calculation of this ratio to take into consideration the average of the figures relation to shareholder's investments in the beginning and ending balance sheets.

So far as profits unconcerned, they are to be visualized from the viewpoint of the return to shareholders with the result that they would be arrived at after the payment of tax and interest on long term liabilities. This is so because this income alone would be available to the shareholders for dividend.

$$\text{Return on shareholder investment} = \frac{\text{Net Profit After Tax}}{\text{Shareholder's Fund}}$$

Return on shareholders investment or return on capital is another affective measure of the profitability of an enterprise. In fact analysis, the realization of a satisfactory net income is the major objective of a business and the ratio of net profit to shareholders fund shows the extent to which this objective is being achieved.

The return on shareholders investment of HCF has been presented in table 4.17

Table -4.16
Return on Shareholder Investment of HCF
(2060/61 to 2065/66) In Rs. '000'

Year	Net Profit after tax	Share holders fund	Ration in times
2060/61	(89,571)	(96,429)	(0.92)
2061/62	20,722	(75,921)	(0.27)
2062/63	65,646	(10,374)	(6.32)
2063/64	39,867	32781	1.21
2064/65	104,628	112,788	0.93
2065/66	151,488	219,810	0.68
Average			(4.69)

Sources: Annual Reports of HCF for the year 2060/61 to 2065/66

As per above table the return on shareholders investment ratio is in decreasing trend in 1st three years and in creasing trend in remaining years of study. Its average is negative i.e. (4.69) times. It is (0.92) times, (0.27) times, (6.32) times, 1.21 times, 0.93 times and 0.68 times in the years of 2060/61 to 2065/66 respectively.

To conclude, return on shareholders investment is not satisfactory due to higher costs cost control and efficient use of resources should be followed to correct the present situation.

Return on Equity Capital

Another aspect to be considered in the analysis of overall profitability is the rate of return on equity capital (REC) which relates the net profit available to equity shareholders to the amount of capital invested by them.

Another way of looking at the rate of return on equity capital is to divide the net profit available to equity shareholders by the number of outstanding equity share in order to calculate earning per equity share.

There are several interpretations of return on equity capital and by far the most important has been the one in which it is looked upon as return on total equity capital employed. According to this interpretation, net profits available to equity shareholders are related to recorded claims of these residual claimants including equity share capital, revenue reserve and appropriation of profit.

$$\text{Rate of Return on Equity Capital} = \frac{\text{Net Profitable for Equity Shareholders}}{\text{Equity Share Capital}}$$

This rate of return is designed to show what percentage, the earned profit of the period bears to the amount of capital invested by equity shareholders.

The return on equity capital of HCF has been presented in table

Table 4.17

Return on Equity Capital Ratio of HCF

2060/61 to 2065/66

In Rs. '000'

Years	Net profit after tax	Equity share capital	Ratio in times
2060/61	(89,571)	900,685	(0.09)
2061/62	20,722	900,685	0.02
2062/63	65,646	900,685	0.07
2063/64	39,867	900,685	0.04
2064/65	104,628	900,685	0.11

2065/66	151,488	900,685	0.16
Average			0.24

Sources: Annual reports of HCF 2060/61 to 2065/66

Table 4.18 shows return on equity capital ratio. It is negative in 1st year due to negative net profit after tax. It is in increasing trend in 2nd and 3rd year, decreased in 4th year and increasing trend in remaining years of study. it is (0.09) times, 0.02 times, 0.07 times, 0.045times 0.11 times and 0.16 times in the years of 2060/61 to 2065/66 respectively. To conclude return on equity capital is not satisfactory. This situation is the result of highest costs. Cost control, efficient use of resources should be followed to control the present situation.

Return on Capital Employed:

This ratio measures the relationship between employed and net profit after tax. This ratio indicates how well the management has used the fund supplied by creditors and owners. Higher ratio indicates the efficient use of fund entrusted to the firm by creditors and owners. This ratio can be calculated by using below formula.

$$\text{Return on Capital Employed} = \frac{\text{Net Profit After Tax}}{\text{Capital Employed}}$$

The capital employed in a business may be defined in a number of ways but the two most widely definitions are "Gross capital employed" and "net capital employed". "Gross capital employed" usually comprises the total assets used in the business, while "net capital employed" consists of total assets used in the business less its current liabilities. However in the commonly accepted sense, the term covers capital, capital resources revenue reserve (including profit & loss a/c balance) _ and long term loan such as debenture. The return on capital employed (ROCE) of HCF has been presented in the table 4.18 below:-

Table 4.18
Return on Capital Employed of HCF
(2060/61 to 2065/66) In Rs. '000'

Years	Net profit	Net capital employed	Ratio in times
2060/61	(89,571)	427,147	(0.20)
2061/62	20,722	449417	0.05
2062/63	65,646	514,733	0.13
2063/64	39,867	588,781	0.07
2064/65	104,638	660,673	0.16
Average			0.06

Sources: Annual reports of HCF for the years 2060/61 to 2065/66

The above table 4.19 shows the return on capital employed ratio. It is negative in 1st year due to negative net profit after tax. In 2nd and 3rd year increasing trend and in 5th year decreased but after this year again in increasing trend. It is (0.20 times, 0.05 times, 0.13 times, 0.07 times. 0.16 times and 0.20 times in the years of 2060/61 to 2065/66. The average³ is 0.06 Return on capital employed ratio is now in increasing trend but not satisfactory.

