CHAPTER-ONE

Introduction

1.1 Background of the study:

Industrialization is considered essential for the economic development of any country these days. It is usually though that a country is advance on the path of economic development by industrialization. The role of agriculture sector goes on decreasing where as the role of industrial sector goes on increasing. The developing countries are emphasizing industrialization because it has to uplift the economics standard of the people, creates more employment opportunities, earn foreign exchange through export promotion and reduce dependency on import.

Agriculture is still the back bones of the Nepalese economy. Economic development is not possible without agricultural prosperity. Nepalese planners over the year has given top priority to the agricultural sector. With the passes of time government of Nepal formulated a policy to develop possible agro - based industries within the country at least to substitute import of industrial consumable goods. The basic goal was to have self sufficiency, to generate revenue and create employment opportunity by establishing industrial units in the county.

The history of organized industrial development in Nepal started from second plan period (2019-2022). During that period some industries such as sugar, cigarette, leather were established to fulfill the demand of the nation. Cement industry was also established in 3rd plan period (2022-2027). The first cement industry of Nepal is Himal Cement Company which was established in 2023 B.S. from private sector and converted into public limited company in 2031 B.S. The respective development of cement industry in Nepal is given below :

Table - 1

S.N.	***Annual Production Capacity***	***Name of the Industry***	***Address***
1	108400 MT.	Himal Cement Company Limited	Chobar, Kirtipur
2	260000 MT.	Hetauda Cement Industry Limited	Lamsure, Hetauda
3	277200 MT.	Udaypur Cement Industry Limited	Jaljale, Udaypur
4	16500 MT.	Shree Maruti Cement Limited	Chandra udaypur
5	9000 MT.	Triveni Cement (Nepal) Pvt. Ltd.	Gondrang Bharatpur
6	9000 MT.	Annupurna Cement Industry	
7	115000 MT.	Panch Ranta Cement Pvt. Ltd.	Tanahu

8	3000 MT.	Butwal Cement Mills Pvt. Ltd.	Nawalparsi, Parasi
9	150000 MT.	Lumbini Cement Pvt. Ltd.	Karaiha VDC, Rupandehi
10	60000 MT.	National Cement Pvt. Ltd.	Katahari, Morang
11	120000 MT.	Surya Cement Pvt.Ltd.	Duhabi, Sunsari
12	30000 MT.	Balazi Cement Udyog	Naubise
13	30000 MT.	Dynasty Industry Nepal Pvt. Ltd.	Krishna Nagar, Kapilbastu
14	120000 MT.	Kanak Cement Pvt. Ltd.	Makwanpur
15	30000 MT.	Mittal Cement Industry Pvt. Ltd.	Chandragadi Jhapa
16	90000 MT.	Kosmos Cement Industry Pvt. Ltd.	Nakta Jhip - 1
17	60000 MT.	Buddha Cement Pvt. Ltd.	Kapilbastu
18	132000 MT.	Pashupati Cement Pvt. Ltd.	Jayamari - 2, Kapilbastu
19	90000 MT.	Laxmi Cement Ind. Pvt. Ltd.	Udaypur - 9, Banke
20	90000 MT.	Vijaya Cement Pvt. Ltd.	Bahaduragunj - 7, Kapilbastu
21	30000 MT.	Chitwan Cement Udhyog Pvt. Ltd.	Tilakpur, Nawalparasi
22	66000 MT.	Jagadamba Cement Ind. Pvt. Ltd.	Gonaha - 7, Rupandehi
23	15000 MT.	Narayani Cement Udhyog Pvt. Ltd.	Lipanimal, Bara
24	30000 MT.	Manakamana Cement Pvt. Ltd.	Chandra, Udaypur
25	30000 MT.	Buddha Cement Industries	Karamiya, Rupandehi
26	60000 MT.	Brija Cement Ind. Pvt. Ltd.	Gonha, Rupandehi
27		Krishna Cement Co. Pvt. Ltd.	Pusauni, Bara
28	132000 MT.	Bishwakarma Cement Pvt. Ltd.	Birgunj, Lalparsa, Parasi
29	45000 MT.	Amber Ind. Pvt. Ltd.	Birphar, Kapilbastu
30	150000 MT.	Suprim Cement Pvt. Ltd.	Karmiya, Rupandehi

31	75000 MT.	Gorakhkali Cement Udayog Pvt. Ltd.	Duwaghadi
32	150000 MT.	Siddhartha Cement Udayog	Rupandehi
33	90000 MT.	Dynisty Inds. Nepal Pvt. Ltd.	Birapur
34	60000 MT.	Nepal Ambuja Cement Udayog	Kamahariya
35	150000 MT.	Reliance Cement Pvt. Ltd.	Rupandehi
36	90000 MT.	Ambe Cement Pvt. Ltd.	Lipani Birta
37	155000 MT.	Shivam Cement Pvt. Ltd.	Simara - 3
38	60000 MT.	Shree Cement Ind. Pvt. Ltd.	Limani, Parsa
39	45000 MT.	Kailash Cement Pvt. Ltd.	Kamahariya, Rupandehi
40	99792 MT.	Dang Cement Ind. Pvt. Ltd.	Purandaha, Dang
41	39600 MT.	Om Cement Pvt. Ltd.	Bharatpur - 9, Chitwan
42	60000 MT.	Shyam Mineral Ind. Pvt. Ltd.	Duwagadi, Jhapa
43	10500 MT.	Koshi Cement Udayog Pvt. Ltd.	Suniwar - 3, Sunsari
44	150000 MT.	Maruti Cement Ind. Pvt. Ltd.	Chandra udaypur
45	43000 MT.	KP Cement Ind. Pvt. Ltd.	Dhading - 7
46	15000 MT.	Jay Bageshwari Cement Ind.	Banke
47	12000 MT.	Jaykali Cement Udayog Pvt. Ltd.	Gonaha - 6, Rupanehi
48	163721 MT.	Sagarmatha Cement Pvt. Ltd.	Hatiya, Makawanpur
49		Panche Kanya Cement Ind.	Chhatta Pipura, Bara

Out of these cement industries Udaypur Cement Industry Limited (UCIL) is one of the biggest cement industry in Nepal. The history of UCIL is started from "A feasibility study of establishment a cement industry" which was studied by Japan International Co-operation Agency (JICA) in 2035 B.S. After feasibility study, UCIL was registered in 31st Jestha 2044 B.S. It was assigned to Onoda Engineering Company Limited, Japan in 31st Ashadh 2044 B.S. as consultant engineering agency. A loan agreement was made between government of Nepal and government of Japan in 28th Ashwin 2044 B.S. And the ambassador of Japan informed that the loan was converted into Aid to ministry of finance, Nepal government in 24th Shrawan 2045 B.S. Contract was given to Turnkey Contractor : Consortium of Kawasaki Heavy Industries Ltd. and Toyomenka Kaisha Ltd.

Japan on 9th Jestha 2046 B.S. The construction period was Ashoj 2046 B.S. to kartik 2049 B.S. The test programme of first bag of cement production was held in 20th kartik 2049 B.S. and it commenced the commercial production in 26th poush 2049 B.S. The first elected Prime Minister after the restoration of democracy in 1990. Shree Girija Prasad Koirala inaugurated the UCIL on 24th Bhadra 2051 B.S. UCIL is one of the import substitution industry in Nepal. The basic raw materials comes from Nepalese natural resources like lime stone, clay, silica sand, water etc. It is largest firm of Nepalese cement industry on the basis of annual production capacity. It is also the most modern industry in Production, Quality control system with well equipped laboratory comparisons, standard equipment including x-ray analyzer for the quality control was also brought in application. It has mine of limestone which provides highest quality of limestone in Nepal. The objective of UCIL at the time of it's incorporation were production, selling and distribution of cement. It is operating with same objective till now.

Annual production capacity of UCIL is 2,77,200 Mt. Tone. It's product has 2nd top quality in South Asia. But it is not operating in full capacity due to different constraints. So, it has been failed to fulfill the needed demand of the nation. It directly affects the competitive capacity of the factory.

Since the industry has made the country self sufficient to some extent to meet the demand of cement and occupies a significant role in providing employment opportunities to the people of nation. It's long term survival is much more important for economic development of the country. For survival of an industry it should be financially sound. Without financially soundness the long term survival of any industry is impossible and it can not be able to contribute for economic development of the country. That is why finance has become an important operational aspect of an industrial management. As the sound performance of every organization depends upon its financial position. Therefore, periodical appraisal of financial position is absolutely essential. Such appraisal of financial position also reflects overall performance of management. Thus, this study has attempted to analyze the short term as well as long term financial performance of cement industries in Nepal with special reference to the Udaypur Cement Industry Limited.

1.2 Focus of the study:

Udaypur Cement Industry Limited is one of the manufacturing public enterprises in Nepal. It was established to fulfill the national demand of cement by producing and supplying qualitative cement to the people at reasonable prices. UCIL had good financial position during their initial period of it's operation. But now a days it looks not so much sound. In this context this study intends to know the financial performance of the cement industry and the reasons for such frightening situation of financial weakness.

For successful operation of the business enterprises it has to co-ordinate various activities like marketing finance, production, distribution and soon. To achieve organizational goal all these activities are very important but financial activities are much more important than others. The success and failure of any organization is measured generally in terms of financial condition because every activity begins with finance. Finance is often said as 'life blood of business'. Thus, there should be proper management of finance in any organization for the achievement of organizational goal. Therefore, this study has been looks into the financial performance, focusing on short - term as well as long - term financial performance and financial policy of the industry.

1.3 Statement of the problem:

Nepal is least developed and land locked country. It has been located between the two big countries. i.e. People Republic of China and India. Basically, it is an agricultural country. In spite of its vast and rich natural resources if falls under the third world of least developed nations. It is because of unused vast resources due to the lack of adequate capital, lack of skilled labor, technology, practices and procedures of mobilization of such resources and awareness.

Establishment of public enterprise is used as a measure towards the socio - economic growth of any country. Industrialization is the back bone of the economic development of the country. It helps to build infrastructure for social and economic development by supplying goods and services at reasonable prices as well as providing employment opportunities.

The present study highlights in detail the problems regarding the cement industries in Nepal with special reference to UCIL. The industry is successful to fulfill its objectives only to some extent.

Success of any business enterprise is measured by generating surplus. But the financial performance of UCIL is not looked so much satisfactory from the view point of its profitability trend. The industry has always been showing not good financial condition. However, during 1st year of it's operation it had earned some profit. But after that it has been running into losses because of under utilization of it's capacity, strike, overstaffing, labor negligence, political interference, ineffective management and other operating problems. At present it is facing problem in highly competitive market due to increased costs and prices of it's products as well as failing to fulfill the market demand of it's products. Under such circumstances, even a slight negligence on the part of management may endanger the financial performance and position of the industry. Although, it is necessary to have evaluation of it's periodical financial performance so that the areas of it's weaknesses should be detected and also for immediate corrective actions. Therefore, this study could be taken enquiry of the financial performance of the

industry. In particular, every effort should be made to find out the answer to the following issues :-

(a) Is the industry able to meet it's current obligations immediately?

(b) Has the industry satisfactory performance of its inventories?

(c) Does the industry maintain the velocity of it's credit payment?

(d) Is there sufficient scope for raising long - term loan?

(e) Is the owner's investment in assets is adequate?

1.4 Objectives of the study:

The main objective of this study is to assess the financial condition of the UCIL. Along with the main objectives some specific objectives have been set out as follows :

(a) To evaluate the liquidity position

(b) To assess the performance of inventories of the firm and debtors.

(c) To measure the effectiveness in the utilization of working capital.

(e) To test the long - term solvency position of the firm.

(f) To review the financing policy of the firm.

1.5 Need and Significance of the Study:

The cement industry in Nepal is one of the major industry. It plays a significant role in the economic development of the nation. It provides employment opportunities as well as increases gross domestic product by utilizing own resources. It also supports to physical infrastructure development of the nation. The industry has made an effort to some extent towards self-sufficient in respect of cement production. It also occupies a significant role in increasing per capital income of the country. Over and above many others are benefited in numerous ways. In order to enjoy the full advantages of the industry, it's efficient operation is essential. Thus, it's long term survival is more important for economic development of country. For survival of an industry it should be financially sound. Without financial soundness the long-term survival and efficient operation of any industry is impossible and it can not be able to contribute for economic growth of country and fulfill the demand and desire of society. That is why, finance has become an important operational aspect of an industrial management. As the financial soundness of every organization depends upon it's financial performance, the periodical appraisal of financial performance is most essential. Such an appraisal of financial performance also affects the performance of financial position and management.

This study has been made intensive enquiry into short - term as well as long - term financial position of the industry. In particular, it could assess the current obligation paying capacity, quick debt paying capacity, debtors turnover, efficiency of working

capital utilization, capital structure, effectiveness of the utilization of fixed assets etc. In addition, the remedial measures should also be suggested on the basis of the findings of the study. Thus, the study would be useful not only for the short term and long term creditors but also for the management of industry as well as the stakeholders of the industry.

1.6 Research Methodology:

Research methodology refers to the various sequential steps adopted by a researcher in studying a problem with certain objective in view. This study has been problem into the financial performance of UCIL. In order to achieve pre-determined objectives the methodology applied in conducting the study has consist of research design, population and sample, nature and sources of data, data gathering procedure, data processing and tools used for analysis of data.

1.6.1. Research Design:

Research design is the plan, structure and strategy of investigation conceived so as to obtain answer to research questions and to control variance. It gives the frame work of the study. This study has the aim of finding out the short term as well as long term financial performance of the UCIL Published annual reports (from 2054/55 to 2068) comprising balance sheet, profit and loss a/c and other accounting statement and supporting has been used for study. On the basis of presented data and facts analytical research design has been for assessing the financial performance. Thus, this study has followed the descriptive as well as analytical approach.

1.6.2. Population & Sample:

At present the cement industry in Nepal consists of nearly 50 units which form the population for the study. The selection of any one of these units can not 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; this study is a case study of the UCIL.

1.6.3. Nature and Sources of Data:

The study has been based mainly on secondary data. The sources of secondary data could be both internal and external. The internal secondary data include data available in financial statement and unpublished official records of UCIL. The external secondary data include the data available in books, periodicals, unpublished official records of the government organization and published and unpublished reports.

1.6.4. Data Collection Techniques:

First of all exhaustive list of required data and information for the study has been prepared. Then a letter of recommendation for proper help has asked for and has been taken from the campus. After that, the data needed for the evaluation of financial

condition of the UCIL has been obtained directly from the registered head office of the industry at Gaighat, Udaypur. The supplementary data and information has been obtained from the unpublished official records of the office of the registrar of companies the reports of the comptroller and Auditor General of Nepal and previous studies related to this aspect.

1.6.5. Data Analysis Tools:

The financial techniques like ratio analysis and trend form the main pool for these analyzing financial facts in this study. In addition, the statistical tools like percentage, average, also have been applied in order to make the analysis more systematic, scientific and useful. Besides these, a graph has also been constructed to give a much more vivid picture of the trends and relationships of the facts under consideration.

1.7 Limitation of the Study:

Although this study has been made for partial fulfillment of the requirement for the degree of Master of Business Studies, it should be of considerable use to the creditors as well as the management of the industry. However, this study is subject to some limitations. Following are the limitations of the study:-

(a) Problem of reliable data is the major problem for research study. This study is based on secondary data so this study is not free from the limitation of secondary data.

(b) This study is based on past nine year's published financial statements so the conclusion drawn from these may misguide for future action.

(c) The financial performance has been assessed on the basis of limited tools and techniques of financial management.

(d) Government rules and regulation and technological aspects of the firm also affect the financial performance of the firm. But this study is not concentrated on the government rules and regulation and technological aspect.

(e) Due to limited time and financial constraints, this study is only concerned with financial performance of the UCIL.

(f) For making logical and meaningful interpretations, it should be more appropriate to compare the actual ratios of the factory with those of the industry to which it belongs. But in this study the inferences has been drawn comparing the actual ratios with the absolute and historical standards and average of ratios, due to unavailability of the ratio of the industry.

(g) This study is only suggestive rather than directive.

1.8 Organization of the Study:

The entire study has been divided into five major chapters. The first chapter has a general introduction of the subject matter containing background of the study, focus of the study, statement of the problems, objectives of the study, need and significance of the study and limitation of the study. While in the second chapter the relevant literature and studies has been reviewed marking logical and meaningful groupings. The third chapter is the research methodology which is to be adopted in carrying out the study where as in the fourth chapter the pertinent data has been presented and analyzed with the help of financial and statistical tools. The fifth chapter has been given summary, Conclusion and suggestion for improving the financial performance of the industry.

CHAPTER-TWO

2. Review of Literature:

In the previous chapter, a general introduction of the Cement Industry in Nepal was discussed. The present chapter deals with the relevant literature relating to the subject matter of the study to develop some expertise in one's area to see what new contributions can be made and to receive some ideas for developing a research design.

This chapter is divided into two sections. The first section is conceptual review which covers the topics such as concept of financial performance, concept and significance of financial position basis of evaluation of financial position, Concept of financial statements, anatomy of financial statements and techniques of evaluation of financial statement. The second section is review of related studies. Under this section past studies related with the field are reviewed.

2.1 Concept of Financial Performance:

Financial Performance analysis can be considered as a heart of the financial decisions. The growth and development of any enterprises is directly influenced by the financial policies. Rational evaluation of financial performance of the enterprise is essential to prepare sound financial policies. At present financial management in public enterprises is too much involved in record keeping, raising necessary funds and maintaining relationship with bank & another financial institution. Financial aspect is one of the most neglected aspects of PEs in Nepal. The monitoring of financial result for corrective action is exercised rarely and the periodic review of budget, development of internal check and control, analysis of generation of funds and its investment in cash are also rarely conducted. This often lead to the situation where management are not aware of the real financial position of the enterprises.

Financial performance as a part of the financial management is the main indicator of the success or failure of the enterprises. There are different persons, institution who are affected by the decision of the enterprises. Stakeholders such as owners, managers, creditors, investors, customers, Tax authorities etc are indirectly interested about the financial performance of the enterprise. Though the type of analysis according to the specific interest of the party involved i.e. shareholders of the enterprise are concerned principally with the present and expected future earning and the stability of the earning of the enterprises. This shows that they concentrate their analysis on the profitability of the enterprises. Management of the enterprises is interested in all aspects of financial analysis to adopt a good financial management system and for the internal control of the enterprises. Trade creditors are primary interested in the liquidity position to see the ability of the enterprises to pay their short term claims, long term creditors are more interested in the cash flow ability of the enterprises to services debt over a long run,

similarly, all the concerned groups are interested either directly or indirectly about the financial performance of the enterprises. Thus, financial analysis is the process of identifying the financial strength and weakness of the firm by properly establishing the relationship between the items of the balance sheet and profit and loss account. In sum it is a process of evaluating the relationship between component parts of financial statement to obtain a better, understanding of a firm's performance and position.

2.2 Concept of Financial Statement:

"The basis for financial planning, analysis and decision making is the financial information".[1] Accounting is a discipline which accumulates reports and interprets financial information about an organization. Financial information is needed to make intelligent decision about and for an organization. Simply stated, accounting is concerned with communicating financial information. To communicate financial information, an entity must have the ability to collect and appropriately arrange the necessary data. This requires the development of a process for taking bits of information (inputs) and converting them into meaningful reports (outputs). "If financial information is going to be used, it must be reported. Financial information which is used only within the firm as a basis for decision making is referred to as internal financial information. For internal purpose, there are many types of reports. But no standard reports exist for internal financial information because the format varies on the management needs of the individual firm. Financial information which is used by parties outside the firm to make decisions about the firm is called external financial information."[2] For reporting external information, Specific types of reports have been developed which is called financial statements.

Financial statements may refer to any formal and original statements which disclose financial information relating to any business concern. A firm communicates financial information to the users through financial statements. They are the means to present the firm's financial situation to the users. Preparation of financial statements is the responsibility of top management. In other words, we can say that, to present the firm's financial performance to the users, a statement prepared by top - level management is known as financial statement. Financial statements are prepared from the accounting records maintained by the firm. The generally accepted accounting principles and procedures are followed to prepare these statements. These statements are used by investors and financial analysts to examine the firm's performance in order to make investment very carefully and contain as much as information possible.

According to John N. Mayer, "The financial statements provide a summary of the accounts of a business enterprise, the balance sheet reflecting the assets, liabilities and

[1] I.M. Pandey "Financial Management". Vikash Publishing House Pvt.Ltd., New Delhi 8th Edt.P.27.
[2] Richard W. Metcalf and Pierre L. Titard "Principles of Accounting," W.B. Saunders co-London, 1976, P.12

capital as on certain date and the income statement showing the results of operations during a certain period."[3]

This definition emphasizes traditional financial statements Viz balance sheet and profit & loss account. Many other financial statements such as funds follow statement, statement of retained earnings and schedules & notes have been completely ignored. Smith and Ashburn define financial statement as "the end product of financial accounting is a set of financial statements - prepared by the accountant of a business enterprise, that propose to reveal the financial position of the enterprise, the result of its recent activities, and an analysis of what has been done with earning."

According to this definition financial statements are the outcome of preparing financial accounts and these statements reveal financial position and profitability of the concern and the utilization of retained earnings. In other words, we can say that financial statements are the end product or output of an accounting system designed and used in an organization. The inputs to this system are the business transaction or financial events taken place in the organization. These transaction or events are processed with generally accepted accounting principles and procedures in the course of their transformation into financial statements.

2.2.1. Objectives of financial statements:

The main objective of financial statement is to provide necessary information to those persons and parties who are interested about the information and who must make the decision about business activities. The other objectives are:

i) To provide reliable financial information about economic resources and obligations of a business enterprise.

ii) To provide reliable information about changes in net resources (resources minus obligations) of an enterprise that results from the profit directed and other activities.

iii) To provide financial information that assists in estimating the earning potential of the enterprise.

iv) To disclose to the extent possible, other information related to the financial statement that is relevant to statement users.

2.2.2 Importance of financial statements:

Financial statement is an important statement expressed in terms of money values which provides necessary and valuable information to the management for sound decision making. It helps to provide information about profitability, liquidity, operating

[3] John M. Mayer financial statement analysis

activities of business organizations. The importance of financial statement can be pointed out as follows:

i) It provides valuable and pertinent information to the management for decision making activities.

ii) It provides information about profitability, liquidity and operating activities of the business organization.

iii) It shows the true and fair financial picture of the organization.

iv) It helps to analyze the future profitability of the business organization.

2.2.3. Anatomy of financial statements:

2.2.3.1. Income statement

To determine the operational position of an enterprise during a certain period of time, a statement is prepared which is called income statement. It is also called statement of income and earned surplus, statement of revenue and expenses, operating statement. Income statement shows the change in a firm's position as a result of its operation over a period of time. The earning capacity and potential of a firm are reflected by its income statement. The income statement is a "Score board" of the firms' performance during a period of time. The period of time is an accounting period. The period of time for which business activities of a firm are reported is called the accounting period. The accounting period may be a month or a quarter or half year. The income statement is prepared in accordance of the nature of business. A trading concern will prepare income statement as trading and profit & loss account where as a manufacturing concern will include manufacturing account also. Thus, we can say that income statement may be prepared in the form of manufacturing account, trading accounts, profit & loss a/c and profits & loss appropriation account.

Manufacturing account is an account which is only prepared by a manufacturing concern to ascertain the cost of production of goods produced or manufactured. The direct expenses (i.e. direct material consumed, direct labour, direct expenses or chargeable expenses) and indirect or factory expenses (i.e. all expenses relating to factory) is included in this account. After preparing the manufacturing account the manufacturer desires to know the gross profit or gross loss on goods manufactured. For this purpose trading account is prepared. In other words, trading account is prepared mainly to know the profitability of goods bought or manufactured and sold by the businessman. Gross profit and Gross loss is the difference between actual sale proceeds and cost of goods sold. The excess of sale proceeds over cost of goods sold is known as gross profit while the excess of cost of goods sold over sale proceeds is known as gross loss. Third step of preparing income statement is profit & loss a/c. The profit & loss account is opened by recording the gross profit (on credit side) or gross loss (on debit

side). The purpose of preparing this account is to ascertain the net result of the business unit during an accounting period. All expenses Viz, office and administrative, selling & distribution and miscellaneous expenses (i.e. interest on loan, loss on sale of fixed assets, loss by fire or the Ft etc.) will appear on the debit side. Income and gains to be shown on the credit side e.g. discount received, interest received commission received, rent earned, profit on sale of fixed assets, income from investments etc. The differences between two sides represent either net profit or net loss. The excess of credit over debit side is known as net profit where as the excess of debit over credit side is known as net loss. Net profit of P/L account is transferred to profit & loss appropriation account is prepared to show how the profits of the company have been used or appropriated. The balance of this account will show the amount of profit retained in hand and carried forward. The appropriations can not be more than the profits, so this account will not have a debit balance. There can not be appropriations without profits.

A classified income statement presents revenue and expenses in a manner designed to provide maximum understanding of a firm's operation. Thus, the income statement is classified into division of expenses into logical categories and adjustment in presentation of the revenue section.

The five primary section of an income statement are: revenue, cost of goods sold, operating expenses, financial expenses and income tax expenses.

1. Revenues Section:-

Every time a business sells a product or performs a service it creates revenue. Revenue typically results from sale or service. Revenue can be referred to as "gross sales" or "gross services" since they are presented before deduction. Deductions from gross revenue are of two type i.e. (i) sales return and (ii) discount for prompt payment.

2. Cost of Goods Sold Section:-

The cost of goods sold section reports the cost of merchandise which was sold during the accounting period. Simply stated, to the cost of inventory at the beginning of the period, add the cost of merchandise bought during the period to get the goods available for sale. To determine cost of goods sold during the period, the cost of goods on hand at the end of the period is deducted from cost of merchandise available for sale.

Deduction of cost of goods sold from net sales equals to gross margin. Gross margin is the amount available to meet expenses and hopefully, to result in net income for the firm's owners.

3. Operating Expenses Section:-

The major expenses, exclusive of cost of goods sold are grouped under the "operating expenses". Generally, operating expenses represents the resources expended, except for inventory purchase in generating the period revenue. These expenses are

divided into selling expenses and general & administrative expenses. The expenses which results from displaying, selling, delivering or installing a product or performing a service is classified as selling expenses, whereas the expenses associated with running a firm refers to as "general and administration expenses". These expenses include management's salary, expenses connected with operating an office such as office rent and depreciation on office furniture & fixtures and general expenses which can not be related to the buying or selling activity and expenses arising from delinquent or uncollectible.

4. Financial Expenses:-

If the owners had not invested enough funds the firm would need to borrow funds. Generally the firm would borrow funds from debentures, bonds, long - term debt etc. The firm which is borrowing funds other than equity, has to pay interest on its borrowing, the cost of borrowing (i.e. interest refers to financial expenses). In other words, interest expenses resulting from long - term debt are reported on the income statement as financial expenses.

5. Tax Expenses:-

The business organization pays tax on its income in a manner similar to the way an individual does. Therefore, tax expenses shown on the income statement. Amount payable as tax is shown under this heading.

Income statement presents the summary of revenues, expenses and net income (or net loss) of a firm. It serves as a measure of the firm's profitability. Revenues refer to the total of all resources received from sale of a firm's goods / services / assets or by the supply of the firm's resources to others. Alternatively, revenues mean the value that a firm receives from its customers. The firm uses economic resources used to earn revenues during a period of time is called expenses. If there is excess of revenues over expenditures it will show a profit and if the expenditures are more than the income then there will be a loss.

The time interval for an income statement is usually one year, although if may be prepared monthly, quarterly or semi-annually. All of the revenues and expenses are accumulated for the period of time it covered. Therefore, it is necessary to indicate on the face of the income statement the period of time covered.

In summary, the income statement communicates financial information concerning an entity's revenues and expenses over a period of time, usually one year.

The important functions of the income statement or P/L account are:

- It gives concise summary of the firm's revenues and expenses during a period of time.
- It measures the firm's profitability.

- In terms of the overall accounting functions, P/L account.

Accumulates economic data i.e. revenue (Rev.) and expenses (Exp.) in accordance with the mode Rev - Exp = NP (Net Profit)

Measures net profit by matching revenues and expenses according to basic accounting principles.

2.2.3.2. Balance Sheet

A statement of assets and liabilities and owner's equity is known as balance sheet. The balance sheet is one of the important financial statements indicates the financial condition or the state of affairs of a business at a particular moment of time. In other words, a balance sheet reports an entity's financial position at a specific point in time. "It's purpose is to provide a listing of the resources possessed by an entity and the claims of creditor (s) and owner (s) against those resources."[4] The statement itself may be referred to as a balance sheet, a statement of financial position, or a statement of financial condition or statement of assets, liabilities and owner's fund etc. Of those, the title 'Balance Sheet' is mostly used because it is a sheet of ledger account balances which were not transferred to trading and profit & loss account. Balance sheet is prepared by taking up all the personal account (capital & drawings) and real accounts (assets and properties) together with the net result obtained from profit & loss account showing the debit balance on the right hand side (called assets side) and credit balance on the left hand side (called liabilities side) in order to show the real financial position of a firm at particular date. Thus a balance sheet is not an account but it is a statement prepared from the balances of accounts.

"The balance sheet is divided into two segments; (1) resources possessed by the firm; and (2) claims against these resources. Traditionally the claims are further divided according to their relationship with the firm. The two groups are : (1) creditors, with a primary financial claim to the firm's assets with legal resources against the firm it claims are not paid; and (b) owners those with a residual claim against the resources".[5] The balance sheet can be prepared in two styles, one report form and other the account form. There is no specific form for the preparation of Balance Sheet but the typical format followed in presenting balance sheet data is possible to identify the three main categories presented in a balance sheet. The three categories are : (1) assets, representing the resources possessed by an entity; (2) liabilities; detailing claims against the company by creditors groups; and (3) owners equity, the residual interest of the owners of the firm. The assets are shown on the right hand side and capital and liabilities are shown on the left hand side.

[4] Richard W. Metcalf & Pierre L. Titard. Op. Cit. P.32
[5] Metcalf & Titard Op. Cit P.34

The assets and liabilities should be arranged in balance sheet in some specific order. Arrangement of assets and liabilities in the balance sheet is called 'marshalling of assets and liabilities'. The order of assets and liabilities is either (i) on liquidity basis or (ii) on permanency basis. When balance sheet is prepared on liquidity basis then more liquid assets like cash in hand, cash at bank, investments etc. are shown at first. On liabilities side, the liabilities to be paid in the short period are shown first, long - term liabilities next and capital on the last. When balance sheet is prepared on permanency basis on assets side fixed assets are shown first and liquid assets are shown at last. On liabilities side the capital is shown first, long term liabilities next, short term and current liabilities in the last.

The various items of the balance sheet may be grouped in to the following categories:-

[A] Assets:

"An assets is something of value owned by an entity. These possessions should be capable of being measured in monetary terms. Assets are the future benefits. They represent; (a) stored purchasing power (e.g. cash), (b) money claims (e.g. receivables, stock) and (c) tangible and intangible items that can be sold or used in business to generate earnings."[6]

Asset may be classified as:

1) Current Assets:-

"Current assets are those assets which can, and will be converted into cash (or used to conserve cash) during the next year or during the operating cycle if it is longer."[7] Thus, current assets are those operating assets used in business which can be converted into cash during the short time operation of a business. According to Alexander wall, "Current assets are such assets as in the ordinary and natural course of business move onward through the various processes of production, distribution and payment of goods, until they become cash or its equivalent by which debt may be readily and immediately paid."[8] Thus, current assets are either cash in hand, and cash at bank or shortly convertible into cash. "..... Cash or other assets that are reasonably expected to be realized in cash or sold or consumed during a normal operating cycle of a business or within one year of the operating cycle is shorter than one year."[9]

Conventionally, current assets designate assets which are held for a short period of time, usually not more than a year from the balance sheet. These are also known as liquid

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[6] I.M. Pandey. Op. Cit. P. 31-32
[7] Metcalf & Tictard Op. Cit. P. 53-54
[8] Alexande Wall - "How to evaluate financial statement".
[9] Accounting principles board, Basic concept and Accounting principles underlying financial statements of Business enterprises (New York : American Institute of certified Public Accountant, 1971) P.94

assets. From the point of view of analyst the following are generally included in current assets :

i) Cash in hand at bank.

ii) Book debt, also known as debtors or account receivables.

iii) Bills receivable, also known as notes receivables.

iv) Stocks : Raw materials, work in progress, finished goods.

v) Government and other marketable securities.

vi) Advance payment (prepaid expenses).

vii) Accrued income etc.

2) Fixed Assets:-

Fixed assets are those which are acquired for the purpose of using them in the conduct of business operation and not for re-selling to earn profits. It is only by making use of these assets that the function like production and distribution are being performed for earning the income. Fixed assets would include long - term investment also. Some examples of assets coming into the category of fixed assets are :

i) Tangible Fixed Assets:-

The fixed assets which can be seen or touched is known as tangible fixed assets. Tangible fixed assets are those which have a physical existence and generate goods and services. Tangible fixed assets include; land, building, plant, machinery, tools, equipments, furniture, fixture, leasehold improvements, trucks and automobiles etc.

ii) Intangible Fixed Assets:-

The fixed assets which can not be seen or touched is known as intangible fixed assets. It means that these assets do not have any physical existence; they are invisible or Intangible. These assets do not generate goods and services directly. It represents the firm's rights. It includes patents, copyrights, trade marks, good wall and franchises etc.

iii) Other Non - Current Assets:-

Other non-current assets include assets that can not be included in any of the above categories usually, they represent deferred charges payments for services or benefits for a period longer than the accounting period are referred to as deferred charges and include advertising, preliminary expenses etc.

[B] Liabilities:-

The second major content of the balance sheet is liabilities of the firm. Liabilities may be defined as the claims of outsides against the firm. Alternatively, they represent the amount that the firm owes to outsides, i.e. other than owners. A liability may arise

either through normal operations of a business or through the process of obtaining funds to finance operations. Liabilities can be classified into :

1) Current Liabilities:-

All short term obligations generally due and payable within one years are described as current liabilities. Current liabilities include such debts and obligation / charges, which are payable either at demand or within one year from the balance sheet. The accounting principals board has defined current liabilities as : " ..... current liabilities include those (liabilities) expected to be satisfied by either the use of assets classified as current in the same balance sheet or the creation of other current liabilities or those expected to be satisfied within a relatively short period, usually one year."[10]

Current liabilities include trade creditors, account payable, bills payable, notes payable, short term public deposits, outstanding or accruals, bank borrowings, provisions, income received in advance etc.

2) Long tern liabilities:-

Liabilities which become due a year or more in the future are placed in a separate grouping under the heading "long term debt". The sources of long - term borrowing are (i) debentures (ii) bounds (iii) mortgages (iv) secured loan from financial institutions and commercial banks etc.

3) Other liabilities:-

Deferred incomes is referred to other liabilities. Deferred income represents the liability that arises out of received in advance, deferred income tax credit etc.

[C] Owner's Equity:-

The third major content of a balance sheet is the owner's equity. It refers to the claims of the owner's of the business against the assets of the firm. Alternatively owner's equity may be viewed as that part of the resources of a firm which are supplied by it's owner's. The owners of a business are known as shareholders. There are two types of shareholders; (i) ordinary shareholder (ii) Preference shareholder. The preference shareholders are entitled to a started amount of dividend and return of principal at maturity. The ordinary shareholder's are also called equity holders. They are different from the preference shareholders as well as the creditors. The claim of equity holders changes due to the earning (or loss) of the firm and their distribution. Owner's equity will increase when the firm makes earnings and retains whole or part and will decrease when the firm makes losses.

The owner's equity consists of two elements : (i) Paid - up capital, i.e. the initial amount of funds contributed by the shareholders; (ii) retained earnings / reserve and

[10] Accounting Principles Board P. 94

surplus, i.e. that part of the profits belonging to the shareholders which is not paid out to them as dividends but instead is retained ploughed back in the business. Under this heading all those reserves which have been created out of undistributed profits are shows. The reserves are classified as capital reserve and revenue reserves. Capital reserves are those reserves which are not face for distribution as profits whereas revenue reserves are created out of appropriations of profits, Various items included here are ; capital reserve, capital redemption reserve, share premium account, other reserves, surplus i.e. profit & loss A/c proposed additions to reserves and sinking fund etc.

We can observe from accounting equation i.e. TA = TL + OE that assets and liabilities will cause a change in owner's equity. These changes may be summarized as follows :[11]

1. Owner's equity will increase (i) if assets increase while liabilities remain unchanged or they increase less than assets increase; (ii) if assets decrease while liabilities decrease more than assets do; or (iii) if assets remain unchanged while liabilities decrease.
2. Owner's equity will decrease (i) if assets decrease while liabilities remain either unchanged or increase or decrease less than assets decrease; (ii) if assets increase while liabilities increase more than assets do; or (iii) if assets remain unchanged while liabilities increase.
3. Owner's equity will remain unchanged (i) if both assets and liabilities remain unchanged; (ii) of both assets and liabilities increase by the same amount; or (iii) of both assets and liabilities decrease by the same amount.

The important functions served by the balance sheet are :[12]

- It gives a concise summary of the firm's resources and obligations.
- It is a measure of the firm's liquidity
- It is a measure of firm's solvency

In terms of the overall accounting functions, balance sheet :[13]

- Accumulates information in conformity with the basic accounting equation, TA + TL + OE.
- Measures assets and liabilities in monetary units and in accordance with cost principles.
- Communicates information about assets (resources)

Liabilities (Outside claims) and owner's equity (residual claim of owners) to owner's, creditors and others.

[11] C.J. Woelfer, Accounting : An introduction, Good year 1977. P.P. 4.2-4.3
[12] I.M. Pandey, OP. Cit. P. 42
[13] I.M. Pandey Op. Cit P. 42

2.2.3.3Statement of Retained Earnings:

The board of directors has two options for treatment of an enterprises net income. It may distribute all or part of it to owners, or it may retain the earnings (net income) in the business (equivalent to increasing the owner's capital). Generally, enterprises distribute part of the earnings to owners and retain part for future growth. Sometimes the board of directors may arbitrarily restrict retained earnings for specific purpose, such as future plant expansion or new product development.

The statement of changes in retained earnings indicates the changes in retained earnings that have occurred during the accounting period. Since the amount of retained earnings is affected by net income or net loss, the statement of retained earnings should always be prepared when an income statement and balance sheet are prepared. A retained earnings statement may be a separate statement or it may be combined with the income statement. For companies that have a number of changes in retained earnings, a separate statement is more appropriate than a combined statement. A statement of retained earnings is also known as profit & loss appropriation account or income disposal statement. As the name suggests it shows appropriation of earnings. The previous year's balance is first brought forward. The net profit during the current year is added to this balance on the debit side, appropriation like interim dividend paid, proposed dividend on preference and equity share capital, amount transferred to debenture redemption fund, capital redemption fund, general revenue, etc. are shown. The balance in this account will show that amount of profit retained in hand and carried forward. The appropriation can not be more than profits, so this account will not have a debit balance. These can not be appropriations without profits.

2.2.3.4Funds flow statement:

The basis of financial statement i.e. the balance sheet and profit & loss account or income statement of business, reveal the net effect of the various transaction on the operational and financial position of the company. The balance sheet gives a summary of the firm's resource (assets) and obligations (liabilities and owner's equity) at particular point of time. It reveals the financial status of the company. The balance sheet gives a "static" view of the financial position. The assets side of balance sheet shows the development of resources of an undertaking while the liabilities side indicates its obligation i.e. the manner in which these resource were obtained. The profit and loss account reflects the results of the business operations for a period of time. It contains a summary of expenses incurred and the revenues realized in an accounting period. Both these statement provide the essential basic information on the financial activities for a business. But the balance sheet does not disclose the course for changes in the assets and liabilities and owner's equity between the end of the next period. The profit & loss account, in a general way, indicates the resources provided by operations. But there are

many transactions that take place in an undertaking and which do not operation through profit & loss account. Thus, another statement has to be prepared to show the changes in the assets and liabilities from the end of one period of time to the end of another period of time. This statement is called funds flow statement.

Funds follow statement is known by various names such as sources and application of funds; statement of changes in financial position; sources and uses of funds; summary of financial operations; where came in and where gone out statement, movement of working capital statement, movement of funds statement, funds received and disbursed statement; funds generated and expended statement; sources of increase and application of decrease ; funds statement; etc.

"The funds flow statement is statement which shows the movement of funds and is a report of the financial operation of the business undertakings. It indicates the various means by which funds were obtained during a particular period and the ways to which these funds were employed. In simple words, it is a statement of sources and application of funds."[14]

Funds follow statement is a method by which we study changes in the financial position of a business enterprise between beginning and ending financial statement dates.

"Every change between the amount of an item at the beginning and the amount at the end of an accounting period is examined and used in preparing the statement."[15]

Foulke defines this statement as:

"A statement of sources and application of funds is a technical device designed to analyze the changes in the financial condition of a business enterprise between two dates."

Anthony defines this statement as:

"The funds flow statement describes the sources from which additional funds were derived and the use to which these sources were put."

I.C.W.A. in Glossary of Management Accounting terms defines funds flow statement as "a statement, either prospective or retrospective setting out the sources and applications of the funds of an enterprise. The purpose of the statement is to indicate clearly the requirement of funds and how they are purposed to be raised and the efficient utilization and application of the same."

The term 'flow' means movement of funds. It includes both 'inflow' and 'outflow' of funds. In the analysis of funds flow statement, funds means working capital. According to the working capital concept of funds, the term 'flow of funds' refers to the movement of funds, in the working capital. If any transaction results in the increase in

[14] R.K. Sharma and Shashi K. Gupta "Management Accounting". 5th edition (Kalyani Publishers) 1987, P. 269.
[15] Metcalf & Titand Op. Cit. P. 116.

working capital, it is said to be a sources or inflow of funds and if it results in the decrease of working capital, it is said to be an application or outflow of funds, further, incase the transactions do not change working capital, It is said to have not resulted in the flow of funds, moreover, one of the primary financial responsibilities of management is to ensure that the firm has sufficient working capital to support the firm's business operations. An adequate flow of working capital is essential to sound health of the business. "An adequate amount of working capital provides a financial defense against emerging or seasonal drains on resources, enhances the credit worthiness of the firm, enables the management to operate efficiently and flexibly and allows the firm to take advantage of special favourable opportunity."[16]

"The flow of funds occures when a transaction changes on the one hand a non - current account and on the other a current account and vice - versa. When a change in a non - current account is followed by a change in another non - current account, it does not amount to flow of funds. This is because of the fact that in such case neither the working capital increases nor decreases. Similarly when a change in one current account results in a change in another current account, it does not affect funds. Funds move from non - current to current transaction or vice - versa only. In simple language funds move when a transaction affects (i) a current assets and a fixed assets, or (ii) a fixed and a current liabilities, or (iii) a current assets and a fixed liability, or (iv) a fixed liability and current liability and funds do not move when the transaction affects fixed assets and fixed liability or current assets and current liability."[17]

(A) Sources and uses of working capital

Any transaction that increases the amount of working capital is a source of working capital. In the same way, any transaction that decreases working capital is a use of working capital. Transaction that does not change the amount of working capital is neither sources nor use of working capital.

The typical sources and uses of working capital are summarized below :

a) Sources of working capital :

1. Decrease in working capital.
2. Funds from operation (adjusted net income)
3. Sale of non - current assets:
   - i) Sale of long term investment.
   - ii) Sale of tangible fixed assets like land, building, plant, equipment etc.
   - iii) Sale of in tangible fixed assets like good will, patents, copy rights etc.

[16] E.A. Spiller, financial Accounting: Basic concepts (Richard D. Irwin, Homewood, I II, 1917) P. 596.
[17] R.K. Sharma and Shahi K. Gupta, Op. Cit., P.P. 270-271.

4. Long - term financing
   i) Long - term borrowings (loans, debentures, bonds etc.)
   ii) Issuance of equity and preference shares.

b) Uses of working capital:

1. Increase in working capital.
2. Loss from operation (adjusted net loss)
3. Purchase of non - current assets:
   i) Purchase of long - term investments.
   ii) Purchase of tangible fixed assets like land, building, plant, equipment etc.
   iii) Purchase of intangible assets like goodwill, patents, copyright etc.
4. Payment of long term debt (debenture bonds, loans etc)
5. Redemption of redeemable preference share.
6. Payment of cash dividend.
7. Payment of Tax.

c) Procedure for knowing whether a transaction results in the flow of funds or not:[18]

1. Analyze the transaction and find out the two accounts involved.
2. Make journal entry of the transaction.
3. Determine whether the accounts involved in the transaction are current or non - current accounts.
4. If both the accounts involved are current, i.e. either current assets or current liabilities, it does not result in the flow of funds.
5. If both the accounts involved are non-current i.e. either permanent assets or permanent liabilities, it still does not result in the flow of funds.
6. If the accounts involved are such that one is current account while the other is a non-current account, i.e. current assets and permanent liability or current assets and fixed assets or current liability and fixed assets or current liability and permanent liability, then it results in the flow of funds.

[18] R.K. Sharma and Shashi K. Gupta, Op. Cit. P.P. 272-273

(B) Uses of the funds flow statements:[19]

The statement is useful as a tool of historical analysis as it helps to answer questions such as given below:

1. What is the liquidity position of the firm?
2. What are the causes of changes on the firm's working capital?
3. What fixed assets are acquired by the firm?
4. Did the firm pay dividends to its shareholders or not? If not, as it due to shortage of funds?
5. How much of the firms working capital needs were met by the funds generated from current operations?
6. Did the firm use external sources of finances to meet its needs of funds?
7. If the external financing was used, what ratio of debt and equity was maintained?
8. Did the firm sell any of its non-current assets? If so, what were the proceeds from such sales?
9. Could the firm pay its long - term debt as per the schedules?
10. What were the significant investment and financing activities of the firm which did not involve working capital?

(C) Limitation of funds flow statements:

The funds flow statement has a number of use however it has certain limitations also which are listed below.

1. It is not a substitute of an income statement or balance sheet. Because it provides only some additional information as regards changes in working capital.
2. It generally does not consider the non - fund transaction. That is, it ignores transactions which do not affect the working capital.
3. It can not reveal continuous changes.
4. It is not an original statements ; it is only systematic re-arrangement of accounting data given in the financial statements.
5. It is basically historic in nature and is related to past analysis. Of course, projected funds flow statement may give an idea about the future but it can not be prepared with much accuracy.
6. It does not provide information about changes in cash; which are more important and relevant for financial management than working capital.

[19] I.M. Pandey, Op. Cit. P. 81

2.2.3.5Schedules & Notes:

A number of schedules are prepared to supplement the information supplied in the balance sheet. The schedules of investments, Fixed assets, Debtors, Creditors, advance payments, outstanding expenses, share capital, long term debts, stocks etc. are prepared to give details information about these transaction. All these schedules are used as part of financial statements. All the necessary schedules & notes are prepared so as to supplement the balance sheet information.

Limitations of financial statements:

The financial statement has a number of use however, it has certain limitation also. Generally, financial statements suffer from the following limitations.

1. The information furnished by the financial statements are not precise. Since the construction of these statements is based on practical methods and rules used and propounded on the basis of experiences of several years of accountancy profession, therefore, the information estimating from them can not be precisely measured.[20]
2. Financial statements don't disclose the correct financial position of the business concern. The financial position of a business concern is affected by several other factors like as economic, social, and financial; but only financial factors are being recorded in financial statements; social and economic factors are not incorporated in these statement.[21]
3. Financial statements do not reflect a complete picture of a concern. They are prepared based on the monetary involvement of the events or transactions (i.e. only quantitative factors). Event with no monetary involvement (i.e. qualitative factors) but having long - term implication on the performance and financial position of an organization like entry and exit of competitors; quality of the management team; trust, competency and commitment of employees etc Cannot be recorded in the financial statements.
4. Profits disclosed by the profit & loss account is also not a real profit. The profit & loss account for a particular year exhibits a profits, which in never accurate and correct mathematically or from economic point of view because a number of items shown in the profit & loss account are just estimated.[22]
5. Balance sheet can not disclose the exact financial position of business, because the values shown in it are not real values of assets or values for which these can be sold. Exact position can be shown only when the business is liquidated or sold.

[20] S.P. Gupta "Management Accounting" Sahitya Bhawan Publication, 2005. P. 46
[21] S.P. Gupta I Bid. P. 47
[22] S.P. Gupta, I. bid. P. 47

6. The balance sheet is affected by various concepts e.g. fixed assets by going concern concept, debtors and stock in trade by conservatism. Because of this, the balance sheet does not show the financial position of the concern as is claimed by it. Balance sheet is nothing but a collection of various unamortized costs.[23]

7. Balance sheet is considered to be a static document and it reflects the position of the concern may be changing day - to - day. As a result of this limitation, there is possibility of window dressing in the balance sheet.[24]

8. Many items are influenced by the personal judgment and since the "Soundness of the judgment necessarily depends on the competence and integrity of those who make them" the quality of statements, in its turn gets affected by the quality of the team which organizes the whole show.[25]

9. Information conveyed by these statement may not be comparable on account of difference between dates of preparation of these statements. At the same time, the difference in methods of accounting followed by different concerns and in nature of business of different concerns may render the financial statements of two concerns impossible or difficult for the purpose of comparison.[26]

Thus, keeping in view all these limitations from which financial statement suffer it can be concluded that these statements show the position of financial accounting rather than the financial condition of a business.

2.3 Financial Statement Analysis:

The two basic financial statements i.e. Balance Sheet and Income statements, provide the information about operating performance and financial position of the firm. The information contained in these statements is used by management, creditors, investors and others interested parties. But balance sheet and income statement give all the required information to its users. The users of financial statements can get better information about the financial strength and weakness of the firm of the users properly analyze the information reported in these statements.

"An act of assessing financial strength and weakness of an organization through the meaningful search of information contained in financial statement is known as financial statement analysis."[27] In simple word, financial statements analysis can be described as examining the composition of any financial statement or statements for the purpose of interpreting and drawing conclusions. "Analysis of financial statements means the presentation of facts given in financial statements into district and different

[23] R.L. Gupta, "Advanced Accounting."
[24] S.P. Gupta, Op. Cit. P. 47
[25] R.L. Gupta, Op. Cit
[26] S.P. Gupta, Op. Cit. P. 47
[27] K.N. Wagle & R.K. Dahal, Management Accounting, Khanal Books & Stat. 2004, P.10.3

components by using scientific methods and it also includes the arrangement of facts according to the need and convenience. In other words, financial analysis involves the division of facts on the basis of some definite plans, classifying them into classes on the basis of certain conditions and presenting them in most convenient, simple and understandable form."[28] In addition to this, analysis also attempts to study the relationship between different items of financial data and factors. Thus, we can say that, "analyzing financial statements is the process of financial statements to obtain a better understanding of a firm's position and performance. There are three areas to be analyzed : (1) the balance sheet (2) the income statement and (3) certain relationships between segments of both statements. In order to arrive at an overall evaluation of a firm's financial strength, all three areas must be examined."[29]

The first task of financial analyst is to select the information relevant to the decision under consideration from the total information contained in the financial statement. The second step involved in financial analysis is to arrange the information in a way that will bring out significant relationship. The final step is to study these relationship and interpret the results. In single sentence, financial analysis is the process of selection, relation and evaluation.

"All analysis of financial data involves comparison. That comparison may be of data given in financial statement, this is known as analysis of a particular statement e.g. analysis of balance sheet, analysis of income statement etc. Analysis may involve the comparison of data of two different financial statements. This is called inter statement analysis, e.g. analysis may relate the profit shown by profit & loss account to shareholder's equity shown by balance sheet. Analysis may also involve the comparison of statement of the statements of two different companies."[30]

In nutshell, analysis of financial statements refers to such a treatment of the information contained in the income statement and the balance sheet so as to provide full diagnosis of the profitability and financial soundness of the profitability and financial soundness of the business. The nature of analysis and interpretation of financial statement, depends a great deal on the personal knowledge and capability of the analyst. Thus, the nature of analysis will differ depending on the purpose of the analyst. It also requires a sound knowledge of accounting principles, specially, the nature and limitations of financial statements.

According to I.M. Pandey, through financial analysis, one can try to seek answers to the following questions :[31]

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[28] S.P. Gupta "Management Accounting, Shahitya Bhawan Publication 2005, P.51
[29] Metcalf & Titard, Op. Cit. P.157
[30] Jagwant Singh & Rantej Paul, Management Accounting, Kitabmahal, 1982 P. 37
[31] I.M. Pandey, Management Accounting, Vikas Publishing House, 1983, P. 90

1. Is the firm in a position to meet its current obligations?
2. What sources of long - term finance are employed by the firm and what is the relationship between them? Is there any danger to the solvency of the firm due to the employment of excessive debt?
3. How efficiently does the firm use it assets?
4. Are the earnings of the firm adequate?
5. Do investors consider the firm profitable and safe for the purpose of investing their money in the shares of firm?

2.2.1 Types of Financial Analysis:

Financial analysis can be classified into different categories depending upon :

1. The basis of organization of information for analysis, and
2. The basis of information used for analysis.

1. On the basis of organization information for analysis :-

According to this basis, financial analysis can be of two types :

(a) Horizontal Analysis:-

In the case of this type of analysis financial statements for number of years are examined and analyzed. Under this analysis, the periodical trend of various items shown in the statements i.e. whether they have increased or decreased with the passage of time is examined. It is also known as 'dynamic analysis' or 'trend analysis'. It is very essential for horizontal analysis that percentage increase or decrease for each item should be calculated. The analysis contains figure for two or more years and the change are shown regarding each item from the base year usually in the form of percentage. Such analysis gives the management considerable understanding into levels and areas of strength and weakness. Comparative statements are the form or Horizontal Analysis.

(b) Vertical Analysis:-

In case of this type of analysis, a study is made of the quantities relationship of the various items in the financial statement on a particular date. It is also called 'static analysis' or 'structural analysis'. Common - size statements are the form of vertical analysis. Such an analysis is useful in comparing the performance of several companies in the same group or divisions or department in the same company. Since this analysis depends on the data for one period. It is not very useful for a proper analysis of the company's financial position.

2. On the basis of information used for analysis:-

According to this basis, financial analysis can be of two types:-

(a) External Analysis:-

The analysis which is done by outsiders is known as external analysis. Outsides include creditors, suppliers, investors, government agencies etc. These parties do not have access to the internal records of the concern. They mainly depend upon the published financial statements and their analysis serves only a limited purpose.

(b) Internal Analysis:-

The analysis which is done by internal analysts such as executives, employees etc. On the basis of information obtained from the internal and unpublished records and books, are called internal analysis. Such an analysis serves meaningful purpose of internal management and employees.

2.3.2 Importance of Financial Analysis:

The importance of financial analysis can be summarized as follows :

1) Financial analysis measures the firm's liquidity, profitability and solvency position.
2) Financial analysis assesses the firm's operating efficiency, financial position and performance.
3) Financial analysis helps the management in identifying the factors responsible for creating managerial, operating and other problems.
4) Financial analysis fulfills the objectives and interest of short term creditors, present and potential investors, long term creditors, management and regulating authorities.