Funds Flow Analysis:

The statement of sources and uses of funds in HCF is prepared and analyzed in this section. A funds flow statement is a valuable aid to financial manager or a creditor in evaluating the uses of funds by a firm and in determining how the firm finances those uses. It is also known as the analysis of inflows and out flows of funds during a certain period of time in the past or future. The projected statement of source and uses of funds based on financial statement is an essential part of financing planning and controlling

process. It helps to know where the funds were collected from and how they were utilized in the past.

Analysis of source can uses of funds is designed to highlight the changes in the financial condition of HCF between two periods of time it is an operating statement as it summarizes the financial activities for a period of time. From the analysis one can see the sources and uses of fund during the study period of HCF. It also discloses relative importance of each of the sources and uses.

Sources of funds: -All the changes that cause increase in fund of the corporation are regarded as sources and analyzed one by one below: Loan fund raised.

- a) Decrease in Working Capital
- b) Sales of Investment
- c) Funds from Operation
- d) Sales of Fixed Assets

Uses of Funds:

All the changes that cause decrease in total funds of the corporation are regarded as use of funds and analyzed one by one below:-

- a) Loss from operation
- b) Repayment of loan
- c) Addition to investment
- d) Purchase of fixed assets
- e) Increase in working capital

Table 4.19

Sources and Uses of Funds of HCF

(2060/61 to 2065/66)

In Rs '000'

F.Y	2060/61	2061/62	2062/63	2063/64	2064/65	2065/66
Sources of Funds						
Loan Raised	5189	52830	4800	2352		
Dec. in W.C.	-	56639	62248	22127	23097	-
Sales of Inventory	-	-	-	68223	-	14282
Funds from operation	-	-	-	-	5054	16396
Sales of Fixed Assets	-	-	-	-	-	-
Total	5189	109469	66848	92702	28151	20678

Uses of Funds	2060/61	2061/62	2062/63	2063/64	2064/65	2065/66
Loss from operation	26068	67135	62804	92702	-	-
Repayment of Loan	-	-	-	-	22206	227
Additional Investment	13319	13444	4044	-	5945	-
Purchase of fixed assets	-	28890	-	-	-	-
Increase in WC	10802	-	-	-	-	20451
Total	5189	109469	66848	92702	28151	20678

Table 4.20 indicates, that the major sources of funds of HCF during the period of analysis from 2060/61 to 2065/66 is the decrease in working capital followed by increase in long in long term loan, decrease in long term investment. During the period of study working capital decreased to Rs. 23,097 while long term loaned increased to Rs. 2352 thousand. During this

period the decrease in long term investment was Rs. 59435 thousand. The changes that have taken place in the working capital position of the HCF have weekend its financial position.

CHAPTER – 5

SUMMARY, CONCLUSION AND SUGGESTION

5.1 Summary:

The Hetauda Cement Industry is a concrete based import substitution industry in Nepal occupies a pivotal place in the modern sectors of the national economy this industry has made the country self sufficient in respect of Cement production the industry not only gives as shoulder in improving the country's balance of payment situation by substituting the import of cement but also contributes significantly to tax revenue. As the country is well-endowed with the major resources, such as raw materials, skilled manpower needed for the proper development of the industry. It possesses immense scope for expansion and growth at present there are two cement Industry in Nepal. One is Udaypur Cement factory whose annual production capacity is 3, 06,000 metric tons per year. Another cement industry is Hetauda cement industry whose annual production capacity is 2, 88,000 metric tones per year. Infact, trading result of HCF is also towards gradual increase. The present study looks into the financial performance of cement industry in Nepal with special reference to Hetauda cement industry.

Thus, this study aims to have true picture about financial performance of the company. Thus, effort has been made to study classify and analyze the performance of the company on financial point of view and recommend some suitable suggestions for the improvement in financial performance of This study covers period of six years starting from financial years 2060/61 to 2065/66. This is the most latest study and covers information of relatively more years to analyze the financial performance of HCF. The Main sources of data are secondary data which consists of mostly the annual reports. It comprises balance sheet and profit and loss account (income statement). Besides this information has also been supplemented from published and unpublished reports and bulletins of the company and auditors general reports on HCF as well as profiles of public enterprise in Nepal etc.

The study applied various financial tools in the process of the study. They are financial ratios i.e. Liquidity groups, turnover groups, capital structure groups, profitability groups, funds flow analysis. Apart from these tools, simple statistical tools like percentage, average have also been used for making the analysis more systematic, scientific, and useful. Both analytical and descriptive approaches have been followed to make the study more revealing.