2.3.3. Objectives of Financial Analysis:[32]

Each user of financial statements has a distinct objective for which he attempts to analyze and interpret. In spite of the variations in the objectives of interpretation by various classes of people, there are some common objects of financial analysis and interpretation which are as under :

1) To examine the earning - capacity and efficiency of various business activities with the help of income statements.
2) To estimate about the performance efficiency and managerial ability by the management of a business concern.
3) To determine short term and long - term solvency of the business concern with the help of statement of position, i.e. Balance sheet.
4) To enquire about "the financial position and ability to pay" of the concerns seeking loans and credits.

[32] S.P. Gupta Op. Cit., P.53

5) To determine the profitability and future prospects of the concern.

6) To investigate the future potential of the concern.

7) To make comparative study of operational efficiency similar concerns engages in the identical industry.

2.3.4. Procedures of Analysis:[33]

The following procedure is adopted for the analysis and interpretation of financial statements.

1) The objective and extent of analysis and interpretation should be determined. Needless to say that the selection of techniques of interpretation depends upon the objective and extent of interpretation.

2) The financial data given in the statements should be recognized and re-arranged. It will involve the grouping of similar data under same heads and breaking down of individual components of statements according to nature. The data is reduced to a standard form.

3) All financial data shown in financial statements should be studied just to understand their significance.

4) Additional information required for the work of interpretation should be collected properly.

5) Data collected should be presented in some logical way.

6) A relationship is established among financial statements with the help of tools and techniques of analysis such as ratios, trends, common size statements, comparative statements etc.

7) The information is interpreted in a simple and understandable way. The significance and utility of financial data is explained for helping decision making.

8) The conclusions drawn from interpretation are presented to the management in the form of reports.

2.3.5 Limitations of Financial Analysis:

Financial analysis suffers from certain limitations. The major limitations of financial analysis can be summarized as under :

1) Financial analysis fails to disclose the current worth of enterprise. Financial analysis is based on financial statements which records historical facts. They do not record the changes in the price level.

2) Financial analysis is based on fact and figure contained in financial statements, Hence the limitations of financial statements such as influence of personal

[33] S.P. Gupta, Op. Cit, P. 53 and R.K. Sharma & Shashi K. Gupta, Op. Cit, P. 76

judgment, disclose of monetary facts only are also the limitations of financial analysis.

3) Financial analysis is a tool to measure the profitability, efficiency and financial soundness of the business. If may spot symptoms of financial problems and operational efficiency but it can not suggest definite remedies. A final decision in this regard will required further investigations and through diagnosis.

2.3.6. Tools and Techniques of Financial Analysis:

A number of tools & techniques have been developed to undertake analysis of financial statement in order to reach conclusion about the financial health, profitability and efficiency of an enterprises and also to compare and enterprise with other similar undertakings. Some of the major and popular tools are as under :

1) Ratio Analysis
2) Comparative Statement Analysis
3) Common Size Statement Analysis
4) Trend Analysis
5) Funds Flow Analysis

2.4 Ratio Analysis:

An arithmetical relationship between two figures is known as 'Ratio'. It is computed by dividing one item of relationship with other. Ratio simply means one number expressed in terms of another. When this definition of ratio is explained with reference to the items shown in financial statements, then it is called 'accounting ratio'. According to J. Batty, "the term 'accounting ratios' is used to describe significant relationships which exist between figures shown in a balance sheet, in a profit & loss account, in a budgetary control system or in any other part of the accounting organization."[34] So the ratio is the measurement of quantitative relationship between two or more items of financial statement connected with each other. An analysis of financial statements with the help of 'ratio' if may be termed as 'ratio analysis'. Ratio analysis is most widely used powerful tool of financial analysis. Most business firm uses ratios as yardstick for evaluating the financial position and performance. Data or information given in financial statements in absolute firm are dumb and are unable to communicate anything. Ratio help to summarize the large quantities of financial data to make qualitative judgments about the firm's financial position and performance. Thus, we can say that ratio analysis is a process of establishing meaningful relationship between two figures or set of figures of financial statements with a view to present the financial statements in simple, concise and intelligible form.

[34] J. Battay, 'Management Accounting' P.413

Ratio analysis is a technique of analysis and interpretation of financial statement. To evaluate the performance of an organization by creating the ratio from the figures of different account consisting in balance sheet and income statement is known as ratio analysis. Alexander wall is considered to be pioneer of ratio analysis. He presented after a serious thinking a detailed system of ratio analysis in 1909. It aims at making use of quantitative information for decision making. A ratio helps the analysis to make qualitative judgment about the firm's financial position and performance.

As the ratio are simple to calculate and easy to understand, these are widely used techniques of financial analysis. It may be emphasized here that ratio makes relationship easy to grasp but it does not tell the reader whether the relationship is good or bad. In other words, a single ratio in itself does not indicate favorable or unfavorable condition. Thus, for useful interpretation of the financial statements, it should be compared with some standard. Standards of comparison may consist of:[35]

1) Past ratio (Time series analysis) i.e., ratio calculated from the past financial statements of the same form.
2) Projected ratios (Performa analysis), i.e. ratio developed using the projected, or Performa, financial statements of the same firm.
3) Competitors ratio (cross - sectional analysis), i.e. ratio of some selected firm, specially the most progressive and successful competitors, at the same point in time.
4) Industry ratios (Industry analysis), i.e. ratios of the industry to which the firm belongs.

To make an effective use of ratio analysis following points should be kept in hand :[36]

i) A ratio of only those figures shall be computed which have a mutual cause and effect relationship or one item has significant relation with other.
ii) To ascertain the direction of change, ratios hall preferably be presented in tabular form.
iii) It shall be determined before and which ratio will best serve the purpose of analysis. Only the desired ratios shall be computed.
iv) In inter - firm comparison, it shall be seen that two firms are similar in most of the respects.
v) In case of seasonal industries, the effect of seasonal variations on the data being used shall be kept in mind.

[35] R.N. Anthony, and J.S. Reece, "Management Accounting." (Taraporewats, 1975 P.P. 260-263.)
[36] Jag'want Singh and Rantej Paul, Op. Cit. P.P. 49-50.

vi) Management may manipulate the figures by different means e.g. positioning recording of transactions, postponing transactions itself etc. Analyst shall keep a watch on such tendencies.

2.4.1 Importance of Ratio Analysis:

Ratio analysis is an important technique of financial analysis. It is a way by which financial stability and health of the concern can be judged. The followings are the main importance of ratio analysis :

1) Ratio analysis simplifies the financial statements. It tells the whole story of changes in financial condition of the business.

2) Ratio analysis helps in planning and forecasting. Ratio can assist management in its basic function of forecasting, planning, coordination, control and communications.

3) Ratio may be used as measure of efficiency for inter - firm and intra - firm comparisons.

4) Ratio analysis helps to access important characteristics of business like liquidity, solvency / profitability and efficiency.

Thus, 'Ratio Analysis' plays a very important role in the interpretation of the financial statements correctly and to make the figures comparable and more meaningful.

2.4.2. Procedure for Ratio Analysis:

The following procedure is generally followed, while analyzing the financial statements through ratio analysis :

i) Selection of relevant data from the financial statements depending upon the objective of the analysis.

ii) Calculation of appropriate ratios from the above data.

iii) Comparison of the calculated ratios with the ratios of the same firm in past, or the ratios developed from projected financial statements or the ratios of some other firms or the comparison with the ratios of the industry to which the firm belongs.

iv) Interpretation of the ratios.

2.4.3. Limitations of Ratio Analysis:

Though ratio analysis is a widely used technique to evaluate financial position and performance of a business it possesses some limitations which are stated below :

i) A single ratio in itself is not important and has limited use. For better interpretation a number of ratios have to be calculated which is likely to confuse the analyst than help him in making any meaningful conclusion.

ii) There are no well accepted standards for all ratios with which the actual ratios may be compared. Because conditions of one concern differ significant from those of another concern.

iii) The accuracy and correctness of ratios are totally dependent upon the reliability of the data contained in financial statements on the basis of which ratios are calculated.

iv) Ratio are only the means to reach conclusion and not conclusion on themselves.

v) Ratios are tools of quantitative analysis only and it ignores the qualitative factors. But normally the qualitative factors are needed to draw conclusions.

vi) Ratios are computed from past accounting records which have their own limitations.

vii) Ratio analysis is only a beginning and it gives little information for decisions.

viii) Ratios are simply means and not end in themselves.

ix) Ratio have to be interpreted and different people may interpret the same ratio in different ways. Ratios suffer from the personal business of analyst.

x) It ignores the changes in price level's which makes the interpretation of ratios invalid.

xi) Time lag in calculation the ratios and communicating the same to the concerned persons should not unnecessarily be too much.

xii) Comparisons are made difficult due to difference in size and accounting procedure of two concerns.

xiii) Ratio analysis is not only one techniques of analysis. There are many other techniques which should also be used, while attempting to draw any conclusions.

2.4.4. Classification of Ratios :

Ratio may be classified in a number of ways depending upon one or the other similarity. Some important classifications are given below :

(A) Classification by Statements :

1) Balance Sheet Ratios :
   - (i) Liquidity Ratio
   - (ii) Current Ratio
   - (iii) Stock Ratio
   - (iv) Proprietary Ratio
   - (v) Capital Gearing Ratio etc.

2) Income Statement Ratios :
   - (i) Gross Profit Ratio

(ii) Operating Ratio

(iii) Net Profit Ratio

(iv) Expense Ratio

(v) Interest Coverage Ratio etc.

3) Composite / Mixed Ratios :

(i) Stock turnover ratio

(ii) Debtor turnover ratio

(iii) Creditors turnover ratio

(iv) Working capital turnover ratio

(v) Current assets turnover ratio

(vi) Total capital turnover ratio

(vii) Fixed assets turnover ratio

(viii) Total assets turnover ratio

(ix) Return on capital employed

(x) Return on shareholders fund etc.

(B) Classification by Users :

1) Ratio for Management :

(i) Operating ratio

(ii) Return on capital employed

(iii) Stock Turnover

(iv) Debtors Turnover

(v) Solvency Ratio

2) Ratios for creditors :

(i) Current Ratio

(ii) Solvency Ratio

(iii) Creditors Turnover

(iv) Fixed Assets Ratio

(v) Debt Service Ratio etc.

3) Ratios for Shareholders :

(i) Return on shareholders fund

(ii) Capital Gearing Ratio

(iii) Dividend Coverage

(iv) Yield Ratio

(v) Proprietary Ratio

(vi) Dividend Rate

(vii) Assets cover of share etc.

(C) Classification by Tests :

1) Liquidity Ratio

(i) Current Ratio

(ii) Quick Ratio etc.

2) Leverage Ratio :

(i) Debt Equity Ratio

(ii) Debt to Total Capital Ratio

(iii) Coverage Ratio

3) Activity Ratio :

(i) Inventory / Stock Turnover Ratio

(ii) Debtors Turnover Ratio

(iii) Fixed Assets Turnover Ratio

(iv) Total Assets Turnover Ratio

(v) Capital employed Turnover Ratio

(vi) Average Collection Period

4) Profitability Ratios :

(i) Gross Profit Margin

(ii) Net Profit Margin

(iii) Operating Ratio

(iv) Return on Capital Employed

(v) Return on Shareholders Fund

(vi) Return on Equity Capital

(vii) Return on Assets

(viii) Earning Per Share

(ix) Price Earning Ratio

(x) Dividend Per Share

(xi) Dividend Yield Ratio

As mentioned above several ratios, calculated from the accounting data. In addition to this, ratios may be classified also by importance by accounting significance,

by nature, by purpose etc. Different authors classified ratios differently in their books. Some of these are given below :

According to James C. Van Horne, Ratios are categorized into five types as :[37]

(A) Liquidity Ratio :

(i) Current Ratio

(ii) Quick Ratio

(iii) Average Collection Period

(iv) Receivable Turnover Ratio

(v) Average Payable Period

(vi) Inventory Turnover Ratio

(B) Debt Ratios :

(i) Debt to equity ratio

(ii) Cash flow (EBITDA) to Debt and capitalization i.e. cash flow to total liabilities ratio.

(iii) Cash flow to long - term debt ratio.

(iv) Enterprise ratio (Total borrowing + Equity) to cash flow ratio.

(C) Coverage Ratios :

(i) Interest Coverage Ratio

(ii) Cash - flow coverage Ratio

(D) Profitability Ratios :

(i) Gross Profit Margin

(ii) Net Profit Margin

(iii) Selling, general & adm. expenses to sales

(iv) Rate of return on equity.

(v) Return on Assets (ROA).

(vi) Net operating profit rate of return

(vii) Assets turnover ratio

(viii) Earning power to total assets

(ix) Return on equity (ROE)

(E) Market value Ratios :

(i) Price / Earning Ratio

(ii) Dividend yield

[37] James C. an - Horne, "financial management policy" 12th edition (Perarson Education Singapore P. Ltd, Indian Branch 2002) P. 351.

(iii) Market to Book Ratio

(iv) Tobin's Q ratio

According to western & Copeland, ratios are categorized into three major groups as :[38]

(A) Performance Measures :

1. Profitability Ratios :
   - (i) Net Operating Income (NOI) to sales
   - (ii) NOI to total assets.
   - (iii) Net income (NI) to sales
   - (iv) NI to equity or (ROE).
   - (v) Change in NOI to change in total capital.
   - (vi) Change in NI to change in equity.
2. Growth Ratios :
   - (i) Sales
   - (ii) NOI
   - (iii) Net income
   - (iv) Earning per share (EPS)
   - (v) Dividend per share (DPS)
3. Valuation Measures :
   - (i) Price earning
   - (ii) Market value to equity to book value of equity.
   - (iii) Dividend yield + capital gain (Shareholders Return)

(B) Operating Efficiency Measures :

1. Assets and investment management
   - (i) Cost of goods sold to inventories.
   - (ii) Average collection period.
   - (iii) Sales to fixed assets
   - (iv) Sales to total capital
   - (v) Changes in total capital
2. Cost Management :
   - (i) Gross profit to sales (Gross Margin)
   - (ii) Marketting & Administrative expenses to sales

[38] J.fred weston & Thomas E. Copeland, "Managerial finance" 9th edition. (The Dryden Press, A Harcourt Brace Jovanovich College Publisher 1990) P.191.-

(iii) Labour Costs to Sales

(iv) Employee Growth rate

(v) Pension expenses per employee

(vi) Research and development expenses to sales

(C) Financial Policy Measures :

1. Leverage Ratio :

(i) Total assets to book value of equity.

(ii) Interest bearing debt (IBD) to total capital.

(iii) IBD to total capital, market.

(iv) Earning before interest & taxes (EBIT) to int. expenses.

(v) EBIT 0 lease expenses to fixed charge.

(vi) IBD funds from operations.

2. Liquidity Ratios :

(i) Current assets to current liabilities (current ratio)

(ii) Quick Ratio

(iii) Interest (Increase in R/E - depreciation) to investment.

According to I.M. Pandey, ratios are categorized into four types as :[39]

(A) Liquidity Ratios :

(i) Current Ratio

(ii) Quick Ratio

(iii) Cash Ratio

(iv) Interval Ratio

(v) Net Working Capital Ratio

(B) Leverage Ratios :

(i) Debt Ratio

(ii) Debt equity Ratio

(iii) Capital equity Ratio

(iv) Interest coverage Ratio

(C) Activity Ratio :

(i) Inventory turnover

(ii) Days of interest holding

(iii) Debtors turnover

[39] I.M. Pandey, Op. Cit. P. 109

(iv) Average collection period

(v) Assets turnover

(D) Profitability Ratios :

(i) Gross profit margin

(ii) Net profit margin

(iii) Operating expenses ratio

(iv) Return on investment

(v) Return on equity

(vi) Earning per share

(vii) Dividend per share

(viii) Dividends and earning yields

(ix) Price earning ratio

(x) Market value to Book value Ratio

(xi) Tobin's 'Q' Ratio

2.4.5. <u>SELECTED RATIOS:</u>

(A) Liquidity Ratios :

(i) Current Ratio

(ii) Quick Ratio

(B) Leverage Ratios

(i) Debt - equity Ratio

(ii) Debt to total capital Ratio

(iii) Interest Coverage Ratio

(C) Activity Ratios :

(i) Inventory turnover ratio

(ii) Debtors turnover ratio

(iii) Average collection period

(iv) Fixed assets turnover ratio

(v) Total assets turnover ratio

(vi) Capital employed turnover ratio

(D) Profitability Ratios :

1. Profitability in relation to sales

(i) Gross Profit Ratio

(ii) Net Profit Ratio

(iii) Operating Profit Ratio

2. Profitability in relation to investment

(i) Return on assets

(ii) Return on shareholders equity

(iii) Return on capital employed

(iv) Return on equity capital

(v) Earning Per Share (EPS)

(vi) Dividend Per Share (DPS)

(vii) D/P Ratio

(viii) Earning yield Ratio

(ix) Dividend yield Ratio

(x) Earning power Ratio / Du - point chart.

Among these ratios, some of the important and most widely used ratios are explained here as under :

(A) Liquidity Ratios :

The liquidity ratios measure the liquid position of the enterprise. In other words, if measures the ability of a firm to meet its short term obligations and reflect the short term financial strength / solvency of a firm. This ratios flashes out picture of the capacity of an enterprises to meet it's short term obligation out of its short term resources. In order words, this ratio shows the ability of current assets in rupee for every one rupee of current liabilities. If the company is unable to meet its short term obligations due to lack of sufficient liquidity, it will give the result of bad credit rating, loss of creditors confidence etc. High liquidity also gives bad result as low profitability, unnecessary tied up funds in current assets, which become ideal. So there must be proper balance between the degrees of liquidity. Therefore we can say that liquidity is a prerequisite for the very survival of a firm. Different types of ratios have been used to measure the liquidity position of an enterprise. Most commonly used ratios to measure liquidity position are as under :

1. Current Ratio :

Relation between current assets and current liabilities is known as current ratio. In other words, current ratio establishes the relationship between current assets and current liabilities. It is computed by dividing current assets by current liabilities. Current assets are those assets which can be converted into cash within short period of time, generally within a year. The current assets include, cash balance, bank balance, receivables (book debts, bills receivables) inventories or stock, prepaid expenses, marketable securities or short term investments, short term loans and advances, accrued incomes etc. Likewise current assets, current liabilities are those obligations which are payable within a short

period, normally not exceeding one year, These include creditors, bills payable, outstanding expenses short term loan, bank overdraft, advance receipt etc.

Current ratio can be calculated by using following formula :

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

Higher the current ratio shows better is liquidity position. For many types of business 2:1 is considered to be an adequate ratio. If the current ratio of a firm is less than 2:1 the liquidity position of the firm is supposed not good. The cash may not be available to pay current liabilities. If the current ratio is more than 2:1, the company may have an excessive investment in current assets which do not produce a return.

2. Quick Ratio :

Ratio between quick assets and current liabilities is known as quick ratio. It is also known as acid test ratio or liquid ratio. An assets is said to be liquid if it can be converted into cash within a short period without a loss of value. In that sense, cash in hand and cash at bank are the most liquid assets. All the current assets excluding inventory or stock and prepaid expenses are known as quick assets. This is because, the inventories can not be converted into cash immediately without a sufficient loss of value. In the same manner, prepaid expenses are excluded from quick assets because they are not expected to be converted into cash. The quick ratio can be calculated by diving the total of the quick assets by current liabilities. Thus,

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

Where,

Quick Assets = Current assets - Inventories - Prepaid expenses.

Higher the quick ratios better the liquidity position. For many types of business 1:1 is considered to be an adequate ratio. If the quick ratio of a firm is less than 1:1 the solvency position of a firm is not good. The cash may not be available to pay current liabilities. If the quick ratio is more than 1:1 than the company may have an excessive investment in quick assets that do not produce a return.

(B) Leverage Ratios :

The ratios which measure the long - term financial position (performance) of the firm is known as leverage ratio. These ratios are also called solvency ratio or capital structure ratio. Leverage ratios show the proportions of debt and equity in financing the firm's assets. These ratios indicate the situation of the capital structure, which is calculated to measure the company's ability of using debt for the benefit of shareholders. Long term creditors, like debenture holders, financial institutions etc. are more concerned with the firm's long term financial performance (position). To judge the long - term financial performance (position) of the firm, leverage ratios are calculated. Leverage

ratios indicate firm's ability to meet the fixed interest and costs and repayment of the principal amount at the maturity and the security of loans of long - term creditors. Leverage ratios may be calculated from the balance sheet items to determine the proportion of debt in total financing. They are also computed from the income statement items by determining the extent to cover fixed charges. The leverage ratios used in this study are mentioned below :

1. Debt - Equity Ratio :

A ratio between borrowed fund and owner's equity is known as debt - equity ratio. In other words, the relationship describing the lender's contributions for each rupee of the owner's contributions is called debt - equity ratio. Debt equity ratio also known as external - internal equity ratio is calculated to measure the relative claims of outsiders against the firm's assets. This ratio indicates the relationship between the external equities or the outsides fund and the internal equities or the shareholders funds. It is also called debt to net worth ratio. The shareholders funds consist of equity share capital, preference share capital, capital reserves, revenue reserves and reserves representing accumulated profit and surplus etc. The accumulated losses and deferred expenses, if any should be deducted from the total to find out shareholder's funds.

There is a controversy regarding current liabilities. Some writers are of the view that current liabilities do not reflect long - term commitments and hence should be excluded from outsider's fund. Thus,

$$\text{Debt - Equity Ratio} = \frac{Long\ term\ debt}{Sahreholder's\ equity}$$

In the same way, some writers suggest that current liabilities should also be included in the outsider's fund to calculate debt - equity ratio.

Thus,

$$\text{Debt - Equity Ratio} = \frac{Total\ debt}{Sahreholder's\ Equity}$$

Where,

Long - term debt = Debenture + Bond + Long term loan etc.

Shareholder's equity = Equity share capital + preference share capital + reserve & surplus + Retained earning etc.

Total Debt = Long - term debt + current liabilities.

Interpretation of this ratio depends upon the financial policy of the firm and upon the firm's nature of business. A ratio 1:1 may be considered to be a satisfactory ratio. But there can not be any 'rule of thumb' or standard of norms for all types of business. A high ratio shows the large share of financing by the creditors, as compared to that of owners and vice - versa. Interpretation also depends upon analyst. Creditors prefer law debt equity ratio where as shareholders prefer high debt equity ratio. Creditors prefer low debt

equity ratio because it gives a greater margin of safety for them. In the same way, shareholders prefer high debt equity ratio because it indicates that the firm has been able to use low - cost outsiders funds to margin their earnings.

2. Debt - To - Total Capital Ratio :

A ratio between long - term debt an total capital is known as debt to total capital ratio. This ratio relates outside liabilities not merely to the shareholders fund but to the total capitalization of the organization. It shows the degree of relation and protection of total capital against long term or total debt. In other words, this ratio helps to establish a link between funded debt and total long - term funds available in the business. This ratio can be calculated in various ways based on the different approaches used in the computation of the quantum of debt.

When current liabilities are excluded from the debt and total capital, then it is calculated in following ways :

$$\text{Debt to total capital ratio} = \frac{Long\ term\ \ debt}{permanenet\ capital \\ or\ Capital\ employed}$$

Where,

Permanent capital = Shareholder's equity + long term debt

When current liabilities are included in the debt and total capital, then it is calculated as follows :

$$\text{Debt to total capital} = \frac{Total\ \ debt}{permanenet\ capital + current\ liabilities}$$

Where,

Total debt = Long - term debt + current liabilities.

Interpretation of this ratio is same as debt - equity ratio. There is no standard norm for all types business. But 1:1 is considered to be satisfactory. A low ratio represents security to creditors in extending fund. On the other hand a high ratio represents a greater risk to creditors and also to shareholders under depression. A very law ratio can worry owners as the firm is not using debt to their best advantages.

3. Interest Coverage Ratio :

A ratio between earning before interest and tax (EBIT) and interest expenses is known as interest coverage ratio. It is also known as "time - interest - earned ratio". This ratio measures the debt servicing capacity of a firm. It measures how many times interest charges are covered by funds that are available to pay the interest charges. In other words, interest coverage ratio indicates the number of times interest is covered by the profits available to pay the interest charges. The rate indicates the extent to which the earning may fall without causing any embarrassment to the firm regarding the payment of interest charges. It is calculated in following ways.

Interest coverage ratio = $\frac{Earning\ before\ interest\ \&\ tax}{Interest\ Charges}$

A high ratio is a sign of law burden of borrowing of a business and lower utilization of borrowing capacity. In contrast a law 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. From the point of view of the creditors, the larges the ratio, the greater the ability of the firm to made the payment of interest to creditors. Thus, creditors prefer the higher ratio.

(C) Activity Ratios :

Resources of an enterprise are invested in various assets with a view to make sales and earn profits. The efficiency with which assets are managed directly affects the volume of sales. The better the management of assets, the larger is the amount of sales and the profits. Activity ratios measure the efficiency or effectiveness with which a firm manages its resources or assets. In other words, activity ratios reflect the efficiency with which an organization manages and uses assets in generating sales. These ratios are also called turnover ratios because they indicate the speed with which assets are being converted turned over into sales. A proper balance between sales and assets generally reflects that assets are managed well. An activity ratio can be defined as a test of the relationship between sales or cost of goods sold and various types of activity ratios. Some of the important and most widely used ratios which are commonly included in this category are as given below :

1. Inventory Turnover Ratio :

Every firm has to maintain a certain level of inventory of finished goods so as to able to meet the requirements of the business. But the level of inventory should neither be too high nor too low. Maintaining too high inventory is costly and unnecessarily blocks capital which can other wise be profitable used somewhere else. On the other hand too law inventory may mean loss of business opportunities. So it is necessary to manage inventories efficiently and effectively in business.

The inventory turnover ratio (I.T.R.) indicates the number of times the stock has been turned over during the period. In other words, the inventory turnover shows how rapidly the inventory is turning into receivable through sales. It indicates whether the investment in inventory is efficiently used or not. It tests the efficiency in inventory management. It is also called stock turnover ratio and stock velocity. The turnover may be calculated separately for raw - materials, work - in - progress and finished goods. Generally, it is calculated for merchandising inventory i.e. the inventory of finished goods. Inventory turnover is computed in various ways as :

(i) When cost of goods sold and opening and closing inventory are given :

Inventory Turnover Ratio = $\frac{Cost\ of\ goods\ sold}{Average\ Inventory}$

Where,

Cost of goods sold = sales - gross profit.

or,

= opening stock + purchase + purchase expenses - closing stock

Average inventory = $\frac{Opening\ stock + Closing\ stock}{2}$

(ii) When cost of goods sold and opening inventory are not given :

Inventory Turnover Ratio = $\frac{Sales}{Closing\ stock}$

There are no 'rules of thumb' or 'standard inventory turnover ratio' for interpreting the inventory turnover ratio. The norms may be different for different firms depending upon the nature of industry and business conditions. However, a high inventory turnover indicates good inventory management and low inventory turnover indicates poor inventory management.

2. Debtors Turnover Ratio :

A concern may sell goods on cash as well as on credit. Credit is one of the important elements of sales promotion which is used by number of companies. Customers to whom goods are sold on credit are called debtors or book debts in accounting language. In other words trade debtors are the result of credit sales. It includes bills receivables and account receivables also.

Debtors are expected to be converted into cash within a short period. Debtors turnover ratio indicates how quickly debtors or receivables are converted into cash. This ratio indicates the velocity of debt collection of the firm. The debtors turnover ratio is a test of the liquidity of the debtors of a firm. A high ratio indicates that debts are not being collected rapidly. The higher the value of its turnover, the more efficient the management of the debtors or more liquid the debtors and vice - versa. Debtors turnover is computed in various ways as :

(i) When credit sales and opening debtors are given :

Debtors Turnover Ratio = $\frac{Credit\ Sales}{Average\ debtors}$

Where,

Average debtors = $\frac{Opening\ debtors + Closing\ debtors}{2}$

(ii) When credit sales and opening debtors are not given :

Debtors turnover ratio = $\frac{Sales}{Debtors}$

Higher debtors turnover ratio is preferable. Because it shows the efficient management of credit or debtors and more liquid are the debtors.

Note :-

Trade debtors should be included the amount of bills receivable and account receivable also and for calculating debtors turnover ratios always gross value of the debtors should be taken i.e. no provision reserve for bad and doubtful debts should be deducted from them.

3. Average Collection Period :

"The average collection period represents the average number of days for which the firm must wait after making a sale before collecting cash from customers."[40] Average collection period is days for which book debt remain outstanding. Thus, average collection period is calculated to know the average number of days for which a firm has to wait before trade creditors are converted into cash. It indicates the rapidity or slowness with which the money is collected from debtors. Average collection period is calculated as follows :

$$\text{Average Collection Period} = \frac{Days\ in\ a\ year}{Debtors\ turnover\ ratio}$$

$$\text{or,} \quad = \frac{Debtors}{Sales\ per\ day}$$

$$\text{or,} \quad = \frac{Debtors}{Sales(Net)} \times Days\ in\ a\ year$$

It measures the quality of debtors. The shorter the average collection period, the better is the quality of debtors as a short collection period implies quick payment by debtors, i.e. minimum average collection period is preferable.

4. Fixed Assets Turnover Ratio :

Fixed assets are used to generate sales. Therefore, a firm should manage its assets efficiently to maximize sales. The relationship between sales and fixed assets is called fixed assets turnover. In other words, a ratio between sales and fixed assets is known as fixed assets turnover ratio. The fixed assets turnover ratio indicates the extent to which the investment in fixed assets contributes towards sales. This ratio measures its investment in fixed assets as land, building, plant and machinery, furniture etc. It also indicates the adequacy of sales in relations to the investment in fixed assets. Fixed assets turnover ratio is calculated as follows :

$$\text{Fixed assets turnover ratio} = \frac{Net\ \ Sales}{Net\ Fixed\ assets}$$

Generally, high fixed assets turnover ratio indicates efficient utilization of fixed assets in generating sales and better business performance. But the lower ratio indicates inefficient management and utilization of fixed assets. It means a decline in the capacity utilization of the business concern.

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[40] I.M. Pandey, Op. Cit. P. 514

5. Total Assets Turnover Ratio :

The assets of the firm whether fixed or current are used to generate sales. Therefore, a firm should manage its assets efficiently to generate maximum sales through their proper utilization. The relationship between sales and total assets is called total assets turnover. In other words, a ratio between sales and total assets is known as total assets turnover ration. To measure the efficiency of the company in managing and utilizing total assets, total assets turnover ratio is obtained. This ratio is a measurement of generating sales per rupee of investment in total assets. Total assets turnover ratio is calculated by dividing net sales by the total assets. Total assets are obtained by deducting fictitious assets from total amount of assets side of balance sheet. It is calculated as follows:

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

Higher total assets turnover ratio represents efficient utilization of total assets where as lower total assets turnover ratio represents the inefficient utilization of total assets. Decreasing ratio shows that either, sales should be increased or some assets should be displayed. Thus, high assets turnover ratio in general is preferable.

6. Capital Employed Turnover Ratio:

A ratio between sales and capital employed is known as capital employed turnover ratio. Capital employed represents the amount of owner's equity and debenture, bond and long - term loan. The amount of capital employed represents the net current assets (i.e. current assets minus current liabilities) and long term assets of the firm. In other words, capital employed is either equal to shareholder's fund plus long - term loans or equal to total assets minus current liabilities. In one sentence capital employed is the amount entrusted by the owners and long - term loan financiers to the firm. This ratio is calculated know the effectiveness in utilizing the capital employed for making sales activity. It is calculated as follows:

$$\text{Capital employed Turnover Ratio} = \frac{Sales}{Capital\ employed}$$

Higher capital employed turnover ratio shows the maximum utilization of capital employed and lower capital employed turnover ratio shows the inefficient utilization of capital employed for making sales activity. Thus, higher capital employed turnover ratio is preferable.

(D) Profitability Ratios:

Profit is the difference between revenue and expenses over a period of time (usually one year). The primary objective of a business undertaking is to earn profit. To survive and grow over a long period of time, profit earning is considered essential for the business enterprise. Profit is the ultimate for the business. Therefore the analysis of profits is extremely important, thus the financial manager should continuously evaluate

the efficiency of the company in terms of profit. An ability to earn maximum from the maximum use of available resources by the business concerns is known as 'profitability'. The profitability ratios are calculated to measure the operating efficiency of a company. In other words, profitability ratio measures the management's over all efficiency as shown by the return generated from sales and investments. Thus, profitability is an indicator of efficiency of the business organization. Besides management of the company, creditors and owners are also interested in the profitability of the firm. Generally, profitability ratios are calculated either in relation to sales or in relation to investment. Generally two major following types of profitability ratios are calculated.

1. Profitability in relation to sales.
2. Profitability in relation to investment.

1. Profitability in relation to sales:

The following ratios can be ascertained considering the sales as basis :

(i) Gross Profit Ratio :

One of the most common ratios in operational analysis is the calculation of gross profit. A ratio between gross profit to net sales in known as gross profit ratio. It is also called gross profit margin. It is usually expressed in percentage. A firm should have a reasonable gross profit margin to ensure adequate coverage for operating expenses of the firm and sufficient return to the owners of the business. It is calculated by as follows :

$$\text{Gross Profit Ratio} = \frac{Gross\ \text{Pr}\ ofit}{Net\ Sales} \times 100$$

Two basic component of the gross profit ratios are gross profit and net sales. Simply the excess of net sales over cost of goods sold is known as gross profit i.e.

Gross profit = Net sales - Cost of goods sold.

Where,

Cost of goods sold = Net purchase + Manufacturing expenses + opening stock - closing stock.

Net sales can be found by deducting sales returns or return inwards, if any, out of the sales i.e.

Net sales = Total sales - Sales return / Return inward

A higher ratio is sign of efficient management, which reflects lower cost of goods sold and maximizing profit. Hence, higher percentage is preferable of the company and vice - versa.

(ii) Net Profit Ratio:

A ratio between net profit after tax to net sales is known as net profit ratio. This ratio measures the over all profitability of the firm. This ratio indicates management's ability to operate the business with sufficient success not only to recover the cost of

borrowed fund but also to leave a margin of reasonable compensation to the owner's for providing their capital at risk. It is calculated as :

Net Profit Ratio = $\frac{Net\ profit\ after\ tax}{Net\ sales}$

The two basic elements of the ratio are net profit and sales. The net profit are obtained after deducting income tax.

A higher ratio is the sign of efficient management and better is the profitability. Hence, higher percentage is preferable for the company and vice - versa.

(iii) Operating Profit Ratio :

A ratio between operating profit to sales is known as operating profit ratio. The profit shown by the profit & loss account is not the real operating profit. Because it includes both the non - operating incomes and expenses also. Operating profit can be found by adding non - operating expenses and deducting non - operating incomes, if any, in the net profit shown by profit and loss account. It is calculated as follows :

Operating profit ratio = $\frac{Operating\ \Pr ofit}{Net\ Sales} \times 100$

Where,

Operating Profit = Net sales - Operating cost

or, = Net sales - (cost of goods sold + Administrative & office expenses + selling & distribution expenses)

Operating profit = Net profit + Non - operating expenses - Non - Operating incomes

When operating expenses ratio is given then it is calculated as :

Operating profit ratio = 100 - Operating cost ratio.

Higher operating profit ratio is favorable because it shows a high margin to cover interest, income tax, dividend and reserve etc and vice - versa.

2. Profitability in Relation to Investment :

The following ratios can be ascertained considering the investments as basis :

(i) Return on Assets (ROA) :

The profitability ratio measures in terms of the relationship between net profits and assets is known as return on assets. It is also known as return on investment. This ratio measures the rate of return on investment. This ratio measures the rate of return earned by the firm as a whole for all its investors. The theory is that the assets employed in a firm are responsible for its net income. The income figure used in computing this ratio should be operating profit. By using operating income in the calculations, one can measure how well the assets were used in normal operation of business. In other words, it

measures the productivity of the assets. It is also called profit - to - assets ratio. It is calculated by following different formula :

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

or, $= \frac{Net\ profit\ after\ tax - preference\ dividend}{Total\ Assets} \times 100$

or, $= \frac{Net\ profit\ after\ tax - preference\ dividend}{Total\ \text{tan}\ gible\ assets} \times 100$

Where,

Total assets = Current Assets + Fixed Assets + Intangible Assets

This ratio measures the profitability of all financial resources invested in the firm's assets. Hence, the higher ratio implies that the available source and tools are employed efficiently and vice - versa.

(ii) Return on Shareholders Fund :

This ratio measures the relationship between net profit after interest & taxes and shareholders fund. The objective of computing this ratio is to determine how efficiently the funds supplied by shareholders have been used. It indicates the firm's ability of generating profit per rupee of shareholder's funds. Shareholder's fund include equity share capital, preference share capital, share premium, Reserves, Surplus, retained earnings less accumulated loss, if any. This ratio indicates the profitableness of the owner's investments and calculated as follows :

Return on Shareholder's fund = $\frac{Net\ profit\ after\ tax}{Shareholder's\ fund} \times 100$

Where,

Shareholder's fund = Equity share capital + preference share capital + Reserve & surplus + General reserve + Share premium + Retained earnings + Profit & Loss appropriation account - Preliminary expenses - Discount on issue of Share and debenture - profit & loss (debit balance).

Higher ratio is preferable because it shows the more efficient utilization of shareholder's fund and vice - versa.

(iii) Return on Capital Employed :

Return on capital employed is an effective measure of profitability of a business organization. This ratio measures the relationship between capital employed and net profit after tax. This ratio indicates the efficiency in utilization of fund supplied by creditors and owners. This ratio is calculated as follows :

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

or, $= \frac{Net\ profit\ after\ tax + Interest}{Capital\ employed}$

Where,

Capital employed : Shareholder's fund + Debentures + Bonds + Long term loan

(iv) Return on equity capital :

In real sense, ordinary shareholders are the real owners of the company. Preference shareholders have a performance over ordinary shareholders in the payment of dividend as well as capital. Preference shareholders get a fixed rate of dividend whether there is profit or loss of the company. Thus, ordinary shareholders are more interested in the profitability of a company and the performance of a company. A ratio which shows the relationship between earning available to equity shareholders and outstanding equity share capital is known as return on equity capital. It can be computed in following ways :

Return on common shareholder's equity

$$= \frac{NPAT - \Pr ef.dividend}{Common\ shareholder's\ \ equity}$$

or, $$= \frac{\mathrm{Re}turn\ available\ \ for\ equity\ shareholders}{Common\ shareholder's\ \ equity}$$

As this ratio reveals how well the resources of a firm's ordinary shareholders are being used, higher the ratio, better the results and vice - versa.

(v) Earning Per Share (EPS) :

The income per common share is known as earning per share. It measures the profit available to the equity holders on per share basis i.e. the amount that they can get on every share hold. The objective of computing this ratio is to measure the profitability of the firm on per equity share basis. This ratio is computed by dividing the net profit after tax and preference share (i.e. profits available to the shareholders) by the number of the outstanding shares. Thus,

$$\text{EPS} = \frac{Net\ \ profit\ available\ to\ equity\ holders}{No.of\ \ equity\ shares\ outs\tan ding}$$

Higher earning per share is preferable and vice - versa. Because, higher the earning per share higher will be the market price of shares.

(vi) Dividend Per Share (DPS) :

The whole amount of earning may or may not be distributed to shareholders by a company. How much per share the dividend is distributed to common shareholders can be known from this ratio. In other words, the amount of earning distributed and paid on per share basis cash dividend is considered as dividend per share. The objective of computing this ratio is to measure the profitability of the firm on dividend per equity share basis. It can be calculated by following formula :

$$\text{Dividend per share} = \frac{Dividend\ \ paid}{Number\ of\ \ equity\ share}$$

Higher DPS shows the efficient of management and vice - versa. A large number of present and potential investors are interested in DPS rather than EPS.

(vii) Dividend Payout Ratio (D/P ratio) :

A ratio between dividend per share (DPS) to earning per share (EPS) is known as dividend payout ratio. It is also known as pay - out ratio. The objective of computing this ratio is to measure what percentage share of earnings available to equity shareholders is paid out as dividend to them. It can be computed by the following way.

Dividend payout ratio $= \frac{DPS}{EPS}$

or, $= \frac{Total\ cash\ dividend\ to\ equity\ holders}{Total\ net\ profit\ belonging\ to\ equity\ holders}$

or, = 1- Retention Ratio

Where,

Retention Ratio = Earning not distributed to shareholders is known as retained earning. And the ratio between retained earning to earning is known as retention ratio.

Higher D/P ratio is preferable and vice - versa.

(viii) Earning Yield Ratio :

A ratio between earning per share and market value per share is known as earning yield ratio. In other words, earning expressed in terms of the market value per share is known as earning yield ratio it can be calculated by the following way :

Earning Yield Ratio $= \frac{Earning\ per\ share}{Market\ value\ per\ share}$

Higher earning yield ratio is preferable and vice - versa.

(ix) Dividend Yield Ratio :

A ratio between dividend per share to market value per share is known as dividend yield ratio. In other words, dividend per share expressed in terms of the market value per share is known as dividend yield ratio. It can be computed by following formula :

Dividend Yield Ratio $= \frac{Dividend\ per\ share}{Market\ value\ per\ share}$

Higher dividend yield ratio is preferable and vice - versa.

(x) Earning Power Ratio :

The profitability of a firm can be measured either in relation to investment or operating efficiency. The overall profitability can be measured on the basis of combination of these two ratios, which is known as earning power ratio. It is also known as Du-pont Control Chart. It is a system of management control. As it is designed by an American Company named Du-pont Company is popularly called Du-pont control chart.

The earning power or Du-pont chart is a central measure of the overall profitability and operational efficiency of a firm. It shows the interaction of the profitability and activity ratio. It implies that the performance of a firm can be improved either by generating more sales volume per rupee of investment or by increasing the profit margin per rupee of sales. Earning power ratio or Du-pont chart is based on two elements i.e. net profit and investment in total sales. Net profit is related to operating expenses. If the expenses are under control then profit will increase. The earnings as a percentage of sales or earnings divided by sales gives us percentage of profitability. Earnings can be calculated by deducting cost of sales from sales. Cost of sales include cost of goods sold plus office & administrative expenses and selling & distribution expenses. Capital employed or investment, on the other hand consists of current assets and fixed assets. Current assets include debtors, stock, bills receivables, cash etc. Fixed assets are taken after deducting depreciation. In summary we can say that earning power ratio has two elements. These are : (i) Net profit margin, and (ii) Investment turnover. The earning power of a firm can be computed by multiplying the net profit margin and investment turnover. Thus,

Earning Power = Net profit margin × Investment turnover

We know that,

$$\text{Net Profit Margin} = \frac{Net\ profit\ after\ tax}{Sales}$$

$$\text{Investment turnover} = \frac{Sales}{Investment}$$

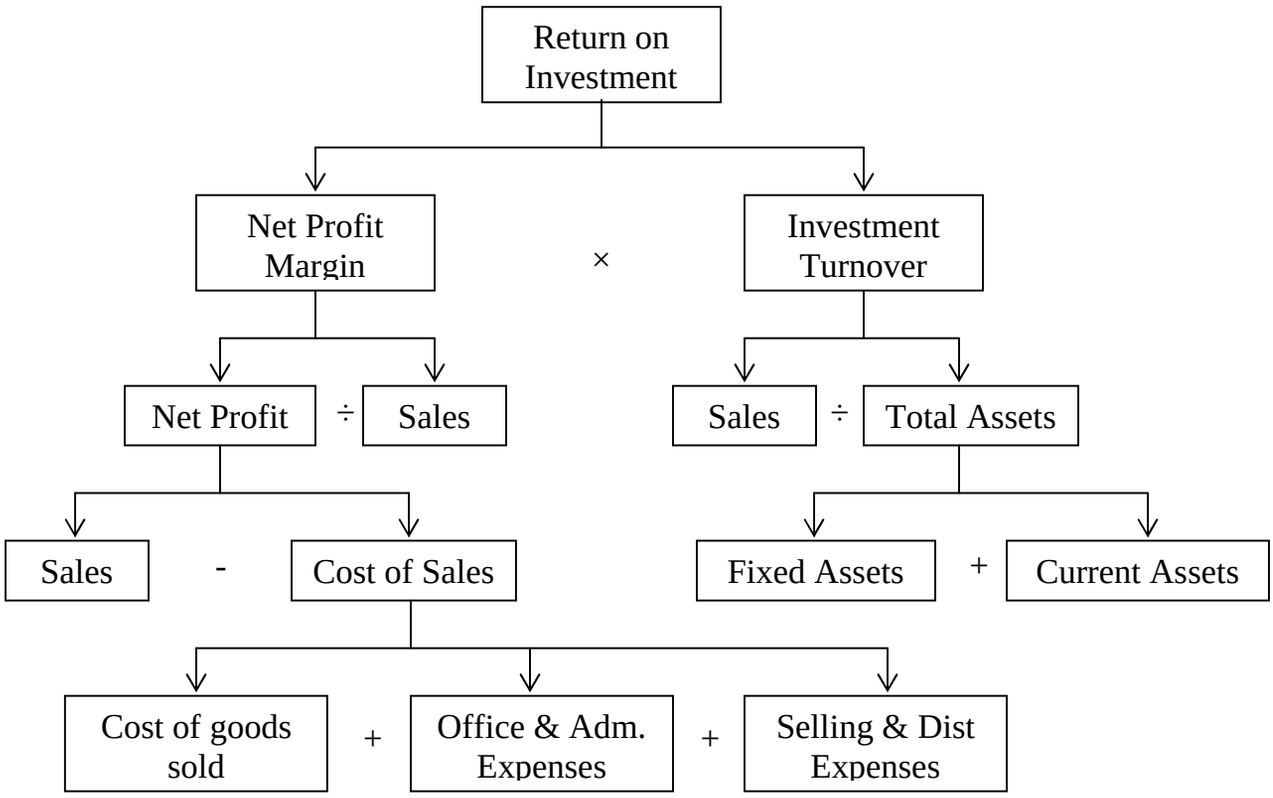
Therefore,

$$\text{Earning power} = \frac{NPAT}{Sales} \times \frac{Sales}{Investment}$$

$$\therefore \text{ Earning power} = \frac{NPAT}{Investment}$$

The basic elements of the earning power of a firm is presented in a chart which is called Du-pont chart as under :

Du - Pont Chart



The earning power of the return on investment ratio is a central measure of the overall profitability and operational efficiency of a firm. The return on investments becomes a yard stick to measure efficiency because return influences various operations. The above chart clearly shows that return on investment is affected by a number of factors. Any change in these factors will effect the return on investment. By using this, the management is able to pinpoint weak spots and take corrective actions. Thus, that chart is very useful for management and it helps in concentrating for managements and it helps in concentrating attention on forces affecting profit.

2.5 Comparative Financial Statement:

Financial statements are prepared at a particular date only adds more information as installment to the history of the concerned business enterprise. Thus, for analyzing the present financial position of that enterprise, it becomes essential to study the previous history of the business enterprise. For this purpose, a statement is prepared covering financial position of a series of a period that is called comparative statements. Comparative statements are those statements which summarize and present related accounting data for a number of years incorporating there in the changes (absolute or relative or both) in individual items. Generally, comparative statements include comparative data for only one year preceding the current year. But sometimes the time

span covered may be 3 to 5 years. A comparative statement usually consist of two columns, depicting figures of previous year and current year and a column showing increase or decrease between the two dates. Another column may be added to show the percentage of increase or decrease. Such statements are useful as they provide the data for comparison or trend analysis also. Financial data will be comparative only when the techniques, procedures and principles followed in the collection, recording and presentation of accounting data are same over the period for which the business history is being studied.

2.6 Trend Analysis:

There are several techniques of analysis of financial statement. One of the important and useful techniques of analysis of financial statement of different year is known as "Trend Analysis". As it over comes the major limitations of comparative & common - size statement (i.e. absence of a basis of standard to indicate whether the proportion of an item is favorable or unfavorable) it is better than those two statement. Trend analysis discloses the change in financial and operating data between specific period and makes possible for the analyst to form a opinion as to whether favorable or unfavorable tendencies are reflected by the accounting data. Trend analysis indicates the upward and down ward direction of change. Under this method trend percentage is calculated for each item of several years to the same item of base year. Thus, one particular year out of many year is taken as base. Generally the earliest or the latest year is taken as base year. The values of one particular item out of several items shown in the financial statements are converted into ratio or percentage of several items shown in the financial statements are converted into ratio or percentage taking the value of that item in base year as equal to 100%. Thus, trend ratio may be compared with industry in order to know the strong or weak points of a concern. These are calculated only for major items instead of calculating for all items in the financial statements. Trend ratio which is based on balance sheet information's are called 'Financial Trend' and those based on profit & loss account or income statement information's are called "Revenue Trent". Thus, in one sentence we can say that the trend analysis makes it easy to understand the change in an item or a group of items over a period of time and to draw conclusion regarding the change in data.

The following formula can be used to complete the percentage for trend analysis ;

$$\text{Trend percentage} = \frac{Yearly\ Amount}{Based\ Year's\ Amount}$$

2.8 Review of Related Studies:

Some studies have been made in the subject of financial performance analysis of various organizations. Among these studies, this section will review some of them related

to cement industry along with others study made in the field of cement and industry in Nepal.

Mr. Bhes Prasad Bhurtel has under taken the thesis entitled, "A Financial analysis of manufacturing public enterprises in Nepal; A case study of Udaypur cement industry limited." His study explains that financial efficiency of the Nepalese public enterprises has not been satisfactory in accomplishing one of the basic objectives relating to generating profit. UCIL is one of the public enterprises industrial sector whose financial position is getting worst and worst day by day. So, an attempt is being made why UCIL has been financially weak? In his thesis research

Bhurtel has been undertaken the following objectives of the research :

(i) To examine the profitability records of UCIL.

(ii) To examine the strength and weaknesses and various aspects of financial operation of UCIL in order to evaluate the financial health.

(iii) To examine the position of the source and utilization of funds and cash in the past to find out the role of internal sources of financing.

(iv) To examine the capital structure of UCIL.

(v) On the basis of the analysis, to explore the various reasons for the existing financial position of UCIL and suggest for reforms.

Bhurtel's study covered only manufacturing sector specially Udaypur cement industry limited. The study analyzed only secondary data and it covered only six years from F/Y 2050/51 to 2062 B.S. Both exploratory and analytical research designs were to be followed in the study :-

Bhurtel collected data from central office of UCIL, Kathmandu Branch Office of UCIL, Publications of UCIL, Publications of Ministry of Finance (Like Economic Survey, targets and performance of public enterprises), publications of national planning commission, annual reports of Auditor general's and other related available documents. The data were shown in term of percentages, simple average, Standard deviation, co-efficient of variation and graphs.

On the basis of the research work, Bhurtel made following conclusions :

(i) The profitability records of UCIL was unsatisfactory because profitability ratios (MPM, ROFAR, ROTAR and ROTCER) were negative. The trend of profitability ratios were also functioned widely in negative region to down ward direction.

(ii) The effect of unsatisfactory profitability record was reflected in the overall financial condition of the enterprise.

(iii) The solvency position of UCIL, in both long - term and short - term (current) were also unsatisfactory and almost all efficiency ratios were in unfavorable to the firm.

(iv) The capital structure ratios of UCIL, were satisfactory in comparison to profitability, efficiency and solvency ratios.

(v) Fund flow analysis indicated that fund from operation, income from other sources, increase of long - term loan, issue of preferred stock, sale of investment and decrease in working capital had been the main applications of fund. Internal sources didn't seem in favor to its expansion and growth.

(vi) Average capacity utilization of the concern was only 45 percent during the study period. The under utilization of the capacity is the most important cause of such financial position.

(vii) UCIL had not taken serious attentions to proper planning, controlling and budgeting aspect. It was confused about its overall objective of conducting the concern either it was in service motive or in commercial line. It was due to the changes in the government's perspective regarding this.

Bhurtel also highlighted the same reason responsible for the negative profitability, unfavorable and unsatisfactory financial health. The reasons are under utilization of annual capacity of the concern, political intervention, lack of transparency, absence of sound financial and accounting system, irresponsible management, lack of internal and final auditing system, and absence of proper pricing policy.[41]

Another thesis entitled "A financial Analysis of Industrial public enterprises in Nepal". (Special reference to Udaypur Cement Industry Ltd.)"[42] was done by Sarsawati Multiple Campus student Uday Bahadur Rana Magar. Rana Magar was studied the financial position of UCIL from 2049/50 to 2062.

The major objectives of the study were :

- ❖ To examine the profitability records of the concern
- ❖ To examine the strengths and weakness of various aspects of financial position in order to evaluate the financial health of the concern.
- ❖ To examine the capital structure of the concern.
- ❖ To examine the solvency position of the concern.

[41] Bhes Prasad Bhurtel "A financial analysis of Manufacturing Public enterprises in Nepal : A case study of Udaypur Cement Industries Limited." Unpublished Master's Degree's Thesis, Central Department of Management, T.U. Kirtipur, Kathmandu, 2000.

[42] Uday Bahadur Rana Magar, "A financial Analysis of Industrial Public Interprises in Nepal, With special reference to udaypur cement industry ltd." Submitted to Central department of Management Kirtipur, 2060. (T.U. - D/338.62/R5F)

- To examine the position of the sources and applications of funds in the past to find out the role of the internal sources of financing.
- On the basis of the analysis, the researcher explores the various reasons for the existing condition of the concern and suggests reforms as recommendation.

For that different evaluative techniques like ratio analysis had been used by Rana Magar. The findings made by him were :

- The profitability ratios had shown the highly unsatisfactory conditions of profitability and had indicated that UCIL had been suffering from heavy loss. Only the GPM seemed satisfactory out of eight profitability ratios i.e. GPM, NPM, ROTAR, ROFAR, ROSFR, ROCER and ROESFR. Except GPM all of them were quite unsatisfactory and most of them are negative. The trend of profitability ratio had also fluctuated widely in the negative region to downward direction. High cost of production, administration and selling expenses, mismanagement of resource allocation and poor financial management were the main reasons for the concern's poor profitability condition.
- All the efficiency ratios were highly unsatisfactory except the debtors turnover ratio. The debtors turnover ratio was quite satisfactory and the firm seemed to had sound collection policy. All the assets in the industry had not been properly utilized. Misuse of power, vehicles and other assets of the industry were increasing day by day. All this indicates that the total resources including the fixed assets had not been efficiently managed and utilized to generate adequate sales and profit. The management seemed to be fully unsuccessful to utilize the owner's fund and long - term creditors fund in generating sales.
- The liquidity position of the industry was found very poor and unsatisfactory which revealed its poor working capital policy. The analysis had concluded that UCIL was not able to meet its manufacturing debt and obligation in time. The trend of liquidity ratios were going downward every year. The short term solvency of UCIL seemed very weak and doubtful.
- The capital structure ratio of the industry were satisfactory in comparison to other ratios. Debt equity and debt to total capital ratio had not been fluctuated in the study period and had been going upward.
- Trend analysis of some of the relevant items had been conducted to examine the trend of these items and their impact on the profitability, liquidity, leverage and turnover position of UCIL. This analysis had examined the rate of changes. It had observed the significant relation between one item of another but it had shown more clearly that the trend projection of UCIL was not satisfactory, so the financial position was going to be bad condition.