The entire study has been divided into five major chapters. The first chapter gives a general introduction of the subject matter while in the second chapter the pertinent literature and studies have been reviewed making logical and meaningful groupings. The third chapter devises the research methodology adopted in carrying out the study whereas in the fourth chapter the relevant data have been presented and analyzed with the help of financial and statistical tool. The fifth and last chapter gives summary, Conclusions and suggestions for the improvement of financial performance of HCF.

5.2 Conclusions:

- 1) The absolute amount of current assets and current liabilities of HCF registered an indefinite trend during the period of the study from 2060/61 to 2065/66. The current ratios of HCF are 1.39 times, 1.68 times and 1.30 times in the financial years of 2060/61 to 2065/66 respectively correct ratios are less than standard i.e. 2:1 all these facts lead one to conclude that the short term financial position is not better from the creditor's point of view.
- 2) The absolute amount of quick assets and current liabilities of the factory recorded no definite trend during the period of analysis the quick ratio of the factory indicates in increasing trend. It is 0.39 times, 0.52 times, 0.58 times, 0.75 times, 0.75 times, 0.68 times. And 0.75 times in the years of 2060/61 to 2065/66 respectively these ratios are less than standard i.e. 1:1 Hence liquidity position of the HCF is weak from the creditor's point of view.

- 3) The inventory turnover ratio of the factory is in fluctuating trend during the period of study.
- 4) It is 1.5 times, 2 times, 1.91 times, 2.13 times, 1.92 times and 1.74 times in the year of 2060/61 to 2065/66 respectively these ratios are always less than standard. The foregoing analysis tells that the inventory has not been managed efficiently.
- 5) Receivable turnover ratio indicates that the time taken to collect debtors is prompt. Average collection period is 2 days, 2 days, 0 day, 0 day, 0 day, and 1 day in the financial years of 2060/61 to 2065/66 respectively, the foregoing analysis shows that the receivables has been managed efficiently.
- 6) The working capital turnover ratio of the factory marked a decreasing trend. It is 9.22 times, 9.32, times, 5.05 times, 4.67 times and 3.67 times in the years of 2060/61 to 2065/66 respectively. These ratios indicate that working capital is not used efficiently during the period of study.
- 7) HCF has low leveraged capital structure and creditors are in favorable position from security point of view.
- 8) The gross profit margin marked in fluting trend during the period of study. It is 6.61%, 22.54%, 28.41%, 23.46% 31.49 and 35.92% in the financial years of 2060/61 to 2065/66. It shows the operation efficiency in HCF. Though cost of sales is relatively high to sales. To get better rest cost of production should be decrease.
- 9) The operation profit ratio indicates fluctuating trend in period of study. It is (7.5)%, 12.20%, 17.28%, 11.50%, 18.22% and 22.64% in financial years of 2060/61 to 2065/66 respectively operating profit ratio of HCF is in increasing trend though to get better result the company should decrease its operating expenses.
- 10) The net profit margin is also in fluctuating trend. It is (21.52) %, 3.16%, 9.96%, 6.07%, 14.81% and 20.19. Its average is 20.19% to get high

net profit margin, the company should rise demand of product, sale and decrease cost of sales, operation expenses etc.

5.3 Suggestions:

In the light of aforementioned analysis and interpretations some glaring suggestions may be offered as follows:-

- 1) HCF should maintain adequate liquidity position. Thus to have better and constant desired liquidity the company should judge the quantity and quality of its current assets current liabilities.
- 2) The HCF should try to maximize the utilization of its all the resources the factory should improve its overall turnover through efficient and effective utilization of its existing resource and capacity by proper handling rather than trying to increase further investment.
- 3) HCF has no long term debt except nominal amount in the last year of the study. The cost of debt is less than the cost of equity. For growing concern like HCF. It is better to use more long term debt and obtain the benefits of leverage. But management of HCF. Should have more risk taking ability.
- 4) The factory needs a suitable cost system for controlling the operation cost and thereby providing a return on shareholders fund.
- 5) The owners funds needs to be injected into factory to replenish the erosion of funds by frequent losses in past years. Thus, owner's funds to meet working capital requirement would not only strengthen the liquidity but also the profitability of the factory.
- 6) The company tries very hard to maximize its financial activities in future. The company should invest their resource where the return is optimum. It should generate maximum possible fund from internal resources i.e. from successful operation of the companies activates.
- 7) Finally, it would not be out of place to mention there threat the study has been made with some specific objectives. It therefore, does not claim to have looked into all the problems confronting the factory. Though it has made a detailed analyses at least of financial performance or inter

firm comparative analysis at least of financial performance, an inter firm comparative analysis could not be made due to various constrains. Hence a comparative study of the cement manufacturing units constrains. Hence a comparative study of the cement manufacturing units constituting the cement industry in Nepal may further be carried on at large for all practical purposes.

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THE END