- Low fund generation, misuse of generated fund, excessive investment in less productive working capital and under utilization of fixed assets have been the major factors responsible for the negative profitability of the industry.
- During the study period, the average capacity utilization of UCIL was only 44.31%. The under utilization of the capacity was the major reason for such poor financial position. The rate of capacity utilization indicates that the firm had been unable to utilize its resources to meet the targeted volume of cement production.
- Demand of the product of UCIL was higher than that of the other cement industry's product. Because the industry had hearty proud of its quality products. Absence of proper pricing policy and particular price guidelines from government had led UCIL to confusing price decisions.
- The operation disturbance was another reason for negative profitability. The supply of raw materials (like iron ore, gypsum) and utilities (coal, furnish oil, packing bag etc) were supplied from foreign countries. The supply system were very weak which had disturbed in operation of the factory time to time. Another course of operational disturbance was breakdown which caused by inefficient management of repair and maintenance. Poor industrial relation would be another considerable thing of operational disturbance.
- The general manager and financial manager in particular were some of the weak points in UCIL. They had not paid serious attention to proper planning, controlling and budgeting aspect. In UCIL, the internal resources hadn't finance the expansion and growth of the enterprise and UCIL was more and more dependent upon the external resources. In short, faulty financing and investment decisions were responsible to the poor profitability.
- Political intervention had appeared in the appointment of board of directors, general management and top level managers, recruitment of personnel and labor, purchase of raw material and fixed assets. Such intervention had caused a great misuse of its resources and facilities. The political intervention had appeared at various sides as well as in various form in the industry. For example, the board of director committee had recognized and changed six times only in the FY 2054/55. Similarly, law employee productivity in terms of overstaffing than wanted by the production volume was another considerable matter of the negative profitability of UCIL.
- UCIL was confused about its overall objectives of conductivity the industry either of was service motive or a commercial line. It was due to the changes in the government's perspective regarding this.

CHAPTER-THREE

3. RESEARCH METHODOLOGY

The basic study of the study is to analyze the financial performance of UCIL and to recommend necessary suggestions for the improvement of financial condition and financial performance. To fulfill this objective of the study, appropriate methodology has been followed. So, this part concerned with research methodology applied in this study. This covers research design, population and sample, nature and sources of data, Data collection technique, data processing and tabulation and analytical tools used.

3.1 Research Design:

Research design is the plan, structure and strategy of investigation conceived so as to obtain answers to research questions and to control variance. It gives the frame work of the study. This study aims at finding out the short - term as well as long - term financial performance of the UCIL. For this, historical data of UCIL for seven fiscal years (2062 to 2068) has been collected. Analytical design used to access and analyze the financial position and performance of UCIL. The exploratory design has been used to explore and find out necessary suggestions for strengthening the financial condition.

3.2 Population and Sample:

At present the cement industry in Nepal consists of nearly 50 units which form the population for the study. And only UCIL has been selected as sample unit for this study.

3.3 Nature and Sources of Data:

Data and information are the life blood of any research. Together the information, data collection is major task of any research. To achieve the objectives of this study, both primary as well as secondary data have been used for the purpose of the study. Financial statement of UCIL, other publication of UCIL, Publications of ministry of finance, publications of FCCIN. Annual reports of department of Audit General and other secondary data are basic sources of data. Further, the resources has also used unstructured questionnaire and discussion, interviewed with the concerned authorities as the primary sources of information.

3.4 Data Collection Technique:

Most of the parts of this study depends upon secondary data i.e. Balance sheet and profit and loss account of the company which has been collected from the central office of UCIL located at Jaljale, Udaypur. Other necessary data are picked up from various books such as journals, magazines, published and unpublished dissertation, reports, economic surveys etc. Which are available at the library of various sectored office.

Primary data have been collected through the personal visit of researcher to branch office, factory and central office of UCIL itself. Informal talk and interview method have

also been applied. Some primary information have been collected by developing the unstructured questionnaire to acquire the view of the officials. Discussion was also conducted with the concerned authority for classification and verification of truthfulness of the collected data. All the collected data have been used according to need and requirement of this study.

3.5 Data Processing Procedure :

Data collected from various sources by using various procedures were some in appropriate forms and some in not, appropriate forms for the analysis. So, first of all irrelevant data are set a side and relevant are compiled processed in appropriate forms.

3.6 Analytical Tools used in the Study:

For presentation of collected data and its interpretation some financial tools i.e. ratio analysis, funds flow analysis and trend analysis and some statistical tools i.e. simple average and graph have been used when it is necessary.

CHAPTER-FOUR

4. Presentation and Analysis of Data:

This chapter entitled "Presentation & Analysis of Data" has been organized to present the results and analyze them accordingly. The specific objective of this study is to examine the short term as well as long term financial performance of the factory. To meet this objective, it is essential to present, analyze and interpret the data contained in annual reports of UCIL. From FY 2062 to FY 2068. The annual reports includes balance sheet, income statement along with their supporting schedules.

The financial statement of UCIL. from F.Y. 2062 to FY2068 have been used in this chapter to analyze its short term as well as long term financial position of the factory. Thus, the presentation, analysis and interpretation of data are given below.

4.1 Analysis of short term financial position:

(a) Current Ratio:

Current ratio of UCIL is calculated to test the liquidity position or short - term solvency position. The current ratio of UCIL is calculated by dividing current assets by current liabilities. The current assets of the factory are those assets which can be converted into cash within short period of time generally within a year. The current assets of UCIL include inventories, sundry debtors' cash and bank balance, advance payment, prepaid expenses and deposits. Likewise current assets, current liabilities of the factory are those obligations which are payable within a short period normally not exceeding one year. The current liabilities of UCIL include sundry creditors, bills payable, advance received from customers, interest payable to bank and provisions made during the year. The actual current ratio of the factory is compared with standard current ratio i.e. 2:1 to draw a meaningful conclusion about the current ratio of the factory. The current ratio of the UCI Ltd. has been presented in the table given below :

Table - 2

Current Ratio of UCIL

(From FY 2062 to FY 2068)

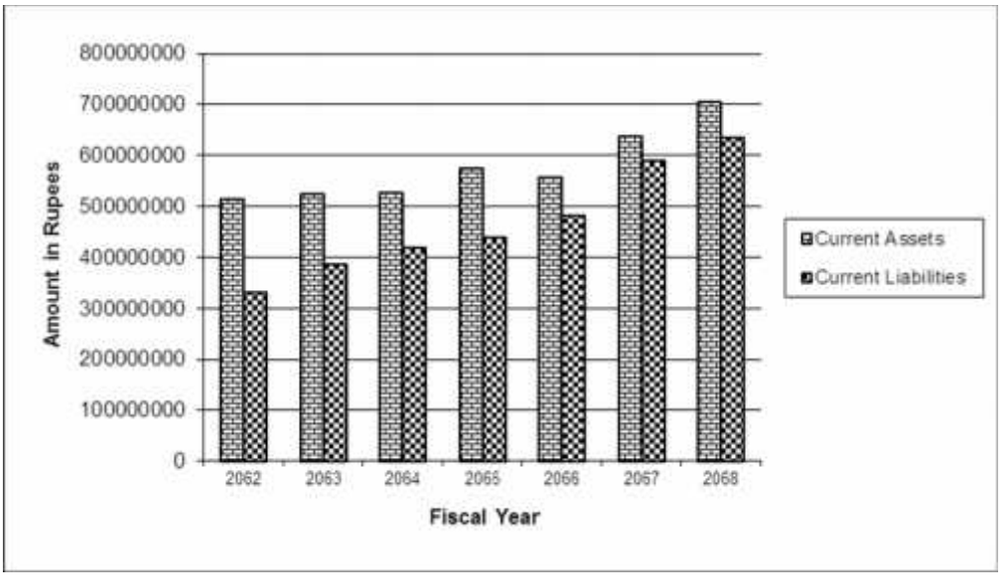
Year	*Current Assets*	*Current Liabilities*	*Ratio (in times)*
2062	514,748,376	329,672,797	1.56
2063	524,406,749	386,047,279	1.36
2064	525,841,641	417,826,570	1.26
2065	575,195,399	438,096,537	1.31
2066	557,725,412	481,916,110	1.16

2067	636,065,247	590,274,294	1.08
2068	704,583,001	633,910,794	1.11

The trend line of current assets and current liabilities can be shown in the figure given below :

Graph - 1

Graph showing the trend line of current assets and current liabilities.



The above table shows the current assets, current liabilities and current ratio of Udaypur cement factory from fiscal year 2062 to 2068. It shows that the current ratio has been decreasing from fiscal year 2062 towards 2064 respectively during the study period. The main reason for decreasing in current ratio is increasing in current liabilities in comparison to increase in current assets. In fiscal year 2065 current ratio is slightly greater than current ratio of fiscal year 2064. It is due to increase in current assets is greater than current liabilities in comparison to the fiscal year 2064. After fiscal year 2065 current ratio has been decreased gradually till fiscal year 2067. It is also due to increase in current liabilities is more than increase in current assets. In fiscal year 2068 current ratio has increased in comparison of current ratio of fiscal year 2067. It is due to increase in current ratio is as greater than as increase in current liabilities. The rate of decreasing in current ratio has decreased from fiscal year 2062 to fiscal year 2064. After a slight increase in current ratio of fiscal year 2065 the rate of decreasing in current ratio has again increased in fiscal year 2066. But in fiscal year 2067 the rate of decreasing in current ratio has decreased. In fiscal year 2068 current ratio has increased in comparison of fiscal year 2067 but rate of increasing is very low i.e. only by 0.03 times. Obviously the current ration of the factory is not satisfactory as compared with the standard ratio

2:1. Because the current ratio of the factory never meets the standard ratio. Hence, the short term financial condition or liquidity position of financial performance of the factory was not satisfactory.

(b) Quick Ratio :-

Quick ratio of Udaypur cement industry is calculated to test the short - term financial performance or liquidity position of the factory. But it emphasizes the instant debt paying capacity of the factory. In other words, quick ratio of the factory measure the factory's capacity to pay off claim of current liabilities immediately. Quick ratio of the factory is computed by dividing of quick asses by current liabilities. Quick assets of the factory refer to those assets which can be converted into cash within a very short period without a loss of value. In that sense, cash in hand and cash at bank are the most liquid assets of UCIL. The other assets which are considered to be relatively liquid and included in the quick assets of UCIL are sundry debtors, security money and bills receivables. As inventory can not be converted into cash immediately without a sufficient loss of values, it is not included in the quick assets of factory. In the same manner prepaid expenses and advances are also excluded from the list of quick assets of UCIL because they are not expected to be converted into cash. In other words all the current assets excluding inventory and prepaid expenses are considered as quick assets for UCIL. To draw a meaningful interference about quick ratio, the actual quick ratio of the UCIL is compared with the standard quick ratio i.e. 1:1 which is considered to be a satisfactory quick ratio for a commercial or industrial undertaking. The quick ratio of UCIL from fiscal year 2062 to 2068 is presented in the table given below.

Table - 3

Quick Ratio of UCIL

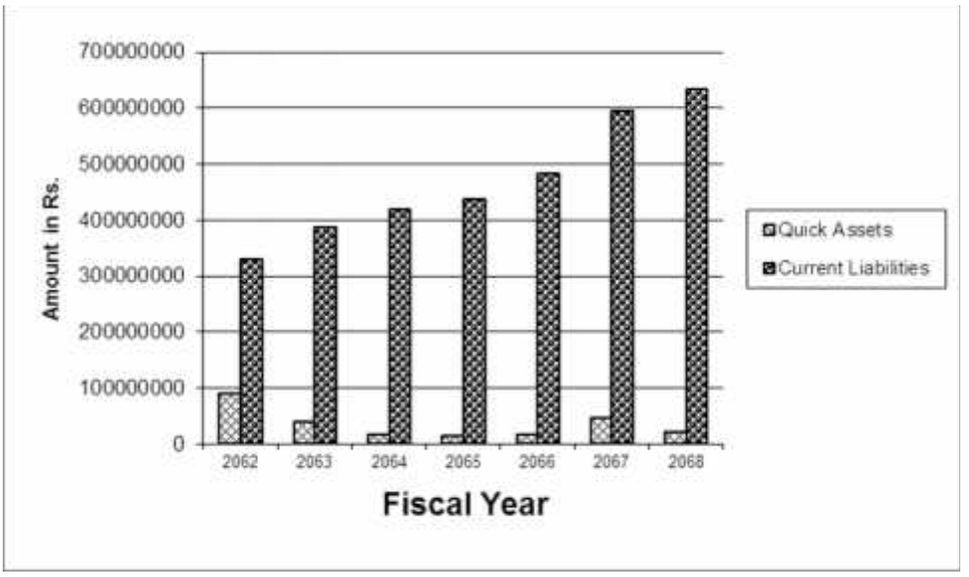
(From F.Y. 2062 to F.Y.2068)

Year	*Quick Assets*	*Current Liabilities*	*Ratio (in times)*
2062	90,209,684	329,672,797	0.27
2063	39,571,945	386,047,279	0.10
2064	17,407,078	417,826,570	0.04
2065	15,054,910	438,096,537	0.03
2066	16,312,202	481,916,140	0.03
2067	45,853,821	594,274,294	0.08
2068	22,039,693	633,910,794	0.03

The trend line of quick assets and current liabilities can be shown in the figure given below:

Graph-2

Graph showing the trend line of quick assets and current liabilities.



The above table shows the quick assets, current liabilities and quick ratio of UCIL from F.Y. 2062 to 2068. It shows that the absolute amounts of quick assets and current liabilities and quick ratio of UCIL are registered in definite trends during the period of study. Quick ratio of UCIL has range from a minimum of 0.03 in F.Y. 2065 to maximum of 0.27 in F.Y. 2062. If varied from 0.03 times to 0.27 times recording a range of 0.24 during the study period. In F.Y. 2062 quick assets of the factory is higher as compared to the other year during the study period. Due to this reason quick ratio in this year is 0.27 times which is higher than other fiscal year during study period. In F.Y. 2063 quick assets are less as compared to the previous F.Y. So quick ratio is also less than of previous F.Y. i.e. quick ratio in F.Y. 2063 is 0.10 times which is 0.17 times less than quick ratio of F.Y. 2062. The quick ratio in F.Y. 2064 is 0.04 times which is 0.06 times less than quick ratio in F.Y. 2063. It is due to decrease in quick assets and increase in current liabilities. In F.Y. 2065, 2066 and 2068 quick ratio is 0.03 times which is 0.01 times less than quick ratio of F.Y. 2064. Decrease in quick ratios in above F.Y. are also due to decrease in quick assets and increase in current liabilities. In F.Y. 2068 quick ratio is 0.08 times which is 0.05 times greater than quick ratio in F.Y. 2066 which is caused by increase in quick assets. The above table also shows that current liabilities are respectively increased from F.Y. 2062 to 2068 during study period. Obviously, the quick ratios of the factory are not satisfactory as compared with the standard ratio 1:1. It has never meets the standard ratio during the study period. Hence the liquid financial position of the factory was very week during the study period.

(c) Inventory Turnover Ratio :

As inventory turnover ratio measure the efficiency of inventory management, the inventory turnover ratio of UCIL is calculated to show how efficiently and defectively inventories of the factory are managed. It also explains whether investment in inventories is within proper limits or not. It also shows how rapidly the inventory is turning into receivable through sales. Inventory turnover ratio of UCIL is calculated by diving cost of goods sold by average inventory. Where cost of goods sold is computed by adding raw material consumed and production expenses and adding opening stock of finished goods and deducting closing stock of finished goods. Where production expenses include wages, salaries and other allowances of factory employees, electricity charges of factory, generator fuel expenses, stores spare expenses, oil & lubricants, Power fuel expenses insurance premium of factory building and machinery, bonus. Like wise cost of goods sold, average inventory is calculated by adding the stock in the beginning and at the end of the period and dividing it by two. Inventory of finished goods is valued at cost price and market price whichever is less, work in progress is valued at cost, raw material is valued at weighted average cost stores is valued at cost on FIFO method and wastage on realizable value. Usually, a high inventory turnover indicates efficient management of inventory because more frequently the stock are sold, the lesser amount of money is required to finance the inventory and vice - versa. But a too high turnover of inventory may not necessarily always imply a favorable situation. Because it may be the result of a very law level of inventory which results in shortage of goods in relation to demand and a position of stock out. There are no "rules of thumb" or standard inventory turnover ratio for interpreting the inventory turnover ratio of all types of business. It may be different for different firms depending upon the nature of industry and business condition. Thus, for interpretation the actual inventory turnover ratio of UCIL is compared with its average. Inventory turnover ratio of UCIL is shown in the table given below :

Table - 4

Inventory Turnover Ratio of UCIL

(From F. Y. 2062 to F.Y. 2068)

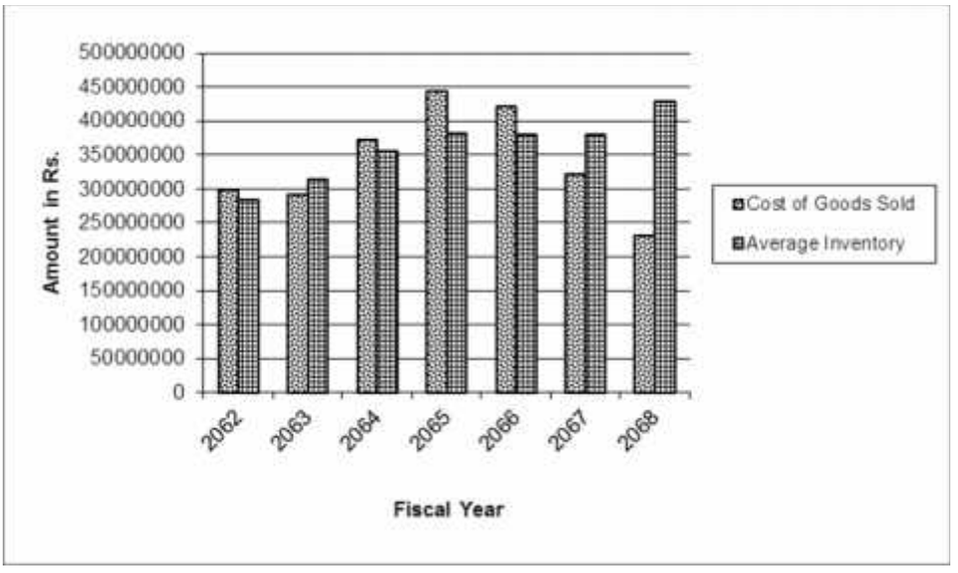
Year	*Cost of goods sold*	*Average inventory*	*Ratio (in times)*
2062	298,361,763	283,408,705	1.05
2063	290,149,794	312,895,190	0.93
2064	372,663,219	355,696,838	1.05
2065	443,382,251	381,444,475	1.16
2066	420,640,789	379,062,474	1.11

2067	321,868,537	379,174,383	0.85
2068	231,174,285	429,076,307	0.54
Average			***0.96***

The trend line of cost of goods sold and average inventory can be shown in the figure given below :

Graph-3

Graph showing the trend line of cost of goods sold and average inventory.



The above table shows the cost of goods sold, average inventory and inventory turnover ratio of UCIL from F.Y. 2062 to 2068. The table shows that inventory turnover ratio in F.Y. 2065 is 1.16 times which is highest than all other during study period. It is caused by higher cost of goods sold. In F.Y. 2062, 2064 and 2066 inventory turnover ratio is greater than one. It is due to cost of goods sold is greater than average inventory. But in F.Y. 2063, 2067 and 2068 inventory turnover ratio is less than one. It is due to amount of cost of goods sold is less than amount of average inventory.

The average inventory turnover ratio of UCIL during the study period is 0.96 times. During the F.Y. 2062, 2064, 2065 and 2066 it is greater than average inventory turnover ratio. But during the F.Y. 2063, 2067 and 2068 inventory turnover ratio is less than average of its study period. The average inventory turnover ratio during study period is less than one. It shows that the cost of goods sold amount is less than the amount of average inventory. Thus we can say that there is not proper management of inventory in UCIL i.e. there is deficiency in inventory managed by UCIL.

(d) Working Capital Turnover Ratio :

Working capital turnover ratio of UCIL is calculated to measure how efficiently and effectively working capital is employed by the factory. Working capital turnover ratio of UCIL is calculated for the analysis of short - term financial position and performance. It also indicates the number of times the working capital is turned over in the course of a year. Working capital turnover ratio is calculated by dividing cost of sales by average working capital is more appropriate. However, due to lack of the information about opening working capital, average working capital cannot be calculated. So working capital turnover ratio of UCIL is calculated by dividing sales by closing working capital. Working capital of UCIL is calculated by subtracting current liabilities from current assets. Where current assets of UCIL include inventory, cash and bank balance and advance payment and deposits. Current liabilities include sundry creditors, bill payable, advance received from customers, interest payable to bank and provisions made during the year. Generally a higher working capital turnover ratio indicates efficient utilization of working capital and lower ratio indicates inefficient utilization of working capital. There is no 'rule of thumb' or 'standard ratio' for interpreting this ratio. But a very high working capital turnover ratio is not a good situation for any firm because it may be the result of a very low level of working capital which directly affect the smooth operation or day to day work of business enterprises. Therefore for interpreting the working capital turnover ratio of UCIL, the actual ratio is compared with its average ratio. Working capital turnover ratio of UCIL is shown in the table given below :

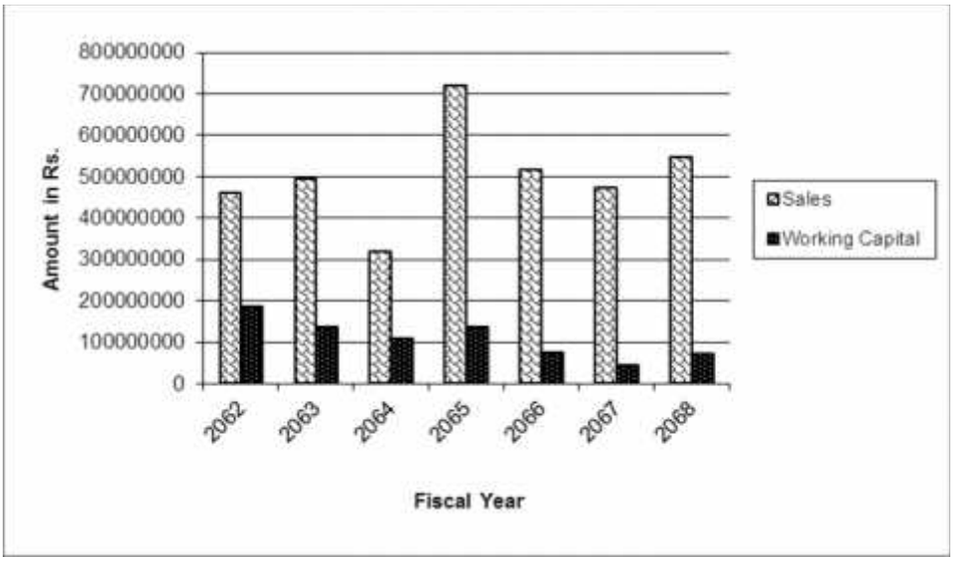
Table - 5
Working capital turnover ratio of UCIL
(From F.Y. 2062 to F.Y. 2068)

Year	*Sales*	*Working capital*	*Ratio (in times)*
2062	460,732,059	185,075,579	2.49
2063	495,214,231	138,359,470	3.58
2064	518,493,875	108,015,071	4.80
2065	719,292,020	137,098,862	5.25
2066	515,310,520	75,809,272	6.80
2067	473,388,070	45,790,953	10.34
2068	546,465,285	70,672,207	7.73
Average			***5.86***

The trend line of sales and working capital can be shown in the figure given below:

Graph-4

Graph showing the trend line of sales and working capital



The above table shows the absolute figure of sales, working capital and working capital turnover ratio of UCIL. The sales of UCIL marked an increasing trend during first four year and a fluctuating trend during the remaining year of study. Where working capital showed fluctuating trend during the study period. Working capital turnover varied from minimum of 2.49 times in F.Y. 2062 and maximum of 10.34 times in F.Y. 2067 recorded the range of 7.85 times during the study period. In the earlier year of study period working capital turnover ratio is less it is due to less sales value and higher working capital value in earlier year of study period.

The average working capital turnover ratio of UCIL during study period is 5.86 times. Working capital turnover ratio of UCIL is above the average in last three F.Y. of study period. During first four F.Y. of study period does not meet the average. This means the efficiency of working capital is improving and the management has to keep it up to that extent so as to working capital deficiency will not come.

4.2 Analysis of long term financial and position:

(a) Debt Equity Ratio :

Debt equity ratio of UCIL is calculated to show the relationship between borrowed funds and owner's capital to measure the long - term solvency position of the factory. In other words, debt - equity ratio of UCIL describes the lender's contributions for each rupee of the owner's contributions. Debt equity ratio of UCIL also analyzing the composition of capital structure of factory. Debt equity ratio of UCIL indicates the relationship between the external equities or the shareholders funds and long term debt.

Long term debt of UCIL includes unsecured loan, the accumulated losses and deferred expenses are excluded from total to find out shareholders fund. The interpretation of the debt equity ratio depends upon the purpose of analysis, the financial policy and the nature of business of the firm. Usually, a ratio of 1:1 may be considered to be a satisfactory ratio. Thus, to make interpretation of the debt - equity ratio, the actual ratio of UCIL is compared with standard of 1:1. Debt equity ratio of UCIL is shown in the table given below :

Table - 6

Debt - Equity Ratio of UCIL

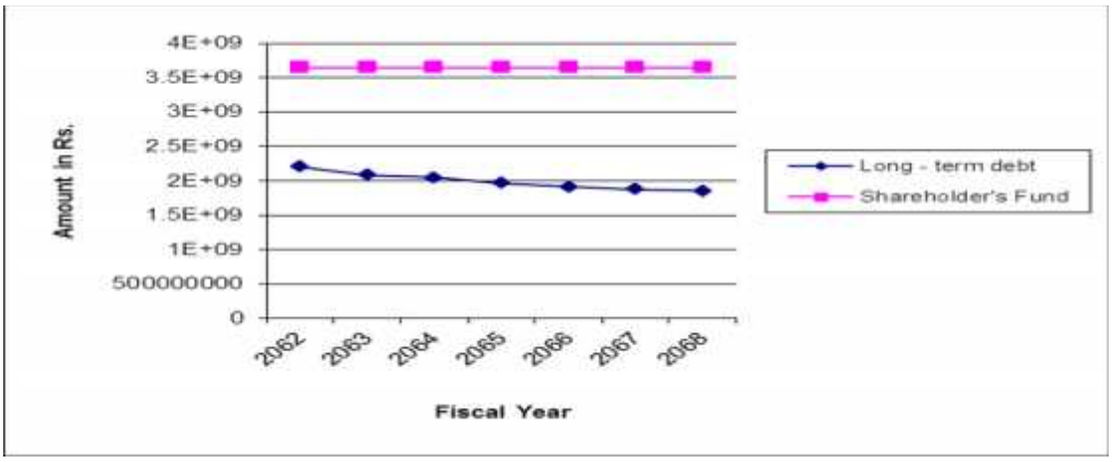
(From F.Y. 2062 to 2068)

Year	*Long - term debt*	*Shareholder's Fund*	*Ratio (in times)*
2062	2,206,200,274	3,648,051,000	0.60:1
2063	2,081,200,274	3,648,051,000	0.57:1
2064	2,046,175,274	3,648,051,000	0.56:1
2065	1,966,175,274	3,648,051,000	0.54:1
2066	1,910,000,000	3,648,051,000	0.52:1
2067	1,880,000,000	3,648,051,000	0.52:1
2068	1,855,000,000	3,648,051,000	0.51:1
Average			***0.55:1***

The trend of long - term debt and shareholder's fund can be shown in the figure given below :

Graph - 5

Graph showing the trend line of long - term debt and shareholder's fund



The above table shows the long - term debt, shareholders fund and debt - equity ratio of UCIL from F.Y. 2062 to 2068. Debt - equity ratio of UCIL varied from 0.51 times in F.Y. 2068 to 0.60 times in F.Y. 2062 recording a range of 0.09 times. The debt equity ratio of UCIL is in decreasing trend from first year to last year of study period. It is due to decreasing trend in long - term debt where as shareholders fund is same in whole study period. The average debt - equity ratio of UCIL during study period is 0.55 times. The debt equity ratio of UCIL touched the average in 1st three F.Y. only. After that it never touched the average debt - equity ratio. It also never touched the standard i.e. 1:1. It always much below than standard. The lowest debt - equity ratio is considered as favorable from long - term creditors point of view because it provides a large margin of safety for them. But a very law ratio is not considered satisfactory for the shareholders because it indicates that the firm has not been able to use low - cost outsider's funds to magnify their earnings. Thus we can say that the lower ratio of UCIL implies the unbalanced financial condition of the factory.

(b) Funded Debt to Total Capital Ratio :

Funded debt to total capital ratio of UCIL is calculated to establish a link between long - term funds raised from outsiders and total long - term funds available in the factory. Funded debt to total capital ratio of UCIL is calculated by dividing funded debt i.e. long - term debt by total capital. Funded debt includes unsecured loan taken by factory as discussed in the previous ratio. On the other hand total capital includes both long - term debt and shareholder's fund. Shareholder's fund is obtained in the same way as discussed in previous ratio. There is no 'rule of thumb' but lesser the reliance on outsiders the better will be. Up to 50% or 55% this ratio may be tolerable and not beyond. To make meaningful interpretation actual funded debt to total capital ratio of UCIL is compared with generally accepted standard i.e. 50% or 55% and its average also. The funded debt to total capital ratio of UCIL has been presented in the table given below with its average.

Table - 7

Funded Debt to Total Capital Ratio of UCIL

(From F.Y. 2062 to 2068)

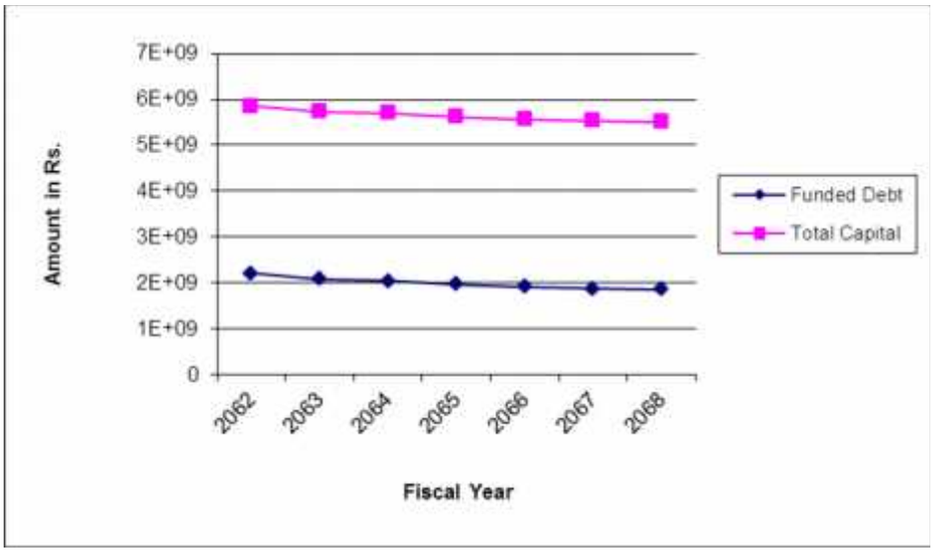
Year	*Funded Debt*	*Total Capital*	*Ratio (in%)*
2062	2,206,200,274	5,854,251,274	38%
2063	2,081,200,274	5,729,251,274	36%
2064	2,046,175,274	5,694,224,274	36%
2065	1,966,175,274	5,614,226,274	35%

2066	1,910,000,000	5,558,051,000	34%
2067	1,880,000,000	5,528,051,000	34%
2068	1,855,000,000	5,503,051,000	34%
Average			***35%***

The trend line of funded debt and total capital can be shown in the figure given below :

Graph - 6

Graph showing trend line of funded debt to total capital



The above table shows the funded debt to total capital ratio of UCIL from F.Y. 2062 to 2068. It also indicates that funded debt and total capital is in decreasing trend from 1st year to last year of study period. Funded debt to total capital ratio of 1st year is high i.e. 38% and ratio of last three year is law i.e. 34%. It has the range of 4%. The average funded debt to total capital ratio is 35%. During the study period 1st four year factory has meet the average. But after that during last three year of study period funded debt to total capital ratio is below than its average. Factory has also never meet the generally accepted standard of 50% or 55%, it shows that the ratio is quite law. In this way we can conclude that the factory has not relied much on outside sources for raising long - term funds. There is enough scope for the factory to raise long - term loans from outsiders. It indicates that the firm has not been able to use low - cost outsider's funds to magnify their earnings.

(c) Proprietary Ratio :-

Proprietary ratio of UCIL is calculated for determining the long - term solvency of the factory. This ratio establishes the relationship between shareholder's fund in net worth and total assets. Proprietary ratio of UCIL is calculated by dividing shareholder's funds by total assets. Shareholders funds of the factory are share capital, undistributed profits, reserves and surplus out of this amount accumulated loss and deferred expenses like preliminary expenses should be deducted. The total assets of UCIL include both fixed assets and current assets. Fixed assets include land & building, plant & machinery, vehicles, furniture & fixture, office equipment, communication equipment, computer, weighting machine, electric equipment, Rope way etc. Likewise fixed assets current assets, include closing stock, sundry debtors, cash in hand, cash at bank and advances. As equity ratio or proprietors ratio represents the relationship of owner's fund to total assets, higher the ratio or the share of the shareholder's in the total capital of the factory, better is the long - term solvency position of the factory. But there is no 'rule of thumb' for interpreting this ratio in every organization. So, actual ratio of UCIL is compared with average to make interpretation. The proprietary ratio of UCIL is shown in the table given below :

Table - 8

Proprietary Ratio of UCIL

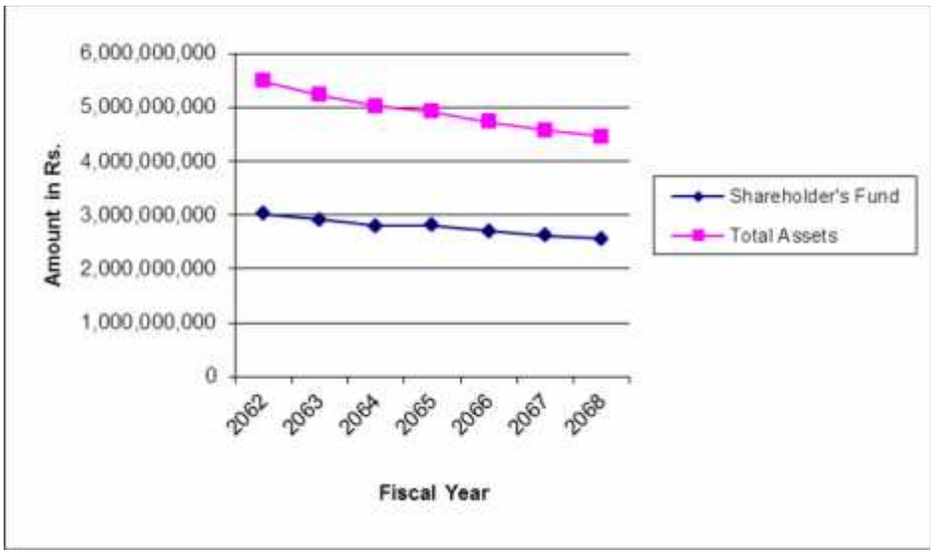
(From F.Y. 2062 to 2068)

Year	*Shareholder's Fund*	*Total Assets*	*Ratio (in %)*
2062	3,018,652,009	5,485,516,502	55
2063	2,915,764,350	5,220,391,097	56
2064	2,797,219,956	5,029,583,957	56
2065	2,803,165,324	4,918,291,580	57
2066	2,704,609,912	4,726,323,148	57
2067	2,616,701,229	4,571,176,720	57
2068	2,559,455,978	4,451,693,722	57
Average			56.43

The trend line of shareholder's fund and total assets can be shown in the figure given below :

Graph - 7

Graph showing the trend line of shareholder's fund and total assets



The above table show the shareholder's fund, total asset and proprietary ratio of UCIL from F.Y. 2062 to 2068. Proprietary ratio of UCIL varied from a maximum of 57% in F.Y. 2065 (to 2068) to a minimum of 55% in F.Y. 2062. It recorded a range of 2% during the study period. Proprietary ratio of UCIL marked an increasing and constant trend during the first fiscal year to last fiscal year of study period. In F.Y. 2062 proprietary ratio of UCIL is 55%. In F.Y. 2063 and 2064 it is 56% after that from F.Y. 2065 to 2068 it is 57%. Such trend is dues to decrease in shareholder's fund consist less decrease than decrease in total assets. The average proprietary ratio of UCIL is 56.43% and actual ratio cover its average during four last F.Y. of study period. From this point of view we conclude that the proprietary ratio of UCIL is satisfactory.

(d) Fixed assets to net worth ratio :

The ratio of fixed assets to net worth of UCIL is calculated to measure the extent to which shareholder's funds are invested in fixed assets. Generally, fixed assets to net worth ratio of UCIL is calculated by dividing fixed assets by net worth. This ratio establishes the relationship between fixed assets and shareholder's fund. Fixed assets of UCIL include land, building, plant & machinery, vehicle, furniture & fixture, office equipments, communication equipments, computer, weighting machine, electric equipments. For the purpose of calculating fixed assets to net worth ratio written down value of fixed assets is used in other words, cost of fixed assets, as reduced by the related amount of depreciation is used in this ratio. Net worth of UCIL include share capital. Undistributed loss and deferred expenses should be deducted. If the ratio is less than 100% it implies that owner's funds are more than total fixed assets and a part of working

capital is provided by the shareholders. When the ratio is more than 100%, it implies that owner's funds are not sufficient to finance the fixed assets and the firm has to depend upon outsiders to finance the fixed assets. There is no 'rule of thumb' to interpret this ratio but 60 to 65 percent is considered to be a satisfactory ratio in case of industrial undertakings. As 60 to 65 percent is considered satisfactory, to make interpretation of fixed assets to net worth ratio of UCIL, actual ratio is compared with this rule. Actual assets to net worth ratio of UCIL from F.Y. 2062 to 2068 is shown in the table given below :

Table - 9

Fixed Assets to Net Worth Ratio of UCIL

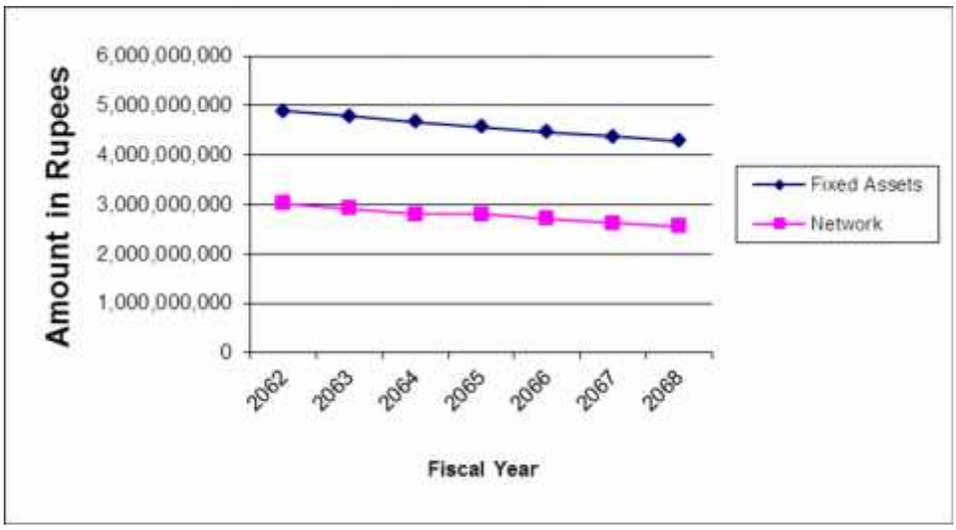
(From F.Y. 2062 to 2068)

Year	*Fixed Assets*	*Network*	*Ratio (in %)*
2062	4,886,376,704	3,018,652,009	162
2063	4,779,552,092	2,915,764,350	164
2064	4,672,627,096	2,797,219,956	167
2065	4,563,988,675	2,803,165,324	163
2066	4,457,705,641	2,704,609,912	165
2067	4,372,315,276	2,616,701,229	167
2068	4,287,688,770	2,559,455,978	168

The trend line of fixed asset and net worth can be shown in the figure given below :

Graph - 8

Graph showing the trend line of fixed asset and net worth



The above table shows fixed assets, net worth and fixed assets to net worth ratio of UCIL from F.Y. 2062 to 2068. The fixed assets to net worth ratio of UCIL are in increasing trend for 1st three year of study period. It is due to less decrease in fixed assets than decrease in net worth. In F.Y. 2065 fixed assets to net worth ratio is less than of previous year. It is due to decrease in fixed asset and increasing net worth in that year. After that i.e. from F.Y. 2066 fixed assets to net worth ratio is increased till last year of study period. It is due to less decrease in fixed assets than decrease in net worth. During study period fixed assets to net worth ratio of UCIL never meets the standard. This means that the factory has to depend upon outsiders to finance the fixed assets. In this way, long - term financial position of the factory is not satisfactory.

(e) Fixed Assets to Total Long - term funds Ratio :

For the analysis of long term financial position and performance of UCIL another ratio is calculated named fixed assets to total long - term fund ratio. This ratio is also known as fixed assets ratio. Generally, sound financing policy is that all fixed assets must be financed out of long - term funds. Therefore, this ratio is better than fixed assets to net worth ratio. Fixed assets to total - long tern funds ratio of UCIL is calculated by dividing fixed assets by total long - term fund available in the factory. For calculating this ratio, depreciated value or written down value of fixed assets is used. Fixed assets of UCIL includes land, building, plant & machinery, vehicles, computers, office equipments, communication equipments and weighting machine etc. Total long term funds of UCIL include shareholder's funds and borrowings. Shareholders funds include share capital, an distributed profits. Out of which deferred expenditure and accumulates loss are deducted. Long term funds include unsecured loan. Generally the ratio 1:1 or 100% is considered satisfactory. To make interpretation the actual ratio of UCIL is compared with generally accepted rule of thumb i.e. 1:1. The fixed assets to total long - term funds of UCIL is shown in the table given below :

Table - 10

Fixed Assets to Total Long Term fund Ratio of UCIL

(From F.Y. 2062 to 2068)

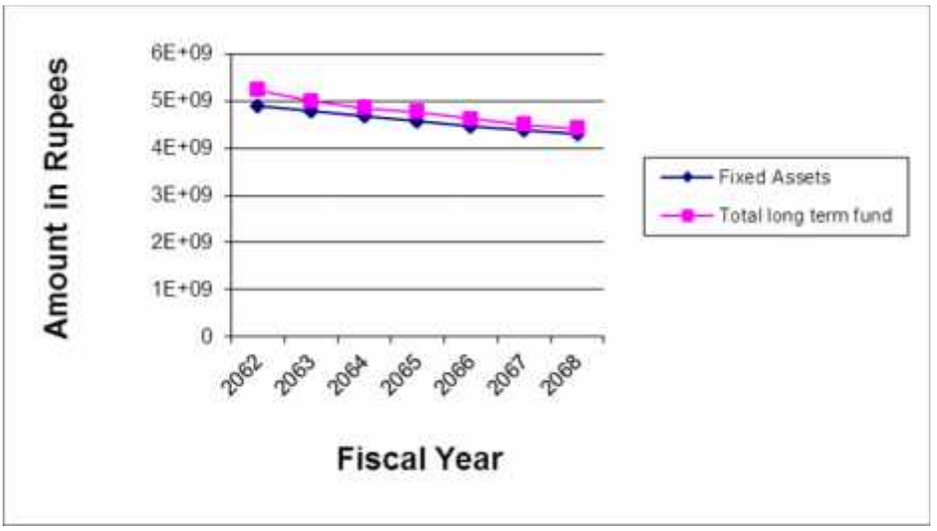
Year	*Fixed Assets*	*Total long term fund*	*Ratio (in %)*
2062	4,886,376,704	5,224,852,283	94
2063	4,779,552,092	4,996,964,624	96
2064	4,672,627,096	4,843,395,230	96
2065	4,563,988,675	4,769,340,598	96
2066	4,457,705,641	4,614,609,912	97

2067	4,372,315,276	4,496,701,229	97
2068	4,287,688,770	4,414,455,978	97

The trend line of fixed assets and total long term fund can be shown in the table given below :

Graph - 9

Graph showing the trend line of fixed asset and total long term fund



The above table shows that the fixed assets to total long - term fund ratio in F.Y. 2063 has increased in comparison of previous F.Y. It is due to less decrease in fixed assets than decrease in total long term fund. The ratio occurred in F.Y. 2063 i.e. 96% remains constant till F.Y. 2065. It is due to decrease in fixed assets is as same proportion as decrease in total long - term fund. In F.Y. 2066 again 1% increase in fixed assets to total long term fund ratio i.e. it is 97%. It is due to less decrease in fixed assets than decrease in total long - term fund. In F.Y. 2067 and in F.Y. 2068 ratio is same as in F.Y. 2066. It is due to decrease in fixed assets is in same proportion as decrease in total long - term fund. Obviously, it was always less than the standard of 100% during the study period. As 100% or less than 100% is considered satisfactory, the fixed assets to total long term fund ratio of UCIL is satisfactory. This means total long term funds are sufficient to invest in fixed assets and a part of the working capital requirement is met out of long term funds of the factory. In this way, we can say that, the long - term financial position or performance of the factory is satisfactory one.

(f) Ratio of Current assets to proprietor's fund :

The ratio of current assets to proprietor's funds of UCIL is calculated to show the long - term financial performance and position of the factory. The ratio indicates the extent to which proprietor's funds of the factory are invested in current assets. Ratio of current assets to proprietor's funds of UCIL is computed by dividing current assets by

amount of proprietor's funds. Current assets of UCIL include cash & bank balance, stock, advance payments and deposits. Proprietor's funds of UCIL include share capital, accumulated profits. Out of those amounts total accumulated losses and deferred expenses are deducted. There is no. 'rule of thumb' for this ratio. Because it varies from firm to firm depending upon the nature of business. So, to make meaningful interpretation, the actual ratio of UCIL is compared with the average. The current assets to proprietor's funds ratio of UCIL is given in the table below :

Table - 11

Current assets to proprietor's funds ratio of UCIL

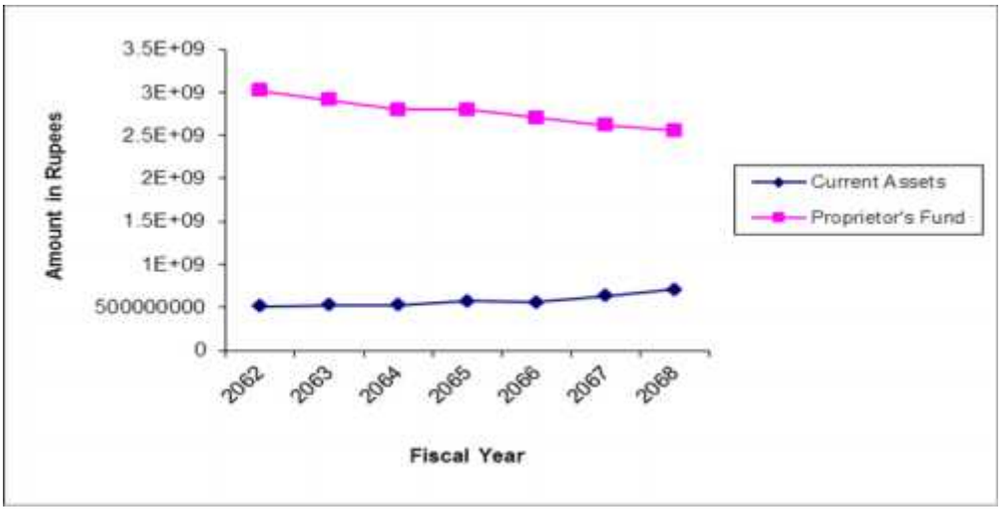
(From F.Y. 2062 to 2068)

Year	*Current Assets*	*Proprietor's Fund*	*Ratio (in times)*
2062	514,748,376	3,018,652,009	0.17
2063	524,406,749	2,915,764,350	0.18
2064	525,841,641	2,797,219,956	0.19
2065	575,195,399	2,803,165,324	0.20
2066	557,725,412	2,704,609,912	0.21
2067	636,065,247	2,616,701,229	0.24
2068	704,583,001	2,559,455,978	0.28
Average			***0.21***

The trend line of currents and proprietor's funds can be shown in the table given below:

Graph - 10

Graph showing the trend line of current assets and proprietor's fund



The above table shows the current assets, proprietor's funds and current assets to proprietor's fund ratio of UCIL. Table shows that there is increasing trend in ratio from 1st year to last year of study period. Which is due to increase in current assets and decrease in proprietor's fund from 1st F.Y. to last F.Y. during the study period. In F.Y. 2065 proprietor's fund increased in comparison of F.Y. 2064. But still ratio has increased in comparison of previous F.Y. It is due to increase in current ratio is in higher proportion than increase in proprietor's fund. The average ratio is 0.21 times. Only last three years of study period meet its average ratio. Thus, it can be said that current assets to proprietor's fund ratio of UCIL is in satisfactory towards last year of the study period.

(g) Debt - Service Ratio / Interest Coverage Ratio :

Debt - service ratio of UCIL is calculated to test the debt - servicing capacity of factory. It is the major test of solvency which measures how many times interest charges are covered by the funds that are available to pay the interest charges in the factory. In other words, debt service ratio of UCIL indicates the number of times interest charges is covered by the profits available to pay interest charges. Debt service ratio of UCIL is calculated by diving profit before interest and taxes by interest amount. There is no 'rule of thumb' for interpreting this ratio. But, generally high ratio is preferable because it indicates the lower utilization of borrowings capacity. But a too high debt - service ratio may not be good for the firm because it may imply that firm is not using debt as a source of finance so as to increase the earnings per share. For interpretation actual ratio of UCIL is compared with average. Debt-service ratio of UCIL is shown in the table given below :

Table - 12

Debt - Service Ratio of UCIL

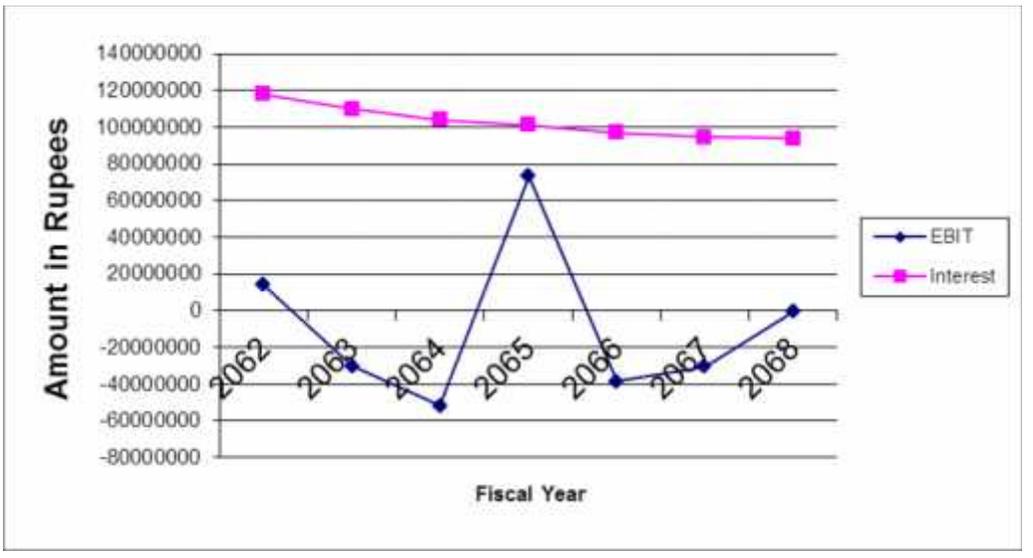
(From F.Y. 2062 to 2068)

Year	*EBIT*	*Interest*	*Ratio (in times)*
2062	14,199,765	117,810,014	0.12
2063	(30,357,856)	109,767,548	(0.28)
2064	(51,836,039)	103,946,101	(0.50)
2065	73,246,395	101,028,208	0.73
2066	(38,690,408)	97,102,750	(0.40)
2067	(30,403,240)	94,679,167	(0.32)
2068	(563,281)	93,810,070	(0.006
Average			***(0.094)***

The trend line of EBIT and Interest charges can be shown in the figure given below :

Graph - 11

Graph shown in the trend line of EBIT & Interest Charges



The above table shows earning before interest and tax (EBIT), interest expenses and interest coverage ratio of UCIL from F.Y. 2062 to 2068. In F.Y. 2062 interest coverage ratio of UCIL is 0.12 times which is very law than generally accepted standard of 6 times. In F.Y. 2065 interest coverage ratio of UCIL is 0.73 times which is also very law than generally accepted standard of 6 times. These all are due to very law amount of EBIT than interest expenses amount. Remaining all year of study period interest coverage ratio are negative which is due to negative EBIT. The average debt - service ratio of UCIL is (0.094) which is also negative. In this way we can conclude that the debt service ratio of UCIL is not satisfactory i.e. is very bad.

4.3 Analysis of Profitability Position:

(a) Gross Profit Margin / Ratio :

Gross profit margin is also known as gross margin which reflects the efficiency with which management produce each unit of product. This ratio indicates the average spread between the cost of goods sold and the sales revenue and it indicates the efficiency of operation as well as now products are priced. The gross profit margin / ratio of UCIL is calculated by dividing gross profit of UCIL by sales of UCIL and multiplying it by 100. The gross profit margin of UCIL is show in the table given below :

Table - 13

Gross Profit Margin of UCIL

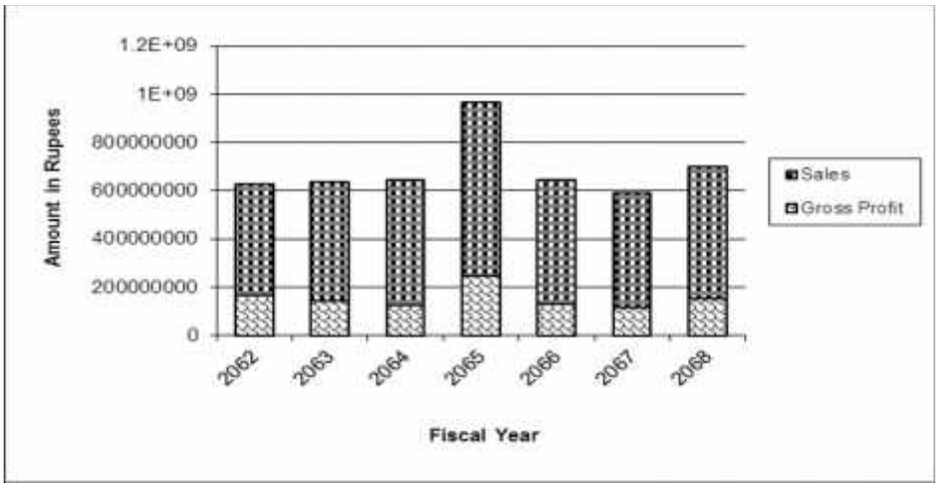
(From F.Y. 2062 to 2068)

Year	*Gross Profit*	*Sales*	*Ratio (in%)*
2062	167,207,443	460,732,059	36.29
2063	141,254,320	495,214,231	28.52
2064	124,037,476	518,493,875	23.92
2065	246,207,675	719,292,020	34.23
2066	129,135,828	515,310,520	25.06
2067	116,829,618	473,388,070	24.68
2068	150,177,067	546,465,285	27.48
Average			***28.60***

The trend line of gross profit and sales can be shown in the figure given below :

Graph - 12

Graph showing the trend line of gross profit and sales



The above table shows the gross profit, sales and gross profit margin of UCIL from F.Y. 2062 to 2068. The gross profit margin in F.Y. 2062 is 36.29%. After F.Y. 2062 it has decreased till F.Y. 2057/59. It is due to gradual decrease in gross profit and increase in sales revenue. But in F.Y. 2065 gross profit margin increased to 34.23%. It is due to high increase in gross profit than increase in sales in comparison of F.Y. 2064. After F.Y. 2065 the gross profit margin has been gradually decreased till F.Y. 2067. It is due to high decrease in gross profit than decrease in sales revenue. In F.Y. 2068 gross

profit margin increase comparison of fiscal year 2068. It is due to increase in gross profit is high than increase in sales in comparison. The average gross profit ratio of UCIL is 28.60% which meets only in F.Y. 2062 and 2065. Remaining all the years of study period it never meets the average ratio. There is also fluctuation in ratio during study period. In conclusion, we can say that UCIL has not so much satisfactory of its gross profit margin during the study period.

(b) Net Profit Margin / Ratio :

Net profit margin is also known as net margin which establishes the relationship between net profit and sales. It indicates efficiency in manufacturing, administering and selling the products. This ratio is the overall measure of the firm's ability to turn each rupee of sales into net profit. If the net margin is in adequate, the firm will fail to achieve satisfactory return on owner's equity.

A high net profit margin would insure adequate return to owners as well as enable a firm to with stand adverse economic conditions when selling price is declining, cost of production is raising and demand for the product is falling. A low profit margin has the opposite implication. However, a firm with a profit margin can earn a high rate of return on investment. It is has higher inventory turnover. The net profit margin should therefore be evaluated in relation to the turnover rate. The ratio is calculated by dividing net profit by sales and multiplying by 100. The net profit margin of UCIL is given below in the following table :

Table - 14

Net Profit Margin of UCIL

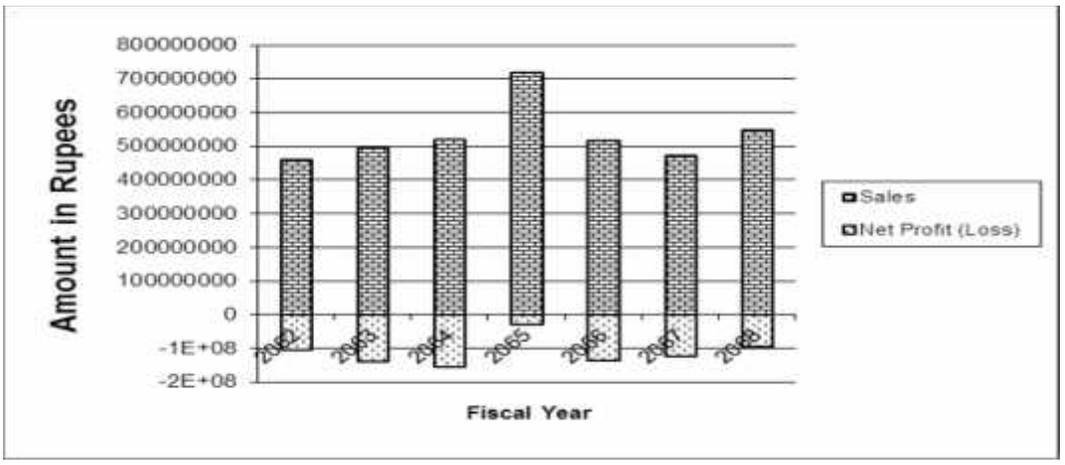
(From F.Y. 2062 to 2068)

Year	*Net Profit (Loss)*	*Sales*	*Ratio (in %)*
2062	(103,610,249)	460,732,059	(22.49)
2063	(140,125,404)	495,214,231	(28.30)
2064	(155,782,140)	518,493,875	(30.05)
2065	(27,781,813)	719,292,020	(3.86)
2066	(135,793,158)	515,310,520	(26.35)
2067	(125,082,407)	473,388,070	(26.42)
2068	(94,373,351)	546,465,285	(17.27)
Average			***(22.11)***

The trend line of net profit (loss) and sales can be shown in the figure given below :

Graph - 13

Graph showing the trend line of net profit (loss) and sales



The above table shows the net profit, sales revenue and net profit margin of UCIL from F.Y. 2062 to 2068. The net profit margin of UCIL comes to be negative 22.49, 28.30, 30.05, 3.86, 26.35, 26.42 and 17.27 percent respectively in the respective year of study from 2062 to 2068. It is observed that the average net profit margin is negative 22.11 percent which is not satisfactory and the whole study period ratio is very poor. UCIL has been increasing heavy loss during first three year of study period. In F.Y. 2065 loss has been reduced. After that it has again increased it's loss respectively till F.Y. 2067. In F.Y. 2068 UCIL has decreased it's loss in comparison of F.Y. 2067. A whole we can say that UCIL has very bad condition in it's net profit during the study period.

(c) Return on Total Assets :

The return on total assets is a useful measure of the profitability of all financial resources invested in the UCIL assets. It evaluates the efficiency of factory in utilization and mobilization of it's assets. It is calculated by dividing net profit by total assets. A high return on total assets ratio shows higher earning of the factory in terms of its total assets. Which is the indication of appropriate utilization of total resources of the company. A low ratio shows unsound financial position due to law level of return. The return on total assets ratio of UCIL is presented in the following table :

Table - 15

Return on Total Assets Ratio of UCIL

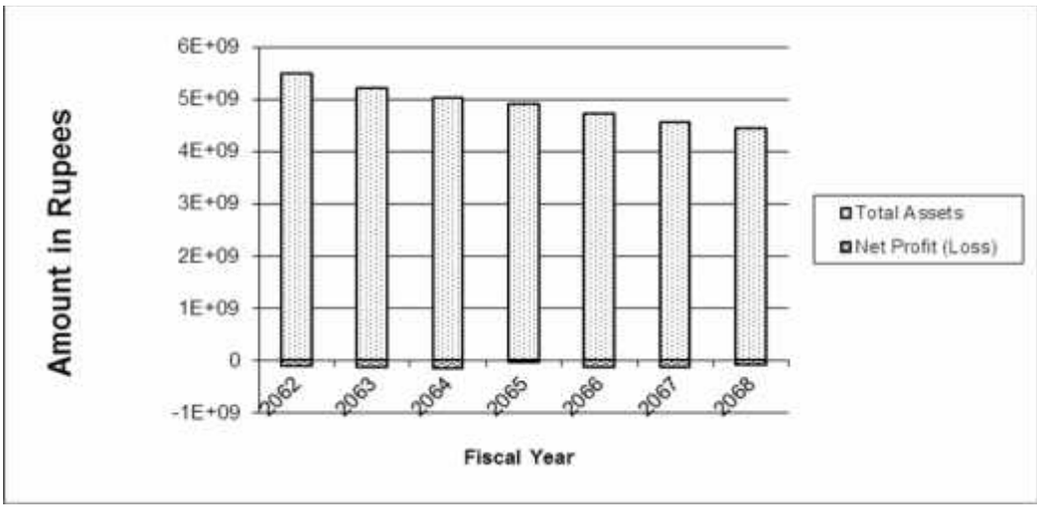
(From F.Y. 2062 to 2068)

Year	*Net Profit (Loss)*	*Total Assets*	*Ratio (in %)*
2062	(103,610,249)	5,485,516,502	(1.89)
2063	(140,125,404)	5,220,391,097	(2.68)
2064	(155,782,140)	5,029,583,957	(3.10)
2065	(27,781,813)	4,918,291,580	(0.56)
2066	(135,793,158)	4,726,323,148	(2.87)
2067	(125,082,407)	4,571,176,720	(2.74)
2068	(94,373,351)	4,451,693,722	(2.12)
Average			***(2.28)***

The trend line of net profit (loss) and total assets can be shown in the figure given below :

Graph - 14

Graph show in the trend line of net profit (loss) and total assets



The above table shows the net losses, total assets and return on total assets of UCIL from F.Y. 2062 to 2068. It is observed that during study period return on total assets is very poor i.e. it is always negative. It is due to there is always losses in UCIL during study period. The average return on total assets of UCIL is negative 2.28 percent which is not satisfactory. It indicates that management has failed to invest in assets of UCIL. In other words, management is less efficient to mobilize its financial resources in its full strength and the factory has to pay more attention in reducing its operating cost.

(d) Return on Shareholder's Equity :

Return on shareholder's equity ratio is one of the major aspect to be considered in the analysis of overall profitability. It indicates how well management has used the fund supplied by equity shareholders in an enterprise. In other words it relates the net profit available to equity shareholders to the amount of capital invested by them. It is considered as necessary for the management of any business enterprise to maximize its owner's wealth through generating resources from the business by efficient allocation and utilization of the resources of the enterprise ROE ratio is calculated by dividing net profit after taxes by dividing net profit after taxes by net wroth (Shareholder equity capital) and multiplying by 100. Return on shareholder's equity of UCIL is shown in the following table :

Table - 16

Return on shareholder's equity

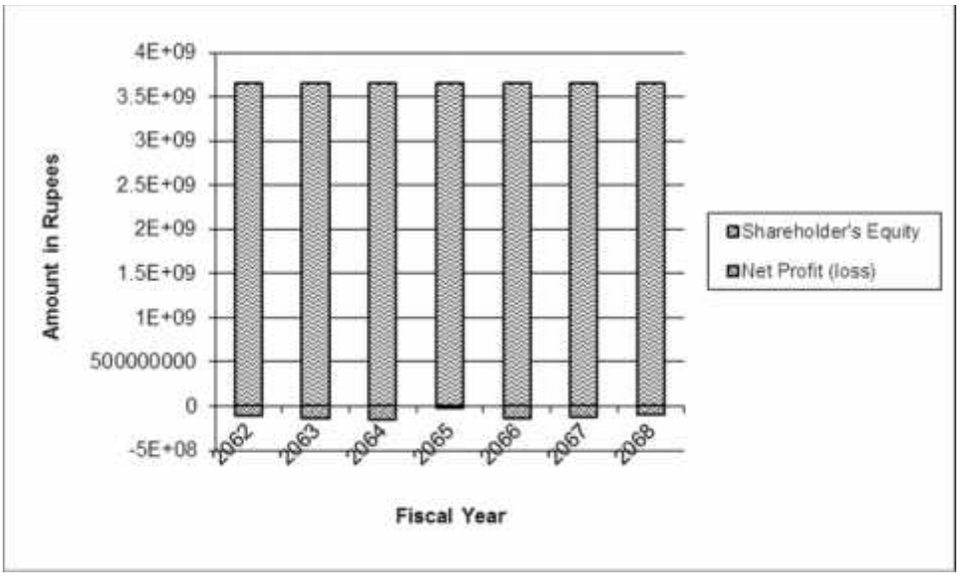
(From F.Y. 2062 to 2068)

Year	*Net Profit (loss)*	*Shareholder's Equity*	*Ratio (in %)*
2062	(103,610,249)	3,648,051,000	(2.84)
2063	(140,125,404)	3,648,051,000	(3.84)
2064	(155,782,140)	3,648,051,000	(4.27)
2065	(27,781,813)	3,648,051,000	(0.76)
2066	(135,793,158)	3,648,051,000	(3.72)
2067	(125,082,407)	3,648,051,000	(3.43)
2068	(94,373,351)	3,648,051,000	(2.59)
Average			***(3.06)***

The trend line of net profit (loss) and shareholder's equity can be shown in the figure given below :

Graph :- 15

Graph showing the trend line of net profit (loss) and shareholder's equity



The above table shows the net losses, shareholders equity and return on shareholders equity of UCIL from F.Y. 2062 to 2068. The return on shareholder's equity of UCIL is in negative all the study period. It's average return on equity is negative 3.06 percent. It has maximum of 4.27 percent negative return in F.Y. 2064 and has minimum of 0.76 percent negative return in F.Y. 2065. It has the range of 3.51 percent negative return. The main reason behind the negative ratio is due to less utilization of its capacity i.e. low sales revenue, excessive cost of production and highly increased administrative and selling expenses.

The overall profitability position of UCIL in terms of return on shareholder's equity ratio indicates that the management has not uses the owner's capital soundly. The factory with least return on capital could not attract the potential investors to invest in the factory. As a consequence the market value of it's share have gone down in recent years. Thus, the return on equity ratio of UCIL is unfavorable.

(e) Operating Expenses Ratio :

Operating expenses ratio measures the operating efficiently of the organization. It shows the extent to which the firm is able to generate surplus from the operation of the business. It is the proportion of cost of goods sold plus operating expenses to sales revenue. The operating expenses of UCIL includes cost of goods sold, Administrative expenses, Advertising, selling and promotion expenses. A low operating ratio shows higher the operational efficiency and vice - versa. The operating expenses ratio of UCIL is presented below:

Table - 17

Operating Expenses Ratio of UCIL

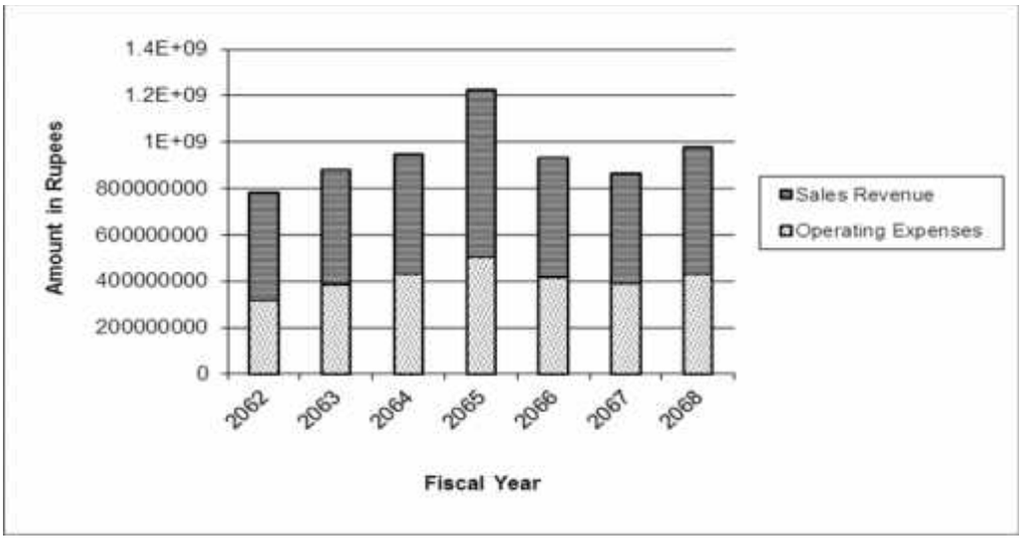
(From F.Y. 2062 to 2068)

Year	*Operating Expenses*	*Sales Revenue*	*Ratio (in %)*
2062	320,326,438	460,732,059	69.53
2063	386,338,038	495,214,231	78.01
2064	430,428,526	518,493,875	83.02
2065	506,483,105	719,292,020	70.41
2066	417,227,907	515,310,520	80.97
2067	389,425,139	473,388,070	82.26
2068	432,026,069	546,465,285	79.17
Average			***77.62***

The trend line of operating expenses and sales revenue can be shown in the figure given below :

Graph :- 16

Graph showing the trend line of operating expenses and sales revenue



The above table shows operating expenses, sales revenue and operating expenses ratio of UCIL from F.Y. 2062 to 2068. Operating expenses ratio of UCIL varied from a minimum of 69.53 percent in F.Y. 2062 to a maximum of 82.26 percent in F.Y. 2060.61.

It has the range in operating expenses ratio of 12.73 percent during the study period. During first three year of study period operating expenses ratio of UCIL has been increased respectively. It is due to increase in the amount of operating expenses is higher than increase in the amount of sales revenue. In F.Y. 2065 the operating expenses ratio of UCIL is decreased to 70.41 percent in comparison of operating expenses ratio of UCIL in F.Y. 2064 i.e. 83.02 percent. It is due to increase in sales revenue is much higher than increase in operating expenses. After F.Y. 2065 again operating expenses ratio has increased respectively till fiscal year 2067. It is due to decrease in operating expenses is less than decrease in sales revenue. In F.Y. 2068 operating expenses ratio has again decreased in comparison of F.Y. 2067. It is due to increase in operating expenses is less than increase in sales revenue. The average operating expenses ratio of UCIL is 77.62 percent during the study period. In F.Y. 2063, 2064, 2066, 2067 and 2068 operating expenses ratio of UCIL is higher than its average and only in F.Y. 2062 and 2065 is below than its average. In this way, the operating expenses ratio of UCIL is generally much higher which shows less operational efficiently of management.

4.4 Analysis of Funds Flow of UCIL:

In addition to the analysis of various ratios and trend attempted earlier, it is also necessary to attempt the funds flow analysis to review the sources and application funds in the past for evaluating the soundness of financing and investment decision of UCIL which is prepared to depict a picture of utilization and mobilization of funds. Although, funds flow analysis is not an alternative to other tools of financial statement analysis, this supplements the other tools to get more vivid picture of the financial position of the industry. In the present analysis, financial statements are analyzed with the help of changes in working capital and changes in source and application of funds.

4.4.1. Schedule of changes in working capital:

It is prepared to find out the net increase or decrease in working capital in current year in comparison to the previous year. The purpose of preparing this statement to arrive at a single figure of increase or decrease in working capital at the end of the period as compared with that of the beginning. An increase in working capital means applying long - term funds to wards short - term needs and shows as use or application of funds and a decrease in working capital means applying short - term funds towards long - term needs. In other words schedule of changes in working capital shows the short term liquidity position of UCIL. In any business concern, working capital should be properly balanced because the less working capital is to loose the opportunity profit and excess working capital is block of capital and it is also burden of cost of capital. This section consists of analysis of changes in working capital of UCIL year by year.

Table - 18
Schedule of Changes in Working Capital
For the F.Y. 2062

Particulars	***2061***	***2062***	***Working capital : Increase (decrease)***
(A) Current Assets :			
Inventory	285,827,278	280,990,131	(4,837,147)
Cash and bank balance	100,017,953	90,209,684	(9,808,269)
Advance Payment, Advance loans and Deposit	124,173,877	143,548,561	19,374,684
Total Current Assets	***510,019,108***	***514,748,376***	***4,729,268***
(B) Current Liabilities :			
Trading and other payables	328,849,489	319,643,921	9,205,568
Provisions	7,977,483	10,028,876	(2,051,393)
Total Current Liabilities	***336,826,972***	***329,672,797***	***7,154,175***
Working Capital (A - B)	***173,192,136***	***185,075,579***	***11,883,443***

The above table represents schedule of changes in working capital of UCIL between F.Y. 2061 and 2062. The schedule shows that there is increase in working capital by Rs. 11,883,443 in F.Y. 2062 in comparison of its previous fiscal year. Current assets inventory, cash and bank balance are decreased and advance payment, advance loan and deposit are increased. In total amount of current assets is increased by Rs. 4,729,268. Similarly, current liabilities like trading and other payables are decreased and provision is increased. In total amount of current liabilities is decreased by Rs. 7,154,175. As there is a slightly increase in working capital it means that there is favorable condition of working capital in F.Y. 2062.

Table - 19

Schedule of Changes in Working Capital

For the F.Y. 2063

Particulars	***2062***	***2063***	***Working capital: increase (or decrease)***
(A) Current Assets :			
Inventory	280,990,131	344,800,248	63,810,117
Cash and bank balance	90,209,684	39,571,945	(50,637,739)
Advance Payment, Advance loans and Deposit	143,548,561	140,034,556	(3,514,005)
Total Current Assets	***514,748,376***	***524,406,749***	***9,658,373***
(B) Current Liabilities :			
Trading and other payables	319,643,921	374,685,326	(55,041,405)
Provisions	10,028,876	11,361,953	(1,333,077)
Total Current Liabilities	***329,672,797***	***386,047,279***	***(56,374,482)***
Working Capital (A - B)	***185,075,579***	***138,359,470***	***(46,716,109)***

The above schedule of changes in working capital of UCIL for the F.Y. 2063 states that the working capital is decreased by Rs. 46,716,109. Current assets, inventory is increased but cash and bank balance and advance payment, advance loan and deposits are decreased. Similarly, current liabilities trading and other payables and provisions are increased. In total current assets is increased by Rs. 9,658,373 and current liabilities in total is increased by Rs. 56,374,482. Since there is decrease in working capital it seems to be unfavorable condition of working capital.

Table - 20

Schedule of changes in working capital

For the F.Y. 2064

Particulars	***2063***	***2064***	***Working capital: increase (decrease)***
(A) Current Assets :			
Inventory	344,800,248	366,593,428	21,793,180
Cash and bank balance	39,571,945	17,407,078	(22,164,867)
Advance Payment, Advance loans and Deposit	140,034,556	141,841,136	1,806,580
Total Current Assets	***524,406,749***	***525,841,642***	***1,434,893***
(B) Current Liabilities :			
Trading and other payables	374,685,326	388,929,154	(14,243,828)
Provisions	11,361,953	28,897,416	(17,535,463)
Total Current Liabilities	***386,047,279***	***417,826,570***	***(31,779,291)***
Working Capital (A - B)	***138,359,470***	***108,015,072***	***(30,344,398)***

The above schedule of changes in working capital of UCIL of the F.Y. 2064 states that the working capital is decreased by amount of Rs. 30,344,398. Current assets, inventory and advance payment, advance loan and deposit are increased where as cash and bank balance is decreased. Similarly, current liabilities trading and other payable and provisions are increased. In total current assets is increased by amount of Rs. 1,434,893 and current liabilities is increased by amount of Rs. 31,779,291. Hence, the working capital is decreased, it seems to bean favorable working capital position of UCIL.

Table - 21

Schedule of changes in working capital

For the F.Y. 2065

Particulars	***2064***	***2065***	***Working capital: increase (or decrease)***
(A) Current Assets :			
Inventory	366,593,428	396,295,522	29,702,094
Cash and bank balance	17,407,078	15,054,910	(2,352,168)
Advance Payment, Advance loans and Deposit	141,841,136	163,844,967	22,003,831
Total Current Assets	***525,841,642***	***575,195,399***	***49,353,757***
(B) Current Liabilities :			
Trading and other payables	388,929,154	402,235,267	(13,306,113)
Provisions	28,897,416	35,861,270	(6,963,854)
Total Current Liabilities	***417,826,570***	***438,096,537***	***(20,269,967)***
Working Capital (A - B)	***108,015,072***	***137,098,862***	***29,083,790***

The above schedule of changes in working capital of UCIL for the F.Y. 2065 states that the working capital is increased by amount of Rs. 29,083,790. Current assets, inventory and advance payment, advance loan and deposits are increased where as cash and bank balance is decreased. Similarly, all the current liabilities are increased. In total current assets is increased by amount of Rs. 49,353,757 and current liabilities is increased by amount of Rs. 20,269,967. Increase in current liabilities is lower than increase in current assets so there is increase in working capital. Thus, we can say that there is efficient working capital management.

Table - 22
Schedule of change in working capital
For the F.Y. 2066

Particulars	***2065***	***2066***	***Working capital: increase (or decrease)***
(A) Current Assets :			
Inventory	396,295,522	361,829,425	(34,446,097)
Cash and bank balance	15,054,910	16,312,202	1,257,292
Advance Payment, Advance loans and Deposit	163,844,967	179,583,784	15,738,817
Total Current Assets	***575,195,399***	***557,725,411***	***(17,469,988)***
(B) Current Liabilities :			
Trading and other payables	402,235,267	436,006,595	(33,771,328)
Provisions	35,861,270	45,909,546	(10,048,276)
Total Current Liabilities	***438,096,537***	***481,916,141***	***(43,819,604)***
Working Capital (A - B)	***137,098,862***	***75,809,270***	***(61,289,592)***

The above schedule of changes in working capital of UCIL states that the working capital is decreased by amount of Rs. 61,289,592 in F.Y. 2066. Current assets, inventory is decreased where as cash and bank balance and advance payment, advance loan and deposits are increased. Similarly, current liabilities, trading and other payables and provisions are increased. In total current assets is decreased by amount of Rs. 17,469,988 and current liabilities is increased by amount of Rs. 43,819,604. Schedule shows that current assets and current liabilities both are in unfavorable condition. So, it can be said that working capital management of UCIL is inefficient in this year.

Table - 23

Schedule of changes in working capital

for the F.Y. 2067

Particulars	***2066***	***2067***	***Working capital: increase (or decrease)***
(A) Current Assets :			
Inventory	361,829,425	396,519,340	34,689,915
Cash and bank balance	16,312,202	45,853,821	29,541,619
Advance Payment, Advance loans and Deposit	179,583,784	193,692,086	14,108,302
Total Current Assets	***557,725,411***	***636,065,247***	***78,339,836***
(B) Current Liabilities :			
Trading and other payables	436,006,595	538,592,205	(102,585,610)
Provisions	45,909,546	51,682,089	(5,772,543)
Total Current Liabilities	***481,916,141***	***590,274,294***	***(108,358,153)***
Working Capital (A - B)	***75,809,270***	***45,790,953***	***(30,018,317)***

The above schedule of changes in working capital of UCIL states that the working capital is decreased by amount of Rs. 30,018,317 in F.Y. 2067 in comparison of F.Y. 2066. All the current assets are increased and all the current liabilities are also increased during the year. In total, current assets is increased by amount of Rs. 78,339,836 where as current liabilities is increased by amount of Rs. 108,358,153. As there is high increase in current liabilities than increase in current assets, there exists decrease in working capital. It represents that there is in efficiency in working capital management of UCIL in this year.

Table - 24

Schedule of changes in working capital

For the F.Y. 2068

Particulars	***2067***	***2068***	***Working capital: increase (or decrease)***
(A) Current Assets :			
Inventory	396,519,340	461,633,273	65,113,933
Cash and bank balance	45,853,821	22,039,693	(23,814,128)
Advance Payment, Advance loans and Deposit	193,692,086	220,910,035	27,217,949
Total Current Assets	***636,065,247***	***704,583,001***	***68,517,754***
(B) Current Liabilities :			
Trading and other payables	538,592,205	576,593,792	(38,001,587)
Provisions	51,682,089	57,317,002	(5,634,913)
Total Current Liabilities	***590,274,294***	***633,910,794***	***(43,636,500)***
Working Capital (A - B)	***45,790,953***	***70,672,207***	***24,881,254***

The above schedule of changes in working capital states that there is increase in working capital by amount of Rs. 24,881,254 in F.Y. 2068 of UCIL in comparison of its previous F.Y. Current assets, cash and bank balance is decreased where as inventory, advance payment, advance loan and deposits are increased. Current liabilities, trading and other payables and provisions are increased. In total, current assets is increased by amount of Rs. 68,517,754 where as current liabilities is increased by amount of Rs. 43,636,500. The increase in current assets is higher than increase in current liabilities so there exists increase in working capital. It represents that there is efficient working capital management of UCIL in this year.

Thus, the above analysis on schedules of changes in working for the different fiscal years concluded that the working capital management is not satisfactory. The schedules of changes in working capital for the 1st and 4th and 7th (last) fiscal year has increased in working capital. In fiscal year 2nd, 3rd, 5th and 6th working capital has decreased. The trend of working capital indicates that the factory has been loosing its profit generating opportunity year by year. It also indicates that short - term solvency position of UCIL is worse.

4.4.2. Computation of funds from operation:

Funds from operation is the difference between the operating revenues that provided funds during the accounting period and operating expenses that involved an outflow of funds during the accounting period. It refers to those funds which are generated in the business as a result of carrying out the operation during the normal course of the business. Funds from operation is the most important source of funds for all the business concern. A comparative statement of funds from operation of UCIL for the study period is states below in the table.

Table - 25

A Comparative Statement of funds from operation :

Of UCIL for seven fiscal years

(From 2062 to 2068)

F.Y. / ***Particulars***	***2062***	***2063***	***2064***	***2065***	***2066***	***2067***	***2068***
Net profit (loss)	(103,610,249)	(140,125,404)	(155,782,140)	(27,781,813)	(135,793,158)	(125,082,407)	(94,373,351)
Add : Non cash & non operation Exp :-							
Depreciation	110,963,433	111,085,642	111,212,940	111,392,765	109,423,811	87,026,181	87,072,783
Deferred expenses write off	37,237,745	37,237,745	37,237,745	37,237,745	37,237,745	37,237,745	37,237,745
	44,590,929	**8,197,983**	**(7,331,455)**	**120,848,697**	**10,868,398**	**(818,481)**	**29,937,177**
Less : Non operating income	-	-	-	-	-	-	-
Funds from operation (less from operation)	44,590,929	8,197,983	(7,331,455)	120,848,697	10,868,398	(818,481)	29,937,177

From above table it is observed that the funds from operation of UCIL are Rs. 44,590,929 in F.Y. 2062, Rs. 8,197,983 in F.Y. 2063, Rs. 120,848,697 in F.Y. 2065, Rs. 10,868,398 in F.Y. 2066 and Rs. 29,937,177 in F.Y. 2068. Where as loss from operation of UCIL are Rs. 7,331,455 in F.Y. 2064 and Rs. 818,481 in F.Y. 2067. It seems that there is in five F.Y. funds from operation and in two F.Y. there is loss from operation. The loss from operation indicates the unsatisfactory or negative profitability which is the application of the funds of UCIL for the year. The small amount of funds from operation doesn't show the satisfactory financial position of the firm.

4.4.3. Statement of sources and Applications / Uses of funds:

Funds flow statements are important managerial tools for financial analysis. Schedule of changes in working capital is the first part of funds flow statement and funds from operation is calculated as the second part of funds flow statement which is attempted earlier. Then the researcher is going to analyze sources and application of funds as another part of the funds flow statement which shows from which and where the funds available to the firm and where the funds have been applied.

The sources of funds of a firm are issuing share capital and debenture, long term debt, sale of fixed assets, sales of investment, capital subsidy, grants and aid, decrease in working capital and funds from operation. Similarly, the application of funds of a firm are purchase of fixed asset, payment of long - term debt, purchase of investment, purchase of share and debenture, increase in working capital and loss from operation. Here, in the case of UCIL, source of funds consists of funds from operation, sale of work in progress, decrease in working capital and sale of investments. Similarly, application of funds consists of loss from operation, Repayment of long - term debts, purchase of fixed assets, share of investment made, increase in working capital, last year loss adjusted, purchase of work in progress, short term loan investment and fixed investment. A comparative statement of sources and uses of funds of UCIL for the study period is given below in the table.

Table - 26

Funds flow statement
Of UCIL for seven F.Y.
(From 2062 to 2068)

F.Y. / *Particulars*	*2062*	*2063*	*2064*	*2065*	*2066*	*2067*	*2068*
Source of funds :							
Funds from operation	44,590,929	8,197,983	-	120,848,697	10,868,398	-	29,937,177
Sale of assets work - in - progress	199,337	-	-	998,200	200,188	297,098	-
Sale of fixed investment	120,000,000	75,000,000	20,900,000	-	-	2,500,000	22,500,000
Working capital decrease	-	46,716,109	30,344,398	-	61,289,590	30,018,318	-
Total Sources of funds	**164,790,266**	**129,914,092**	**51,244,398**	**121,846,897**	**72,358,176**	**32,815,416**	**52,437,177**
Uses of funds :							
Loss from operation	-	-	7,331,455	-	-	818,481	-
Repayment of long term debt	150,000,000	125,000,000	35,025,000	80,000,000	56,175,274	30,000,000	25,000,000
Net purchase of fixed assets	2,840,429	4,038,350	2,947,560	3,752,545	3,340,964	1,936,903	1,224,336
Increase in working capital	11,883,443	-	-	29,083,789	-	-	24,881,254
Last year loss adjusted	66,394	-	-	3,510,563	-	60,032	113,636
Purchase of assets work in progress	-	222,680	1,340,383	-	-	-	1,217,951
Share investment made	-	653,062	1,200,000	3,000,000	2,841,938	-	-
Short - term loan investment	-	-	3,400,000	-	-	-	-
Fixed Investment made	-	-	-	2,500,000	10,000,000	-	-
Total uses of funds	***164,790,266***	***129,914,092***	***51,244,398***	***121,846,897***	***72,358,176***	***32,815,416***	***52,437,177***

Fiscal year 2062 :

Funds flow statement of UCIL includes sources of funds and uses of funds. Sources shows that funds from operation is 27.06%, sale of assets work - in - progress is 0.12% and remaining 72.82% is sale of fixed investment in F.Y. 2062.

Similarly, uses of funds of UCIL in F.Y. 2062 consists of repayment of long term debt is 91.02%, net purchase of fixed assets is 1.72%, increase in working capital is 7.22% and last years loss adjustment is 0.04%.

During the year UCIL has generated major funds from sale of its fixed investment i.e. 72.82% and uses of major funds in repayment of long - term debt i.e. 91.02%. It shows that the funds generated by UCIL during the year is not favorable but uses is favorable because it reduce the long - term liability.

Fiscal year 2063 :

In fiscal year 2063 the sources of funds of UCIL consists of funds from operation is 6.13%, sale of fixed investment is 57.73% and working capital decrease is 35.96% so it is not much satisfactory.

Similarly, uses of funds of UCIL consists of repayment of long - term debt is 96.22%, net purchase of fixed assets is only 3.11%, purchase of assets work in progress is 0.17% and share investment made is 0.50% so uses of funds of UCIL in F.Y. 2063 is also not so much satisfactory.

Fiscal year 2064 :

In F.Y. 2064 sources of funds of UCIL consists of sale of fixed investment of 40.78% and 59.22% of working capital decrease.

Similarly uses of funds consists of loss from operation is 14.31%, repayment of long-term debt is 68.35%, net purchase of fixed assets is 5.75%, purchase of assets work in progress is 2.62%, share investment made is 2.34% and short - term loan investment made is 6.63%.

In this F.Y., UCIL has not the sources of funds from operation and has made net purchase in fixed assets by only a little amount. So, the funds flow of UCIL in F.Y. 2064 is not so much satisfactory.

Fiscal year 2065 :

During this fiscal year UCIL has generated funds from operation is 99.18% and from sale of assets work in progress is 0.72%. So inflow of funds is satisfactory.

Similarly, uses of funds of UCIL in this fiscal year, repayment of long - term debt is 65.66%, net purchase of fixed assets is 3.08%, increase in working capital is 23.87%, last year loss adjustment made is 2.88%, share investment made is 2.46% and fixed investment made is 2.05%. Since, Uses of funds in this year includes major share of

repayment of long - term debt and increase in working capital so out flow of funds is also satisfactory.

Fiscal year 2066 :

In this fiscal year sources of funds of UCIL consists of funds from operation is 15.02%, sale of assets work - in - progress is 0.28% and working capital decrease is 84.70%. It seems not much satisfactory of inflow cash.

Similarly, uses of funds of UCIL in this F.Y. includes repayment of long - term loan is 77.64%, net purchase of fixed assets is 4.62%, share investment made is 3.93% and fixed investment made is 13.82%. Its seems slightly satisfactory out flow of funds..

Fiscal year 2067 :

Sources of funds of UCIL in F.Y. 2067 includes sale of assets work in progress is 0.91%, sale of fixed investment is 7.62% and working capital decrease is 91.48%. So inflow of funds in factory during the year is not so much satisfactory.

Similarly, uses of funds of UCIL in F.Y. 2067 includes loss from operation is 2.49% repayment of long term debt is 91.42%, net purchase of fixed assets is 5.90% and last year loss adjustment made is 0.19%. So outflow of funds is also not so much satisfactory.

Fiscal year 2068 :

During the F.Y. 2068 UCIL consists as sources of fund are funds from operation is 57.09% and sale of fixed investment made is 42.91%.

Similarly, during the year UCIL consists as uses of funds are repayment of long - term debt is 47.68%, net purchase of fixed assets is 2.33%, increase in working capital is 47.45%, last year loss adjusted is 0.22% and purchase of assets work in progress is 2.32%. So both the inflow and out flow of funds of UCIL during the year looks satisfactory in some extent.

In this way, the financial performance in terms of profitability, efficiency, liquidity and capital structure position of UCIL have been analyzed with the help of ratio analysis, trend analysis and funds flow analysis. After the analysis of profitability position, efficiency position and liquidity position in terms of resource mobilization to generate sales and profit of UCIL have revealed that all the positions are fluctuating and below the satisfactory level because of resulting the return is placed in the negative region. Only capital structure position is in the normally satisfactory level. The financial in balance which has remained a great challenge for the financial stability, has necessitated to under take corrective actions to avoid such in balances.

CHAPTER-FIVE

Summary, Conclusion and Recommendation

5.1 Summary:

Nepal is the least developed and land - locked country. Which is situated on the heart of Asia between India and China. Nepal had predominatingly agrarian economy. Nearly 79% of the economically active population is estimated to be involved in agriculture. But agriculture sector alone cannot develop the economy. No country in the wide world is found to have raised its economic standard till it limits its economic activities to raw agriculture. A simultaneous development in both the sector of agriculture and industry will only enhance the country's economic standard. Thus, it is being recognized that industrialization is the answer to the problem of agro based under developed nation. For by lateral development of the industry and agriculture, an agro based industry is essential to develop overall aspects of the country. So, industrialization is a fundamental instrument of progress, modernization and social change which breaks the vicious circle of backwardness and poverty of nation. Economic development through industrialization is ultimate route of overall development.

Industrialization should not only mean mere increment in the counting number of industries which do not pursue the basic goal or objective of nation. Rather, it should be understood as establishing new industries as per the need of the country as well as ensuring better workings of established industries. In fact, better workings of the established industries encourage establishing new industries or vice - versa. Hence, it is essential to ensure better working of established industries.

Financial soundness is a major prerequisite for the survival of an enterprise. Unless and until an enterprise is financially sound it can not fulfill the expectation of its owners, creditors, consumers and the nation as a whole. The volume of profit is not only one index of an enterprise's financial strength and success.

The focus of present study is Nepal's largest public sector cement industry i.e. Udaypur Cement Industry Limited. The financial condition of the industry is limping. It has been facing a great financial crisis during the study period. An attempt has been made in this study to judge short - term as well as long - term financial performance of the factory.

To achieve the objective of analyzing short - term as well as long - term financial performance of UCIL most widely used and universally accepted ratios, trend analysis, funds flow analysis are applied. The study is solely based on published financial statement of the factory for seven years from 2062 to 2068. The data from financial statements are shorted, tabulated and analyzed using above mentioned ratios. Since the

study is based on historical data the research design designated are historical and exploratory types.

5.2 Conclusion / Major Findings:

On the basis of analysis of financial statements of UCIL following are made :

(A) Short - term financial performance and position :

i) The liquidity position of the factory as shown by the analysis looks not much satisfactory from current ratio point of view. Current ratio of the factory is below the standard (i.e.2:1). Current ratio of factory varied from 1.08 to 1.56 times during the study period. This shows that the factory has been facing problem to meet current obligations. This means the factory has not sufficient cash or cash equivalent assets to pay current obligation within the year.

ii) Quick ratio of the factory is extremely low and never meet the standard (i.e. 1:1). The highest and lowest quick ratio during the study period is 0.27 and 0.03 respectively. It indicates that the liquidity position of the factory is also not much satisfactory. This shows that the factory has not much cash to pay off claim of creditors immediately.

iii) Inventory turnover ratio of UCIL also indicates unsatisfactory position. Average inventory turnover ratio of UCIL is observed 0.96 times which is less than one. It means that there is greater amount of average inventory value than amount of cost of goods sold. Thus, it becomes clear that there is not proper management of inventory in UCIL.

iv) Working capital turnover ratio of UCIL indicates the satisfactory liquidity position. It varied from minimum of 2.49 times to maximum of 10.34 times during the study period. The average working capital turnover ratio of UCIL is observed 5.86 times which shows the satisfactory liquidity position. First four years ratio is below than average but lastly it improved and went up than average ratio. This means the efficiency of the utilization of working capital is improving.

(B) Long - term financial performance and position:

i) The debt - equity ratio of UCIL represents that the lenders contribution is quite below than the shareholder's contribution. It never meets the standard of 1:1 during the study period. It is observed that the average debt equity ratio of UCIL is only 0.55 which shows the unsatisfactory combination of internal and external equities. This unbalanced capital structure shows poor long - term solvency position.

ii) Funded debt tot total capital ratio also represents unsatisfactory long - term solvency position of the factory. The actual funded debt to total capital ratio of the factory is much lower than generally accepted standard i.e. 50% or 55%. It never

meets the standard. Average ratio of the factory is 35% which shows unsatisfactory or poor solvency position of the factory.

iii) Proprietary ratio of the factory shows satisfactory long term solvency position of the factory. It is observed that it is always greater than or equal to 55%. The average ratio is 56.43% which shows satisfactory long - term solvency position of the factory. But while comparing actual ratio with its average it is observed that first three years it is less than average after that it is greater than average during the study period.

iv) Fixed assets to net wroth ratio shows unsatisfactory long-term solvency of the factory. It is always greater than 100% which means owner's funds are not sufficient to finance the fixed assets and the factory has to depend upon outsiders to finance the fixed assets.

v) - Fixed assets to total long - term fund ratio of UCIL also shows unsatisfactory long term solvency position. During the study period it never meets the standard of 100%. It is always below the standard. The highest ratio is only 97%. This means the firm has not sufficient long - term fund to finance fixed assets. As actual ratio is always below 100%, it means a part of the working capital requirements is met out of long - term funds of the factory.

vi) From the point of view of current assets to proprietor's fund ratio, the long tern financial position of the factory is also unsatisfactory. The average of this ratio is 0.21 times. The actual ratio of the factory does not meet its average during first four year of study period. But after that it is increasing so it can be say that long term financial position is improving.

vii) From the view point of debt - service ratio, the long term financial position of the factory is unsatisfactory. Because average of this ratio is negative 0.094 which means that EBIT is less than interest charges. This means even interest charges can also not meet by factory from their profit.

(C) Profitability Position:

i) The gross profit margin of the factory is minimum of 23.92% and maximum of 36.29%. And average gross profit margin is 28.60%. During the study period the gross profit margin has fluctuated. So gross profit margin of UCIL does not looks much satisfactory.

ii) Net profit margin of UCIL is not in good condition during the study period since it has always negative ratio which shows that there is always loss in the factory during study period.

iii) Return on total assets of the factory is also not looked satisfactory during the study period. Because it has always negative ratio which means that there is always net loss during the study period which indicates danger for an organization in future.

iv) Return on shareholders equity of UCIL is also always not satisfactory during the study period due to negative profitability.

v) Operating expenses ratio of UCIL is minimum of 69.53% and maximum of 83.02% and in average it is 77.62% during the study period. The ratio is always greater than its average except during 1st year and 4th year of the study period. Since operating expenses ratio is much higher which shows less operational efficiency during the study period of UCIL.

(D) Funds Flow Analysis:

Funds flow analysis attempted in the study indicates that the main sources of funds are funds from operation, sale of assets work - in - progress, sale of fixed investment and working capital decrease. Similarly, the main applications of funds are loss from operation, repayment of long - term debt, net purchase of fixed assets, increase in working capital, last years loss adjustment made, purchase of assets work - in - progress, share investment made, short-term loan investment made and fixed investment made. Low fund generation, misuse of generated funds, excessive investment in less productive assets and under utilization of fixed assets are the major factors responsible for the negative profitability of the industry. The financial imbalance which has remained a great challenge for the financial stability.

(E) Others:

i) During the study period, the average capacity utilization of UCIL is only 38.26%. The under utilization of the capacity is the major reasons for such weak financial performance. The rate of capacity utilization indicates that the firm has been unable to utilize its resources to meet the targeted volume of cement production.

ii) Demand of the product of UCIL is higher than that of the other cement industries. Because the industry has hearty proud of its quality products. Absence of proper pricing policy and particular price guidelines from government has led UCIL to confusing price decisions.

iii) The operational disturbance is another reason for negative profitability. The supply of raw materials (like iron ore, gypsum) and utilities (coal, furnish, oil, packing bag etc.) are supplied from foreign countries. The supply system is very weak which has disturbed the operation of the factory from time to time. Another course of operational disturbance is breakdown which is due to inefficient management of repair and maintenance. Poor industrial relation would be another considerable factor of operational disturbance.

iv) The general manager in general and financial manager in particular has some of the weaknesses in UCIL. They have not paid serious attention to proper planning, controlling and budgeting aspect. In UCIL, the internal resources couldn't finance the expansion and growth of the enterprise and UCIL is more and more dependent upon the external resources. In short, faulty financing and investment decisions are responsible to the poor performance.

v) Political intervention has appeared in the appointment of board of directors, general managers and top level managers, recruitment of personnel and labor, in purchasing of raw material and fixed assets. Such intervention has caused a great misuse of its resources and facilities. The political intervention had appeared at various sides as well as in various form in the industry. Low employee productivity in terms of overstaffing than wanted by the production volume is another considerable matter of the negative profitability of UCIL.

vi) UCIL is confused about its overall objectives of conductivity the industry either it is service motive or a commercial motive. It is due to the changes in the government's policy regarding this.

vii) The accounting system of UCIL is also not so much satisfactory because modern tools and techniques of financial analysis like ratio analysis, funds flow analysis. Comparative and common size financial statement analysis, trend analysis etc have not been applied due to lack of motivation and required skill of related personnel. The traditional financial statements (income statement and balance sheet) alone do not serve to the purpose of timely and proper decision making.

viii) The absence of separate costing department and absence of cost classification have made it impossible to analyze the cost structure, cost behaviour and cost - control programme. Moreover, the reporting and management information system have not been accepted and used for the purpose of controlling performance and this aspect has been further complicated due to the absence of any scientific criteria or standard to compare the performance.

5.3 Recommendation:

At the end, from top to bottom of the study following recommendations are made for improving the present condition of UCIL.

- Profitability position of UCIL is not favorable. The industry should launch a long-term programme to cut - down excessive cost of production and operating cost. Cost reduction technique, cost control devices, inventory control, standard costing are suggested to be followed which will perhaps improve in the cost reduction. Cost responsibility centre should be clearly defined and assigned proper responsibility. Without perfect knowledge of cost, profit can't be determined.

Authorized body has to pay attention on internal as well as external factors to minimize cost.

- The activity ratios show the inefficiency of management for not using full capacity of the plant. The production level should be increased by utilizing its existing fixed assets, adopting short range and long range production plan. The industry should solve the problem of overstaffing and unsatisfactory resource mobilization, and should generate higher sales and profit by utilizing the high demand of its product. Unused assets should be disposed off.
- The liquidity position has been poor and it must be improved adopting an appropriate strategy of maintaining an adequate liquidity position either by holding more current assets or by reducing the level of current liabilities or changing both the variables in any direction.
- Red - tapism, unnecessary formalities and political intervention should be avoided, which have created delays on decision making and planning process. Management should be fully autonomous and responsible on policy making as well as implementation.
- Effective programme should be initiated to improve the productivity of labor and personnel. Morale of management personnel and labor should be increased and motivated. Incentive plan should be introduced for them. The reward and punishment process should be systematized on the basis of work performance.
- Preventive measures for maintenance should be adopted for controlling idle time and break down of machine and for reducing maintenance cost. To make maintenance work effective and to avoid disturbance in production process, effective measures should be initiated in its operation identifying the key factors.
- The industry should have its own pricing manual that guides its pricing decision being free from the government intervention. Price should be set up on the basis of demand as well as quality of its product.
- The purchase and sales process should be transparent and fair. The direct purchasing of raw material from producers should be discouraged. The transparent purchasing policy should be started with listed suppliers making them compete in quotation and tender competition. To manage selling and distribution process effective and transparent any concern or party having institutional skill and adequate go-down should be selected as sole distributor.
- Effective accounting and financial system should be applied in the industry. Refreshment and advanced training should be conducted immediately for the personnel working under finance / account department. In financial area, UCIL should introduce ratio analysis, funds flow analysis and other performance

analysis regularly for evaluating its financial performance to diagonize the financial strengths and weakness in order to correct the loopholes of the industry.

- Strength, weakness, opportunity and threats (SWOT) analysis will also helps the industry to enhance the inter - departmental and intra - departmental interaction and co-ordination. It should be used in practical life.
- The industry should be free from government interference. The frequently changes of general manager has created the unstable environment. So, the post of general manager should be selected from internal personnel so that he has already experienced in the field of the industry. The government should clear its objectives and goals as well as the proper system of reward and punishment.

If the above recommendations are followed, UCIL will definitely improve its future. At last if the above recommendations are impossible to be applied effectively and unable to uplift the industry from the current adverse position the other alternative will be towards privatization for maximum utilization of national resources and foreign aid.

Computation of EBIT of UCIL
(From F.Y. 2062 to 2068)

F.Y. / ***Particular***	***2062***	***2063***	***2064***	***2065***	***2066***	***2067***	***2068***
Profit (or loss) before provision of Income tax	(103,610,249)	(140,125,404)	(155,782,140)	(27,781,813)	(135,793,158)	(125,082,407)	(94,373,351)
Add Interest Exp.	117,810,014	109,767,548	103,946,101	101,028,208	97,102,750	94,679,167	93,810,070
EBIT	***14,196,765***	***(30,357,856)***	***(51,836,039)***	***73,246,395***	***(38,690,408)***	***(30,403,240)***	***(563,281)***

Computation of Operating Expenses of UCIL
(From F.Y. 2062 to 2068)

F.Y. / ***Particular***	***2062***	***2063***	***2064***	***2065***	***2066***	***2067***	***2068***
Cost of goods sold	293,524,616	353,959,911	394,456,399	473,084,345	386,174,692	356,558,452	396,288,218
Add Total Adm. Selling & Promotion Exp.	26,801,822	32,378,127	35,972,127	33,398,760	31,053,215	32,866,687	36,337,851
Operating Exp.	***320,326,438***	***386,338,038***	***430,428,526***	***506,483,105***	***417,227,907***	***389,425,139***	***432,626,069***

Computation of Shareholders Fund in Net Worth of UCIL
(From F.Y. 2062 to 2068)

F.Y. / ***Particular***	***2062***	***2063***	***2064***	***2065***	***2066***	***2067***	***2068***
Share Capital	3,648,051,000	3,648,051,000	3,648,051,000	3,648,051,000	3,648,051,000	3,648,051,000	3,648,051,000
Less Accumulated Loss	(368,734,773)	(508,860,177)	(664,642,317)	(695,934,694)	(831,727,852)	(956,874,280)	(1,051,357,277)
Deferred Expenditure	(260,664,218)	(223,426,473)	(186,188,727)	(148,950,982)	(111,713,236)	(74,475,491)	(37,237,745)
Shareholders fund in net worth	***3,018,652,009***	***2,915,764,350***	***2,797,219,956***	***2,803,165,324***	***2,704,609,912***	***2,616,701,229***	***2,559,455,978***

Computation of Total Long - Term Fund of UCIL
(From F.Y. 2062 to 2068)

F.Y. / ***Particular***	***2062***	***2063***	***2064***	***2065***	***2066***	***2067***	***2068***
Shareholder's fund in net worth	3,018,652,009	2,915,764,350	2,797,219,956	2,803,165,324	2,704,609,912	2,616,701,229	2,559,455,978
Add Long term fund	2,206,200,274	2,081,200,274	2,046,175,274	1,966,175,274	1,910,000,000	1,880,000,000	1,855,000,000
Total long term fund	***5,224,852,283***	***4,996,964,624***	***4,843,395,230***	***4,769,340,598***	***4,614,609,912***	***4,496,701,229***	***4,414,455,978***

Computation of Cost of Goods Sold of UCIL
(From F.Y. 2062 to 2068)

F.Y. / ***Particular***	***2062***	***2063***	***2064***	***2065***	***2066***	***2067***	***2068***
Cost of Sales	293,524,616	353,959,911	394,456,399	473,084,345	386,174,692	356,558,452	396,288,218
Add Opening Stock	285,827,278	280,990,131	344,800,248	366,593,428	396,295,522	361,829,425	396,519,340
Less Closing Stock	(280,990,131)	(344,800,248)	(366,593,428)	(396,295,522)	(361,829,425)	(396,519,340)	(461,633,273)
Cost of goods sold	***298,361,763***	***290,149,794***	***372,663,219***	***443,382,251***	***420,640,789***	***321,868,537***	***231,174,285***

Computation of Average Inventory of UCIL
(From F.Y. 2062 to 2068)

F.Y. / ***Particular***	***2062***	***2063***	***2064***	***2065***	***2066***	***2067***	***2068***
Average Inventory	285,827,278+ 280,990,131	280,990,131+ 344,800,248	344,800,248+ 366,593,428	366,593,428+ 396,295,522	396,295,522+ 361,829,425	361,829,425+ 396,519,340	396,519,340+ 461,633,273
	2	2	2	2	2	2	2
	=283,408,705	***=312,895,190***	***=355,696,838***	***=381,444,475***	***=379,062,474***	***=379,174,383***	***=429,076,307***

Computation of Working Capital of UCIL

(From F.Y. 2062 to 2068)

F.Y. / *Particular*	*2062*	*2063*	*2064*	*2065*	*2066*	*2067*	*2068*
Working Capital	514,748,376-	524,406,749-	525,841,641	575,195,399-	557,725,412-	636,065,247-	704,583,001
	329,672,797	386,047,279	-417,826,570	438,096,537	481,916,140	590,274,294	-633,910,794
	=185,075,579	***=138,359,470***	***=108,015,071***	***=137,098,862***	***=75,809,272***	***=45,790,953***	***=70,672,207***

Computation of Total Capital of UCIL

(From F.Y. 2062 to 2068)

F.Y. / *Particular*	*2062*	*2063*	*2064*	*2065*	*2066*	*2067*	*2068*
Shareholder's fund	3,648,051,000	3,648,051,000	3,648,051,000	3,648,051,000	3,648,051,000	3,648,051,000	3,648,051,000
Add Long term debt	2,206,200,274	2,081,200,274	2,046,175,274	1,966,175,274	1,910,000,000	1,880,000,000	1,855,000,000
Total Capital	***5,854,251,274***	***5,729,251,274***	***5,694,224,274***	***5,614,226,274***	***5,558,051,000***	***5,528,051,000***	***5,503,051,000***

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